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**Health-seeking behaviour for childhood illnesses in urban
South Africa**


By Natalie Spark-du Preez

A Doctoral Thesis

**Submitted in partial fulfilment of the requirements
for the award of
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Abstract

In urban South Africa there has been increasing child morbidity and mortality as a result of HIV/AIDS; a paucity of data on health-seeking behaviour for childhood illnesses; high reported use of traditional medicine and general patient dissatisfaction with free public health services. This study therefore aims to investigate the main factors influencing choice of health care provider for Black children under 6 years of age in Johannesburg and Soweto, using both qualitative and quantitative methods. In-depth interviews with caregivers (n = 5), providers of traditional (n = 6) and Western (n=6) health care, as well as 5 focus groups with caregivers, provide insight into different health care beliefs and practices. An utilisation-based survey was conducted with 206 Black caregivers of children under 6 years of age from 1 public clinic in Soweto (n = 50), 2 private clinics (50 caregivers in total) in Johannesburg, 2 public hospitals (53 caregivers in total) from Johannesburg and Soweto and 2 traditional healers (53 caregivers in total) from Johannesburg and Orange Farm, an informal settlement on the outskirts of Johannesburg. The facilities where interviews took place in this study were purposively selected.

Caregiver beliefs were found to be at the heart of the decision-making process. These beliefs are shaped by the caregiver's world-view, religion, family (particularly grandmothers of the child and caregiver), social networks and previous experiences. Beliefs were also found to affect the caregiver's perceptions of the child and the illness. Findings suggest that the caregiver will be limited in her decision-making by her age and accumulated knowledge, her socio-economic status as well as the availability of support and social networks. These in turn affect the degree to which distance and cost are barriers to health care-seeking. Characteristics of the provider, experiences in the past, as well as the outcome of the treatment, were all found to interact with the afore-mentioned factors to shape current patterns of resort, as well as future decisions made.

When a child was unwell, caregivers usually gave home treatments first, particularly for diarrhoea, vomiting, fever, constipation and crying. Although the use of over-the-counter (OTC) medicines in this study varied according to the illness being treated, overall the higher socio-economic status (SES) respondents were more likely to use OTC medicines and less likely than other groups to use home treatments. Home treatments as well as OTC medicines were not always used appropriately. Nearly three-quarters of caregivers had given or would give traditional medicine to their child if the need arose, although this varied by education levels and SES. The most well-known African childhood illnesses were *inyoni* and *ibala*, which in the South African world-view Western medicine is not able to treat. In general, private sector care (primary and higher) was perceived to be better than public sector care because of more thorough examinations, stronger medicines, enough medicines and generous prescriptions, no queues, friendly staff who listen and are attentive, the availability of a doctor, high-tech equipment, cleanliness and the food provided. Although the public hospitals suffer from similar problems to those found at PHC clinics, compared with the primary health care facilities they were generally thought to be better-stocked with

medicines and more accessible in terms of opening hours, performing better physical examinations, having more doctors and high-tech equipment, and staff were believed to be more attentive than their PHC counterparts.

Results from this study highlight the need for community and household integrated management of childhood illnesses (IMCI) which has remained underdeveloped in South Africa. In particular, this should involve understanding the symptoms that mothers themselves recognise as significant and incorporating these into health education messages, as well as educating caregivers (mothers, grandmothers and relatives) about the safe, timely and appropriate use of enemas, home treatments, over-the-counter medicines and traditional medicines. Furthermore, these results underline the need to improve patient and provider communication as well as patient care in public services, the need to include traditional healers in the community component of IMCI, as well as training Western health care providers about health-seeking behaviour in the context of the local belief system. In order to improve the future health and well-being of millions of children in South Africa, understanding the determinants of health-seeking behaviour is essential for ensuring that effective strategies are put in place and that changes are implemented where they are needed most.

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1. Introduction

Studies on the utilisation of health care services have examined overall utilisation, including levels of use (Akin, Griffin, Guilkey & Popkin, 1995; Bhatia & Cleland, 2001; Develay, Sauerborn, & Diesfield, 1996), as well as predictors of the use of allopathic compared with alternative medical care systems (Fosu, 1994; Develay *et al.*, 1996; Bender, Rivera & Madonna, 1993; Weaver, Ndamobissi, Kornfield, Blewane, Sathe, Chapko, Bendje, Nguembi, & Senwara-Defiobona, 1996; Gesler, 1979a, 1979b). Other more focused studies have considered the differences in health services utilisation (use vs. non-use, private vs. public, allopathic vs. traditional) for different populations or diseases and the determinants of patterns of use (Thind & Andersen, 2003; Celik & Hotchkiss, 2000; de Bartolome & Vosti, 1995; Heuveline & Goldman, 2000; Pebley, Goldman & Rodriguez, 1996). An understanding of utilisation patterns and factors influencing such use is necessary for ensuring that policies on health care are effective (Thind & Andersen, 2003). By way of introduction, the following sections provide a description of the study area examined in this research and the rationale for conducting research on health-seeking behaviour in urban South Africa.

1.1 Background: Study area

After decades of crisis, South Africa's first democratic elections in 1994 heralded the end of oppressive White minority rule and the dismantling of many restrictive race-based policies. The African National Congress party (ANC) won the first elections with Nelson Mandela elected as President and since then, the ANC has seen 2 further victories under Thabo Mbeki.

With many diverse cultures, languages and beliefs, it is not surprising that South Africa's 46.9 million (Statistics South Africa, 2005a) people have been called the "Rainbow Nation". Almost 80% of the population are Black Africans composed of a culturally and linguistically heterogeneous groups: Zulu, Xhosa, Ndebele, Swazi, Southern Sotho, Northern Sotho, Tsonga and Venda. In addition, 9.3% of the population are White, 8.8% are Coloured and 2.5% are Indian or Asian. (Statistics South Africa, 2005a). Because of the myriad of cultures, 11 languages are recognised in South Africa, and the most commonly spoken at home are isiZulu (23.8%), isiXhosa (17.6%) and Afrikaans (13.3%) (Statistics South Africa, 2005a).

Approximately 80% of South Africans are Christian (Burger, 2005). These include the African Independent Churches (AIC), the Afrikaans Dutch Reformed Church, the Roman Catholic Church, the Methodist Church, the Anglican Church, various Lutheran and Presbyterian Churches, the Congregational Church, traditional Pentecostal Churches, Independent Charismatic Churches, Greek Orthodox and Seventh Day Adventist Churches (Burger, 2005). The largest grouping of Christian Churches (some 4000) are the AICs which are breakaways from various mission churches (the so-called 'Ethiopian' Churches), and today mostly comprise

the Zionist and Apostolic Churches. There are believed to be at least 900 different AICs from all ethnic groups in Soweto alone (Burger, 2005). The Census (2001), recorded the following affiliations: Zion Christian (11.1%), Pentecostal / Charismatic (8.2%), Catholic (7.1%), Methodist (6.8%), Dutch Reformed (6.7%), Anglican (3.8%), other Christian (36%), Islam (1.5%), other (2.3%), unspecified (1.4%), and none (15.1%) (Burger, 2005; Statistics South Africa, 2001a).



Figure 1.1: Provincial map of South Africa

Sesotho (13.1%) and English (12.5%) (Statistics South Africa, 2001b).The capital of Gauteng is Johannesburg which is also the major economic hub in South Africa.

As can be seen in Figure 1.1, South Africa is made up of 9 provinces of which the smallest (1.4% of land area) and most densely populated is Gauteng province in which this study took place (Statistics South Africa, 2001b; Hirschowitz, 1995a). Black Africans constitute the majority (74%) of Gauteng’s 8,837,178 inhabitants, followed by 20% Whites, 4% Coloureds and 2% Indian or Asian (Statistics South Africa, 2001b). In Gauteng the main languages spoken at home include isiZulu (21.5%), Afrikaans (14.4%),

Table 1.1 provides a summary of selected demographic data taken from the mid-year estimates for 2005 (Statistics South Africa, 2005a). Despite South Africa being an upper middle income country (World Bank, 2005), according to the United Nation’s State of the World Population Report (UNFPA, 2005), the TFR reported by Statistics South Africa (2.78) is close to that found in less developed regions of the world (2.82). The life expectancy in South Africa reported by Statistics South Africa (2005a) (45 male; 48.8 female) is also lower than that of least developed countries found in the UN report (50.8 male; 52.7 female), mostly as a result of HIV/AIDS.

Table 1.1: Summary of selected demographic data for South Africa*

Indicator	2005 mid-year estimate
Total population	46.9 million
Crude birth rate	23.8 births / 1,000 population
TFR	2.78 children born / woman
Life expectancy at birth	Total population: 47.1 years Male: 45 years; Female: 48.8 years
HIV/AIDS	Adult prevalence (15-49): 17%

*Statistics South Africa (2005a)

The percentage of the population aged 15 and over who can read and write is 84% for males and 81% for females (UNFPA, 2005). Access to education has improved tremendously since the decades of racially skewed apartheid education. In 2003, approximately 94% of children of school-going age were enrolled in school and this has been made possible by an exemption or reduction of school fees for those unable to pay and compulsory education up to the age of 15 (Department of Education, 2005a, 2005b; Statistics South Africa, 2003; Government Communication and Information System, 2005). According to the last Census results in 2001, amongst adults 20 years and older, 17.9% of the population had no schooling, 16% had some primary education, 6.4% had completed primary school, 30.8% of the population had some secondary schooling, 20% had completed secondary schooling and 8.4% had tertiary qualifications (Statistics South Africa, 2001b).

The overall Black unemployment rate¹ in South Africa is estimated to be 31.6% (Statistics South Africa, 2005b) and for females this rate is approximately 37.6%. Mid-year estimates for March 2005 put total unemployment² in South Africa at 26.5% (Statistics South Africa, 2005b). The largest share of the workforce (27%) are employed in unskilled occupations such as domestic work compared to 5% in managerial occupations and 7% in professional employment (Statistics South Africa, 2001b).

In terms of household goods, Table 1.2 shows that 73% of households in 2001 (Statistics South Africa, 2001b) in South Africa had a radio, over half of households had a television and refrigerator, nearly a third had a cell phone, 24.4% had a landline and 8.6% had a computer. Figures for Gauteng show higher proportions on all selected household goods than those of the country as a whole. Racial inequalities are apparent when looking at the differences in proportions of the Black, Coloured, Indian or Asian and White populations who possess certain goods.

Table 1.2: Census data on possession of selected household goods*

Household goods	South Africa	Gauteng	Black	Coloured	Indian or Asian	White
Radio	73%	77.4%	68.7%	75.3%	91%	94.7%
Television	53.8%	65.7%	44.2%	73.6%	91%	92.6%
Computer	8.6%	15.1%	1.8%	9.4%	27.9%	46%
Fridge	51.2%	62.1%	39.9%	73.2%	96.2%	97.6%
Landline phone	24.4%	32.4%	12%	43.2%	74.8%	78.6%
Cellular phone	32.3%	45.1%	24.6%	31%	58.9%	74.6%

*Statistics South Africa (2001b)

¹ Percentage employed of the economically active.

² Percentage unemployed of the entire working age (15-65) population.

Dwelling types recorded in the 2001 census (Statistics South Africa, 2001b) include backyard (4.8%), traditional (14.4%), informal (16.4%), formal (63.8%) and other (0.3%) dwellings. In Gauteng a higher proportion of informal (22.3%) and formal (68.6%) dwellings were found and a smaller proportion of backyard (3.5%) and traditional dwellings (5.3%) were recorded. For South Africa as a whole, 47% of people live in 3 or less rooms and for the province of Gauteng this figure was 49%. The average household size in South Africa is 3.8 and for Gauteng this is 3.2.

1.1.1 An overview of Johannesburg

The Soweto-Johannesburg metropolis comprises the largest urban area in South Africa and is also its centre of commerce. Johannesburg has a population of 3.2 million and is the provincial capital of Gauteng (Statistics South Africa, 2001a; City of Johannesburg, 2006a). Soweto, a former township under Apartheid is situated about 15 km away from the centre of Johannesburg and comprises approximately 63 km² with an estimated 1 million residents (City of Johannesburg, 2006b).

Johannesburg³ is administratively divided into 11 regions which are responsible for the delivery of health, housing, social welfare and leisure services (v. Figure 1.2). These regions which look after about 300,000 residents each, juxtapose wealthy well-established neighbourhoods with poorer ones lacking basic amenities. Region 7 for example, comprises the sprawling old township area of Alexandra alongside more prosperous suburbs of higher-income earners. In Region 8 is found the Inner City, characterised by high-rise office and residential buildings. An attempt is being made to regenerate this area of the city, which in recent years has seen the spread of urban blight and degradation as a result of the exodus of many businesses to the surrounding suburbs.

Soweto is split between Regions 6 and 10 to the south east of the greater metropolitan area. Region 6 is mainly made up of the old "matchbox"⁴ houses, built during apartheid. There are however also large areas of informal settlements and poverty is a major problem, with high unemployment and low educational levels. Region 10 is closer to the Johannesburg Central Business District (CBD) and includes more established areas such as Orlando, the first township development in Soweto. In some areas of Region 10, up-market housing can also be found.

³ The information in this section is taken from the City of Johannesburg website (2005).

⁴ Low cost four-room brick houses with tin roofs.

Region 11, known as the 'Deep South' includes Lenasia to the north, a former Indian residential area under apartheid legislation. Although the majority of neighbourhoods fall in the lower income bracket, there are large middle-income neighbourhoods with relatively stable communities. The southern part of the region comprises the large informal settlements (Orange Farm / Weilers Farm (Kanana Park) area) and has suffered from marginalisation more than any other area as a result of its geographic location. As a result there are high levels of unemployment (70%) and poverty, with 50% of the population having no income and approximately 62% of the remainder earning less than R1500 (US\$250: 2004 exchange rate) a month, indicating that the majority live below the breadline.



Figure 1.2: The 11 administrative regions of Johannesburg

1.2 Background: Health care providers in a pluralistic setting

The Second Kaiser Family Foundation Survey of Health Care in South Africa (Smith, Solanki & Kimmie, 1999) found that whilst 59% of Africans had used public primary health care in the last year, 91% of Whites, 79% of Indians and 57% of Coloureds reported using private primary health care. For hospital care, the majority of Africans, Indians and Coloureds had used public sector facilities whilst 75% of Whites had used private services.

Data on health-seeking from the October Household Survey of 1995 (Statistics South Africa, 1995) revealed that the majority of African (67.7%) and Coloured (62.7%) respondents had used public services for an illness episode, in contrast with Indians and Whites who had mostly used private services (54.9% and 68.4% respectively) (Wadee, Gilson, Thiede, Okorafor, & McIntyre, 2003). Only 4.8% of Africans, 2.7% of Indians and 0.7% of Whites and Coloureds had been to a traditional or spiritual healer. In urban areas, of those seeking care, the use of private providers was mostly found in the high income groups (55.4% for the highest income quintile versus 24.8% for the lowest income quintile), whilst the use of a traditional healer was more common amongst those living in an informal settlement (Wadee *et al.*, 2003; McIntyre, Gilson, Valentine, & Söderlund, 1998). McIntyre *et al.* (1998) note however that in the lowest 2 income quintiles, only about 73% to 79% of those who needed health care sought it. An interesting finding was that when asked about prospective use of health services, only 0.2% of the OHS 1995 respondents said they would consult a traditional healer compared with the 3.7% who had actually sought help from a healer in the last month (Wadee *et al.*, 2003). The authors suggest that the use of traditional health care is probably only considered once the illness occurs.

When health-seeking data from 1995 was compared with data from 1999, there was a significant increase (10%) in those who used the private sector, including those who did not have medical insurance (medical aid) and those without formal education, although the majority of respondents continued to use public services. Explanations for the afore-mentioned increase include a growth in private provision as well as a perceived or experienced decline in public facilities (Wadee *et al.*, 2003). Use of traditional or spiritual healers fell from 3.6% to 1.6%. Focus group results in the Eastern and Western Cape revealed that quality of care in the private sector was perceived to be much better than the public sector where treatment was believed to be ineffective and patients were not treated in an acceptable manner (Palmer, 1999). Furthermore, clinics were not able to treat all illnesses.

The October Household Survey was replaced with the General Household Survey, which in 2002 also found that the majority of Africans (63.5%) and Coloureds (60.9%) had consulted in the public sector for their last illness episode (Statistics South Africa, 2002). In contrast, 61.9% of Indians / Asians and 83.1% of Whites had sought care in the private sector. For those who had consulted in the public sector, 12.9% were dissatisfied with the service they received, compared to 2.9% in the private sector. Similar results were found in the 2003 GHS (Statistics South Africa,

2003). Only half a percent of the population who had reported seeing a provider in the month prior to the surveys in 2003 and 2004 indicated that this was a traditional healer.

Kleinman (1978; Chrisman & Kleinman, 1983) proposed an explanatory model which aims to understand health, illness and healing as a cultural system composed of the *popular sector*, the *folk sector* and the *professional sector*. Most health care including diagnosis (illness labelling), triage, care, adherence to a medical regimen and assessment of an outcome involves families and social networks in the *popular sector*. The *folk sector* consists of quasi-legal or illegal specialist or non-professional health care and in the South African context this would include traditional healers and faith healers. The professional sector encompasses the allopathic health sector. In order to understand the level and nature of health care-seeking by caregivers in Soweto and Johannesburg, it is necessary to understand the pluralistic health care system found in South Africa.

1.2.1 Allopathic health care: An overview

Prior to South Africa's first democratic elections in 1994, the country's health system was race-based and fragmented, with 14 health departments (Naylor, 1988; Sharp, 1988; Segar, 1997) characterised by large discrepancies in the allocation of health care resources and personnel, inefficient management and weak disease prevention and control programmes (Segar, 1997; Buch, 2000). There were separate health departments for Whites, Coloureds and Indians, a Central Health Department and each of the 10 Black 'homelands' had its own health department offering only a limited number of services (Naylor, 1988; Buch, 2000). The system was further characterised by underdeveloped primary health care with most health care focused around hospitals, many of which fell into the segregated 'White' areas (Wadee *et al.*, 2003; Naylor, 1988). Barriers to health care included distance as well as linguistic and cultural barriers, since nearly 90% of the doctors registered in South Africa in the 1980s were White, including those working in the Public Sector (Naylor, 1988). User fees, although low, were still prohibitive for many (Khosa & Thomas, 1995). Soweto clinics for example charged around R8 (US\$1.80: 1997 exchange rate) for consultation and treatment. Higher levels of care including surgery and hospitalisation were more expensive, at around R20 (US\$4.50) (Simon, 1997).

The legacy of apartheid posed many challenges for the new ANC government in 1994 and much progress was made in the first years to make health care more accessible and equitable. In order to deliver primary health care (up to and including district hospital level) more effectively, from 1995 a unified but decentralised national health system began to be implemented, based on the District Health System model⁵ (Department of Health, 2001a). Resources previously concentrated in secondary and tertiary care have been redirected to increase funding for primary health care

⁵ System of health care in which primary health care is delivered to people in a defined geographical area and any decisions for that area are made locally by a district Health Authority rather than at a national or a provincial level. Communities are also encouraged to participate in designing their health care services (Harrison, 1997).

(Smith *et al.*, 1999). Amongst much restructuring, albeit with ongoing teething problems (Department of Health, 2001a), reforms have included the upgrading of many clinics; the implementation of a primary school nutrition programme; the introduction of various programmes such as the Integrated Management of Childhood Illnesses (IMCI); Directly Observed Treatment Short-course for tuberculosis and maternal mortality programmes; the launch of a Patient's Charter and the introduction of universal access to primary health care facilities and free health care for vulnerable groups such as children under six years, pregnant or breastfeeding mothers (up to 42 days after delivery) the elderly, the disabled and some of the chronically ill (Khosa & Thomas, 2005; Buch, 2000). Free primary health care was extended to all South Africans in 1996 (McCoy & Khosa, 1996).

Today the allopathic health system in South Africa consists of a large public sector mostly offering free basic primary health care to about 80% of the population. A well-resourced private sector also exists, whose users are mostly higher-income earners or members of medical insurance schemes (18% of the population) (McIntyre, Bloom, Doherty, & Brijlal, 1995; Schneider & Gilson, 1999). The private dispensing doctor (GP), whose charges vary from R60 to R120 (US\$10 to US\$22: 2004 exchange rate), inclusive of medicines, is not exclusively used by the wealthy or those with medical insurance however. In fact many are low income earners avoiding the overburdened and under-resourced clinics (Joosub, 2004).

In 1999, only 11% of the Black population had full medical aid cover compared with 77% of Whites (Smith *et al.*, 1999). In 2004, 69.7% of Whites, 36% of Indians / Asians, 18.4% of Coloureds and 7.2% of Blacks had access to a medical aid scheme (Statistics South Africa, 2004). A health care survey in 1998 found that most (84%) patients using public primary health care paid nothing and 15% paid out-of-pocket, whilst 49% of those attending private primary care facilities paid out-of-pocket and 48% were covered by medical aid (Smith *et al.*, 1999). Pharmacies are also popular sources of health care in South Africa and many have upgraded to primary health care centres, otherwise known as 'community pharmacies' with a pharmaco-therapist able to diagnose and prescribe medications for a wider range of ailments (Gilbert, 1998).

With a lifting of the economic barrier of fees, primary health care witnessed large increases in patient loads attending curative services, sometimes by as much as 300% (Mathiane, 1994 as cited in Khosa & Thomas, 1995; Schneider, Kaka, Jina, Koobair, Kamalanathan, Asmal, & Peer 1997; Wilkinson, Gouws, Sach, Karim, 2001). In Gauteng Province, the number of child outpatients attending clinics almost doubled overnight (Simon, 1997). Pregnant mothers also started using antenatal services much earlier in their pregnancy (McIntyre & Gilson, 2002). A survey of nurses' experiences of the implementation of free health care revealed that 85% strongly agreed that their workload had increased substantially (Schneider *et al.*, 1997). This surge in attendance was mostly attributed to the high level of previous unmet need, given the low levels of health care utilisation found in household surveys before free health care was introduced (Schneider & Gilson, 1999; Khosa & Thomas, 1995; McCoy & Khosa, 1996). However an increase in attendance has also

been found in the paediatric outpatients at public hospitals, particularly in areas with poorly-functioning primary health care clinics, with many having to 'screen' patients and send them back to the clinic or charge them a fee for having bypassed the PHC facility (McCoy, 1996; McCoy & Khosa, 1996).

Bypassing the clinic because of shortages of medicines and an expectation of a better quality of service is not a new phenomenon, nor is it confined to South Africa (Atkinson, Ngwengwe, Macwan'gi, Ngulube, Harpham, & O'Connell, 1999; Holdsworth, Garner, & Harpham, 1993; Mwabu, 1984; Oskowitz, Schneider, & Hlatshwayo, 1997; Schneider, Magongo, Cabral & Khumalo, 1998). Introduction of free primary health care with little prior consultation or preparation has meant that existing staff and infrastructure have had to absorb the impact which has sometimes impacted negatively on quality of Public Sector care and service delivery. Staff shortages, unmanageable workloads and low pay have contributed in turn to low morale and the outflow of staff to the private sectors and abroad (Walker & Gilson, 2004; Lehmann & Sanders, 2002). The ability of staff to explore problems with patients in detail, have sufficient time for consultations and deal with the daily patient load has therefore suffered as a result (Walker & Gilson, 2004). The attitudes of some health care personnel have created additional barriers, with hostile and judgmental attitudes, particularly of nurses, reported by patients (Jewkes, Abrahams & Mvo, 1998). On the other hand, nurses also have to put up with abuse from patients and have to answer for any shortages in the clinics (Walker & Gilson, 2004; WHO 2002a). The focus of the Department of Health's 1999-2004 Strategic Framework for Health was therefore to improve the quality of health service delivery (Buch, 2000).

1.2.2 Traditional health care

1.2.2.1 The *muthi*⁶ trade on the Witwatersrand

Although many continue to see traditional medicine as "meaningless pseudo-psychological mumbo-jumbo which is positively harmful" (Freeman & Motsei, 1992:p.1186), its continued use in highly urbanised societies alongside free Western medicine bears testament to the positive results it brings for many who use it (Bibeau, Corin, Buganza, Mandela, Mahoya, Mukana, Makengo, Ahluwalia, & Mechin, 1980; Fassin, Jeanne, Cèbe & Réveillon, 1988; Edwards, 1986; Longmore, 1959; Press, 1978; Janzen, 1978; Warren, 1978). It is also believed that witchcraft, sorcery beliefs as well as pollution⁷ may actually increase with modernisation because of the increased social strain and interpersonal conflicts as a result of employment and relationships, as well as a greater chance of being exposed to 'pollutants' in an urban environment (Mitchell, 1965 & Swantz, 1990 as cited by Green, 1999; Cunningham, 1993; Pfeiffer, 2002).

According to Hirst (1990), most people tend to consult a Western doctor first and will consult a traditional healer when all else fails. Gumede (1990) stated the reverse in the case of South Africa,

⁶ Traditional medicine.

⁷ Pollution in this context refers to a person or place that is in an impure or 'polluted' state which is usually associated with birth or death. It does not refer to contaminating the environment.

with around 80% of people likely to visit the traditional healer first in rural areas and 40% in urban areas. For those who don't go to traditional healers, reasons given in a study in South Africa in the late 1990s included non-belief, only believing in the power of prayer, only believing in doctors and the cost (Segar, 1997). Most people were embarrassed or reluctant to discuss their use of traditional medicine due to denigration from the biomedical profession as well as the church.

Urbanisation does not preclude the use of traditional medicines. In a study in Durban, KwaZulu-Natal in 1995, 53% of Black clinic patients had been to a traditional healer at least once in the previous year (Mander, 1998). The authors report that this may be an underestimate as respondents were not asked about purchasing traditional medicine themselves (from other sources). In other surveys, the views of traditional healers' patients who do not always use Western health facilities may not be captured. Of those patients interviewed at traditional healers in the Durban survey (Mander, 1998), 27.1% went more often than they did 6 years previously (1990), 27.1% went less often and 45.7% had not changed their frequency in the use of traditional medicine. The main reason for change in use was because the traditional medicine had worked and the respondent was getting better (59.1%). Other reasons included going to a Traditional Medical Practitioner (TMP) for certain problems only (13.6%), Western doctors had failed to help (4.5%), the respondent's mother was a TMP (4.5%), not being sick very often (4.5%), problems were increasing (4.5%), being sick quite often (4.5%) and TMPs not having helped (4.5%). For the patients interviewed at Western clinics who had been to a traditional healer in the past, 43.8% went more often, 41.1% went less often and 15.1% reported no change. Almost 60% of the respondents interviewed at Western clinics reported that they had changed their use because they were now getting better, 10.8% were not sick very often, 8.1% went because Western doctors had failed to help them and 5.4% used traditional medicine more because their problems were increasing.

The Witwatersrand which includes the East Rand, Johannesburg and the West Rand (Williams, Balkwill, Witkowski, 1997), is South Africa's second largest market for medicinal plants after the markets in KwaZulu-Natal (Williams, 1996), providing a source of income for thousands of people from KwaZulu-Natal, Eastern Cape, Mpumalanga, Lesotho and certain areas of Gauteng and the Free State. Formal sector traders operate from *muthi*⁸ shops whilst informal sector traders sell plants from pavements and markets (Williams, 1996).

Two well-known markets in Johannesburg are the Mai-Mai Market (v. Figure 1.3) and Faraday Market. Known as "Ezinyangeni" - the place of healers, Mai-Mai is the oldest market in Johannesburg with 176 units dedicated to selling traditional medicines, divining and training apprentices (Thale, 2003). Although some of its traders are traditional healers, the Faraday market has more of a wholesale function than Mai-Mai and supplies many of the Witwatersrand traditional healers and *muthi* shops with bark, roots and plants. In the late 1990s, the annual trade was estimated to be 450 - 800 tonnes with more than 450 species in trade (Williams, 1996).

⁸ Herbal / African chemist. The Xhosa equivalent is an *Amayeza* store (Cocks & Dold, 2000).



Figure 1.3: A TMP stall at Mai-Mai Market

In the early 1990s it was estimated that over 200,000 traditional healers (*inyangas*) and diviners (*sangomas*) practised in South Africa versus 25 to 30,000 'modern' doctors (Kale, 1995). Mid-1990s estimates surmise that there were 18,000 TMPs in Soweto alone (Williams, 1996). Towards the end of the 1990s, the total number of traditional healers in South Africa was estimated to be approximately 350,000 (Bodeker, 2000). In these numbers, the demand for services would be expected to be high and it is not surprising therefore to hear reports that about 80% of the Black population use the services of traditional healers (Kasilo, 2000). Other surveys have found much lower proportions consulting traditional healers, although this may be a result of negative attitudes towards traditional medicine which result in participants being unwilling to report using these services (Louw & Pretorius, 1995; Bye & Dutton, 1991).

Health care during apartheid left behind a legacy of bias towards allopathic health care. The National Health Plan (African National Congress, 1994) however committed itself to involving traditional healing in the national health care service, thus giving consumers the right to choose their health care provider. Legislation was also changed to facilitate the controlled use of TMPs. It should be noted that the overview of traditional health care and attitudes towards it which are outlined in this chapter and in the literature review is a stereotypical synopsis and not all healers or patients fit this mould. In the same way, not all Western doctors are ignorant of traditional medicine.

1.3 Rationale

The rationale for conducting this study included the need to look at the appropriateness of health-seeking in order to improve child health through responsible care-seeking. Child health statistics show that further goals are yet to be reached in improving child health, particularly that of the Black South African population. A further reason for studying health-seeking in South Africa is to

find out whether health services are meeting the needs of the study population. There are also limited data on health-seeking behaviour for children under 6 in South Africa, without which improvements cannot be made.

1.3.1 Appropriateness of health-seeking

One rationale for looking at the utilisation of health services is to examine the appropriateness of health care-seeking, and in the case of child health, the focus is usually on the mother or primary caregiver (Goldman, Pebley, & Gragnolati, 2002). In the health-seeking process, a caregiver decides what type of medicine and care a child receives at home, whether the child should see a health care provider and if so the type of provider (Goldman *et al.*, 2002). Decisions are also made following the provider's advice on whether to purchase prescribed medication, as well as how this is administered. Studies show that seeking health care too late or not seeking appropriate care has led to many preventable childhood deaths (Snow & Marsh, 1992; Gutierrez, Reyes, Martinez, Tome, & Guiscafne, 1994; Gray, Smith, & Barss, 1990; Snow, Armstrong, Forster, Winstanley, Marsh, Newton, Waruiru, Mwangi, Winstanley, & Marsh, 1992). Poor care-seeking has in fact been implicated in 6% to 70% of child deaths (Mirza, Macharia, Wafula, Agwanda, & Onyango, 1990; Sutrisna, Reingold, Kresno, Harrison, & Utomo, 1993; Sodemann, Jakobsen, Molbak, Alvarenga, & Aaby, 1997; Reyes, Perez-Cuevas, Salmeron, Tome, & Guiscafne, & Gutierrez, 1997; Terra de Souza, Peterson, Andrade, Gardner, & Ascherio, 2000; Bojalil, 2002; all cited by Hill, Kirkwood & Edmond, 2004). Since the existence of health services does not always guarantee their use or appropriate use, improving care-seeking behaviour in turn reduces childhood morbidity and mortality (Murray & Chen, 1993; Caldwell, 1986; Preston, 1975; Fosu, 1989; Kielmann, DeSweemer, Chernichovsky, Uberoi, Masih, Taylor, Parker, Reinke, Kakar, & Sarma, 1983) by reducing treatment delays, and giving the correct treatment (Hill *et al.*, 2004). In Sri Lanka for example, one explanation for the paradoxical low childhood mortality despite high levels of reported malnutrition and low per capita income, has in part been attributed to the high levels of care-seeking behaviour as well as the quality of the medical system (Amarasiri de Silva, Wijekoon, Hornik, & Martines, 2001).

Many public sector facilities in developing countries are under-resourced and over-used and many childhood illnesses could be prevented by education, better hygiene and nutritional practices rather than relying on curative methods (Vane, 1979; Melrose, 1982; de Wet, 1998a). Many primary health care programmes are trying to move towards a preventative rather than curative approach (de Wet, 1998a). The WHO's Integrated Management of Childhood Illness (IMCI) programme recognises the key role of families in a child's health care by trying to improve home case management of childhood illnesses (Lambrechts, Bryce, & Orinda, 1999; Claeson & Waldman, 2000; Winch, Leban, Casazza, Walker & Percy, 2002). This includes understanding how symptoms and illnesses are classified locally, as well as educating families about when children need to receive immediate medical attention. A further target of the IMCI strategy is to improve the use of drugs by health workers in children under 5 years (Solarsh & Goga, 2004).

Prior to the implementation of the IMCI, a pilot survey in the Western Cape found that 36% of children had needlessly been given an antibiotic (Patel, 2002). Understanding family choices about treatment of childhood illness is therefore essential for improving home care and appropriate care-seeking behaviour.

1.3.2 Are health services meeting the needs of the under 6 population?

Since 1994, free health care has been available for pregnant women and children under 6 years of age in South Africa, thereby removing the cost barrier to the utilisation of health services. Studies, including exit interviews at facilities have revealed that new barriers to health-seeking have emerged however in the form of negative staff attitudes, shortages of medicines, a shortage of staff and a limited in-take of patients (Hirschowitz, 1995b; Smith *et al.*, 1999; Palmer, 1999). Different 'cost' barriers in the form of having to buy medicines or pay for transport to seek more effective care greatly affect the poorest section of South Africa's population. This has also led to patients overwhelming clinics which are known within local communities to run more efficiently (Walker & Gilson, 2004; McCoy, 1996). Furthermore, further pressure has been put on hospital out-patient departments where patients know that there is less likelihood of medicine or staff shortages (McCoy, 1996). Therefore, despite increased access to services since 1994, quality of care and the delivery of primary health care and hospital services remain areas of health care requiring further improvement (Department of Health, 2004a).

1.3.3 Child health in South Africa: progress to be made

Table 1.3 provides a selection of summary statistics from the United Nations Development Programme's Human Development Report for 2005 (UNDP, 2005). The performance of South Africa can be compared to other countries with a middle-level Human Development Index⁹. Although South Africa is performing well in terms of GDP and tuberculosis immunisation for example, gains in infant and child mortality have been eroded by the high HIV prevalence. Other child health statistics such as height for age and measles immunisation are also lagging behind countries such as Brazil and Egypt. Although there are great disparities between regions, rural and urban areas as well as population groups, compared to many other African countries whose under-5 mortality rates are well above 100 per 1,000, South Africa's overall mortality rates are encouraging. Despite this progress, one of the United Nations (2000) Millennium Development Goals aims to reduce under-5 mortality to two-thirds that of the 1990 figure of 60 / 1,000, however the opposite trend has been found so far (Solarsh & Goga, 2004; Bradshaw, Groenewald, Laubscher, Nannan, Nojilana, Norman, Pieterse & Schneider, 2003) with levels estimated to be 66 / 1,000 in 2003 (WHO, 2005; UNICEF, 2005) and 72.1 / 1,000 in 2005 (Statistics South Africa, 2005).

⁹ A composite index measuring average achievements in life expectancy at birth, the adult literacy rate, the combined gross enrolment ratio for primary, secondary and tertiary schools and GDP per capita in purchasing power parity (PPP) US dollars (UNDP, 2005).

Table 1.3: Comparative data from a selection of middle-level Human Development Index (HDI) countries (UNDP, 2005)*

Indicators		Brazil	Venezuela	Egypt	South Africa	Namibia	Botswana	Ghana	Zimbabwe
Human development index	2003	0.792	0.772	0.659	0.658	0.627	0.565	0.52	0.505
World Bank income Classification**	2005	Lower middle	Upper middle	Lower middle	Upper middle	Lower middle	Upper middle	Low	Low
Adult literacy rate (% ages 15 and above)	2003	88.4	93	55.6	82.4	85	78.9	54.1	90
GDP per capita (PPP US\$) (HDI)	2003	7,790	4,919	3,950	10,346	6,180	8,714	2,238	2,443
Total population (millions)	2003	181.4	25.8	71.3	46.9	2	1.8	21.2	12.9
Urban population (% of total)	2003	83	87.6	42.2	56.9	32.4	51.6	45.4	35
One-year-olds fully immunised against tuberculosis (%)	2003	99	91	98	97	92	99	92	92
One year olds fully immunised against measles (%)	2003	99	82	98	83	70	90	80	80
Children with diarrhoea receiving oral rehydration and continued feeding (% under age 5)	1994-2003	28	51	29	37	39	7	24	80
Children underweight for age (% under age 5)	1995-2003	6	4	9	12	24	13	25	13
Children under height for age (% under age 5)	1995-2003	11	13	16	25	24	23	26	27
HIV prevalence (% ages 15-49)	2003	0.7	0.7	<0.1	21.5	21.3	37.3	3.1	24.6
Life expectancy at birth (years)	2000-2005	[0.3 - 1.1] 70.3	[0.4 - 1.2] 72.8	[<0.2] 69.6	[18.5 - 24.9] 49	[18.2 - 24.7] 48.6	[35.5 - 39.1] 36.6	[1.9 - 5.0] 56.7	[21.7 - 27.8] 37.2
Infant mortality rate (per 1,000 live births)	2003	33	18	33	53	48	82	59	78
Under-five mortality rate (per 1,000 live births)	2003	35	21	39	66	65	112	95	126

* For a list of sources and notes for these data go to http://cfapp2.undp.org/hdr/statistics/data/xlfiles/hdr_dat_70142770.xls

** World Bank (2005)

The UNFPA (2005) reports that the IMR in more developed regions of the world is 8, in less developed regions this is 60 and in the least developed countries this is 94. The IMR in South Africa in 1998 was 45.4 per 1,000 (Department of Health, Medical Research Council & Measure DHS+, 1998). Projections for 2005 have risen however to the mid-50s (Statistics South Africa, 2005a; Dorrington, Bradshaw, Johnson, & Budlender, 2004).

For under-5 mortality more developed regions have a rate of 10 for males and 9 for females, less developed regions have an under-5 mortality rate of 91 for males and 89 for females, whilst the least developed regions have a rate of 160 for males and 149 for females (UNDP, 2005). The South African DHS Survey's (1998) revised estimates measured under-5 mortality (male and female) to be 61 per 1,000. Estimates have increased since then to the 70s (Statistics South Africa, 2005a; UNFPA, 2005).

The main reason for any increases in under-5 mortality is mostly due to the HIV / AIDS epidemic. The Burden of Disease Study (Bradshaw *et al.*, 2003) estimated HIV / AIDS to be the cause of 40.3% of deaths in the under-5 age group in South Africa in the year 2000. According to Bradshaw, Groenewald, Laubscher, Nannan, Nojilana, Norman, Pieterse and Schneider (2001), the major portion of childhood deaths in South Africa are from preventable causes. In 1995, the most common causes of death amongst children aged 1 to 4 years in South Africa were injury including poisoning (24%), diarrhoea (20%), malnutrition (13%), and lower respiratory infections (9%). By 2000, malnutrition, diarrhoeal diseases and lower respiratory infections were ranked 2nd, 3rd and 4th after HIV / AIDS in the under-5 age group, although together, malnutrition, diarrhoeal diseases and lower respiratory infections accounted for 20.3% of all deaths.

Variations in under-5 mortality between provinces, urban / rural areas and population groups are wide-ranging. Gauteng Province in which this study took place for example has some of the lowest infant and child mortality indicators in the country (Department of Health *et al.*, 1998; Bradshaw *et al.*, 2003; Dorrington, Bradshaw, & Budlender, 2002). While some of the disparities in health reflect the underlying economic inequalities within the population, morbidity related to the incorrect use of medicines and poor management of childhood illnesses represents a sizeable proportion of injury, disease, and mortality burden which could potentially be eliminated (Caldwell, 1986; Fosu, 1989; Murray & Chen, 1993; Bradshaw *et al.*, 2003). According to Solarsh and Goga (2004) for example, data from the District Health Information System show that full immunisation coverage under the age of 1 year in South Africa is estimated to be 79% and the drop out rate between measles 1 and 2 is 16%. Provinces such as the Northern Cape, Gauteng Province and the Eastern Cape have much higher drop out rates (29%, 23% and 22% respectively).

Diarrhoeal disease, characterised as 3 or more loose or watery stools within a period of 24 hours (Department of Health *et al.*, 1998, WHO-IMCI, 2000) and acute respiratory infections (ARI) are two of the leading causes of childhood morbidity and mortality throughout the developing world, particularly in the first 2 years of life (Feacham & Jamison, 1991; WHO, 2002b; Department of

Health *et al.*, 1998). HIV, malnutrition, poor and unhygienic living conditions, crowded housing and in some cases low levels of health care all exacerbate these common childhood infections in developing countries (Goldman *et al.*, 2002; Department of Health *et al.*, 1998). In South Africa, diarrhoea and ARIs also remain important preventable and treatable illnesses in children (Department of Health *et al.*, 1998).

In the South African Demographic Health Survey (1998), overall 13% of children aged 0-59 months had an episode of diarrhoea in the 2-week period preceding the survey (v. Table 1.4). The highest diarrhoeal prevalence was found in the 6-23 month age group (about 23%) whilst a lower prevalence rate was found in infants under the age of 6 months (11%). The lower prevalence in the first half of infancy is likely to reflect the protective effect of breastfeeding (Woldemicael 2001). Almost half of mothers (49%) had heard of ORT in the DHS survey, 52% indicated that they would increase fluid intake during episodes of diarrhoea, 60% of children were taken to a health facility and 81% were given some form of ORS.

Table 1.4: Prevalence of diarrhoea in children under 5 years of age, South Africa (1998)*

Child's age	% with diarrhoea in age group	% with diarrhoea of total with diarrhoea	Number of children (with and without diarrhoea)
< 6 months	11.1	10.7	505
6-11 months	22.1	10.6	500
12-23 months	24	20.5	973
24-35 months	11.6	19.7	933
36-47 months	8.2	18.7	886
48-59 months	5	19.9	942
Total	13.2	100	4,739

* Department of Health *et al.*, 1998

An overall diarrhoeal prevalence of 9.4% was found in the Province of Gauteng, the second lowest prevalence after the Free State Province. Only 27.7% of mothers in Gauteng knew about oral rehydration packets (ORSOL or SOROL), the second lowest proportion after the Limpopo Province. However 60.3% (the highest in the country) said they would increase the amount of liquids given to the child. Amongst children under 5 who had experienced an episode of diarrhoea in the 2 weeks preceding the survey, 66.7% had been taken to a health facility, 47.2% had been given ORS packet solution at home, and 69.4% had been given home-made solution. A large proportion (86.1%) had been given a home remedy or injection.

Unlike diarrhoea, acute respiratory infection (ARI) prevalence rates are largely uninfluenced by population group, rural versus urban settings or maternal education (Department of Health *et al.*, 1998). The highest rates found in the SADHS (1998) were found in the first 2 years of life (23%) as with diarrhoea (v. Table 1.5). However in contrast, ARI prevalence remained consistently higher during the first 5 years of life. Three-quarters of the children in the survey who experienced ARI were taken to a health facility for advice or treatment.

Table 1.5: Prevalence of ARI in children under 5 years of age, South Africa (1998)*

Child's age	% with ARI in age group	% with ARI of total with ARI	Number of children (with and without diarrhoea)
< 6 months	20.8	11.5	505
6-11 months	24.9	13.7	500
12-23 months	23.7	25.3	973
24-35 months	18.9	19.3	933
36-47 months	15.7	15.3	886
48-59 months	14.5	15	942
Total	19.3	100	4,739

* Department of Health *et al.*, 1998

An overall ARI prevalence of 21.5% was found in the Province of Gauteng which had the second highest figure after KwaZulu-Natal. Overall in the DHS study, 75.3% of children with ARI in the 2 weeks preceding the survey had been taken to a health facility. In the Gauteng Province this figure was 84.1%, the highest proportion in South Africa.

There are no clear-cut differences between the clinical presentations of any viruses in the respiratory tract and there is considerable overlap in signs and symptoms (Madeley & Peiris, 1998). Generally, acute upper (including middle) respiratory infections (AURI) including the common cold, acute otitis media, pharyngitis and tonsillitis, croup, tracheo-bronchitis, and acute epiglottitis, are usually mild and self-limiting and rarely lead to death (Madeley & Peiris, 1998; Kirkwood, 1991). Acute lower respiratory infections (ALRI) comprise pneumonia and bronchiolitis. These syndromes may involve tachypnea, cough, nasal flaring, retractions, wheezing, rales and cyanosis. Pneumonia is the most important cause of death from respiratory infection. It is a common complication of pertussis and measles, particularly among malnourished children (Pio, Leowski, & Ten Dam, 1985).

1.3.4 Limited health-seeking data in an urban highly pluralistic health setting

Studies are lacking on the determinants of health care in urban Africa and those that have been published are often difficult to compare due to methodological differences (Haddad & Fournier, 1995; Fassin *et al.*, 1988; Benyoussef & Wessen, 1974; Maclean, 1966; Gesler, 1979a; Lasker, 1981; Uyanga, 1983; Fosu, 1989; LeBeau, 1998). Using DHS data, Fosu (1989) for example was not able to take into account socio-cultural or service-related factors whilst Haddad and Fournier (1995) used longitudinal data which included service-related factors. Studies of utilisation of traditional health care in comparison to those of modern facilities in African urban environments are also limited (Phillips, 1990; Fosu, 1994; Ryan, 1998; Molyneux, Murira, Masha & Snow, 2002). Although written more than 20 years ago, Ngubane's (1981:p.366) suggestion still applies

today: "There is a need for careful and extensive research to ascertain how Africans, especially those in town, nowadays go about meeting their health needs."

Johannesburg and Soweto form a melting pot of languages, cultures, and indeed health care paradigms. In this context, it is not surprising that different ideas about childhood illnesses and how to manage them abound. Data on health-seeking behaviour for childhood illnesses in this urban pluralistic health setting where traditional healers, faith healers, private clinics and public health care facilities all offer very different types of health services are however limited (LeBeau, 1998; Bland, Rollins, Van den Broeck, Coovadia, & Child Health Group, 2004). Deciding to use a health care facility in an urban environment "represents a conscious choice by the patient and is not due to the lack of another system." (LeBeau, 1998:p.3). Home remedies, over-the-counter (OTC) medicines, traditional medicines and church medicines, whether they are used appropriately or inappropriately, all have an important role to play in the management of childhood illnesses in South Africa. Yet many doctors do not know what choices caregivers make beyond their clinic doors. When would a caregiver give their child a *sput*¹⁰ of soap and water for example? How would burning certain types of plants such as *imphepho* or ground animal parts, known as *inyamazane* stop a child crying? Why would a mother put grey beads, or a horse's tooth around her child's neck? What are *inyoni*, *ibala*, *ishashaza* and *isilonda* and how would a caregiver treat these 'African' illnesses? Which Dutch medicines or *Stuips* are used for protection from evil spirits? Which common childhood illness are chicken gizzards used for? Why do some caregivers bypass the primary health care clinic in favour of the public hospital? These are just some of the health care issues a caregiver might not discuss with a nurse or doctor but which may have implications for the health of the child.

Concepts of health and healing in South Africa today have been shaped by cultural borrowing between African, Indian and European groups present over the centuries (de Wet, 1998a; Hammond-Tooke, 1989). Because these concepts continue to evolve and South Africa's health system is still redressing inequities (Ntuli & Day, 2004), the network of explanatory factors for the choice of health care provider or treatment can be complex (Kroeger, 1983). As well as allopathic, traditional and faith healers, members of the family, neighbours and friends may also offer health care advice – "in a pluralistic environment, across multiple illnesses and caretakers, there can be many patterns of resort." (Ryan, 1998:p.211). 2004 saw the 10th anniversary of democracy in South Africa. After 10 years of restructuring and free public health care for children under 6, this study aims to highlight some of the main factors influencing choice of health care provider for Black children under the age of 6 years in Johannesburg and Soweto, South Africa.

Research for the current study was carried out under the auspices of Birth to Twenty (BT20), the largest and longest running longitudinal birth cohort study of child health and development in Africa (<http://www.wits.ac.za/birthto20/>). Before commencement of the cohort, health service usage was identified as one of several research questions which needed addressing when looking at the

¹⁰ Enema.

health and well-being of children, particularly in an environment undergoing rapid urbanisation (Yach, Padayachee, Cameron, Wagstaff, & Richter, 1990), with high levels of morbidity and mortality. By understanding why and how caregivers make choices for their child's health care, including understanding patient beliefs, information can be produced that informs health promotion and public health policy to be able to provide culturally appropriate systems of healthcare (Airhihenbuwa, 1991; Kleinman, 1978). Reform in the health services should be guided by good data about the health of the population and understanding more about the providers and the users themselves is the first step towards achieving improved equity in health. This study adopts a micro-approach to data collection in order to shed light on health-seeking behaviour for childhood illnesses in the South African context. It focuses on the differences found in caregivers' predisposing (including beliefs) and enabling characteristics, illness characteristics, perceptions of different providers and management of childhood illnesses at different health care providers.

1.4 Aims and objectives

1.4.1 Aims

Given the exploratory nature of this study, the aims are:

- To find out what Black caregivers of children under 6 do when their children under 6 are not well (why they follow different patterns of resort).
- To find out why caregivers make these decisions.
- To find out what might be the main determinants of health-seeking behaviour in this population.
- To find out which aspects of health-seeking behaviour models would be appropriate for developing a framework of health-seeking behaviour in this population.

1.4.2 Objectives

The objectives of the study are:

- To collect data on socio-demographic characteristics of the caregiver, illness characteristics, child characteristics and perceived characteristics of public, private and traditional providers.
- To find out why the caregiver has chosen the provider on the day of interview.
- To find out who influences decisions on health-seeking behaviour within the caregiver's household.
- To find out what proportion of caregivers use traditional medicine for a) their child and b) themselves.
- To find out the reasons for use / non-use of traditional medicine.
- To find out what traditional medicine the caregiver has given to her child in the past and the reasons for its use.
- To find out which Dutch medicines are usually used and reasons for their use.

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- To find out about caregivers' beliefs regarding faith-healing.
 - To find out how caregivers normally manage 10 common childhood illnesses.
 - To find out how caregivers had managed the current illness so far.
 - To find out caregivers' recommendations for improving the health service.

Chapter 2 presents a literature review of models of health-seeking behaviour including barriers to health care utilisation. Chapter 3 provides the methodological framework for the study and this is followed by the qualitative and quantitative results in Chapters 4 and 5. Chapter 6 synthesises the findings from the literature review with results from this study and Chapter 7 discusses the limitations, provides a critique of the study methods and instruments used, gives an outline of possible future research and policy implications and a conclusion.

2. Literature Review

The background to the study will be presented in 2 sections. Section 2.1 provides an overview of the literature pertaining to models which look at the determinants of health-seeking behaviour (e.g. Andersen's Behavioural Model), models which look at stages in illness behaviour (e.g. Suchman's sociological model of health behaviour, Fabrega's framework for understanding illness behaviour, Igun's model of illness behaviour), as well as the models which focus on health beliefs (the Cognition and Social Cognition models). It is necessary to have an idea of what these models entail in order to develop a model specific to the context of health-seeking in urban South Africa. Section 2.2 looks more in-depth at the various barriers and known predictors of health-seeking behaviour. Due to the lack of data on health-seeking behaviour in urban South Africa, it is necessary to look at what studies have found further afield, as well as in South Africa.

2.1 Theoretical focus: Models of health-seeking behaviour

There are a large number of models of health-seeking behaviour or what Schwartz (1969) labelled 'hierarchies of resort', which propose to explain why an individual chooses to use or not use different kinds of health 'services'. These models may either be used for looking at stages in health-seeking behaviour or predictors of health-seeking behaviour. Traditionally the types of explanatory variables depended on the methodology (quantitative or qualitative) and the approach: anthropological, medical, sociological, psychological or economic. For example, *Demographic* models included such variables as age, sex, marital status and family size; *Social Structural* models included variables such as education, occupation and ethnicity; *Social Psychological* or *Cognition* models tended to look at perceived susceptibility to an illness, perceived severity, expected benefit of action as well as the cues which trigger the action taken; *Family Resource* models typically looked at household income, medical aid coverage and having a regular source of health care; *Community Resource models* looked at access to and availability of health services, including characteristics of the health services as well as the community (rural / urban / suburban) and *Organisational* models included characteristics of the health care provider (delivery and nature of service, location) (Wolinsky, 1980).

Recognising that these different types of models are not mutually exclusive (Kroeger, 1983), nowadays a combination of approaches is usually used and no one theory dominates (Glanz, Rimer & Lewis, 1997). It has been suggested that models which suit a particular type of behaviour may be more useful than those which apply to a range of behaviours (Ogden, 2004). Two of the most influential conceptual frameworks have been Andersen's Behavioural Model (Andersen, 1968; Andersen & Newman, 1973; Aday & Andersen, 1974; Andersen, Kravits, & Andersen, 1975) for looking at access and barriers to health services and the Health Belief Model (Hochbaum, 1958, Rosenstock, 1960, 1966; Becker, 1974; Becker, Nathanson, Drachman, & Kirscht, 1977b;

Kirscht, 1974) which focuses on just one of the predisposing aspects to seeking health care which is found in Andersen's model (Kasper, 2000).

Two decades ago, Becker and Maiman (1983) reported the following original models of health behaviour to be the most frequently cited and to have the best predictive ability: Andersen (1968); Anderson and Bartkus (1973); Antonovsky and Kats (1970); Fabrega (1973, 1974); Green (1975); Hochbaum (1958); Kasl and Cobb (1966a, 1966b); Kosa and Robertson (1975); Langlie (1977); Mechanic (1968); Rosenstock (1966) and Suchman (1965a, 1965b, 1966). Although these models differ in their theoretical framework, the type of health behaviour to be explained, and how some variables are operationalised, there is considerable overlap (Becker & Maiman, 1983; Cummings, Becker & Maile, 1980). In terms of health behaviour and behaviour change (as opposed to illness behaviour), Glanz and colleagues (1997) reviewed 1,174 articles and found over 66 different theories and models, of which 21 were mentioned 8 or more times. These included the Health Belief Model, Social Cognitive Theory, Self-efficacy and the Theory of Reasoned Action / Theory of Planned Behaviour. The Health Belief Model (Becker, 1974; Janz & Becker, 1984), Social Cognitive Learning Theory (Bandura, 1986) and the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein, 1980; Fishbein & Ajzen, 1975) are usually the 3 main theories on which models of behaviour change are based (Yoder, 1997). Considerable overlap is also found between these models in the constructs that they measure (Kirscht, 1982; Armitage & Conner, 2000; Gebhardt & Maes, 2001, as cited in Conner & Norman, 2005). The following subsections provide a summary of the most prominent models (in terms of predictability and citation), as well as more recent approaches in Section 2.1.8.

2.1.1 Predicting health-seeking behaviour

2.1.1.1 Andersen's Behavioural Model

Andersen's (1968) original Behavioural Model (BM) and expanded versions (Andersen & Newman, 1973; Aday & Andersen, 1974; Andersen *et al.*, 1975) have been used as a basis internationally to predict and explain the utilisation of health services (Wan & Soifer, 1974; Stock, 1987; Thind & Andersen, 2002; Thind, 2005; Fosu, 1989, 1992, 1994; Keith & Wickrama, 1990; Kempen & Suurmeijer, 1991; Subedi, 1989; Glik, Ward, Gordon, & Haba, 1989), through the use of 'predisposing', 'enabling' and 'need' factors (v. Table 2.1).

Predisposing factors include family and social characteristics which may affect an individual's propensity to use a particular type of health service. Demographic characteristics for example include age, sex and marital status; social structure characteristics include ethnicity, education and occupation of the head of the household and other predisposing factors include beliefs about illnesses and the efficacy of medicines, as well as attitudes towards different health care providers. Enabling factors are those which permit the use of and make health services available. These include personal factors such as family resources and having a regular source of care and service and community-related factors such as the availability of a health service, their staff, medicines,

waiting times and travel times. Need factors include the patient's subjective perceptions of the illness (e.g. severity, days of disability, number of symptoms experienced), the physician's evaluation of the illness, as well as how the patient reacts to the illness (e.g. whether a doctor is seen for all the symptoms or some of the symptoms or not seen).

In Andersen's (1968) nationally representative sample of 2,367 families in the USA, the model explained 43% of the variance in health behaviour, with 'need' (measured by reported disability days) accounting for the greatest proportion (20%) of variance. 'Need' factors explained most of the variation in families' health services use (Andersen *et al.*, 1975; Aday & Andersen, 1974), although Andersen (1995) states that perceived need is itself a consequence of social structure and health beliefs. In an equitable society, need also asserts itself as a stronger determinant of health service use than predisposing or enabling factors.

As with other health behaviour models, criticisms of the Behavioural Model have focused on the measurement validity of its constructs and failure to account for interaction between certain variables (Mechanic, 1979; Rundall, 1981; Tanner, Cockerham & Spaeth, 1983; Wolinsky, 1978). In the past the BM has also been criticised for being too broad to be able to capture the complexity and dynamic nature of health-seeking behaviour, having neglected such factors as social networks, culture, health beliefs and organisational factors (Pescolido, 1991; Rogers, Hassell, & Nicolaas, 1999). Newer versions of the BM however have attempted to incorporate these factors, including feedback loops to explain the dynamic nature of health service use as a function of consumer satisfaction with the service provided and health outcomes (Andersen, 1995). A systems approach redefined access in terms of process components (affecting access into the system and subsequent consumer satisfaction) and outcome components measured through utilisation levels, including types of service utilisation (patient-initiated or discretionary; physician-initiated or non-discretionary) and purposes of visits and consumer satisfaction (e.g. with quality of care, cost, convenience and courtesy of staff) (Andersen & Newman, 1973; Aday & Andersen, 1974, 1981; Becker & Maiman, 1983; Dutton, 1986). The process components were also defined in terms of how easily they could be modified by health policy (Aday & Andersen, 1974). 'Mutable' indicators include manpower, transport, knowledge of illnesses, income and health beliefs. Indicators which cannot be modified by health policy such as demographic and social structure variables are also important however, as they provide information on whom policies should be targeted at.

2.1.2 Stages in health-seeking behaviour

2.1.2.1 Suchman

Suchman's (1965a, 1965b, 1966) sociological model of health behaviour linked health behaviours with social relationships and group structures. Suchman divides the model into 'content' factors of illness behaviour and the 'medical sequence' (v. Table 2.1). The content aspect of the model describes behaviour and outcomes, e.g. using different health care providers (doctor shopping), using different providers at the same source (fragmentation of care), delay in seeking care after

recognising symptoms (procrastination), self-medication and interruptions in treatment or the health care process (discontinuity) (Becker & Maiman, 1983). During the sequence of medical events, the patient experiences the symptoms (physical experience) which are then interpreted and defined according to how much they interfere with social functioning. Outcomes at this stage may depend on the emotional responses (fear or anxiety) expressed as a result of the illness and whether the patient assumes the sick role or denies that the illness exists. Patients may also initiate therapies themselves or receive advice from friends or family during the assumption of sick role stage. In the medical care contact stage, the patient seeks advice from a physician, although diagnosis and treatment may not necessarily be accepted due to the poor quality of doctor-patient communication, as well as physical, social, psychological, financial or administrative barriers (Becker & Maiman, 1983). The final stage is the recovery stage if the patient is healthy, or the rehabilitation stage if the patient is chronically ill.

Suchman (1965a) further developed indices of social structure and medical orientation which were related to health behaviour. An individual's social structure is determined by the level of social cohesion of the community ('ethnic exclusivity'), friends ('friendship solidarity') and the family ('orientation to family tradition and authority') (Becker & Maiman, 1983:p.541). These 3 dimensions were then combined into an index of cosmopolitan-parochial social structure in which high levels of ethnic exclusivity, friendship solidarity and orientation to family tradition and authority defined a parochial structure whilst low levels defined a cosmopolitan structure. Based on an individual's cognitive (knowledge about disease), affective (their scepticism of medical care) and behavioural (dependency in illness) characteristics, their health orientation may range from scientific to popular (e.g. low knowledge, high scepticism and high dependency in illness would define a popular health orientation). Thus a parochial social group affiliation combined with a popular health orientation would be less likely to recognise symptoms and more likely to underestimate the severity of symptoms and therefore delay in seeking treatment (Suchman, 1965a, 1966). They would also be more likely to discuss symptoms with family and friends and seek confirmation, self-medicate and use a physician whom their social support networks approve of. They may be more sceptical of the diagnosis, seek care elsewhere and fail to adhere to the treatment prescribed. Suchman's New York study (1965a, 1966) confirmed these results and found that at the stage where symptoms are experienced health orientation was most important, whilst in the other stages both health orientation and social structure were important for explaining different responses to illness. Other studies have yielded inconsistent results however (Reeder & Berkanovic, 1973; Geertsens, Klauber, Rindflesh, Kane & Gray, 1975; Farge, 1978) and Becker and Maiman (1983) explain that this may in part be due to health orientations being a reflection of specific beliefs independent of the structure of the group. This model is also limited to settings where there is a single health care system and therefore is unable to examine how patients choose and move between alternative sources of care (Ilgun, 1979).

2.1.2.2 Fabrega

Fabrega's (1973, 1974) framework for understanding illness behaviour takes an anthropological approach by looking at how social and cultural factors influence illness evaluations and treatment decisions. Nine stages of behaviour are recognised so long as the illness is seen as 'undesirable', is a 'discrete occurrence' and decisions are 'based on rational evaluations of optimal treatment actions' (v. Table 2.1) (Becker & Maiman, 1983:p.546). In the first 2 stages the symptoms are recognised, evaluated and labelled through internal cues (e.g. memory of previous occurrence) and external cues (e.g. advice from friends or family). Different treatment options are then considered, assessed for how well they are likely to help, the benefits of the treatment are weighed up, the costs of the treatment (personal and economic) are weighed up then the benefits are weighed up against the costs. This then leads the patient to choose a treatment option and the final outcome of the treatment is stored in memory to use in future assessments. Due to difficulties in operationalising the variables in the 9 stages, it is proposed that the model be used "as a rubric for empirical studies which would yield an 'estimate' of key variables." (Becker & Maiman, 1983:p.546). Igun (1979:p.446) also described the model as "unnecessarily mathematical" and thought that the role of family and close friends was not adequately addressed given that the socio-cultural context and the social meaning of illness were not paid enough attention. Unlike Suchman's model however, Fabrega did provide a basis for looking at how patients choose and move between alternative sources of care (Igun, 1979).

2.1.2.3 Igun

Because of the limitations of previous stages in health-seeking models in explaining health-seeking in pluralistic health settings such as Africa, Igun developed an 11 stage model based on ethnographic field experience in Nigeria (v. Table 2.1). These 11 stages vary in duration and some may be simultaneous. They are also not necessarily present in every illness occurrence. In the symptoms-experience stage there is the physical experience of the illness such as pain, weakness or a change in appearance. This is linked to the cue process which may be simultaneous or occur gradually with illness onset. How the person interprets these symptomatic events is referred to as the cognitive aspect. Accompanying the physical experience, the cue process and the cognitive aspect is the emotional response (e.g. fear or anxiety). The person may then move on to the self-treatment stage if he is able to label the illness stage and if it is not serious, otherwise he will move on to the stage of communication to significant others. The assessment of symptoms stage determines whether the person is sick or not and a preliminary diagnosis may be made. When the person is socially recognised as being ill, the assumption of the sick-role stage occurs and the person may be exempt from performing certain roles (e.g. work). Once the illness is socially recognised, the expression of concern stage by kin, close friends and neighbours may include an expressive aspect (e.g. give sympathy or moral encouragement) and an instrumental aspect (e.g. offer diagnosis or recommend treatment). The assessment of probable efficacy of or appropriateness of sources of treatment stage may then occur simultaneously or consecutively and this leads to the selection of treatment plan stage. The patient and his family will weigh up the costs and benefits of a treatment plan (e.g. government hospital versus mission hospital; traditional

healer versus lay herbal recipe). The treatment stage involves following through with the selection stage (e.g. attending a facility, consulting the owner of a medicine store or a traditional healer or making a ritual sacrifice). If this stage does not lead to death then the assessment of effects of treatment on symptoms stage will occur, often simultaneously whilst treatment is given. Whether the treatment is having the desired effects or not is not always interpreted the same by the professional and the lay sector. The patient may then either move into the stage of recovery and rehabilitation or they may return to the stage where symptoms are assessed. The patient may then move from one health care paradigm to another based on these reassessments.

Table 2.1: Major components of 4 health behaviour models

Predicting health-seeking		Stages in health-seeking		
Andersen		Suchman	Fabrega	Igun
Predisposing	Family characteristics	Doctor shopping	Illness recognition & labelling (internal cues; external cues)	Symptoms experience (physical experience; cue process; cognitive aspect; emotional response)
	Social structure	Fragmentation of care	Illness evaluation (present situation versus past experiences)	Self treatment
	Health beliefs and attitudes about medical care, physicians & disease	Procrastination	Treatment plans are considered	Communication to significant others
Enabling	Family resources	Self-medication	Assessment of treatment plans	Assessment of symptoms
	Community resources	Discontinuity	Assessment of treatment plans	Assumption of sick role
Need	Subjective perceptions of illness	Symptom experience	Computation of treatment benefits	Expression of concern (my family and friends)
	Clinical evaluation of illness	Assumption of sick role	Computation of disvalues of illness	Assessment of probable efficacy of or appropriateness of sources of treatment
Access	Health policy	Medical care contact	Net benefits (Treatment benefits minus treatment costs)	Selection of treatment
	Outcome components (consumer satisfaction & utilisation levels)	Dependent-patient role	Selection of treatment plan	Treatment
		Recovery or rehabilitation	Evaluation of treatment	Assessment of effects of treatment on symptoms
				Recovery and rehabilitation

2.1.3 Health belief models

According to Ogden (2004), most of the research into health behaviours has emphasised the role of beliefs in predicting behaviour. Beliefs may be framed by upbringing (including culture, religion and ethnicity) education, previous outcomes and knowledge. In Guatemala, families with 'modern' health beliefs about the cause of illness (i.e. hygiene practices relating to diarrhoea) were more likely to see a health care provider than those who did not have these beliefs (Goldman & Heuveline, 2000). Furthermore, the perceived cause of an illness is one of the main determinants in deciding between traditional and allopathic treatment (Chavunduka, 1978; Stock, 1987; Colson, 1971; Goldman & Heuveline, 2000). Nyamongo (2002:p.382) explains that "notions about an illness may change over time and gradually the patient may assign a new cause to an illness... Assigning new causes usually also signals a shift in treatment." One determinant of treatment type is therefore the perceived aetiology of a disorder (Chalmers, 1990; Janzen, 1978; Warren, 1978; Heap & Ramphela, 1991, Gumedde, 1990; Adetunji, 1991). In Guatemala, families who believe that ARI or diarrhoea is caused by infection may be more likely to seek help from a biomedical provider, whilst those with folk beliefs (e.g. the evil eye, *empacho* or *susto*) about the cause of illnesses are more likely to take their child to a curer (Goldman & Heuveline, 2000). In Nigeria, according to traditional Hausa beliefs 2 types of tuberculosis exist – *tibi* which can only be treated at hospitals and *fuka* which is treatable with herbal remedies from healers (Stock, 1987). According to Goldman and colleagues (2002), biomedical and non-biomedical beliefs are not always mutually exclusive however. In Guatemala, diarrhoea for example could be caused by either germs or be a folk illness (Goldman *et al.* 2002).

Religion plays a large role in health beliefs and in the U.S.A., DeVellis, DeVellis and Spilsbury (1988) found that across 6 different religions, the stronger parents' beliefs in divine influence, the more likely they were to report that they would seek spiritual help if their child was not well and that recovery from the sickness was attributable to divine intervention. They were also more likely to seek help from doctors, friends and relatives. Religion and spirituality have been found to help families in the Midwest U.S.A. cope when their child had been hospitalised (Kloosterhouse & Ames, 2002). In the African context, Fosu (1994) found that religion had a significant effect on the use versus non-use of services in Ghana and Zimbabwe. Christian mothers in Ghana were 1.5 times more likely to have taken their child to a health care facility than non-Christian mothers. In Zimbabwe, non-Christian mothers were 1.3 times less likely to have taken their child for a medical visit than Christian mothers. The analysis was unable to offer any explanation why however. In Kenya being a Christian was strongly associated with a caregiver treating child coughs with injections (provider not known) whilst in Uganda Christian caregivers were less likely to have used injections for their child (Fosu, 1992). Fosu (1992) explains this opposite trend as a result of the persecutions Christians had previously faced in Uganda. In rural Sierra Leone, Gesler and Gage (1987) found that Christian caregivers held more modern health beliefs about the causation of illness than Muslim caregivers. In an urban study in Durban, South Africa, only 3.3% of traditional healers' patients interviewed did not belong to any religion whilst the rest were

Christian (Mander, 1998). The largest proportions belonged to the Zion Church (26.7%), the Roman Catholic Church (16.7%), the Methodist Church (14.4%), and the Nazareth Church (10%). Before discussing cognitive models of health behaviour it is therefore necessary to give a brief summary of lay theories about health and illness because these form such an important component of cognitive models.

2.1.3.1 Attribution Theory and Health Locus of Control

Belief in divine intervention is related to external locus of control (DeVellis, DeVellis, Revicki, Lurie, Runyan, & Bristol, 1985) from Attribution Theory. Attribution Theory attempts to understand causality about health and illness and Kelley (1967, 1971) defines attribution according to 4 criteria, namely distinctiveness (beliefs are specific to the individual), consensus (others share the same view), consistency over time and consistency over modality or situation. Whether these 4 criteria are low or high determine whether the cause is internal (caused by the individual) or environmental or situational external factors (Ogden, 2004). These attributions may then be related to subsequent behaviours based on whether the individual has control over the behaviour or illness or not (locus of control) (Ogden, 2004). An individual may therefore regard events as controllable by themselves (internal locus of control) or uncontrollable (external locus of control in the hands of fate or others) (e.g. Wallston & Wallston, 1982, as cited in Ogden, 2004). This theory has mostly been used in relation to behaviour change and how likely individuals are to comply with a doctor's advice (Ogden, 2004).

2.1.3.2 Cognition and Social Cognition models

Cognition models such as the Health Belief Model (HBM) and Protection Motivation Theory (PMT) have their roots in subjective expected utility theory (Edwards, 1954) which describes behaviour as a process in which the costs and benefits of a particular action or behaviour are weighed up rationally (Ogden, 2004). Whereas Cognition models fail to take into account "the context both of other people and the broader social world" (Ogden, 2004:p.31), Social Cognition models such as the Theory of Reasoned Action (TRA), the Theory of Planned Behaviour (TPB) and the Health Action Process Approach (HAPA) do attempt to include these factors or 'normative beliefs' (what others think about the behaviour).

Social Cognition Theory has its roots in what Miller and Dollard (1941, as cited in Baranowski, Perry & Parcel, 1997) called Social Learning Theory. Bandura (1977, 1986) was the first to develop Social Cognition Theory which included *expectancies*: 'situation outcome expectancies' (e.g. results from negative health behaviours), 'outcome expectations' (i.e. results of a health behaviour) and 'self-efficacy expectancies' (i.e. confidence in the ability to carry out a behaviour); *incentives* (e.g. the benefits of a negative or a positive health behaviour) and *social cognitions* (e.g. normative beliefs). Other constructs identified by Bandura (1977, 1986, as cited in Baranowski, *et al.*, 1997) include the social environment, the physical environment, the situation and observational learning. One of the most proximal predictors of behaviour emphasised by this theory is self-efficacy which has been incorporated into most health behaviour models including Protection

Motivation Theory (Maddux & Rogers, 1983), the Health Belief Model (Becker & Rosenstock, 1987) and the Theory of Planned Behaviour (Ajzen, 1991) (Luszczynska & Schwarzer, 2005).

Cognition and Social Cognition models have been mostly used to predict health behaviours such as screening, exercise, adherence to medication, exercise, weight control, sexual risk behaviours, smoking and eating in developed country settings (Ogden, 2004; Luszczynska & Schwarzer, 2005). Table 2.2 provides a summary of the afore-mentioned predictors used in the Cognition models and the Social Cognition Models. Although there is considerable overlap between these models, how constructs are operationalised may vary (Montaño, Kasprzyk & Taplin, 1997) (e.g. health motivation in the HBM is constructed as factors which determine will in the HAPA model (action plans and control); costs, barriers and benefits in the HBM may be operationalised as response effectiveness (how effective a behaviour would be) in the PMT model).

Table 2.2: Summary of predictors of Cognition and Social Cognition models*

Predictors	Cognition models		Social Cognition models		
	Health Belief Model	Protection Motivation Theory	Theory of Reasoned Action	Theory of Planned Behaviour	Health Action Process Approach
Demographic	✓				
Susceptibility	✓	✓			✓ (threat appraisal)
Severity	✓	✓			✓ (threat appraisal)
Costs / barriers	✓	✓ (response effectiveness)		✓ (external control factors)	✓ (situative barriers)
Benefits	✓	✓ (response effectiveness)		✓ (external control factors)	
Cues to action	✓	✓ (Source of information)		✓ (internal control factor)	
Health motivation	✓				✓ (action plans / action control)
Perceived control	✓ (self-efficacy)	✓ (self-efficacy)		✓ (internal control factor)	✓ (self-efficacy)
Internal control factors				✓ (skills / ability / information)	
Fear	✓ (cue to action)	✓		✓ (belief about outcome)	
Evaluations of outcomes			✓	✓	
Beliefs about outcomes			✓ (attitude towards behaviour)	✓ (attitude towards behaviour)	✓ (outcome expectancies)
Beliefs about important others attitude to behaviour			✓ (subjective norm)	✓ (subjective norm)	✓ (social outcome expectancies)
Motivation to comply with important others			✓ (subjective norm)	✓ (subjective norm)	✓ (social outcome expectancies)
Social support					✓

* Predictors taken from Ogden, 2004; Montaño *et al.*, 1997; Conner & Norman, 2005

Some of the major theorists of health behaviour (Fishbein, Triandis, Kanfer, Becker, Middlestadt, & Eichler, 2001, as cited in Conner & Norman, 2005) together identified 8 variables which should account for the majority of variance in any health behaviour. Influencing behaviour included (i) strong intention, (ii) the necessary skills and (iii) an absence of environmental constraints. Influencing strong intention were (iv) the advantages / benefits outweighing the perceived disadvantages / costs, (v) the amount of social (normative) pressure, (vi) self-image, (vii) anticipating a positive or negative reaction to the behaviour and (viii) the level of self-efficacy. Although this model attempts to integrate aspects of the Cognition and Social Cognition models, it has been criticised for omitting key variables from the original models, i.e. perceived severity and susceptibility as found in the HBM and PMT and including constructs not found in the original models i.e. self-identity / self-image which explained little additional variance when included in the TPB (Conner & Armitage, 1998, as cited in Conner & Norman, 2005). The nature of the relationship between these constructs is yet to be agreed upon (Fishbein *et al.*, 2001) and empirical tests are yet to be carried out (Conner & Norman, 2005).

2.1.4 Cognition models

2.1.4.1 The Health Belief Model

The Health Belief Model (HBM) has been used to predict a variety of health behaviours including preventive behaviour, sick role behaviour and clinic use, mostly in developed country settings (Abraham & Sheeran, 2005; Ogden, 1994). It was first developed in the 1950s and 1960s (Hochbaum, 1958, Rosenstock, 1960, 1966, 1974) and then developed further in the 1970s and 1980s by Becker and other colleagues (Becker, 1974; Becker *et al.* 1977b; Kirscht, 1974) to predict preventive health behaviour through attendance at screening programmes and compliance with treatment. The HBM is based on Cognitive Theory from the early 1930s (Tolman, 1932; Lewin, 1935, 1936, as cited in Strecher & Rosenstock, 1997) which emphasised *value expectancies*, in which “behaviour is a function of the subjective value of an outcome and of the subjective probability, or expectation, that a particular action will achieve that outcome.” (Strecher & Rosenstock, 1997:p.42).

The HBM focuses on a set of ‘core beliefs’ - perceived susceptibility and severity (sometimes grouped as perceived threat), benefits, barriers and ‘cues to action’ (v. Figure 2.1) (Strecher & Rosenstock, 1997; Ogden, 1994; Becker *et al.*, 1977b; Kirscht, 1974; Mugisha, Bocar, Dong, Chepng'eno, & Sauerborn, 2004). Cues to action may be internal (i.e. worrying) or external (i.e. a poster or doctor's leaflet). The HBM also takes into account socio-demographic variables which may indirectly affect the set of ‘core beliefs’ (Strecher & Rosenstock, 1997; Becker & Maiman, 1983). The concept of ‘self-efficacy’ or belief in one's ability to carry out a behaviour (Bandura, 1977) and health motivation (how concerned an individual is about health matters) (Becker, Haefner & Maiman, 1977a) were later added to the HBM.

If people *believe* they are susceptible to a condition, *believe* that it may have a serious outcome, *believe* that a particular course of action will prevent, reduce or ameliorate the perceived susceptibility or severity and *believe* that the perceived benefits outweigh the perceived barriers, they will take action whether it be preventative or curative (Janz, Champion, & Strecher, 2002). Further inclusions in the core beliefs include motivation to maintain or improve health and the perceived control (i.e. confidence) in carrying out the health behaviour (Becker & Rosenstock, 1987; Ogden, 1994).

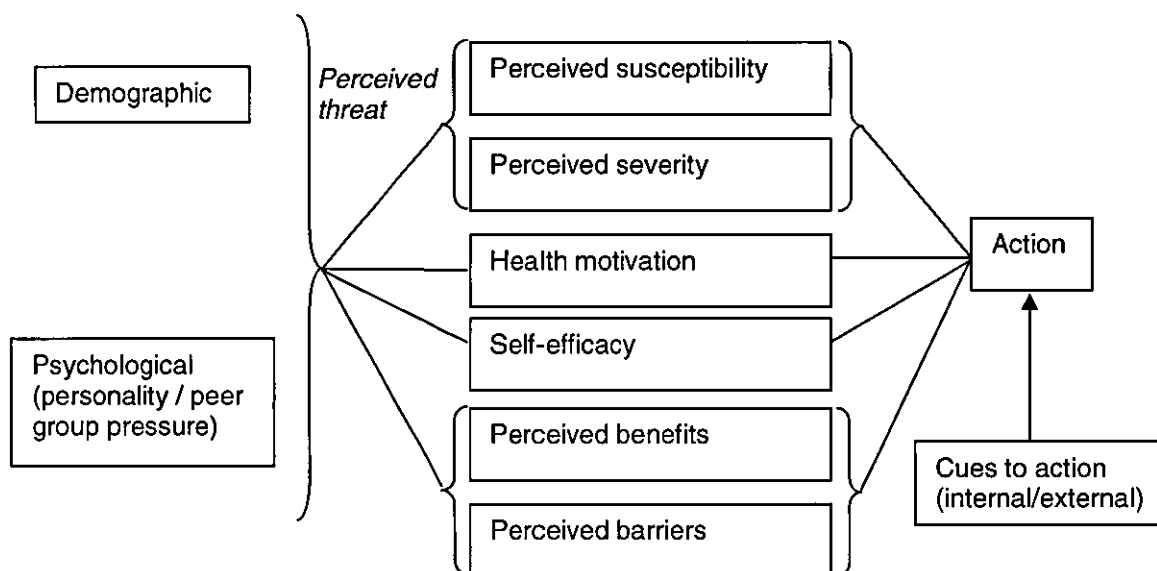


Figure 2.1: The Health Belief Model (Becker *et al.*, 1977a)

In the earliest study, Hochbaum (1958) demonstrated that the likelihood of attending for free tuberculosis screening at mobile X-ray units in the United States was strongly associated with perceived susceptibility and perceived benefits. Several behaviours have been found to be associated with perceived susceptibility, severity and benefits versus barriers including having vaccinations, practising safe sex, dietary compliance, regular dental visits and regular exercise (Becker, 1974; Becker *et al.*, 1977b; Becker & Rosenstock, 1984 as cited in Ogden, 2004). Individual components of the model such as perceived barriers (Norman & Fitter, 1989; Lashley, 1987; Wyper, 1990) and perceived susceptibility (Wyper, 1990) have also been able to predict healthy behaviour such as health screening and self-breast examination. External cues have themselves been used to promote healthy behaviour such as smoking cessation and driving safely (Sutton, 1982; Sutton & Hallett, 1989).

In an evaluation of the use of 46 studies using the HBM, Janz and Becker (1984) found that 'perceived barriers' was the most powerful predictor overall, 'perceived susceptibility' was more important for preventive behaviour than sick-role behaviour, and 'perceived benefits' and 'perceived severity' more important for sick-role behaviour than preventive behaviour. Overall, 'perceived severity' was the weakest predictor. When the type of behaviour (preventive, sick, clinic use) was taken into account however, severity was the second most frequent predictor after barriers.

One major methodological issue with the HBM (and with other models) has been the lack of consistency in the measurement of the concepts involved and the failure to test for validity and reliability before the model is tested (Strecher & Rosenstock, 1997; Rosenstock, Strecher & Becker, 1994; Abraham & Sheeran, 2005). Out of 234 published empirical tests of the HBM for example, Harrison, Mullen & Green (1992) found only 16 studies which had measured all 4 major components of the HBM and checked for reliability and validity. Further criticisms include the fact that the HBM "is limited to accounting for as much of the variance in individuals' health-related behaviours as can be explained by their attitudes and beliefs" (Janz & Becker, 1984:p.44) and these are not always measured in the same way across surveys, thus making them difficult to compare. Several studies have therefore reported conflicting results with low perceived severity (Janz & Becker, 1984), low susceptibility (Becker, Kaback, Rosenstock & Ruth, 1975; Langlie, 1977) and barriers to action (Hill, Gardner, & Rassaby, 1985) associated with healthy behaviour. The HBM has also been criticised for not including emotional factors (Ogden, 2004). Other non-psychological factors, such as socio-economic status and past experience are known to have a strong influence on health-seeking behaviour and these are sidelined in the HBM (Kasper, 2000; Ogden, 2004). Studies which have looked at the effect of SES on health beliefs have found conflicting results. Cummings, Jette and Brock (1979) for example found no relationship although both were significantly related to inoculation behaviour whilst perceived susceptibility and barriers were found to modify the effect of social class on cervical screening (Orbell, Crombie & Johnston, 1995 as cited in Abraham & Sheeran, 2005). It is also not known how the core beliefs of the HBM are inter-related (Abraham & Sheeran, 2005) and it could be argued that not all benefits and barriers of healthy behaviour (Ogden cites the example of tooth-brushing) are processed consciously (Ogden, 2004), particularly those which are habitual (Janz & Becker, 1984). Although some of the components of the HBM are still not well understood and some have low predictive value, Rimer (1997) suggests that by using it in conjunction with other theoretical models these features will improve. This was demonstrated in King's (1982) combination of 8 constructs from attribution theory, the HBM and the TRA to predict 82% of respondents as either attenders or non-attenders for hypertension screening.

In terms of the use of the HBM to look at caregivers' health-seeking behaviour on behalf of their children in both developed and developing country settings, limited data were found. The majority of studies related to compliance with medical regimens and advice. Tuma, Smith, Kirk, Hagmann and Zemel (2002) used a framework based on the HBM to look at caregiver compliance with childhood immunisation schedules in Cameroon. Lower perceived susceptibility, lower perceived severity and increased self-efficacy from the HBM were associated with increased probability that their child's immunisation schedule would be up-to-date. The inverse relationship between perceived susceptibility, perceived severity and immunisation compliance are in contrast to what other studies (for example Becker, Drachman & Kirscht, 1974; Houtrouw, & Carlson, 1993 as cited in Tuma *et al.*, 2002) have found however. No data were available from the present study to be able to explain this relationship. As well as the HBM constructs, a mother's higher level of education and living in an urban area were also associated with increased probability that their

child's immunisation schedule would be up-to-date. In Nepal, Matsuda (2002) tested 4 components of the HBM (perceived benefits, perceived barriers, perceived severity and perceived susceptibility) and found that only perceived benefits was associated with immunisation use. Open-ended questions were able to support mothers' perceptions of the benefits of having their child immunised. Similar to the Houtrouw and Carlson (1993) study, higher education and urban residence were also associated with increased immunisation rates. In a study amongst Black mothers attending a well-baby clinic in the U.S.A., Kviz, Dawkins, and Ervin (1985) found that mothers' health beliefs, notably perceived efficacy of immunisations and perceived benefits of the well-baby services, accounted for 30% of the variance in the number of immunisations a child had received. Becker *et al.* (1977a) found that amongst obese children, maternal perception of vulnerability was predictive of appointment keeping, preparing a prescribed diet and weight change. In a study using a modified version of the HBM to look at how well mothers followed advice on giving medication or keeping doctor appointments for their child, Becker and colleagues (1974) found that the mothers' beliefs about the severity of the illness, the susceptibility of the child to future bouts of the same illness or the efficacy of the medicine were the main predictors of engaging in the recommended behaviours. In a more recent study, Steele, Anderson, Rindel, Dreyer, Perrin, Christensen, Tyc, and Flynn (2001) used two components of the HBM which have been strongly associated with adherence to treatment regimens (perceived vulnerability and barriers) to look at adherence to antiretroviral therapy amongst HIV-positive children, the majority of whom had low-income African American parents. Children on treatment were perceived as being at moderate risk of negative outcomes and caregivers perceived few barriers to adherence. Contrary to the authors' expectations, no significant relationship was found between paediatric medical adherence and perceived vulnerability and barriers. This may however be due to measurement issues of adherence (a discrepancy was found between 3 measures) and social desirability bias as well as a small sample size (30). Furthermore, the measurement of perceived vulnerability may not have been sensitive enough given that at least one of the parents would also have HIV and their threshold of perceived vulnerability may be higher. Other factors from the HBM (e.g. perceived severity of the illness, self-efficacy and perceived benefits) may have been more important for paediatric medical adherence in this population but were not considered. In a similar low-income African American population, Elliott, Morgan, Day, Mollerup, and Wang (2001) similarly found no association between parental perceptions of vulnerability and medical compliance amongst children with Sickle Cell Disease. The HBM accounted for 30% of the variance in compliance. Although mothers believed that infections were a serious threat to their children and that penicillin was beneficial in preventing infections, the only HBM item which remained significant after regression analyses was the burden of compliance (remembering to administer the medication and obtain refills). More important than the HBM constructs were the number of hospitalizations the child had had, as well as socio-demographic variables (e.g. families with fewer children, more than one adult and those with a car). When examining the perceptions of mothers and children regarding asthma medication use, De Paola, Roberts, Blaiss, Frick and McNeal (1997) found modest although consistent support for 2 components of the Health Belief Model. Costs or drawbacks (physical, psychological and financial) and benefits of medication (feasibility

and effectiveness) accounted for 20% of the variance seen and the corresponding parent and child perceptions were significantly related. Perceived severity of the asthma also emerged as a significant factor for children's and mothers' perceptions. The authors considered susceptibility in terms of 'susceptibility to asthma' and found no association as the children had had asthma for 7 years on average. The perceived severity of the asthma influenced the mothers' and children's perceptions of asthma medication, with higher perceived severity associated with more perceived benefits as well as drawbacks. In an older study, Becker, Radius, Rosenstock, Drachman, Schuberth and Teets (1978) found a significant association between adherence to asthma medication and most of the main HBM components (concern about the child's health, perceived vulnerability of the child to illness and asthma, the perceived severity of the asthma, barriers, as well as benefits of its use. Of particular importance to mothers of children with asthma (the majority of whom were low-income African American) were the perceived vulnerability of the child and the severity of the illness, as well as problems associated with the administering the medication (e.g. disturbing social functioning). Outside of the HBM, the mother's marital status and her level of education were also significant predictors of compliance. Because families from different socioeconomic backgrounds are different in terms of the perceived behavioural control that they have over their child's health and subsequent health behaviours, Roden (2004) modified the HBM to include 'perceived behavioral control' (representing health locus of control) and 'behavioral intention' from the Theory of Planned Behaviour so that it reflected a health promotion stance for young families with preschool children in Australia. A study which did not focus on children and their caregivers in particular, but on 'inappropriate attenders' seen at accident and emergency (A&E) services in England, used the HBM to examine reasons why people attend accident and emergency, as well as reasons for delayed or rushed attendance (Walsh, 1995). The HBM was found to be an appropriate framework for looking at emergency attendances, with many patients undertaking a cost-benefit analysis. A&E services were perceived as better than the GP because they were quicker, had better medicine, were more convenient and some felt that the GP would have sent them to A&E anyway. A&E services were also used by patients who had no GP. Significant others were also found to influence patients' use of A&E services.

2.1.4.2 Protection Motivation Theory

One of the reasons why Rogers (1975, 1983, 1985) developed Protection Motivation Theory was to understand the impact of fear on an individual's behaviour (Norman, Boer & Seydel, 2005). The main constructs include perceived severity and susceptibility, response effectiveness (how effective a behaviour would be), self-efficacy and fear (Ogden, 2004). The components of the model are divided into *threat appraisal* (severity, susceptibility and fear) and *coping appraisal* (response effectiveness and self-efficacy) and information which shapes these responses may be *environmental*, including verbal persuasion and learning through observation, or it may be *intrapersonal*, such as a prior experience (v. Figure 2.2) (Ogden, 2004). PMT has been used to predict health behaviours (promoting and compromising), sexual behaviour and medical adherence (Norman *et al.*, 2005). In a meta-analysis of 65 studies using PMT components, Floyd, Prentice-Dunn & Rogers (2000) found that coping appraisal variables and in particular self-efficacy

had the largest effect size when looking at intention (protection motivation) and behaviour. Milne, Sheeran & Orbell's (2000) meta-analysis also found that self-efficacy had the strongest predictions. When considering the type of behaviour, coping appraisal variables were more important for cessation than initiation behaviours (Floyd *et al.*, 2000)

With similarities to the HBM (i.e. perceived vulnerability, severity, perceived barriers and benefits), similar criticisms apply to PMT. Individuals may not always be conscious of the information they process, nor may they always do this in a rational way as implied by the HBM and PMT (Ogden, 2004). Furthermore, habitual behaviour as well as environmental and social factors are not taken into account (Ogden, 2004). Norman and colleagues (2005) suggest that more prospective tests of the PMT are needed to look at how protection motivation translates into behaviour. According to PMT, threat and coping appraisal variables should be mediated by intention, however threat and coping appraisal variables have been found to be weak predictors of future behaviour whilst intention has been found to be a strong predictor of future behaviour (Floyd *et al.*, 2000; Milne *et al.*, 2000; Norman *et al.*, 2005). Although this model has not been developed with health-seeking for childhood illnesses in mind, its focus on how fear can motivate individuals to behave in a certain way may be useful for understanding health-seeking behaviour for childhood illnesses.

Studies using PMT as a framework to explain the actions of an individual to protect another person's health are few and far between and no such studies were found in developing country settings. Strobino, Keane, Holt, Hughart, and Guyer (1996) used PMT to determine the effect of family knowledge and attitudes (the majority of whom were African American) on the immunisation rates of children under 2 years from the poorest areas of Baltimore in the U.S.A. Only 2 PMT variables were associated with a child's immunisation status in this study – belief that the timing of the vaccination did not matter and belief in the safety of multiple immunisations. In both cases, children of parents who held these beliefs were less likely to be immunised. However the demographic (ethnicity, maternal age at birth, size of the family), social support (presence of biological mother in household, maternal isolation, having someone to count on) and access (after hours emergency care) variables had a stronger association with immunisation status than the PMT variables. Norma, Searle, Harrad and Vedhara (2003) used PMT in a prospective study to predict parental adherence to eye patching recommendations for children with amblyopia in Bristol, England. PMT explained an additional 29% of the variance after controlling for characteristics of the child. Perceived vulnerability (failing to patch their child would lead to negative consequences), response efficacy (belief in the efficacy of eye patching) and self-efficacy (confidence in their ability to patch the child) were significant predictors of protection motivation (intention to patch) and adherence behaviour was determined by perceived vulnerability (failing to patch their child would lead to negative consequences) and response costs (eye patching as a barrier to everyday activities). However past adherence behaviour was found to be a better predictor of current adherence behaviour than was PMT. Using PMT as a framework, Flynn, Lyman and Prentice-Dunn (1995) looked at parental adherence to physical therapy recommendations for children with muscular dystrophy. PMT was predictive of parents' intentions to adhere to physical therapy

recommendations for children with muscular dystrophy. Self-efficacy and response efficacy were predictive of protection motivation, whilst self-efficacy was the sole predictor of adherence. One shortcoming was the study's cross-sectional design which meant that there was no prospective measure of adherence and the mediating role of PMT could therefore not be assessed fully. The authors only considered the relationships between PMT and protection motivation (intention) and between PMT and adherence but not the relationship between protection motivation and adherence. Wortel, de Geus and Kok (1995) looked at the safety measures adopted by Dutch mothers to avoid home-related injuries of pre-school children using the Attitude-Social influence-Self-efficacy / barriers model together with variables from the Health Belief Model and Protection Motivation Theory. The main determinants of most safety measures were the mother's belief in the need for the safety measure depending on the child's age, her belief about what her partner thought, as well as the success of adopting the measure. As risk perception is made up of many dimensions, McClain, Bernhardt and Beach (2005), developed a scale based on 4 constructs of PMT (perceived vulnerability, perceived severity, response efficacy and self efficacy) to measure parents' perceived risk of their children contracting a recreational water illness in the U.S.A. Seven factors emerged to make up the risk perception scale. Disease vector acknowledgement and knowledge of transmission of infections explained 29.1% of the variance of perceived vulnerability items; severity of diarrhoeal illness and severity of non-gastrointestinal illness accounted for 36.8% of the variance of perceived severity factors; efficacy of behavioural modifications (e.g. reducing infectious agents in pools) and efficacy of swim diapers explained 45.6% of the variance of response efficacy items; and 29.1% of self-efficacy items were explained by self-efficacy for gastrointestinal recreational water illnesses.

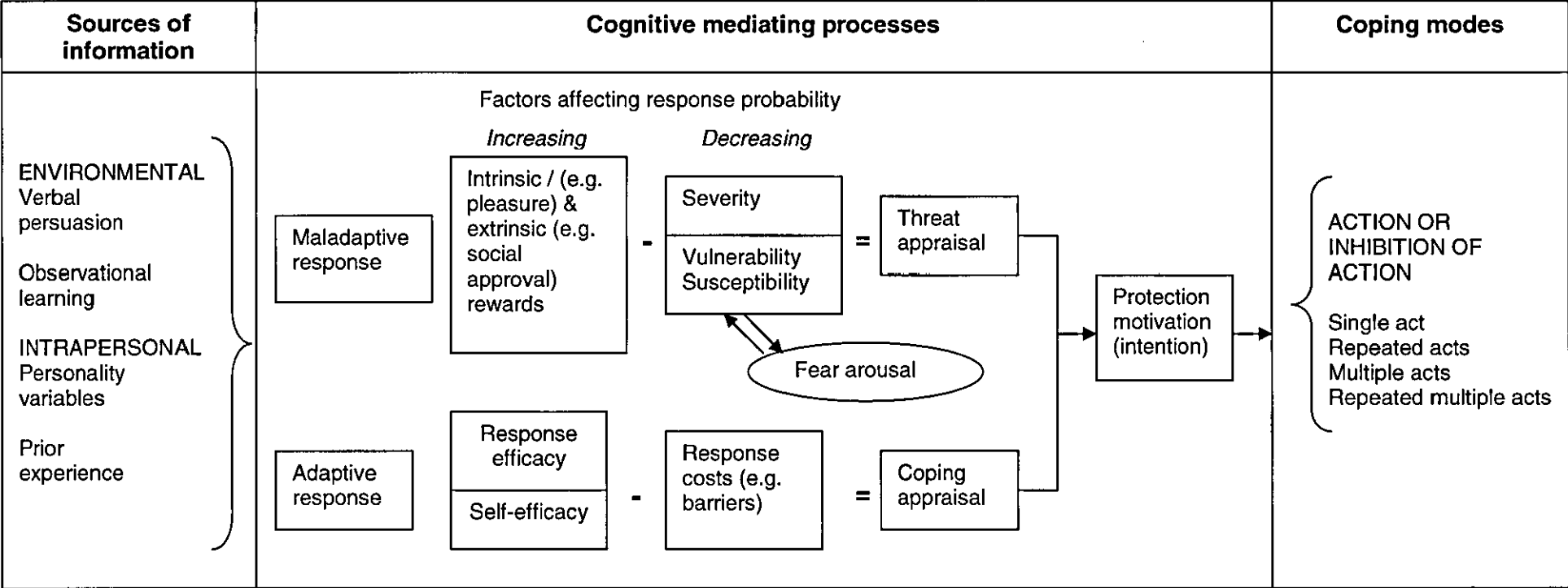


Figure 2.2: Protection Motivation Theory (Rogers, 1983)

2.1.5 Social Cognition models

2.1.5.1 The Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB)

The TPB is a progression from the TRA which was first developed in the 1960s and 1970s (Fishbein, 1967; Ajzen & Fishbein, 1970; Fishbein & Ajzen, 1975) and both attempt to understand the link between attitudes and behaviour (Rimer, 1997). These are deliberative processing models and not behavioural change theories (Montaño *et al.*, 1997), although it is possible to identify mutable attitudes and beliefs (Rimer, 1997). The TRA proposed a less rational approach to behaviour by emphasizing social cognitions as measured by subjective norms (v. Figure 2.3). These subjective norms include beliefs and evaluations about the individual's social world which shape their attitudes (Ogden, 2004; Ajzen, 1985; Ajzen & Madden, 1986; Ajzen, 1988) and are not necessarily logical or rational (Montaño *et al.*, 1997). Social norms for example might exert pressure on an individual to perform or abandon a behaviour (e.g. losing weight, giving up smoking to gain the approval of significant others (normative referents)) and this will be determined by how motivated the individual is to comply (Ogden, 2004). Further emphasis was placed on attitudes towards a behaviour (e.g. mammography) rather than attitudes towards an object (e.g. breast cancer) for predicting behaviour (Fishbein and Ajzen, 1975). The attitudes towards behaviour as well as the normative referents may vary for different behaviours as well as different populations and need to be identified through in-depth interviews, both with individuals who have performed and those intending to perform a behaviour, as well as those who have not (Montaño *et al.*, 1997). This is one of the strengths of the TRA and TPB. Conducting preliminary studies ensures that only those issues which are relevant to the study population and their behaviour are teased out of the many factors which may affect health-seeking behaviour (Rimer, 1997).

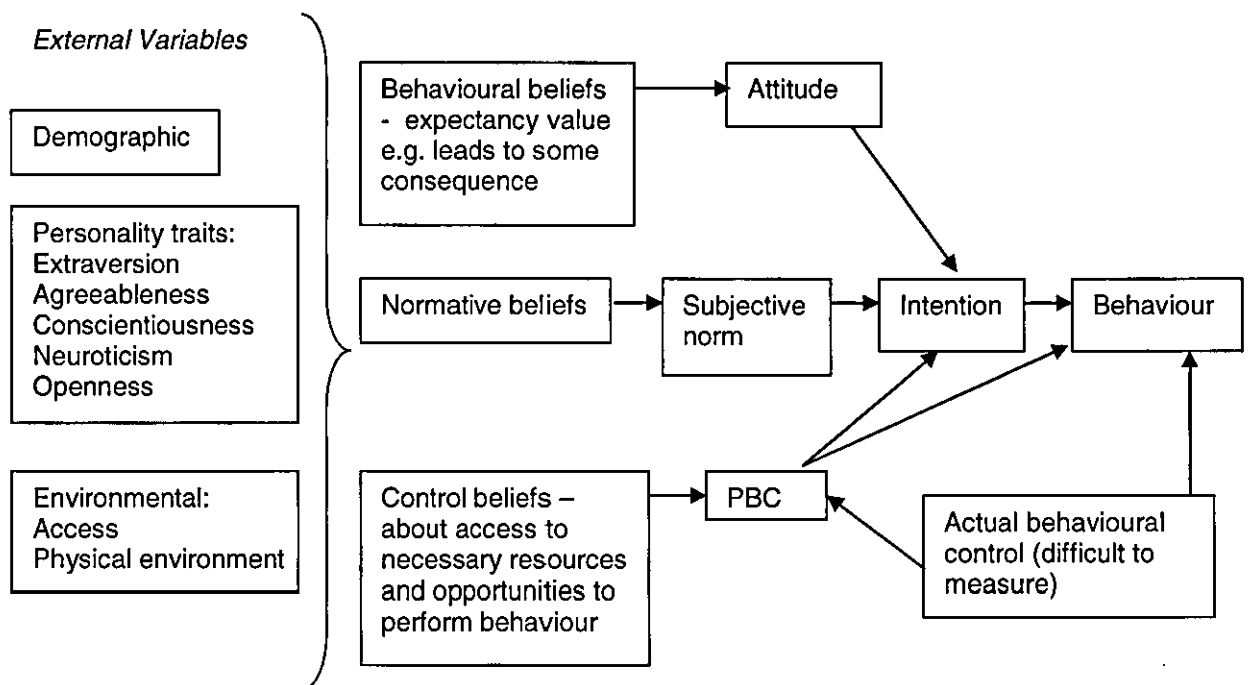


Figure 2.3: The Theory of Planned Behaviour (Ajzen, 1988, 1991)

Both the TRA and the TPB include beliefs about the outcome of a behaviour and a positive or negative evaluation of this. The TPB added to the TRA by also including perceived behavioural control which is made up of internal and external control factors (Ajzen & Madden, 1986; Ajzen, 1991; Ajzen & Driver, 1991). Internal control factors are made up of any information or skills that the individual has accumulated, whilst the external control factors relate to barriers or opportunities which will aid or inhibit behaviour (Ogden, 2004). One weakness of the TRA is that it depends on how much of the behaviour is under volitional control and for this reason the TPB was developed to include perceived behavioural control (Montaño *et al.*, 1997). Fewer studies have used the TPB however to look at health-seeking behaviour (Montaño *et al.*, 1997) and it has also been criticised for omitting a temporal element, for not describing the order of different beliefs or the direction of causality (e.g. how attitudes are translated into intentions) and for assuming that all behaviour is rational (Schwarzer, 1992; Conner & Sparks, 2005).

As with the previous belief models, few studies were found in relation to parents / caregivers and health-seeking behaviour on behalf of their child. The Theory of Planned Behaviour was used to identify the psychological factors influencing mothers' intentions to use oral rehydration therapy (ORT) for the treatment of childhood diarrhoea in rural Benin (Mahougbé Hounsa, Godin, Alihonou, Valois & Girard, 1993). Three significant predictors of intention to use ORT explained 40% of the variance found in this population. These were perceived consequences of using ORT, perceived barriers to its use, and the zone of habitation. When mothers perceived more advantages than disadvantages of using ORT their intention to use ORT was higher. Similarly, when mothers perceived more barriers to ORT, their intention to use it was lowered. Gálvez, Modeste, Lee, Betancourt and Wilkins (2001) found that the best predictors of Peruvian mothers' intention to seek help when they believed their child had pneumonia were subjective norms (mostly from blood and marriage relatives but also from other important people within the community such as religious leaders) and their perceptions about how easy it was to take their child to a clinic (perceived control). When considering attitude items, around a third of mothers interviewed indicated that they felt nervous / doubtful about taking their child to a clinic if they thought they had pneumonia. Outcome beliefs however suggested that some mothers thought that their child would have a bad outcome (e.g. charging for treatment, complications arising, injections which would make the child worse, the clinic neglecting or experimenting on the child, the illness taking a long time to heal, the doctor not being there or only student nurses or nurses being present). The authors indicate that in other studies which have used the TPB, perceived behavioural control followed by attitudes tend to be the best predictors of intention to perform a behaviour. This may be explained by the fact that most other studies have been conducted in Western cultures where personal responsibility tends to overshadow normative influences in practising most health behaviours. The majority of these studies also tend to look at personal health behaviour as opposed to health behaviour on behalf of a dependent. A further caveat highlighted by the authors is the concept of 'self-efficacy'. Three items of perceived behavioural control were not correlated and this may be because 2 of the items emphasised personal responsibility, whilst the only item which predicted intention did not. This may be explained by the fact that there are different 'selves' found in different cultures (Triandis, 1995

as cited in Galvez *et al.*, 2001) and in the collectivist culture of Peru, the concept of 'self' may be more reflective of the collective 'self' than the individual 'self'. Although the family is the most important in-group in collectivist cultures, community members from other in-groups such as church or work also share resources, advice and are involved in each others lives. A study by Beale and Manstead (1991) examined the ability of the Theory of Planned Behavior (attitudes to behaviour, subjective norms, perceived behavioural control, and behavioural intentions) to account for mothers' intentions to limit the frequency of their infants' sugar consumption in the U.S.A. No significant difference was found between the two groups of mothers (one exposed to a dental health education program and one which was not) in terms of change in intentions to perform the advocated behaviour, however the experimental group did exhibit a significant change in attitudes towards limiting the frequency of their infants' sugar consumption. Perceived behavioural control resulted in small but significant increments in the amount of explained variance in intentions and this was enhanced by direct experience of the behaviour (mothers with older children had less perceived behavioural control because their awareness of the difficulty in controlling the frequency of children's sugar consumption).

2.1.5.2 The Health Action Process Approach

The Health Action Process Approach is the model most similar to Social Cognitive Theory (Luszczynska & Schwarzer, 2005) and is one of the stages theories of health behaviour. It was developed by Schwarzer (1992) in an attempt to include a temporal element in the models by distinguishing between decision-making (the motivation stage) and the action stage. The motivation stage is composed of self-efficacy, outcome expectancies about the behaviour (including social outcome expectancies) and threat appraisal (severity and vulnerability). The action stage of the HAPA includes cognitive factors which determine volition, composed of action plans (e.g. having a plan of what to think if faced with the temptation to partake in a certain behaviour) and action control (e.g. thoughts of how to control a behaviour) and situational factors such as social support and financial support. As with the other Cognition and Social Cognition models however, it is assumed that individuals process information consciously and cognitions are measured as if they are separate entities (Ogden, 2004). Furthermore, although as with the Social Cognition models there is an attempt to include social factors in the form of normative beliefs, according to Ogden (2004:p.35), "such measures only access the individual's cognitions about their social world" and environmental factors or other contextual factors in which decisions are made are also not taken into account.

2.1.6 Other models of health behaviour

Other models of health care have drawn on the theoretical frameworks of earlier models, adapting them to suit the type of health behaviour being studied. A few examples include Anderson and Bartkus' (1973) model which integrated sociodemographic, need, economic, ecological and psychological elements from several frameworks including Suchman's (1965a; 1965b; 1966) and Andersen's (1968) to look at students' use of health services. Indicators

included students' perceptions of different sources of health care; their friends' perceptions of the health centre and other sources of care; perception of symptoms and action in response to these symptoms; perceived need for different types of health care; economic factors; availability or access to health services; sociodemographic characteristics; how well symptoms are recognised and how health care is organised.

Green (1975) drew on the Diffusion of Innovations theory and emphasised environmental and system factors including socioeconomic status and social norms, characteristics of the person adopting the health behaviour, particularly their interaction with individuals in their own socioeconomic group as well as other social groups and characteristics of the 'innovation' such as benefits or how culturally acceptable it is.

Cummings and colleagues (1980) used Smallest Space Analysis to synthesise 109 variables grouped by 11 authors of models on the basis of similarity. Six distinct categories emerged: the perception of illness and the treatment of disease; knowledge of disease; social network (e.g. social norms, social interactions and social structures); demographic; access to health care and finally attitude towards health care. Accessibility was sub-divided into the availability of health services and the financial costs of health care. Social network was sub-divided into social interaction patterns, social structural characteristics and social norms. Health threat may be sub-divided into the perception and evaluation of symptoms and response to illness. Knowledge of disease was located close to, and therefore associated with perception and evaluation of symptoms whilst access to health care was located closer to evaluation of health care variables. Social network variables were also close to knowledge variables. Demographic variables were situated closer to access to health care than to the knowledge and health threat variables. Independent items included disruption of social activities, sources of information, topics on which information is sought, past experience with illness and / or action, avoidance of ill health and compatibility of an action with existing values.

Young (1980) adapted the Health Belief Model and Andersen's Behavioural Model to look at choice of treatment in a small Mexican community and managed to predict 287 out of 300 treatment choices. The four major elements of the model include the perceived severity of the illness by relatives; knowledge of a home remedy in the lay referral system; the faith or belief in a treatment and the accessibility of health services including perceived barriers or enabling factors.

Wan and Soifer (1974) also modified Andersen's (1968) model to take into account the context of health behaviour, including different social, economic and cultural values. According to Stock (1987) this modified version was more appropriate for non-Western societies. Benyoussef and Wessen (1974) were also amongst the first to point out that medical care utilisation in developing countries is different from that in developed countries. For example, in some developing countries, particularly in India, gender is reported to affect utilisation of medical services (Ganatra & Hirve, 1994). Some authors report that in developing countries, people with greater economic

resources and higher levels of education, seek help more often from allopathic medical practitioners, while in developed countries they tend to go to practitioners of alternative medicine (Howard, 1978). Others report considerable under-utilisation of allopathic medical facilities in developing countries (Kloos, 1990; Bender *et al.*, 1993).

Since patients ordinarily use multiple sources of health care, Nyamongo (2002) takes into account concurrent patterns of health-seeking behaviour in an ethnographic study of malaria treatment in Kenya. Although patients usually prioritise their decisions according to preference, if they are not satisfied with the cost, outcome, treatment, or physician's attitude, or they receive advice through family and social networks, they will try an alternative therapy. Choosing a treatment option does not always follow the same pathway, nor need it be the same from one individual to another. Nyamongo's (2002) health-switching behaviour model (v. Figure 2.4.) provides an informative picture of the transition process.

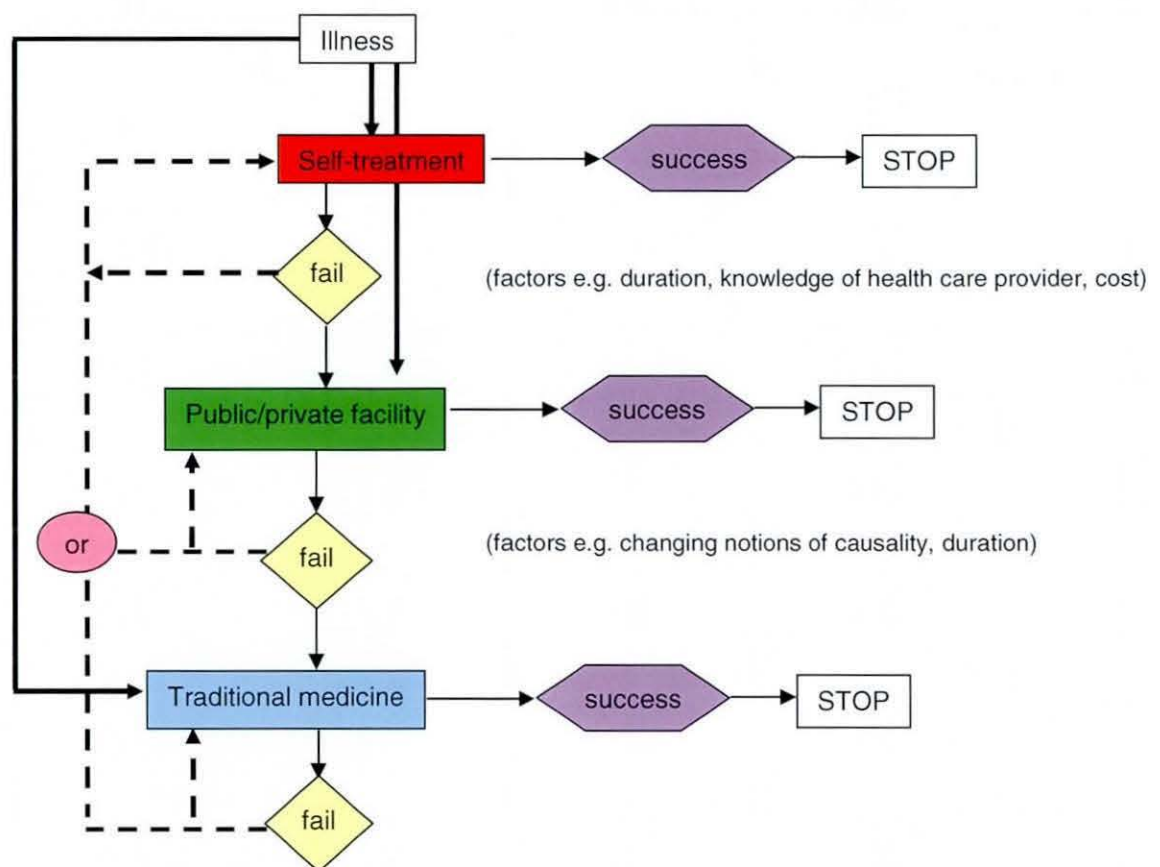


Figure 2.4: Nyamongo's Health-switching Behaviour Model

Ryan (1998) describes a similar model to look at health-switching behaviour for acute illnesses in Cameroon. Whereas synchronic studies look at the use or non use of a particular treatment or provider, diachronic studies look at the order in which treatments or providers are used. In terms of the sequence of treatments, in the Cameroon study, most people (60%) tended to wait at least 24 hours before doing anything and then went on to use home treatment or OTC medicines (over 80%). As an illness progresses, the proportion using outside providers (traditional or biomedical)

will increase, although some will continue to use the same treatment at home or try a different one. Five different sequences accounted for 50% of the behaviour and 15 sequences accounted for 75% of the behaviours, suggesting that people were not acting randomly. That patients are pragmatic has been described elsewhere (Gesler & Gage, 1987). Delaying or waiting was not found to be an important phase of health-seeking in Nyamongo's (2002) ethnographic study, although home treatment was. Both Ryan (1995) and Nyamongo (2002) describe how patients start with the most cost-effective strategy (doing nothing or home treatment) and if unsuccessful then more expensive treatments will be used. These sequential behaviours will obviously depend on the type of illness observed, its severity, outcome from previous treatment choice and financial and social considerations (Nyamongo, 2002; Ryan, 1998).

In pluralistic health care settings cultural beliefs were originally viewed as a barrier to using Western health care. In this 'Adversary Model', illnesses were grouped according to those which Western doctors could treat and those which only traditional healers could treat (Foster, 1977). Weaknesses in this model soon became apparent however as traditional and Western concepts of healing in China integrated successfully (Djukanovic & Mach, 1975 as cited in Pelto & Pelto, 1997). Characteristics of the health care providers themselves were found to impede effective health-seeking (Foster, 1977). Around the same time that these shifts in anthropological thinking were taking place (Pelto & Pelto, 1997) the International Collaborative Study on Health Care (Kohn & White, 1976, as cited in Kroeger, 1983) adapted Andersen's (1968) model to include health services system factors, thereby making it more comprehensive. Figure 2.5, is a health-seeking framework based on Kroeger's (1983) review of factors associated with the use and non-use of services in developing countries, with the outcomes (type of provider) adapted for this particular study on health-seeking behaviour for childhood illnesses in South Africa. This model was selected as a basis for investigating health-seeking behaviour in urban South Africa in this research due to the widespread use of the Andersen Behavioural Model in looking at the determinants of health service use and in the context of developing countries, the use of Kroeger's model in particular (Develay *et al.*, 1996; Thind & Andersen, 2002; Pillai, Williams, Glick, Polsky, Berlin, & Lowe; 2003; Fosu, 1994; Goldman *et al.*, 2002) which has succeeded in explaining a large proportion of health care choices (v. Section 2.1.7). The variables within the framework are discussed throughout this literature review.

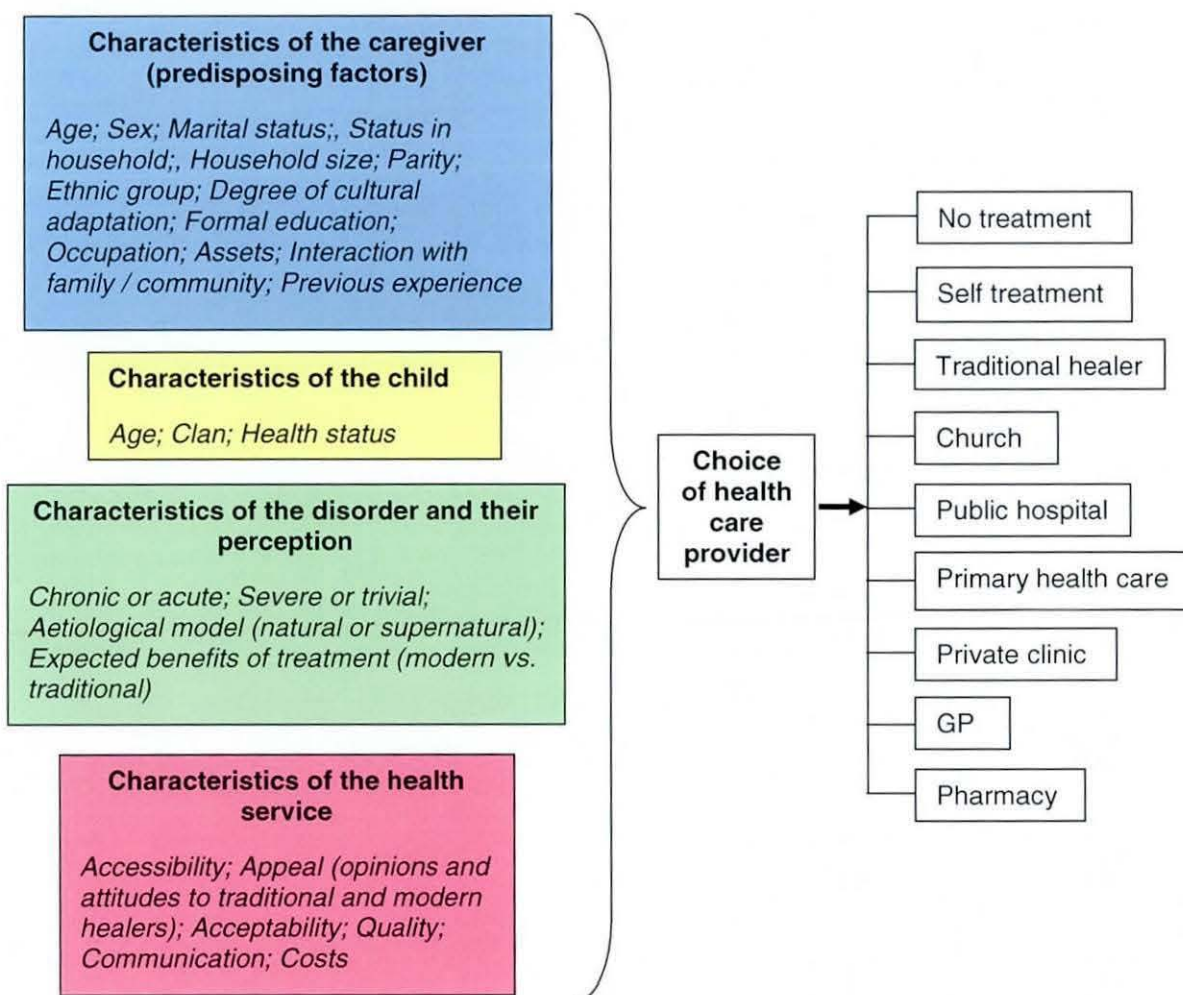


Figure 2.5: Conceptual Framework: Adaption of Kroeger's Health-seeking Framework Review (1983)

2.1.7 Usefulness of models

Earlier multivariate models of health care utilisation and satisfaction with health care services have only been able to explain a small proportion of variance in health behaviour (Scarpaci & Kearns, 1997) e.g. Shortell (1980) – 15-25% of variance; Mechanic (1979) 16 – 25% of variance; Wolinsky (1978) 9 – 12% (29 independent variables). The reasons for this are probably as a result of variable misspecification or the difficulty in measuring patient satisfaction, beliefs and attitudes in a quantitative manner (Scarpaci & Kearns, 1997; Scarpaci, 1993; Veeder, 1975). A further methodological issue may be the 'halo effect' or social response bias in which patients respond favourably so as not to offend anyone. Later more developed models have achieved higher explanatory power. Based on Kroeger's (1983) model which is more suited to developing countries for example, Develay *et al.* (1996) managed to explain 82.4% of health care choices in a household survey. Also using Kroeger's model to look at the utilisation of community health workers in relation to other sources of health care, Sauerborn, Nougara and Diesfeld (1989) explained 72% of health care choices. Fosu (1989, as cited in Fosu, 1992) used a modified version

of Andersen's Behavioural Model and explained 85% of the variance in clinic use by children in Accra, Ghana whilst only 35% of the variance in clinic use by mothers.

When comparing the predictive power of the Social Cognition models¹, Conner and Norman (2005) found that little empirical work had been done. It is therefore difficult to say which of the models are more predictive and which variables are more important in predicting health behaviour (Weinstein, 1993). Some of the models measure more constructs than others which may also lead to a higher predictive power (Hill *et al.*, 1985). Similarly, Sutton (1998, as cited in Ogden, 2004) explains that the models of health beliefs (cognition and social cognition) only predict 40 to 50% of the variance in behavioural intentions, although by adding other variables the performance of these models improves (Ogden, 2004). The TRA and the TPB for example only include subjective norms. Depending on what type of behaviour is being assessed, moral norms (Sparks, 1994; Parker, Manstead, & Stradling, 1995; Légaré, Godin, Dodin, Turcot, & Lapèrrière, 2003, all cited in Ogden, 2004), descriptive norms (does respondent think others carry out behaviour) or injunctive norms (the approval or disapproval of others) (Povey, Conner, Sparks, James & Shepherd, 2000, as cited in Ogden, 2004) may improve the usefulness of the model. As well as the emotion 'fear' which is included in the PMT model, 'anticipated regret' or a feeling of guilt may also be important for predicting a behavioural intention (Richard & van der Pligt, 1991) as may 'self-identity' or how a behaviour fits in with what type of image an individual has of themselves (Sparks & Shepherd, 1992, as cited in Ogden, 2004). When comparing the HBM with the TRA, studies of health behaviour (e.g. breast examination and cervical smears) have usually found that the HBM usually explained slightly more of the variance (Hill *et al.*, 1985; Mullen, Hersey & Iverson, 1987 as cited in Conner & Norman, 2005). Other studies looking at inoculation behaviour (Oliver & Berger, 1979) and AIDS preventive behaviour (Rutter, 1989) have found the opposite however. When the TPB has been compared with the HBM, a study looking at attendance at health checks found not much difference between the models (Conner & Norman, 1994), whilst a study looking at condom use amongst heterosexuals found the TPB to be more predictive (Bakker, Buunk & Siero, 1993). It is necessary therefore to consider the type of health behaviour when applying these models. HIV-preventive behaviour for example is best explained when taking into account the approval of others, which the TRA / TPB take into account and the HBM does not (Fishbein *et al.*, 2001).

In terms of predicting actual behaviour, these models have been less successful with only 19% to 38% of variance in behaviour predicted, probably due to factors beyond the control of the individual which also affect behaviour (cost or availability) (Sutton, 1998). In order to address this intention-behaviour gap, as well as trying to improve on the variables used, past behaviour has also been used to predict future behaviour (e.g. Norman & Conner, 1993; Hodgkins & Orbell, 1998). Habitual behaviour also has a role in predicting future behaviour (e.g. Trafimow, 2000) and in such a situation habit reduces the effect of information (Aarts, Verplanken, & van Knippenberg, 1998, as cited in Ogden, 2004).

¹ Conner & Norman (2005) do not differentiate between Cognition and Social Cognition models.

Cross-sectional behavioural studies may not produce accurate results about utilisation, particularly in pluralistic health settings where multiple therapies are used concurrently or sequentially (Phillips, 1990). Furthermore, in pluralistic settings where proportions of the population using different types of health care are not known, it is more difficult to infer results based on models using aggregate assumptions (Phillips, 1990). Despite drawbacks in definition and measurements of variables, the evolving health behaviour models do highlight the many factors which may affect utilisation and have been shown in the literature to be able to account for a reasonable amount of the variation in health-seeking behaviour.

2.1.8 Conclusion

The models selected for review in this chapter represent the major theories. The review shows however that although each model captures substantial aspects of the health-seeking process they each have limitations. Based on a review of the health-seeking literature, building an eclectic model of health-seeking behaviour for childhood illnesses in the context of South Africa might best be explored through the use of the Andersen Behavioural Model, including Kroger's (1983) adapted model for developing country settings, with added components from the Cognition and Social cognition models. Although the Cognition (Hochbaum, 1958, Rosenstock, 1960, 1966; Becker, 1974; Becker *et al.* 1977b; Kirscht, 1974; Rogers, 1975, 1983, 1985) and Social Cognition models (Fishbein, 1967; Ajzen & Fishbein, 1970; Fishbein & Ajzen, 1975; Ajzen & Madden, 1986; Ajzen, 1991; Ajzen & Driver, 1991; Schwarzer, 1992) have been mostly used to predict preventive health behaviours, aspects of these models may be useful for looking at illness behaviour in the South African context. Because of the overlap in key constructs found between the models Norman and Conner (2005) suggest that this is evidence for identifying the main social cognitions. Components of these models may be used to shed light on personal beliefs and volitional processes underlying health-seeking behaviour (e.g. illness recognition and labelling, beliefs about important others attitude to a behaviour, outcome expectancies, evaluations about outcomes, fear and social support). It is acknowledged however that not all aspects of health-seeking are able to be captured by these models, nor may quantitative methods always be the most suitable to do this.

2.2 Predictors and barriers to health care-seeking

Although by no means exhaustive of all factors which might influence illness behaviour, the following section provides an overview of some of the main predictors and barriers to health-seeking which have been identified in health-seeking behaviour studies. These include characteristics of the caregiver (e.g. education, SES, parity / experience); characteristics of the child (e.g. health status, age, sex); characteristics of the illness (e.g. severity, symptoms, the stage of the illness); characteristics of the provider (e.g. material and human resources, distance, user fees, opening hours, waiting times, staff attitudes) and patient satisfaction with the outcome. A summary of referral systems (i.e. social networks or provider) is also provided as well as why some caregivers do not follow the correct referral procedures for accessing higher levels of care. Health beliefs and illness aetiology are also important predictors and barriers to health-seeking and these are discussed within the South African context in Section 2.3.

2.2.1 Characteristics of the caregiver

2.2.1.1 Education and socio-economic status (SES)

According to Goldman *et al.* (2002), studies have found that more educated parents, particularly mothers, have more self-confidence and more control over family resources and are therefore able to use these resources more effectively in finding effective treatment and better health services when their child is sick (Caldwell, 1986; Cleland and van Ginnekin, 1988; Lindenbaum, 1990, DasGupta, 1990; Fosu, 1994; Pebley *et al.*, 1996; Streatfield, Singarimbun & Diamond, 1990). More educated individuals are also more likely to know more about available health services, communicate more effectively with these providers and therefore use them more (Caldwell, 1979; Schultz, 1984 as cited in Fosu, 1992). Maternal education was found to be an important predictor of use versus non-use of services for children in Ghana and Botswana (Fosu, 1994). In this analysis of DHS data, mothers with no formal education or only primary education were less likely to take their child for a medical visit than those with secondary or higher education. In Metro Cebo in the Philippines, increasing maternal education had the greatest effect on the probability of receiving adequate prenatal care in rural areas and of a child receiving full immunisations in urban areas (Becker, Peters, Gray, Gultiano & Black, 1993). Overall, maternal education was an important determinant of full immunisation and ORS use for both rural and urban women. Maternal education was only associated with adequate prenatal care for rural women.

In rural Sierra Leone, Gesler & Gage (1987) found that more educated mothers reported more episodes of illness in their children and travelled longer distances to health care providers. The authors suggest that more educated mothers may be more knowledgeable about illnesses, as well as about facilities which are further away and have the means to use those facilities. Previously, Gesler (1979a) had found that in Nigeria, children with more educated mothers, better water sources and toilet facilities, had reportedly longer periods of illness, an outcome explained by those with high socio-economic status perhaps having a greater perception of the severity of the

health problem (Mechanic, 1975). A household survey in South Africa in 1995 found that mothers with higher levels of education were more likely to rate their child's health status as very good or excellent (Segel & Hirschowitz, 1995). Even just a few years of education has been associated with increased child survival from ages 1 to 24 months in India and Basu and Stephenson (2005) posit that this may be due to the values of obedience and discipline obtained through exposure to primary school education. Such values may make a woman more likely to seek help from health care providers and follow through with medicine instructions. Formal education has also been found to reduce utilisation of traditional healers' services (Kleinman, 1980; Rhi, 1973; Mohseni, 1979), as well as traditional health care advice from mothers-in-law (Adetunji, 1991).

The education variable is strongly linked to income and SES and independent effects are sometimes difficult to distinguish (Phillips, 1990), usually because households with higher levels of education also tend to have more resources available. Using DHS data from Indonesia, Thind (2005), found that an increase in level of maternal education was associated with an increase in private sector use. However, a higher asset index quartile was also associated with private sector use. In a study in the Nairobi slums, although a higher proportion of mothers (64.1%) with at least secondary education took their child for health care compared to those with primary education or less (59%), this was not found to be one of the main determinants of seeking health care outside the home (Taffa & Chepngeno, 2005). In a 4-country African study using DHS data, the effect of maternal education on caregivers' use of injections for treating cough or fever varied (Fosu, 1992). The strongest effect was found in Uganda, with mothers with primary or no education less likely to have used injections for treating coughs among their children. A weaker effect was found in Kenya for coughs whilst no significant association was found in Ghana or Zimbabwe. In rural Guatemala where not much difference was found in education levels however, income became a more important determinant of the choice of provider (Goldman *et al.*, 2002). Even in rural Tanzania where uniform poverty was expected, disparities were found between households in their health-seeking for acute illnesses in children under 5, with wealthier households having more knowledge about danger signs and seeking more care (Schellenberg, Victora, Mushi, de Savigny, Schellenberg & Mshinda, 2003). In Rwanda, it is suggested that the control a mother has over the household income may actually be more important than the overall level of household income (Csete, 1993). In a study in Israel, Ben-Sira (1988) found that lower SES was associated with increased dissatisfaction with the medical care provided, leading to an increase in the number of recurrent visits. Primary care providers viewed almost a third of visits as redundant (twice as many as that of private fee-for service providers).

Chrisman & Kleinman (1983:p.582) contrast a more person-oriented world-view amongst lower social classes with an institution-oriented world-view amongst higher social classes as a result of their social adaptation. Lacking economic resources, lower socio-economic groups invest more in people (e.g. household size, giving a lot of presents to strengthen social relationships) and this person-oriented world-view is more amenable to beliefs in individuals who possess spiritual or occult powers (Gaines, 1979, as cited in Chrisman & Kleinman, 1983). An institution-oriented view

on the other hand is less likely to implicate personal powers in an individual's illness; the interaction-style with the health care provider is likely to be more formal and alternative treatments (e.g. yoga) involve outsiders rather than relatives, friends and neighbours (Chrisman & Kleinman, 1983).

'Social distance' may also affect access to a provider as patients may be more comfortable using certain types of services, may perceive them to be more appropriate for treating certain problems and may have more confidence in them (Gesler, 1984). Although providers may be geographically accessible, they may not always be socially (or even financially) accessible (Joseph & Phillips, 1984, Bailey & Phillips, 1990).

According to Lindbladh and Lyttkens (2002) lower social classes or groups are less likely to change their habits and therefore more likely to maintain habitual behaviours. Whereas the concept of habit was associated with lower social positions, for individuals in higher social positions this manifested itself as choice. Thus the better off in society are more likely to find benefits in a behaviour as worthwhile as they face lower costs in making those decisions. In a study in Kerala, India, higher SES was associated with fewer visits for medical care for diarrhoea and acute respiratory infection and Pillai *et al.* (2003) hypothesise that this is probably because the higher SES families have the resources to seek care later on in an illness if there is no improvement in their child's health. Higher maternal education was also associated with fewer visits for medical care, although studies in other settings have found the opposite trend (Fosu, 1994; Neumark, Palti, Donchin, & Ellenweig, 1992; Kutty, 1989). Most studies have found that higher SES individuals are more likely to use services (Thind & Andersen, 2002) and lower SES individuals and families (income and education) are more likely to use traditional health care than higher SES ones (Pillai *et al.*, 2003; Gesler, 1979a). In an urban study in Durban, South Africa however, Mander (1998) found that 60% of consumers of traditional medicine had at least some form of secondary education, therefore higher levels of education do not always reduce the levels of use of traditional medicine. In a Southern Cameroon study, traditional healers' patients were the poorest in the sample (individual characteristics), although not necessarily the least educated (Leonard, 2001; 2003).

2.2.1.2 Gravida / Experience

Practical experience may be used to build up a caregiver's medical knowledge (Arskey, 1994). Primiparous or younger mothers may therefore be less confident in their ability to treat a sick child at home and may be more likely to consult family members or go to a health care provider (Goldman *et al.* 2002; Adetunji, 1991). Goldman and Heuveline (2000) for example found that Guatemalan children of lower parity (2) were more likely to be taken to a health care provider during illness episodes than higher parity children (6). In Guatemala Carter (2004) also found that mothers with first children and very young children were more likely to receive advice and assistance from others. This was often instead of or in addition to their husbands and usually involved older women who had more knowledge and experience. Age is therefore sometimes used

as a proxy for a caregiver's accumulated knowledge (Fosu, 1992; Elo, 1992). In Calabar, Nigeria, Freeman, Gesler, Mieras and Schymura (1983) found that younger mothers (< 30 years) with children under 6 years registered more often at the family health clinic than older mothers (>30 years) with children under 6 years. In Nairobi, older mothers (35+ years) were less likely to take their child to a health care provider than younger mothers (Taffa & Chepngeno, 2005). Fosu (1994) found that the age of the mother at delivery was a significant predisposing factor in Uganda, Kenya and Botswana, with younger mothers (under 20) more likely to take their child to a medical facility than older mothers (over 35). Fosu (1994) hypothesises that this may be due to younger mothers feeling more comfortable with using modern health care services as they probably had better access when they started childbearing than older women. Younger women are also more likely to have received more education which would enhance their knowledge of health services and allow them to interact more easily with members of staff (Caldwell, 1986). In Southern Cameroon Leonard (2001; 2003) found that an increase in caregiver or patient age was also found to be a predictor of choosing a healer over a government clinic. In rural villages in Karnataka State, India, pregnant adolescents also reported more contacts with a health care provider than older mothers, however their knowledge of public health programmes was lower (Kilaru, Brookes, Ganapathy & Matthews, 2002). When gravida was taken into account however, the effect of age disappeared and it was primigravidas who had higher levels of antenatal care than multigravidas.

A study of mothers in the USA found that older mothers and mothers with older children, and therefore more experienced, were more likely to keep medicines in their house and use mother-initiated treatment (Maiman, Becker & Katlic, 1986). Past experience allows caregivers to recognise whether a condition needs medical care or not (Kresno, Harrison, Sutrisna & Reingold, 1994; Mull, Mull, Kundi & Anjum, 1994). Other studies have not found this association between past experience and a caregiver's actions (Hussain, Lobo, Inam, Khan, Qureshi, & Marsh, 1997; Nichter, 1994; Stewart, Parker, Chakraborty & Begum, 1994). Mothers in Rwanda who had previously lost a child for example, reported a higher frequency of no treatment as well as fewer health centre visits (Csete, 1993). Similar findings were reported in Bangladesh (Bhardwaj & Paul, 1986) and this type of outcome has been attributed to health beliefs as well as socio-economic barriers to health care (Csete, 1993). Having experienced childhood mortality in the past was positively associated with present use of injections for child coughs in Ghana, Zimbabwe, Kenya and Uganda, however results were only statistically significant for Kenya (Fosu, 1992). Similarly, Fosu (1992) found that the fact that lower birth order children in Uganda (< 6) were less likely to be treated with injections for coughs than higher birth order children (6+) may signify that caregivers who had experienced the effectiveness of injections were more likely to use them again. Although similar trends were found in Ghana and Kenya, the opposite trend was found in Zimbabwe.

2.2.1.3 Relationship to household head

In African societies the traditionally authoritative male role stands juxtaposed to the female role of care and support (Feierman & Janzen, 1992). Intra-household relations will determine to what extent treatment-seeking decisions are solely the mother's domain, who else is involved and to

what extent (Molyneux *et al.*, 2002; Castle, 1993; Mwenesi, Harpham, & Snow, 1995). Molyneux and colleagues (2002) highlighted the importance of the mother's relationship to the household head in intra-household relations and treatment decision-making in the case of uncomplicated childhood fevers and childhood convulsions in Kenya. Women were expected to refer to husbands and elders (in absence of husband) for advice and financial support, although they usually also discussed childhood illnesses with female relatives and friends. An important factor was whether the husbands were resident in the household or not as this governed how closely they were supervised, however the mother's age and the severity of illness were also important determinants of decision-making. In another study in Kenya, Mwenesi and colleagues (1995) found that 63% of mothers sought advice from their husbands before taking their child to a health facility either because they thought it was expected of them or because they did not understand the illness or thought it was serious. Money was not cited as a reason for speaking to their husband. In rural Mali where mothers may be entitled to different household resources depending on their status within their marital families, Castle (1993) found that child mortality was lower in households where women had more social support within the home and were able to earn their own income. Women with peers (sister-in-laws for example) were more likely to have asked someone for advice about their child's illness and because of the increased support mechanisms within the household they were also more likely to take their child for treatment. Higher status (e.g. woman who had daughters-in-law herself) women tended to consult their husbands about their child's illness, whilst lower status women tended to consult their mother-in-law or no one.

2.2.2 Characteristics of the child

2.2.2.1 General health status

As well as childrearing experience, experience with a particular child (i.e. their general health status), is also likely to affect treatment sought, with those in poorer health more likely to be taken for treatment when they become ill. However, Goldman & Heuveline (2000) found the opposite trend in a study in Guatemala, with children in very good health more likely to be taken to a health care provider. A similar incongruous relationship (from a Western point of view) was found in a Sri Lankan study with mothers who did not consider malnutrition to signify ill-health (Amarasiri de Silva *et al.*, 2001) and in a study in Bangladesh where caregivers believed that children who were very ill should not be exposed to the elements and were therefore less likely to be taken to a health centre (Bhardwaj & Paul, 1986). In focus groups conducted in South Africa, health was viewed more in terms of the absence of disease than general well-being (Segel & Hirschowitz, 1995). Such beliefs will vary however across countries and social groups and perceptions about the child's health status may be affected by socio-economic status and education (Segel & Hirschowitz, 1995). In the Guatemalan study, Goldman *et al.* (2000, 2002) posit that this may either be a spurious correlation due to the omission of certain variables in their model such as family income and education, or parents may perceive chronic illness as less serious than a change from good to ill health. There were also only a few children perceived as having very poor health however and results were therefore not significant (Goldman & Heuveline, 2000). Using data from the same

study in Guatemala, Carter (2004) also found that mothers whose child had a history of poor health were less likely to seek advice and support from just their husband regardless of the symptoms and severity of the illness.

2.2.2.2 Age of the child

The age of the child is not a clear-cut determinant of health service utilisation and anticipated relationships do not always hold true (Phillips, 1990) as this will depend on other factors such as caregiver beliefs and illness severity. The younger the child, the more vulnerable they are likely to be perceived and therefore given formal medical care (Kleinman, 1980; Chrisman & Kleinman, 1983; Goldman & Heuveline, 2000; Gesler, 1979a), however depending on the beliefs of the caregiver, this vulnerability also makes them more susceptible to traditional illnesses and supernatural contagions for which traditional health care is more appropriate. In a study in the Nairobi slums, children under 12 months were more likely to be taken to a health care provider than older children (Taffa & Chepngeno, 2005). In Guatemala, families were less likely to administer OTC medicines to an infant (visit pharmacies) and more likely to take them to a doctor, curer or other health care provider (Goldman & Heuveline, 2000; Goldman *et al.*, 2002; Carter, 2004). In Sri Lanka, mothers felt that young children with a serious illness should not be given alternative treatments such as home remedies or ayurveda (Amarasiri de Silva *et al.*, 2001). In Indonesia, children older than 2 years were more likely to be taken to a non-formal provider, but age was not a determinant of public versus private sector use (Thind, 2005). In Rwanda, although children under 2 had fewer reported cases of diarrhoea, they were taken more frequently to a health centre for diarrhoea than older children (Csete, 1993). It should be noted however that there were few reported cases of diarrhoea during the survey. Analysing DHS morbidity data from 6 African countries, Fosu (1994) also found contradictory results. In Kenya, children under 3 years of age were more likely to be taken to a health care facility than those over 3 years of age. In Botswana, infants (under 1 year) were less likely to be taken to a medical facility, despite Botswana having the best organised health system of the 6 African countries which were in the study. Fosu (1994) suggests that this may be due to the success of health campaigns in Botswana, particularly as 79% of childhood diarrhoeal illnesses were treated with ORS at home, compared to 35% in Kenya (Boerma, Sommerfelt, & Shea, 1991). Similar to Fosu (1994), Molyneux and colleagues (2002) found that direct contact with any health facility was more common in children under 5 years of age in Kenya.

2.2.2.3 Sex of the child

In some countries such as Bangladesh, the sex of the child is a determinant of health-seeking behaviour (Bhardwaj & Paul, 1986). In a cross-sectional study in Kerala, India, the gender of the child was not related to the decision to seek care but to the type of care sought (traditional or allopathic), with boys being taken to an alternative provider significantly more than girls (Pillai *et al.*, 2003). The status of women compared to men is much higher in Kerala compared with other Indian states, therefore children are likely to be treated equally (Pillai *et al.*, 2003). In another study in India, Ganatra & Hirve (1994, as cited in Pillai *et al.*, 2003) found that more boys were taken to

private practitioners than girls. In Guatemala, Carter (2004) found that mothers of girls were relatively less likely to have received advice or assistance from their husbands than mothers of boys. In contrast to many Asian studies, a study in the Dominican Republic found that the odds of using health services versus non-use was 82% higher for females than for males (Thind & Andersen, 2002). When looking at 3 indicators of health-seeking behaviour (vaccination, oral rehydration therapy and breast feeding) for children in 9 World Fertility Surveys and 51 Demographic Health Surveys in Africa, no sex differences were found (Garenne, 2003).

Characteristics of the child may be a difficult determinant of health-seeking to predict if the following example is a prevalent viewpoint amongst mothers. Although caregivers started with a treatment which had been used in the past to treat a similar illness, mothers in the town of Efon Alaaye, Nigeria, widely believed that “no two children were exactly the same in their patterns of sickness and the way they responded to treatment.” (Adetunji, 1991:p.1385). From the point of view of the child's characteristics, there may therefore be great variation in health-seeking, even between siblings.

2.2.3 Illness characteristics

2.2.3.1 Severity / perceived need

Health problems may be ordered according to importance or severity, also known as ‘structures of relevance’, which determine what action is taken, how long treatment should be given and when another provider or treatment should be sought (Schutz, 1970, as cited in Kleinman, 1980).

According to Andersen (1995), the most immediate cause of health services utilisation is perceived need as determined by the individual or family members in relation to the type, number, or severity of symptoms experienced during a period of time. The presence of certain symptoms for example, may increase the likelihood of treatment by a health care provider. Goldman & Heuveline (2000) for example found that children with fever and gastro-intestinal symptoms or just fever alone, were much more likely to be taken for treatment than other presenting symptoms including respiratory ones. Fever and gastro-intestinal symptoms in a child were perceived to be more serious by mothers compared with other patterns of illness, although severity was not one of the main determinants of *frequency* of visits to a health care provider (Goldman & Heuveline, 2000). Yoder and Hornik (1996) identified vomiting, fever and lassitude as the symptoms most frequently cited as serious in a six site study in Asia and Africa. In Kenya, a child having diarrhoea (especially with fever) was more likely to be taken for treatment than a child who had a cough (Taffa & Chepnego, 2005). Using Indonesian DHS data, Thind (2005) found that children with mild respiratory infection were more likely to be taken to non-formal health care providers than children with severe illness. Severity was not found to be a determinant of private versus public sector use however. Uncomplicated fevers in urban Kenya were relatively common occurrences and therefore had well-established household responses (Molyneux *et al.*, 2002). In Sri Lanka, phlegm and wheezing were seen as important signs that the child required ‘indigenous’ treatment (Amarasiri de Silva *et*

et al., 2001). In urban Kenya a higher proportion of mothers used traditional medicine to treat convulsions than fever as it often had an interpersonal cause (Molyneux *et al.*, 2002).

In a rural Sri Lankan study, younger children whose symptoms were perceived to be severe and of high risk, were brought to a provider more frequently than those with low-risk symptoms (Amarasiri de Silva *et al.*, 2001). It should be noted however that a large percentage of those with low-risk symptoms also took their child to the health care provider. Carter (2004) reports that in the case of persistent or serious problems, mothers in Guatemala were more likely to get advice from the lay sector. Other studies have also found that the perceived severity of an illness is one of the most important determinants of treatment choice (Yoder & Hornik, 1996, Andersen & Newman, 1973; Young, 1980; Pillai *et al.*, 2003; Bush & Iannotti, 1990; Weller, Ruebush II, & Klein, 1997; Amarasiri de Silva *et al.*, 2001; Goldman & Heuveline, 2000). In the case of Young's (1980) study in Mexico, for more serious illnesses a family tended to choose the health care provider who they trusted the most, regardless of the cost, whilst for less serious illnesses home treatment was more frequent. In a study in Mali, patients were more likely to go to a hospital rather than other types of biomedical facilities if they perceived their illness to be severe (Mariko, 2003). Molyneux and colleagues (2002) found that in serious or dramatic illness episodes, rare illnesses or illnesses in which large costs were involved, conflict and disputes about the appropriate form of treatment were more likely to occur within Kenyan households.

Using DHS data, Fosu (1994) found that children who had fewer reported morbidity episodes were less likely to be taken to a medical facility in all countries examined (Uganda, Kenya, Ghana, Togo, Zimbabwe and Botswana). These need factors were most pronounced in Uganda, Kenya, Ghana and Togo, suggesting more equitable services than those in Zimbabwe and Botswana according to Andersen's (1995) framework. Paradoxically the latter 2 had the most developed health services and also the most equitable, although Fosu (1994) was not able to take into account the severity of the illnesses studied, service-related or socio-cultural factors.

According to Chrisman and Kleinman (1983), unremarkable symptoms may be interpreted as more severe particularly amongst individuals who are under a lot of stress, who lack social support, whose personality types predispose them to hypochondriacal fears, as well as culturally informed labels of illness. Although maternal reports of childhood morbidity measured against biochemical markers of health status in rural Bangladesh were found to be very reliable (Rousham, Northrop-Clewes, & Lunn, 1998), the perceived severity of an illness may sometimes contrast with the actual severity. In West Java for example, 10% of caregivers whose children had died had not recognised the severity of the illness (Sutrisna *et al.*, 1993). In a study in Mexico, 40% of caregivers had not recognised the severity of their child's illness (Bojalil, 2002) and in Bolivia only 39% of caregivers recognised that their child's illness was severe (Aguilar, Alvarado, Cordero, Kelly, Zamora, & Salgado, 1998). Recognising the severity of the illness does not necessarily imply that care will be sought, as was found in 44% of cases in Bolivia (Aguilar *et al.*, 1998). Similarly, a caregiver's

inability to recognise severe illnesses does not always result in poor health-seeking behaviour (Amarasiri de Silva *et al.*, 2001; Aguilar, 1998).

2.2.3.2 Stage of the illness

The stage of the illness has also been found to determine the type of health care provider which is sought (Uyanga, 1979; Mwabu, 1986; Ctsete, 1993; Goldman & Heuveline, 2000; Develay *et al.*, 1996). In Rwanda for example, Csete (1993) found that children whose diarrhoea or fever had lasted longer than 5 days were more likely to be taken to a health centre than to receive no formal medical care. In Goldman and Heuveline's (2000) study in Guatemala, health care providers were mostly visited in the first few days of an illness and this varied by the type of health care provider. On the first or second day of the illness, children were more likely to be taken to biomedical providers but as the illness progressed they were more likely to consult a curer. In the city of Ouagadougou, Burkina Faso, Develay *et al.* (1996) found that whereas acute illnesses (lasting 0-14 days) were mostly treated at home, more lengthy illnesses were treated in biomedical facilities. Reported use of traditional health care was very low (2.4%) in this setting and probably underestimated. Studies have found that traditional healers tend to treat more chronic conditions (Uyanga, 1979; Rhi, 1973; Frankenberg & Leeson, 1976; Goldman & Heuveline, 2000), whilst children's' illnesses tend to be labelled as acute, therefore warranting Western health care (Kleinman, 1980; Kleinman & Sung, 1979). In Good's (1987a) utilisation-based survey, only a minority of medically acute cases were seen by TMPs and the main childhood illnesses seen were gastroenteritis and worms. Over two-thirds of the TMP patients had first been to a clinic which Good (1987a) attributes to the ability of Western medicine to cure the somatic symptoms of an illness. In Sri Lanka, Wolffers (1988) found that patients with acute health problems tended to choose a Western doctor, patients with chronic non-incapacitating complaints or psychological problems tended to choose a traditional healer whilst patients with chronic incapacitating health problems used both traditional and Western health care concurrently or consecutively. Similar patterns were found by Sussman (1988) in Mauritius, with self-treatment using OTCs mostly for acute short-lived illnesses such as colds, fever and headaches and self-treatment with herbal remedies and treatment from traditional and biomedical practitioners used for more serious or chronic longer-lasting illnesses such as rheumatism, hypertension and diabetes. Herbal remedies are usually preferred for long-term illnesses because they are not perceived to be as strong and therefore as harsh on the body as pharmaceuticals. Herbal remedies are also preferred for this reason when a child has been vomiting and for gastro-intestinal disorders (both adults and children) which are common and therefore need regular treatment (Sussman, 1988).

2.2.4 Provider characteristics

Although limited by enabling factors, provider characteristics are an important factor in the health-seeking process. Shortly after the introduction of free primary health care in South Africa, an household survey found that health care had become more accessible to the poorer sections of African society (e.g. those living in traditional dwellings, informal settlements in urban areas and on

white-owned farms) (Hirschowitz, 1995b). Whilst free primary health care is now available in South Africa, the quality of care and availability of staff and medical supplies is not always adequate, as in many other countries. In the same health inequalities survey in 1995, Africans living in formal housing in metropolitan areas were more likely to report that since the introduction of free health care for children under 6, services had worsened (Hirschowitz, 1995b). Hirschowitz (1995b) states that this is probably due to the overcrowding at public health facilities. Measuring quality of health care is either the subjective quality as perceived by the health-seeker, or a more common objective approach is used based on standards in the facilities themselves (Mariko, 2003). The latter, tend to focus on structure (characteristics of the setting such as material and human resources), the medical process itself (e.g. the physical examination, diagnostic tests, and continuity of care) and outcome, including patient satisfaction as set out by Donabedian (1980).

The perceived quality of care has been found to be a strong determinant of utilisation (Mwabu, 1986; Haddad & Fournier, 1995; Gilson, Alilio & Heggenhougen, 1994; Waddington, & Enyimayew, 1989) and when looking at the demand for health care, simply focusing on one aspect of quality is not sufficient to explain demand (Mariko, 2003). Haddad, Fournier, Machouf and Yatara (1998) developed a taxonomy of perceived quality in Guinea but found that it varied according to the respondent's age, sex and ability to access health services. Perceived quality may also vary according to socio-economic group (Calnan, 1988a, as cited in Haddad *et al.*, 1998). When judging quality of primary health care in Guinea, the technical competence of the health staff, interpersonal relations between the patient and provider, the availability and adequacy of services and resources, accessibility and the effectiveness of treatment or care were found to be the main criteria patients used (Haddad *et al.*, 1998). The process of care had twice as many criteria as structural or outcome categories. In Tanzania, the interpersonal behaviour of health staff, technical care including outcome, accessibility of the facility, organisation of health care, drug availability and prescribing and structural aspects including staffing issues were important dimensions of quality of care for women who had used public, private facilities and traditional healers (Atkinson & Ngenda, 1996). In Zambia, qualitative interviews revealed that quality of health care entailed the interaction between the patient and provider (attitude, proper diagnosis, communication of information), the availability of drugs, the condition of the clinic, the accessibility of services and the perceived outcome of the treatment (van der Geest, Macwan'gi, Kamwanga, Mulikelela, Mazimba & Mwangelwa, 2000). The following section gives an overview of how some of these characteristics will affect the health-seeking process.

2.2.4.1 Structural determinants

2.2.4.1a Organisational dimensions

The organisational dimension includes any policies and goals e.g. health being a "social objective" versus a "market commodity" as well as management or staff-related issues that affect the day-to-day running of a health care facility (Gochman, 1997a:p.29). Any shortages, including staff or medication are organisational features.

User fees

In the 1980s many countries in sub-Saharan Africa faced difficulties financing health care which negatively affected their quality, availability and accessibility (Uzochukwu, Onwujekwe & Akpala, 2004). With a continent expected to account for 40% of infant and child deaths worldwide by the turn of the century despite having only 14% of the world's population (UNICEF, 1987), in 1987 the World Health Organisation (WHO) and the United Nations International Children's Fund (UNICEF) met with African Ministers of Health to discuss an initiative to help provide the necessary resources and improve health care delivery (WHO, 1987; UNICEF, 1988). The Bamako Initiative Program as it became known, sought to strengthen and revitalise primary health care, particularly that of maternal and child health through the introduction of cost recovery mechanisms at the community level and ensuring that basic health care was affordable (Uzochukwu *et al.*, 2004).

The economic cost of health care, particularly with reference to the Bamako Initiative, and its impact on utilisation rates is an ongoing debate, with some countries showing increases (Soucat, Gandaho, Levy-Bruhl, de Bethune, Alihonou, Ortiz, Gbedonou, Adovohekpe, Camara, Ndiaye, Dieng, & Knippenberg, 1997; Uzochukwu *et al.*, 2004) and others decreases in health care utilisation (Yoder, 1989; de Bethune, Alfani & Lahaye, 1989; Kanji, 1989, Haddad & Fournier, 1995; Mbugua, Bloom & Segall, 1995; Makinen, Waters, Rauch, Almagambetova, Bitran, Gilson, McIntyre, Pannarunothai, Prieto, Ubilla & Ram, 2000). When asking users themselves about costs it is sometimes difficult to assess whether their answers relate to affordability or a preference not to pay, particularly in contexts such as Kenya and Uganda which have traditionally offered free services (McPake, Hanson & Mills, 1993). With reference to the Bamako Initiative, it should be noted that "the implementation of fees serves the primary goal of improving the quality of health care delivery and raising additional revenues or deterring excessive use." (Litvack & Bodart, 1993:p.369). According to Litvack and Bodart (1993), studies considering user fees under the Bamako Initiative should therefore include both user fees and improvements in quality of care in their assessments and this has not always been done.

Several studies report user fees to be one of the biggest barriers in health care utilisation with a significant decline in utilisation following the introduction of fees (Yoder, 1989; de Bethune *et al.*, 1989; Kanji, 1989, Haddad & Fournier, 1995; Mbugua *et al.*, 1995; Makinen *et al.*, 2000). Studies have provided conflicting evidence with regards to the effect of user fees on utilisation rates (Mwabu, 1995). Some studies show that the demand for health care is price inelastic and that utilisation rates would therefore not be affected by introducing user fees (Kirigia, Fleuret, Renzi, & Byrne, 1989; World Bank, 1987; Akin, Griffin, Guilkey, & Popkin, 1986; Mwabu, 1986; Heller, 1982). Improvements in quality would compensate for any fall in demand which did occur (Kirigia *et al.*, 1989; Resources for Child Health, 1988; Mwabu & Mwangi, 1986). According to MCPake (1993), many of the earlier studies such as Heller's (1982) and Akin and colleagues (1986) which found low elasticities in the price of health care strongly influenced the support for the introduction of user fees, despite their inadequate consideration of quality amongst other methodological issues.

More sophisticated econometric models such as that of Gertler & van der Gaag (1990) have subsequently found income to have a stronger effect on price elasticity and demand. Other studies have shown that amongst low-income groups demand for health care is price elastic, therefore the poor would have lower utilisation rates (Gertler, Locay & Sanderson, 1987; Gertler & van der Gaag, 1990; Wang'ombe, 1984). Variation is also seen in the effects of cost-recovery schemes because of the different strategies involved. In Niger, both a fee-for-service model and a risk-sharing strategy combining both an annual district tax and a small fee-for-service were tested (Diop, Yazbeck, & Bitran, 1995). Whilst the tax-small fee resulted in significant increases in the use of services, the fee-for-service model did not bring about such an increase in utilisation. This was because poorer people found it more difficult to find available resources for each illness episode. Mbugua *et al.*'s (1995) study in rural Kenya shows that although utilisation at government hospitals increased by 52% and that of private and mission clinics fell by 36% following the removal of outpatient registration fees at government hospitals, the use of government dispensaries which had always been free remained the same.

In some cases the free supply of medicines may foster over-utilisation of non-essential drugs (Ugalde & Homedes, 1988) or as in the case of Bledsoe and Goubaud's (1988) study in Sierra Leone, cost may affect medical compliance. If a patient felt better before a prescription was completed, continuing with the medication was believed to be a waste of money. A contrasting problem may be over-prescribing, particularly in cost recovery systems which rely on the sale of drugs (McPake *et al.*, 1993). The purpose of any user fees should be to prevent health services from being used unnecessarily whilst at the same time ensuring accessibility (Phillips, 1990). However, trying to find a fee low enough not to discourage poorer users is difficult as direct cost recovery systems mostly affect the poor (Yoder, 1989).

In a South African national household survey of health inequalities (Community Agency for Social Enquiry, 1994 as cited in Lund & Patel, 1995), 54% of unemployed Africans cited inability to pay as the main reason for not seeking health services when needed. Similar results have been found elsewhere (Creese, 1991; Stanton & Clemens, 1989). In 1998, the Second Kaiser Family Survey of Health Care in South Africa found that 66% of South Africans cited cost as the main reason for not seeking care when needed (Smith *et al.*, 1999). However, other studies report that even poor people are willing to pay and even travel further for better quality services (Mariko, 2003; Stock, 1983; Litvack & Bodart, 1993; Thind & Andersen, 2002; Amarasiri de Silva *et al.*, 2001). In Litvack and Bodart's (1993) unique pretest-posttest controlled experiment in Cameroon, the authors were able to take into account improvements in quality as well as the introduction of user fees. The poorest quintile were found to be sensitive to price changes as other studies have found (Mariko, 2003; Gertler *et al.*, 1987), however in contrast they were more likely to seek care at the fee-based and improved quality facilities than the rest of the population. The reason put forward for this discrepancy by the authors is that time and travel costs previously incurred by the poorest quintile in seeking alternative sources of care when no drugs were available had been higher. Using multinomial probit estimation to assess the quality of services and demand for health care in Ogun

State Nigeria, Akin and colleagues (1995) found that higher prices tended to reduce utilisation, although if quality was increased so did utilisation. In contrast to Gertler and colleagues (1987), no difference was found between income groups in their response to price increases and quality at various facilities. In Tanzania, Abel-Smith and Rawal (1992) found that respondents in the lowest income group indicated the highest willingness to pay if waiting times were reduced or if drug supplies were always available. In a later study in Tanzania, Bonu, Rani and Bishai (2003) also found that a large proportion of respondents were willing to pay for better quality health services, however these rates were lower amongst the poor, the elderly and the female population. Simulation results from Mali show that an increase in user fees would only have a minor effect on reducing the utilisation of health facilities, however lowering the price of drugs would increase utilisation at dispensaries by 9.7% and at hospitals by 17.7% (Mariko, 2003). Facility-based longitudinal studies in Zaïre (de Bethune *et al.*, 1989), Swaziland (Yoder, 1989) and Ghana (Waddington & Enyimayew, 1989, 1990) which have taken into account both the introduction of fees and quality have found that reduced utilisation occurred if there were few improvements in quality. In Benin, Sierra Leone and Guinea, utilisation increased when fees were accompanied by improvements in the quality of care (Knippenberg, Levy-Bruhl, Osseni, Drame, Soucat & Debeugny, 1990). In Haddad and Fournier's (1995) longitudinal study in rural Zaïre, a regular supply of drugs and improvements in the technical quality of services did not compensate for the increased cost of services, although good nurse interpersonal skills sometimes did, and in some cases increased levels of utilisation. The authors suggest that because patients and health care authorities may not necessarily have congruent ideas of what denotes quality in health care, increasing the quality of services may not always compensate for user fees. In an urban study in Durban, South Africa, although the cost of visiting a clinic was cheaper than a traditional healer, this did not deter people from using this source of health care (Mander, 1998). In some cases, buying traditional medicine from street vendors may be a cheaper source of health care, given that consultations with traditional healers were found to be 18 times more expensive in 1998 than self-medication with traditional medicines (Mander, 1998).

In the Dominican Republic, 47.4% of non-insured children had been taken to a private provider despite free health care in the public sector (Thind & Andersen, 2002). In a rural Sri Lankan study, 63.8% of children with ARI and 68.8% of children with diarrhoea had been taken to a private provider mostly because of their availability, shorter waiting times, longer consultation time and respect shown towards the mother (Amarasiri de Silva *et al.*, 2001). The 1993 South African Living Standards and Development Survey (South Africa Labour Development Research Unit, 1994, as cited in Palmer, 1999) reported that 64.9% of urban South Africans, including 30% of the lowest income group had sought care in the private sector. Comparing findings from the 1995 and 1999 October Household Surveys (Statistics South Africa, 1995; 1999) Wadee and colleagues (2003) found that urban use of private services increased from 44.4% to 55.3%, and that those without medical aid using private services had also increased from 26.5% to 33.1%. The use of private services amongst the lowest income quintile in the Black population was 14.1% in 1995 (Wadee *et al.*, 2003). The 2002 South African General Household Survey (Statistics South Africa, 2002)

reported that 36.5% of Africans had consulted in the private sector, although only 8% of the Africans surveyed had access to a medical aid scheme. Regardless of whether these results are overestimates, the fact remains that in some cases poorer people do pay for health care. In a qualitative study in the Eastern and Western Cape, Palmer (1999) found that paying for a service ensured quality and more choice through better medicines, a more thorough examination and better respect for the patient. Similar focus group results were found in another study in South Africa, in which private providers were reported to show more respect to the patient, be more patient, have better opening hours, be more fair and efficient in their service provision (no favouritism shown), have adequate staff numbers and the necessary equipment (Gilson, Palmer & Schneider, 2005). In Nigeria, a survey found that the poorest quartile were the least likely to use the PHC centres (Onwujekwe, 2005). Overall, fees at the primary health care level were not found to be the main reason for the non-use of PHCs. Instead, these were the unavailability of a medical doctor and drugs and Onwujekwe (2005) hypothesises that improving the quality of the services as well as physical access to them could increase equity of their use.

According to Phillips (1990), patients may forgo the extra costs of travelling if the service, including outcome, is of high quality. Similarly, other studies have found that the perceived quality of the service is one of the most important determinants of a patient's willingness to pay (Annis, 1981; Unger, Mbaye & Diao, 1990, as cited in McPake *et al.*, 1993). In a longitudinal study in Zaïre, Haddad and Fournier (1995) found that the interpersonal characteristics of nurses at some health centres minimised the cost barriers to utilisation. In an urban Mexican population, Logan (1988) found that pharmacists were popular sources of health care because their advice was free, they were willing to discuss the cost-effectiveness of the medicines with the patient and the patients believed in the efficacy of the OTCs. In an anthropological study in a rural area in South Africa, Segar (1997) found that key themes in response to illness included uncertainty and lack of control, jealousy and the importance of money and getting value for money. Biomedicine has long been characterised by health care professionals lacking interaction with their patients and viewing them as "passive objects of care" (Sanders, 1985, p.123). Many patients in the Segar (1997) study reported using private doctors despite the higher fees and transportation costs because of lengthy waiting times and rude staff in public facilities. Doctors often made no effort to speak to the patient, simply handing over the medicine. Despite these problems, only one person spoke of lodging a complaint. Reasons for not complaining included a fear of reprisals as well as a lack of knowledge about patient rights. An ethnographic study in Kenya revealed that despite the higher financial cost incurred, patients expected to get better much sooner if they went to a private clinic because the medicine was stronger (Nyamongo, 2002). They were also more likely to receive treatment than if they went to a government clinic. For this reason, many patients prefer to 'shop around', paying more to go to a private doctor where there are less queues and the doctors may be more generous with their prescriptions and the patients therefore feel they get their money's worth. The demand for polypharmacy² explains why many will avoid a facility if they know it is short of medicines, a

² The unwanted duplication of drugs, usually as a result of patients going to multiple physicians or pharmacies.

phenomenon not confined to South Africa (Alubo, 1990; van der Geest & Reynolds Whyte, 1989; Wolffers, 1988; Akin, Griffin, Guilkey, & Popkin, 1985).

When buying a product that is difficult to evaluate, economic theory suggests that “the manner in which the seller is paid has important consequences on the quality of the product provided.” (Leonard, 2003:p.2). Studies throughout Africa confirm that traditional healers are usually paid more if a patient is healed than if they are not healed (Leonard, 2003; Conco, 1972; Edwards, 1983; Oyenye & Orubuloye, 1985; Lasker, 1981). This outcome-contingent fee does not exist in allopathic health care where patients may not be cured despite the expert care that they receive. The difficulty in enforcing such a scheme in allopathic health care is that patients can easily lie about the outcome of the treatment. In traditional health care on the other hand, in many cases it is believed that healers will know if a patient has been healed and non-payment might result in the healer revoking the cure or putting a curse on the patient. Leonard (2001) suggests that this type of ‘payment if cured’ contract may lead to higher quality of care as the healer is also concerned with the amount of effort that patients put into aiding their recovery. Focus group data from the Second Kaiser Family Survey on Health Care in South Africa elaborates on this issue by comparing private and public sector treatment: “They [private doctors] are fast and they are efficient. They do not cheat because the community controls them. With the hospitals it is very difficult. The government pays the staff. Whether you are cured or not cured they do not care because they receive their salaries from the government.” (Smith *et al.*, 1999: p.10). Although traditional healer fees in Nairobi, as in many other countries, are usually governed by the severity and type of illness treated, despite some patients taking advantage of them, leniency is usually shown to those who are poor, particularly the elderly and children (Good, 1987a). In Mozambique, Pfeiffer (2002) found that poorer women with sick children preferred to use the prophets in the African Independent Churches instead of traditional healers as they didn’t have to pay at the prophets. In addition, Waddington & Enyimayew’s (1989, 1990) focus group discussions in Ghana also emphasise the method of payment as an influence on the use of health services. Full payment in cash may be an obstacle to health care for low-income families (Cosminsky, 1987; Weller *et al.*, 1997). Willingness to pay for traditional health care may be interpreted as a willingness to pay for public health care. However as Hausmann-Mueula, Mushi and Muela Ribera (2000) point out, payment for traditional care usually involves cash payment alternatives or credit and there is usually a large amount of social pressure from the extended kin-group to comply.

It should be remembered that health care costs not only involve user fees but also the ‘opportunity cost’ of using such health care (Phillips, 1990). This includes out-of-pocket expenses for treatment or drugs, transport and non-pecuniary cost in terms of the time spent travelling to the facility or queuing. Money may be saved by walking to a facility, however this may involve the loss of earnings through time spent travelling (Phillips, 1990). Travel costs were a strong determinant in the choice of a provider in a study in Southern Cameroon, with patients preferring to travel shorter distances (Leonard, 2001; 2003). Although mission clinics reduced the fees for the poor, this was overturned by high travel costs. A survey in South Africa (Smith *et al.*, 1999) found that travelling to

hospitals usually incurred higher costs than travelling to a primary care facility. In the same survey, 35% of respondents waited more than one hour to be seen at a PHC facility and at a hospital 53% also waited more than an hour. The degree to which cost is a barrier has to be viewed within the context of the particular country, area, health care provider, as well as individual.

Availability, cost and use of medicines

In the words of van der Geest and Reynolds Whyte (1989:p.346), "A clinic without medicines is, one could say, like a bar without beer." The availability of curative medicines is a strong incentive for using primary health care services and the lack thereof is one of the main reasons why people cease to use or bypass such facilities (Mamdani & Walker, 1985; van der Geest & Reynolds Whyte, 1989; van der Geest, 1982). In South Africa, a shortage of medicines at public health facilities is often cited by patients (Mashego & Peltzer, 2005; McCray, 2004; Modiba, Gilson & Schneider, 2001). In a South African survey in 1998, (Smith *et al.*, 1999), 41% of urban Africans thought that the availability of medicines had worsened since 1994, 31% thought it had improved and 29% noted no change. Focus group participants in another South African study reported that the lack of drugs in clinics forced caregivers to go elsewhere for treatment (Gilson *et al.*, 2005). According to Alland (1970, as cited in van der Geest & Reynolds Whyte, 1989), who was one of the first researchers to demonstrate how medicines could be used independently of experts, people want medicines more than the advice from doctors and nurses.

The availability of drugs was found to affect the utilisation of public and non-profit facilities in Mali (Mariko, 2003). In a simulation model, doubling the number of essential drugs would increase public dispensary utilisation by 35.4% and public hospital utilisation by 13.6%. Mander (1997) also found that women in rural areas of Mali were reluctant to go to the clinic a few kilometres away because they knew that all they would get was aspirin or quinine and effective alternatives could be found more locally in the surrounding bush. Other studies have also found the availability of drugs to significantly affect the utilisation of health facilities (Waddington & Enyimayew, 1990; Litvack, & Bodart, 1993; Unger *et al.*, 1990; Gilson *et al.*, 1994). In Haddad and Fournier's (1995) study in a rural area of Zaïre, patients from neighbouring areas were attracted by the study area's availability of drugs. In a later qualitative study in Guinea, Haddad and colleagues (1998) found that the availability of drugs – and effective drugs in particular, to be a key element in the care-seeking process which may sometimes take precedence over other components of quality. In a poor urban neighbourhood of Managua, Nicaragua, Hudelson (1993) found that doctors were considered 'bad' if they did not prescribe any medication for diarrhoea.

Several studies in Central and Latin America in the 1970s (e.g. Ferguson, 1988 cites Cosminsky & Scrimshaw, 1980; Ledogar, 1975 among others) found that pharmacies were an important source of treatment for both the urban and rural poor. In an El Salvador study, despite the government health post offering free treatment, pharmacies were used more often due to the long waits, rude staff, in particular nurses, as well as the lack of explanation for their illness at the Health Posts (Ferguson, 1988). The quality of care was believed to be better at the pharmacy and the medicines

available were perceived to be more effective and fresher than the free unlabelled medicines from the government Health Post. In Managua, Nicaragua, mothers reported having a lot of confidence in the advice given to them by pharmacists and nearly a third thought that pharmacists knew as much as doctors (Hudelson, 1993).

Many patients spend large proportions of their income on treating illnesses which will reoccur so long as socio-economic conditions and the underlying causes of diarrhoea, respiratory infections and malnutrition remain unchanged. In terms of out-of-pocket health expenditure, Ugalde and Homedes (1988) found that the largest proportion in the Dominican Republic (58%) went on medicines. In a rural study in 1984, Ugalde found that peaks in attendance at the clinic coincided with when people knew the monthly supply of medicines would be arriving. When the clinic had run out of medicines people would self-medicate or go to private or public clinics in the town where fees had to be paid. An experimental communal pharmacy with affordable essential medicine was set up at the clinic to reduce the out-of-pocket expenses of patients due to over-medication, the unnecessary use of medicines for self-limiting illnesses, the high cost of medicines in local rural stores and preference for brand-name drugs. The authors hypothesised that the need for non-essential drugs would come down if they had to be purchased and would therefore last longer at the clinic. Furthermore, patients would not have to incur travel and consultation fee expenses by going to town. Results confirmed that low cost medicines were not a barrier to utilisation and resources became available which lowered dependence on the Ministry of Health for the upkeep and running of the pharmacy. One factor which lowered utilisation and was difficult to overcome was the fact that people believed low-cost medicines to be less effective and of lower quality than the more expensive ones, therefore a small stock of brand-name drugs were kept in supply.

The Health Systems Trust (2004) found that only 4% of facilities in Gauteng Province, South Africa had the full complement of the 25 most important and commonly used drugs from the Essential Drugs List. This was compared to 8% nationally, although not all drugs may be used at all facilities. In more than 90% of Gauteng facilities, 7 of the 12 essential items of equipment (e.g. stethoscope, thermometer, BP apparatus) were available in working condition. All Gauteng facilities had a drug register which showed that the percentage of patients who received drugs in Gauteng (99%) was higher than the national average (72%). More drugs per patient (2.6) were also dispensed than nationally (2.0).

Availability of beds

Hospital-based research in Cape Town found that whereas a teaching hospital is likely to emphasise the poor prognosis of a patient who is likely to die, a private hospital on the other hand will do all it can to help the patient survive as long as possible (Gibson, 2004). This is in part due to the difficult decisions that public sector hospital staff are faced with when beds are at a premium. Patients may find themselves being shifted from one ward to another in the attempt to free-up beds, admissions may be delayed entry whilst in-patients are treated and discharged as quickly as

possible (Gibson, 2004). Despite the higher cost, it is not surprising that some patients may therefore opt for private treatment.

2.2.4.1b Environmental dimensions

The environmental dimension of a facility includes its physical characteristics such as location, size, convenience, cleanliness, food, space and decoration. (Gochman, 1997a; Scarpaci & Kearns, 1997). Although size, space and decoration may not affect health-seeking directly, these features may have an indirect effect on the patient's perception of the quality of care provided and how considerate the organisation is (Hiss, 1987a,b as cited in Gochman, 1997a; Ornstein, 1992).

Physical characteristics

Smaller institutional size has been found to have a positive effect in terms of how patients feel they are treated (Mishler, 1981). Larger, crowded facilities which have more hurried consultations are less attractive to patients than a smaller "aesthetically pleasing" setting where a patient has more time to spend with the provider (Scarpaci & Kearns, 1997:p.83). Conversely, hospitals "are the modern shrines of the medical-care system, with their wondrous collection of diagnostic and imaging technology. As well-defined points in the landscape, they symbolize power, expertise..." (Scarpaci & Kearns, 1997:p.89; Feinsilver, 1993). People may therefore attach meanings or a 'sense of place' to health care facilities which give them "an added value above and beyond places of health care per se." (Scarpaci & Kearns, 1997:p.94). As private health care takes on a more consumeristic approach to health, the ambiance or place-centred perceptions of the clinic or hospital may become more important than the function (Scarpaci & Kearns, 1997).

A survey of fixed primary health care facilities in the Gauteng Province (Health Systems Trust, 2004) found that 83% of facilities had adequate consultation rooms (with examination couch, working examination light, washbasin with running water and soap, privacy). This was higher than the national figure of 59%. However only 48% of waiting areas in Gauteng and 50% nationally had sufficient seating. Only 50% of facilities had adequate toilet facilities for staff and patients (nationally this figure was 48%). Seventy-seven percent of facilities in Gauteng also required structural repair, slightly above the national figure of 70%. All Gauteng facilities had water and electricity, most had a telephone available but few had access to a fax or the internet.

Distance

Distance to a health care facility is an important determinant of utilisation of health services, particularly in rural areas (Lasker, 1981; Stock, 1980) although it has been found to be just as important as socio-economic status, even in urban areas in the U.S.A (Bohland, 1984). 'Distance-decay' means that the more difficult a facility is to access, the more likely a patient is to delay seeking treatment, try an alternative therapy or fail to comply with a prescription (Stock, 1980). This effect has been found in most studies looking at the effects of distance on utilisation (Phillips, 1986a; Stock, 1987; Fosu, 1986; Habib & Vaughan, 1986; Gesler, 1979b). The effect that distance will have on utilisation will also depend however on other factors such as the type of illness, the

quality of local providers if they are available, road networks, the cost and availability of transport, as well as the type of transport which will determine journey times (Phillips, 1990; Stock, 1987). In Nigeria, Stock (1987, as cited in Phillips, 1990) found that although utilisation rates will decrease exponentially with distance, illness perceptions will affect the value of the exponent. The steepness of the decline was therefore steeper for health problems which could be treated at home such as rashes and fever and there was no distance decay for illnesses which could only be treated at a health care facility such as tuberculosis. In urban areas, distance may not be one of the main barriers that patients face (Mariko, 2003), although they may still need to travel further if they decide to bypass their local health facility. A health care survey in South Africa found that 11% of urban Africans took an hour or more to travel to a primary health care facility compared to 31% of rural Africans (Smith *et al.*, 1999).

A study in Addis Ababa found that most health facilities used were located in a 3km radius of the study population's homes (Kloos, Getahun, Teferi, Gebre Tsadik & Belay, 1988). Longer trips were made if more specialised services were needed. In Kano State, Nigeria, utilisation fell to one third of the 0km rate at 5km from the dispensary, although this varied from village to village and the effect of distance was muted by the quality of care of the provider and the expectation of cure (Stock, 1987). Many patients of urban TMPs interviewed in Nairobi for example, had travelled considerable distance, usually from rural areas and paid more for the service than they would have done in the rural areas (Good, 1987a). Patients in Malaysia also travelled long distances to see a traditional healer or *bomoh*, with distance-decay only setting in after about 2 hours of travel (Heggenhougen, 1980).

2.2.4.2 Process determinants

The process components of health care involve the aspects of the medical process itself, such as waiting times, examination and length of consultation, as well as communication between the patient and the provider. In Mali, a simulation model has shown that utilisation of public dispensaries could be increased by 136% if the 'process' quality components of health care in public sector staff were as efficient as those in for-profit facilities (Mariko, 2003).

2.2.4.2a Opening hours and waiting time

The accessibility of a provider through their opening hours or the length of time a patient has to wait to be seen can be system barriers to utilising certain facilities (Rundall & Wheeler, 1979; Kasteler, Kane, Olsen & Thetford, 1976). They are also known to affect a patient's perception of the quality of the provider (Atkinson & Ngenda, 1996; Kloos, Etea, Degefa, Aga, Solomon, Abera, Abegaz & Belemo, 1987; Pepperall, Garner, Foxrushby, Moji & Harpham, 1995). In South Africa, Palmer (1999) for example found that some patients may turn to the private sector as a result of the inaccessibility of public sector services at night and at the weekend. Excessive waiting times were also a barrier to health-seeking. Gilson and colleagues (2005) also found that private providers were perceived as being more accessible in terms of their opening hours.

In the Second Kaiser Family Health Care Survey in South Africa (Smith *et al.*, 1999), the unavailability or inaccessibility of services was the second reason cited (23%) after cost for reasons for not having sought care when needed. The third reason cited was the time involved in seeking care (21%). In the same survey 30% of respondents visiting a public primary care facility and 33% visiting a private primary care facility said that it was open every day. For those visiting hospitals however, 97% at public and 92% at private facilities reported that they were open every day with over 90% open for 24 hours a day. After hospitals, private primary care facilities were the most accessible in terms of days of opening with 51% of respondents attending such providers reporting them to be open every day except Sundays. The highest proportion (49%) of respondents at public primary care facilities reported that they were only open weekdays. Despite this, a higher proportion (27%) of respondents at these facilities reported that the site they visited was open 24 hours a day compared to 15% of respondents who had visited a private primary care facility. Thirty three percent of private care facilities visited were reported to have extended opening hours however. A survey of fixed primary health care facilities in the Gauteng Province (Health Systems Trust, 2004) found that 86% of facilities were open for 5 or more days per week for a median of 8 hours, however this was below the national figure of 96% for a median of 9 hours. Gauteng also had the lowest percentage (5%) of facilities offering 24 hour emergency services in the country. This figure had dropped from 7% in 2000.

Logan's (1988:p.116) urban Mexican study found that pharmacies were a convenient source of health care due to the longer hours of opening than other health care providers with "no lengthy waits and no troublesome forms to fill out." The same was found in South Cameroon in relation to vendors in the informal sector who were available day and night to sell antibiotics, anti-malarials, cough and cold remedies, analgesics amongst other medicines (van der Geest, 1988).

Traditional healers are also more likely to work longer and more flexible hours, given it is their source of income. Most of the TMPs (9 out of 10) interviewed in a study in Nairobi for example, worked for 7 days a week, with two-thirds willing to see a patient any time of day or night (Good, 1987a).

2.2.4.2b Ability to deal with the health problem

A lack of medicines, a doctor or equipment may lead patients to consider the services of a primary health care provider as unhelpful and unable to treat all illnesses (Palmer, 1999). In the same way, health-seeking will also depend on the degree to which the type of illness requires provider effort, patient effort or skill of the provider (Leonard, 2003; Mwabu, 1986). In Southern Cameroon for example, patients seek skill in the case of appendicitis, (e.g. government and mission facilities with special equipment). When comparing mission facilities with government facilities in Southern Cameroon, Leonard (2001; 2003) found that patients requiring large amounts of medical effort for their condition were more likely to choose the mission facility. If a patient required both medical and patient effort (e.g. following a treatment) however, the traditional healers were usually chosen since Western medical practitioners had little or no incentives to provide effort or worry about the

effort of their patients (Leonard, 2003). Mission-run facilities demonstrated higher levels of medical effort than government facilities because of their ability to hire, fire, promote or give bonuses to their staff, a power which supervisors of government facilities did not have. Because facility differences in the amount of skill, medical effort and patient effort are usually known to patients, according to Leonard (2003:p.14), this “should lead to distinct patterns in the choice of practitioner”, particularly if the availability of drugs is not the main force driving patients’ choices.

In terms of services provided, a survey of fixed primary health care facilities in the Gauteng Province (Health Systems Trust, 2004) found that only 38% of Gauteng facilities provided immunisation services for at least 5 days per week. This had dropped from 69% in 2000 and was also lower than the national figure of 67%. Only 22% of facilities, a drop from 32% in 2000, offered antenatal care, with 11% able to supervise deliveries. Nationally 55% offer antenatal care and 46% are able to deliver babies. One professional nurse’s knowledge was assessed from each facility (mostly in relation to HIV and its most common opportunistic infections). Although 93% were able to give the correct instructions for making salt and sugar solutions and 99% were able to explain the correct treatment for TB, 84% lacked knowledge on the appropriate use of the BCG vaccination for HIV positive children.

2.2.4.2c Examination and length of consultation

An important part of the medical encounter is the physical examination which, depending on how thorough it is, may influence the patient’s confidence in the doctor’s diagnosis (Scarpaci, 1988; Haddad *et al.*, 1998). The length of the consultation may also contribute. A survey in South Africa (Smith *et al.*, 1999) found that visits to private providers were reported to be longer than those at public primary care providers. Whilst 40% of respondents who had used a public primary care facility reported that the consultation lasted 5 minutes or less, this figure was 18% for respondents who had been to a private facility. The proportion of respondents who reported that the consultation was about 15 minutes was 40% for public and 47% for private facilities. For consultations lasting 30 minutes or more these figures are 20% and 35% respectively. Focus group participants in another South African study also highlighted the fact that examinations at the public clinics did not appear to be thorough enough (Gilson *et al.*, 2005). In some cases the patient receives no examination at all which makes them feel like the doctor can’t be bothered.

Although Wilson and Childs (2002) found that slower consultations were more likely to involve more aspects of care, length of consultation as a marker for the quality of care will also depend on the type of case (e.g. new patient, severity of illness) as well as cultural expectations of how long the consultation should be (Druss & Mechanic, 2003). In a study in the United Kingdom, Ogden, Bavalia, Bull, Frankum, Goldie, Gossiau, Jones, Kumar and Vasant (2004) found that patients usually underestimated how long the consultation actually lasted. Those patients who perceived the consultation to be shorter than it was were more likely to be dissatisfied with emotional aspects of the consultation. The authors conclude that instead of just increasing the length of the consultation, increased listening and understanding on the part of the doctor could improve the

patient's satisfaction with their consultation and motivate them to comply with their doctor's recommendations.

2.2.4.2d Communication

According to Roter and Hall (1997:p.206), "Communication is both the most basic and the most powerful vehicle of health care." Although the doctor-patient relationship continues to evolve and it is acknowledged that not all patients are inarticulate passive recipients of health care, communication and information-sharing between doctor and patient is still problematic, even in developed countries (Armstrong, 1984; Gochman, 1997a), despite being the institutional factor most likely to impact on health behaviour (Gochman, 1997b). In the United States for example, research found that only half of patients left the surgery having understood what their doctor had told them (DiMatteo, 1991). In the Second Kaiser Family Foundation Survey of Health Care in South Africa (Smith *et al.*, 1999) patients rated 85% of nurses and 97% of doctors in terms of how well they listened to the patient as excellent or good. In terms of how well the patient understood the diagnosis, 64% of nurses' patients and 88% of doctors' patients stated that they had understood. Public clinics in particular in South Africa have been criticised for giving patients poor explanations about their health problem (Gilson *et al.*, 2005). In Lusaka, Zambia, a study by Atkinson *et al.* (1999) at a hospital outpatients department revealed that for many users who had been referred, few had been given information about their diagnosis. Similarly in Kenya, caregivers attending government facilities were rarely told what was wrong with their child or explained what medicines had been prescribed or dispensed (Zurovac, Midia, Ochola, Barake & Snow, 2002). One reason for the great demand for medicines and the popularity of self-medication has been attributed to the poor quality of social relations between doctor and patient, particularly amongst lower income groups (van der Geest & Whyte, 1989). In fact it has been suggested that medical prescriptions may be a substitute for effective communication with a patient (Wartman, Morlock, Malitz & Palm, 1981).

One reason for ineffective communication can be attributed to the knowledge perspective - the fact that doctors and patients obtain their knowledge from very different sources (Hayes-Bautista, 1978). According to Helman (1985, as cited in Gochman, 1997a:p.1), the doctor "is more likely to have a 'disease' view, focusing on specific 'objective' pathology; the patient is more likely to have an 'illness' view, reflecting 'subjective' feelings and experiences." Although the physician's knowledge of the explanatory beliefs of the patient is generally limited, this is moreso the case for less well-educated patients (Helman, 1985). In some cases communication between a doctor and a physician may be hampered by linguistic differences (Ngubane, 1977) in which case a lingua franca or an interpreter is used. However as DiMatteo (1997:p.7) points out "It is important to remember that physician and patient may share a language and culture, but still fail to understand each other well." This is due to the subjectivity of the illness experience (Kleinman, 1988) and the patient's potential anxiety as well as the medical jargon used, consultation time limits and differences in physician-patient knowledge and power (DiMatteo, 1997).

The patient may perceive the amount of information that a doctor provides as a reflection of his concern (Roter & Hall, 1997). Although the majority of patients want to find out as much information as they can from their provider (Hall, Roter & Katz, 1988; Roter & Hall, 1992; Ley, 1989), typically they do not ask many questions or seek clarification when they do not understand (DiMatteo, 1997; Roter & Hall, 1992; Barnlund, 1976). This may be as a result of lacking skills in articulation or not wanting to take up too much of the doctor's valuable time (DiMatteo, 1993; Roter, 1984). Socio-demographic characteristics of the patients which are known to hamper effective communication include low income and education (Barnlund, 1976) as well as older age (Putnam, Stiles, Jacob & James, 1985). Even in cases where patients are more assertive, the amount of time available for the consultation is usually limited and the physician may therefore control the amount of information that is exchanged through close-ended questions (DiMatteo, 1997; Kleinman, 1988; Beisecker & Beisecker, 1990; Fisher, 1983). Furthermore, in the United States, Putnam *et al.* (1985) found that diagnosis was technology-driven rather than using detailed medical histories which required more communication skills.

According to Ngubane (1981:p.361), in terms of the doctor-patient relationship, traditional and Western providers differ in the way the case history is prepared, how the patient is diagnosed, communication between the provider and the patient as well as the attitudes of the providers to different types of health care. Further differences arise in terms of what the patient expects of the doctor and vice versa. Western doctors usually ask the patient their reason for attendance and about their symptoms. This is usually followed by a brief examination, with very little explanation about what is wrong with the patient or the cause of the illness (Ngubane, 1977; Good, 1987a; Lasker, 1981). Furthermore, a patient might be reprimanded or treated condescendingly if it is discovered that they have been to a traditional healer, particularly if the patient is attending late in the health-seeking process. This usually deters the patient from telling the doctor or nurse about all forms of treatment that they might have taken leading to inaccurate case histories (Ngubane, 1977). The *sangoma* (diviner) on the other hand usually knows why the patient has come to see them and what the cause of the illness is (Ngubane, 1981). The *inyanga* (TMP / herbalist) may not have the divination powers of the *sangoma*, however they spend a long time finding out about their patient's physical, mental and social well-being (Ngubane, 1981).

2.2.4.2e Staff attitudes and affective behaviour

As well as giving the patient information in a format that they can understand, the doctor's emotional support and understanding is a major element of effective communication (DiMatteo, 1997). "When lay people cannot judge the contribution of the medical or technical intervention to their well-being" (Phillips, 1990:p.208), the bedside manner or the affective behaviour of the health professional and the "perceived degree of helper commitment" (Chrisman & Kleinman, 1983:p.584) becomes crucial to gain the patient's confidence and trust (Ben-Sira, 1976, 1980, 1988; Donabedian, 1985). Ben-Sira (1988:p.94 as cited in Ben-Sira, 1997:p.39) defines affective behaviour as: "(1) attributing therapeutic importance to and (2) engaging in (a) warm, open relations with the patient, (b) attentiveness to problems even if unrelated to disease, (c) gathering

information about personal and family problems, (d) gathering information about social relations, and (e) explaining the rationale of diagnosis and treatment.”

Patients tend to be more satisfied with the physician encounter when their opinions are taken into account and when they are free to express negative emotions (Stewart, 1984). Patients can also recall instructions much better if the doctor is friendlier and when they are involved more in the consultation, rather than placing them in a passive, compliant role (Heszen-Klemens & Lapinska, 1984). By using a more patient-centred approach (Byrne & Long, 1976, as cited in Ogden, 2004) involving the patient more in decision-making and considering their needs and preferences, inappropriate and unnecessary medical care may be avoided as patients are less likely than physicians to choose expensive or invasive treatments (Wennberg, 1990; DiMatteo, 1997; Brody, 1992). They are also more likely to give a complete history of the illness, symptoms and the treatments taken (Waitzkin & Stoeckle, 1972; Hackett, Cassem & Raker, 1973). Choosing a treatment that the patient themselves is happy with also means that they will be more likely to comply (DiMatteo, 1994; DiMatteo, 1997; Speedling & Rose, 1985).

In Jamaica, MacCormack and Draper (1988:p.287) observed that nurses “enjoyed the power of ‘gatekeepers’ to the therapy, sometimes berating the guardians in a verbal show of power.” As well as telling caregivers never to use traditional treatments, complicated words such as ‘electrolytes’ were used when explaining oral rehydration therapy thereby “validating their professional status.” In South Africa itself, a common theme running through focus groups in the Eastern and Western Cape was the negative attitude of staff in the public sector which created an unpleasant atmosphere for the patient (Palmer, 1999). Nurses in particular were criticised for criticising patients, insulting them and showing favouritism. Public clinics in which nurses were friendly, understanding and helpful however, were more accessible to the respondents, even if the medicines were perceived to be weaker.

Other studies in South Africa, notably in public sector obstetric settings have highlighted the barriers created by the negative attitudes of some nurses, including verbal, physical abuse and neglect (Jewkes *et al.*, 1998; Abraham, Jewkes & Mvo, 2001). Nurses have been found to be particularly abusive towards pregnant teenagers, teenage mothers, lower SES patients and those with HIV/AIDS (Modiba *et al.*, 2001). Patients rarely complain however, for fear of victimisation (Jewkes *et al.*, 1998).

Ethnographic fieldwork from a hospital in Ghana describes how patients often (although not from all health workers) receive differential treatment according to their social status and who they know (Andersen, 2004). Patients were seen as problematic if they did not follow instructions, answered questions incorrectly, complained, caused trouble or if they thought they knew more than the nurse or doctor. Complaints about patients mostly referred to patients from rural areas or those who lacked education. Logan (1988:p.116) found that pharmacists in an urban Mexican study were viewed more as “social equals than social superiors”, thereby facilitating communication. Logan

observed that in order to maintain business, pharmacists accepted their client's health care beliefs and were more willing to please their customers than other health care practitioners. As many of the pharmacists lived locally, they were probably more aware of their clients' health and social problems. In South Cameroon, van der Geest (1988) found that the local informal traders who sold medicines were even more approachable than the pharmacists, as people could ask for particular medicines or ask what particular medicines were good for, without having to disclose their health problem. They were also more patient and friendlier towards clients.

The level or ranking of a provider may also indicate the quality of care. In the Philippines for example, Wong, Popkin, Guilkey and Akin (1987) found that midwives at public facilities in urban areas were thought to provide lower quality care than doctors or nurses. Other studies suggest that the presence of qualified health workers attracts patients (Heller, 1982; Sauerborn *et al.*, 1989). In a South African survey (Smith *et al.*, 1999), private facilities (45% primary and 59% hospital) were more likely to be rated as excellent by their attendees than public facilities (19% primary and 14% hospital). In a different study in South Africa, Palmer (1999) found that private doctors were usually favoured because of the polite manner in which they treated patients, spent time talking to them and giving them a thorough examination. Gilson and colleagues (2005) found similar results in their focus groups in South Africa (2005). In Israel, Ben-Sira (1988, as cited in Ben-Sira, 1997) also found that private fee-for-service providers were perceived to display more affective behaviour than primary care practitioners whose services were universally free. This was explained by the private providers' need to attract customers to their service and the primary care providers' need to demonstrate their authority given their perceived lower status by the professional community and patients. A survey of fixed primary health care facilities in the Gauteng Province (Health Systems Trust, 2004) found that 94% were managed by a professional nurse. Compared to other provinces, Gauteng had the highest number of doctors although the number of professional nurses (22.6 per 100,000 population) was below the national figure of 33.2 per 100,000 population. In the Second Kaiser Family Foundation Survey of Health Care in South Africa (Smith *et al.*, 1999), 64% of patients treated at a primary health care facility were treated by a nurse whereas only 8% of patients who visited a private facility and 27% of patients at a public hospital were treated by a nurse. In the same survey, doctors were rated much higher than nurses in terms of the care that they provided. In terms of how well they treated patients, 76% of nurses and 92% of doctors were rated as excellent or good.

2.2.4.3 Outcome and patient satisfaction

Ineffective traditional or biomedical treatment or dissatisfaction with the treatment has been found to be a major determinant of non-compliance (Hayes-Bautista, 1976), switching therapies or using different therapies conjointly (Janzen, 1978; Mburu, 1973; Acuda, 1983). Past successful experiences with a treatment on the other hand are more likely to promote adherence to it (Chrisman & Kleinman, 1983). In the case of childhood convulsions in Kenya for example, Molyneux and colleagues (2002) highlight the importance of previous experience as well as trial

and error when initially choosing a therapy. Recovery, the speed of recovery and therefore the efficacy of the treatment are important criteria when judging the quality of a health care provider or treatment (Haddad *et al.*, 1998) and usually govern whether these will be used again in the future. Measuring the outcome of health care is problematic however, since many illnesses are self-limiting and not life-threatening and would disappear regardless of treatment (Haug, 1997).

Although allopathic health care may be the first choice of many, the unfolding of an illness or failure of a treatment to work within a temporal boundary may change the definition of the illness from a natural one to a personalistic one (Chavunduka, 1978; International Development Research Centre, 1980). It is suggested by Etkin (1988) that one reason for the continued use of traditional medicines is due in part to their efficacy as defined by the patient. Emic signs of efficacy might include the disappearance of symptoms, a physical sign that the healing process is underway (e.g. purging the body, promoting rash eruption) or determining who or what caused the illness and why (Etkin, 1988). Western bias usually means that such definitions of efficacy are usually not understood and often ignored by biomedical health care providers. To ensure compliance, "the clinical reality implied by labelling and treatment must be congruent with the patients' sociocultural construction of reality (Berger & Luckman, 1967), and the symbolic content within which symptoms are embedded (Geertz, 1966)." (Chrisman & Kleinman, 1983:p.584).

There appears to be a discrepancy between a Western practitioner's definition of therapeutic efficacy and that of a patient's (Kleinman, 1980). Whereas the criteria used by a doctor to evaluate the success of a treatment is more technical, usually defined by the absence of disease, or controlling "disordered biological and psychological processes." (Kleinman, 1980:p.82), a patient's evaluation also involves behavioural aspects such as how they feel, as well as subjective evaluations about the doctor's interest in their illness problems as opposed to disease problems, or what Kleinman (1980:p.82) refers to as "the provision of personal and social meaning for the life problems created by sickness." (Cay, Philip, Small, Neilson, & Henderson, 1975; Kane, Olsen, Leymaster, Woolley, & Fisher, 1974). In Santiago, Chile, in predicting patient satisfaction, 4 variables explained 29.6% of variance in predicting quality of care on a Likert-scale. Most satisfaction with the medical encounter usually involved being touched by the physician, being examined well and being listened to, receiving a free prescription drug or being referred to the local hospital for a diagnostic procedure, such as a blood test or X-ray. Dissatisfaction with the place and space of the facility involved the long queues, lack of cleanliness and impolite ancillary staff who booked the appointments. (Scarpaci, 1988). When a patient is not satisfied with the quality of care, the advice given or the outcome of treatment, clinical processes may be affected by non-compliance (Ley, 1981, 1989, as cited in Ogden, 2004), the misuse of health services or the use of harmful or ineffective alternative treatments (Kleinman, 1980).

Mkhwanazi (1989) attributes much of the therapeutic success of the *sangoma* to an empathetic understanding of the patient's health problem within the framework of their world-view. Discrepancies in patient and practitioner Explanatory Models may lead to the patient withholding

information for fear of ridicule or admonishment as well as resulting in the negative health outcomes outlined above (non-compliance, dissatisfaction, etc.) (Kleinman, 1980). When asked to rank different Western health care providers in a Yoruba town in Nigeria in terms of their effectiveness, the main criteria cited by community members included the efficacy of the medication (including speed of recovery), how well qualified the health workers were (including their manner) and recommendations from others who had used the services (its 'fame') (Adetunji, 1991). In a qualitative study in the Eastern and Western Cape, Palmer (1999) found that the efficacy of the treatment in the public sector was often doubted due to the lack of a proper examination, the poor quality of medicines and a poor explanation of the health problem. This led to recurrent visits to the same health care provider to no avail or paying more to see a private practitioner. Similar to previous study findings in South Africa (Smith *et al.*, 1999; Couper, Tumbo, Hugo, Harvey & Malete, 2004), focus group participants in another study in South Africa revealed that medicines at public clinics were generally perceived to be diluted and weaker than the medicines available at private providers (Gilson *et al.*, 2005). Furthermore, participants often felt that they were not examined properly, were given poor explanations of what was wrong with them and were often blamed for their health problem as well as the attitudes of the nurses (Gilson *et al.*, 2005).

Patient satisfaction with a consultation may therefore be divided up into affective aspects such as emotional support and understanding, behavioural aspects such as an adequate explanation and the prescription, as well as competence, including how appropriate the referral is and the physician's diagnosis (Ley, 1988). Satisfaction with the provider also means that a patient will be more likely to perceive their problem as being solved (Ben-Sira, 1988 as cited in Ben-Sira, 1997) and to use their services in the future should they require them (Ross & Duff, 1982). Ben-Sira (1988, as cited in Ben-Sira, 1997) found that lower satisfaction with the provider increased the chances of a patient turning to a private fee-for-service practitioner.

2.2.5 Referral Systems

2.2.5.1 Social networks, support and the lay referral system

Social networks and the support they provide are crucial for finding out new contacts and information, compliance with medical regimens (Levy, 1983) as well as identifying and solving problems (Heaney & Israel, 1997), all of which are important for health-seeking behaviour. More insular groups for example are more likely to maintain traditional health beliefs and reinterpret information from allopathic health care according to these beliefs (Chrisman & Kleinman, 1983). One aspect of social networks is the support they provide. This can be defined or measured in several ways and is always intended to be a positive interaction (Heaney & Israel, 1997). This may be emotional (e.g. care, empathy, love or trust), instrumental (e.g. service or direct assistance), informational (e.g. advice, suggestions, information) or appraisal support (e.g. constructive feedback, affirmation), although it may not always be possible to study them as separate

constructs (House, 1981, as cited in Heaney & Israel, 1997). It should be noted however that "social networks might exert a negative impact in circumstances when dangerous health advice is dispensed, and / or preventive action is discouraged by influential others." (Adams, Madhavan & Simon, 2002:p.175)

According to Barnes (1954, as cited in Heaney & Israel, 1997) social networks which are more close-knit, homogenous and live closer to each other provide each other with better affective and instrumental support. As outlined previously, Suchman (1965a; 1965b) describes these structural characteristics on a continuum ranging from parochial to ethnocentric. Child support in the form of money, sympathy, medicine and advice are invaluable in the health-seeking process, and smaller, poor households may lack support from kinship networks (Sauerborn, Adams, & Hien, 1996). Smaller socially homogenous groups may also not receive as much information as members of larger heterogenous networks which are able to access information much easier (Wheeldon, 1969, as cited in Chrisman & Kleinman, 1983; Kroeger, 1983). With urbanisation, the extended family may become more dispersed, thereby reducing the effect of kin on health-seeking behaviour, particularly with regards to traditional medicine (Feierman, 1979). Although it is still used, families are less likely to participate in actual treatment or associated rituals and financial, temporal and spatial constrictions in urban areas have reduced the length and complexity of such treatments (International Development Research Centre, 1980; Good, 1987a). The more nuclear family structure and work commitments in urban areas were reasons posited for the lower frequency of child health check-ups than in rural areas in South Africa (Hirschowitz, 1995a). In communities or social groups with person-oriented world-views and more close-knit social networks, there are likely to be more knowledgeable people such as grandmothers who can be consulted about treatment (Chrisman & Kleinman, 1983). In Guatemala, the presence of a women's mother-in-law or mother in the household lowered the probability of receiving advice or assistance only from a husband (Carter, 2004). Although mothers are usually the main decision-makers when it comes to child care, husbands or partners also play an important role, particularly in patrilineal societies or if they are expected to pay for the treatment or medical care (Adetunji, 1991). In the case of childhood fever in urban Kenya, Molyneux and colleagues (2002) found that 74% of mothers had received advisory or financial assistance and the main source of financial assistance was from their husbands. Support in visits to shops and health facilities was more likely amongst mothers whose husbands were resident in the same household, mothers who were married and mothers living in male-headed households. In Guatemala, Carter (2004) unexpectedly found that a high proportion of women (63.3%) sought advice and assistance from their husbands when their child had been unwell. The extent to which the husband was involved in the child's illness was determined by characteristics of the illness, the child and the availability of social support and health care providers. Whilst mothers-in-law were more likely to give or provide medicines and mothers of the caregiver were more likely to give home treatments, husbands were more likely to provide money. In Tanzania however, Hausmann-Mueula and colleagues (2000) describe how the onus to pay for the child's health care usually fell upon the mother and many caregivers complained of their husband's and partner's indifference towards their child's health care.

According to Good (1987a), most urban patients are usually referred to a TMP by a relative, friend or acquaintance who has experience of the TMP's work or knowledge of their reputation. In rural Guatemala for example, a caregiver's proximity to parents and in-laws increased the probability that a child would be taken to a curer (Goldman *et al.*, 2002). In Janzen's (1978) view, this 'Therapy Managing Group', or what Mayer (1966) terms an 'action set', is key to understanding the therapeutic choices that patients make across all forms of health care. In certain cases, relatives may actually be in charge of the decision-making process (Stock, 1987). In Kenya for example mothers choices regarding fever and convulsions were sometimes based on the insistence of other family members and if the mother did not conform then disputes could arise (Molyneux *et al.*, 2002). Sometimes mothers would risk separation or divorce if they thought that the treatment would save their child. In some cases mothers sought advice from their mother-in-law who would then take the child to a traditional healer without the father knowing.

Within the Lay Referral System (Friedson, 1970) evaluations are constantly made in terms of symptom change, response to treatment, side effects of the treatment and satisfaction with the folk or professional care. (Chrisman & Kleinman, 1983). The degree to which the action set will be involved in the patient's illness is partly determined by the severity of the illness (Mayer, 1966, as cited in Chrisman & Kleinman, 1983). For more commonplace illnesses the Therapy Managing Group is likely to comprise fewer individuals and in some cases only the sick person themselves, than for illnesses which have a personalistic cause (Hausmann-Mueula *et al.*, 2000).

The degree to which the action set will be involved in the patient's illness is also determined by the structure of the social network (loose-knit or close-knit) (Mayer, 1966, as cited in Chrisman & Kleinman, 1983). 'Noninsular cosmopolitans' (low levels of ethnic exclusivity, friendship solidarity and orientation to family tradition and traditional health beliefs) are likely to trust providers outside their network more than parochials and also base their judgement of the provider and subsequent adherence to treatment on a wider range of factors (Chrisman & Kleinman, 1983). In an urban study of health-seeking behaviour in Senegal, the participation of a mother in urban networks (use of the local language, being a member of local associations and knowledge of the political leader in the area) was associated with utilisation, whilst time spent living in the area on its own was not (Fassin, Jeanne, Cèbe, Réveillon, 1988). Apartheid's urban policy in South Africa ensured that townships such as Soweto were fairly homogenous and low incomes encouraged mutual assistance, thereby creating a strong sense of community (Morris, 1999). More recent research continues to find this sense of community with strong social networks in Soweto (Gilbert & Soskolne, 2003), which for the purposes of this study may be contrasted with the heterogenous community of Johannesburg, particularly the inner city.

Family influence may also foster a notion of reliability in habitual behaviours (Lindbladh & Lyttkens, 2002). "Internal subjectively constructed barriers firmly rooted in prior non-chosen social and economic conditions can be an equally powerful restricting mechanism." (Lindbladh & Lyttkens, 2002:p.458). Over 70% of women in the Sowetan study had been told about Dutch medicines by

their mothers (de Wet, 1998a), and notions of reliability and familiarity would no doubt have influenced their use. In Addis Ababa it was found that if patients had a new illness they tended to seek advice from relatives or friends before going to pharmacies (Kloos *et al.*, 1988). In the Philippines, Hardon (1987) found that families were the most important source of information on health care (44%) followed by the rural health centre (20%) then doctors in town (14%).

2.2.5.2 Professional referral system

A patient may find themselves at a provider through the professional referral system. This may either entail a referral from a clinic or health centre to a higher level of care at a hospital, a referral from a GP to a specialist at a hospital, or a referral from a traditional healer to a biomedical facility. Good (1997) for example, found that 90% of TMPs interviewed referred patients to a clinic or hospital for a wide range of illnesses including fractures and injuries, asthma and tuberculosis.

2.2.5.2a Bypassing

...in poorly funded and overstretched systems... if any sector within the system becomes more efficient and of better quality, gains will soon be lost by the swamping effects of new users switching to it. (Phillips, 1990:p.196)

Before the adoption of a primary health care approach to public health services by the ANC government in South Africa, in 1993 / 4 anyone could attend a teaching hospital (Gibson, 2004). Following the subsequent downsizing of higher level services in order to achieve a more equitable health system, unless in an emergency situation, accessing secondary or tertiary care henceforth requires a referral letter from a recognised health care provider (Gibson, 2004; Scarpaci & Kearns, 1997). Non-emergency routine cases do attend higher levels of care however, without an appropriate referral. In South Africa, 93% of nurses in a survey agreed that patients abused the system of primary health care by shopping around between clinics (Walker & Gilson, 2004). Slikkerveer (1990:p.63) describes 'healer shopping' as "different healers treating the same illness without any process of referral between them."

'Doctor shopping' or bypassing is not just limited to the case of South Africa. Koop (1993, as cited in Scarpaci & Kearns, 1997) reports that 37 million self-referrals without medical insurance often present with non-serious health problems in hospital emergency rooms in the United States. In the Philippines, it is estimated that approximately 60% of hospital cases in the mid-1980s could have been dealt with by PHC services (Phillips, 1986b). According to Phillips (1990), in many cases hospitals are used because of patients' lack of confidence in primary health care. In Sri Lanka, rural residents often bypassed the local government hospital in favour of the larger general hospital in Galle, usually because it lacked supplies and had fewer facilities (Wolffers, 1988). In a study by Akin and Hutchinson (1999) in Sri Lanka, more severely ill patients were more likely to travel further for better quality care and in general facilities (regardless of type) were less likely to be bypassed if they had sufficient doctors and drugs and were in better condition. In Tanzania, lower-

level facilities were also bypassed for district hospitals and other tertiary care facilities mainly due to the difference in quality of services provided (Walraven, 1996).

In Lusaka, Zambia, a study by Atkinson *et al.* (1999) revealed that patients were not bypassing the primary care facilities because they would receive better technical care, but because they believed the outpatient departments at hospitals to be better-supplied with drugs, which in effect made it cheaper as they did not have to go and purchase their own. Of those patients interviewed at the hospital outpatient's department, 60% had come directly, without having been to a health centre, particularly paediatric patients. Furthermore, 41% of those who had been to a health centre had self-referred. Despite the preference for hospital treatment, only 48% considered the services to be good, with the other half complaining of overcrowding, being around others with infectious diseases, poor staff attitudes, doctors not listening properly, as well as rushing the examination. When respondents exiting urban health centres were interviewed, the majority were happy with the staff attitudes and drugs were generally available, although only a few had been explained what was wrong with them. Respondents who were interviewed in the community reported dissatisfaction with the urban health centres due to drug shortages and waiting times, although staff attitudes were generally good and the health facilities were clean. In-depth interviews were held with a group of respondents who had been referred to the hospital but who did not go. The main reasons given included not having sufficient money for transport, food at the hospital, or to buy drugs if there was also a shortage at the hospital. Respondents also assumed that the visit would only be to make an appointment and they would still have to return on another day. Data from this study suggest that it is only a small percentage of the health-seeking population who do bypass the health centres.

Although hospitals were not found to be a source of primary health care as in the previous studies, a study in the capital of Burkina Faso found that patients who lived on the outskirts of Ouagadougou were willing to bypass their local clinic and travel further into the centre where facilities were better equipped and better staffed (Develay *et al.*, 1996). In a study in Burkina Faso where community health workers (CHWs) were supposed to identify and refer serious cases if necessary, these were bypassed in 96.5% of cases, one reason being because CHWs were only trained and equipped to treat a small number of mild conditions (Sauerborn *et al.*, 1989).

2.2.6 Conclusion

The preceding sections have provided an overview of different predictors and barriers to health-seeking behaviour and have highlighted the variability in importance of these variables in different settings. These include characteristics of the caregiver (education, SES, gravida / experience); characteristics of the child (general health status, age and sex); characteristics of the illness (perceived severity or need, stage of illness); characteristics of the provider (organisational and environmental dimensions, process determinants) as well as outcome and patient satisfaction. One variable which has not yet been explored however is that of health beliefs. The following section explores the concepts of world-view and illness aetiology and provides insight into health beliefs and subsequent health-seeking behaviour specific to the context of childhood illnesses in South Africa.

2.3 Health beliefs: World-view and illness aetiology

An ethnomedical approach to understanding health-seeking behaviour places particular emphasis on the meaning of illness (as opposed to disease), experiences and expectations, collectively known as Explanatory Models (EMs) of illness (Kleinman, 1980; Good, 1987a). According to Kleinman (1980:p.105), these serve to “guide choices among available therapies and therapists and to cast personal and social meaning on the experience of illness”. Furthermore, Kleinman (1980: p.105), suggests that these models seek to explain aetiology, the time and mode of the onset of symptoms, pathophysiology, the course of sickness including the degree of severity, and finally treatment and should be distinguished from general health beliefs, as they are formed in relation to a *specific* illness episode and may undergo change fairly frequently. Beliefs about symptoms might also differ considerably to that of a health professional (Chrisman & Kleinman, 1983).

Within these Explanatory Models are ‘semantic sickness networks’ composed of the patient and their family whose experiences and beliefs about symptoms and causality, along with any social problems form a basis for decision-making (Kleinman, 1980; Good, 1987a). Patient and family EMs may often be in conflict, forming a “dyadic relationship” (Kleinman, 1980:p.111). Examples of semantic sickness networks include the concepts of folk-related illnesses in some Latin American countries, such as *caida de la mollera* (fallen fontanelle), *mal aire* (evil air), *mal ojo* (evil eye), *susto* (magical fright), *empacho* (food stuck in the digestive system) and *tirisia* (anxiety) (Weiss, 1988; Rivera & Wanderer, 1986; Kleinman, 1980; Logan, 1988; Weller, Pachter, Trotter & Baer, 1993; Hudelson, 1993). Although not found in the South African world-view, the concept of the ‘evil eye’ occurs in at least 36% of the world’s cultures, including North Africa, Bangladesh, India and Pakistan (Heelas, 1977). In Bangladesh for example giving the evil eye to newborns is referred to as *nazar* (Winch, Alam, Akther, Afroz, Ali, Ellis, Baqui, Darmstadt, El Arifeen, Seraji, & the Bangladesh PROJAHNMO Study Group, 2005), whilst in Kenya the evil eye is referred to as *sihoho* or *juok wang’* (Geissler, Harris, Prince, Olsen, Achieng’ Odhiambo, Oketch-Rabah,

Madiega, Andersen & Molgaard, 2002). Further examples of semantic sickness networks include *heart distress* in Iran, which was perceived as a side effect of the oral contraceptive and hampered its uptake (Good, 1977); *ching* (fright) in Taiwan or Hong Kong; *ut siong* in Taiwan which is characterised by symptoms of anxiety or depression but which has several lay definitions (Kleinman, 1980); *white liver* (strong resemblance to HIV/AIDS) caused by *conjugation*, *hoodoo rootwork* amongst Black southern Americans (Kerr, 1993); rickets, marasmus, weakness and kwashiorkor in Digo children in Kenya are referred to as *chirywa* and attributed to the sexual behaviour of the parents (Daily Nation, January 27, 1978; Gerlach, 1959). In Mozambique a similar life-threatening childhood illness invoked by adultery on the part of either parent (although usually the father whilst the child was still breastfeeding) is referred to as *piringaniso / phiriganiso / piringaniswa* (Pfeiffer, 2002). These concepts of illness and associated patterns of behaviour have evolved from the world-view of the people in these countries (Good, 1987a). Across societies, for many of the afore-mentioned illnesses, Western medicine may be used to cure the somatic symptoms of the 'disease', whilst traditional or folk treatment is needed to cure the cause of the 'illness' (Kleinman, 1980, Adair & Deuschle, 1970) or *tuan-ken* which means "to cut down the root" in Chinese (Kleinman, 1980: p.87). As routine assessments of symptoms and response to treatment are made and new information is learnt, the explanatory model of a patient's illness may change (Blumhagen, 1980; Kleinman, 1980; Good & Good, 1981; AmaraSingham, 1980, as cited in Chrisman & Kleinman, 1983).

Hammond-Tooke (1989:p.32) defines world-view as a "system of concepts that underlies and reflects perceptions of the world and of humanity's place in it." Each person develops their own world-view through their life course and these explanatory concepts may contain conflicting beliefs (Hammond-Tooke, 1989). Therefore concepts of health, illness and healing or *heal memes* (Fabrega, 1997) cannot be divorced from the particular world-view of the person being healed and their cultural group. According to Fabrega (1997:p.23), "The set of heal memes of a specific society provides the meanings of and guides the actions directed toward health, sickness, and healing in that society." Heal memes are passed on from generation to generation and once they are no longer effective they evolve or are discarded.

According to Good (1987:p.15), "Parallel use of biomedical and traditional medical specialists, as well as other sources of therapy, is often pronounced where large segments of the society conceptually separate the treatment of overt symptoms of illnesses from what are perceived as their underlying root causes." The biomedical model tends to view health as a commodity (Taussig, 1980) with scant attention for any social or supernatural causes of illness. In Western medical science there is a causal organism for every disease and the primary concern is to heal the body (Gumede, 1990). Reasons for becoming ill usually fall within 1 of 3 groups: statistical probability, hereditary and lifestyle (Hammond-Tooke, 1989). As well as natural causes of illness such as old age, injury, exposure to heat or cold (Gumede, 1990) or illnesses that are just said to happen (Ngubane, 1977), illnesses in traditional African medicine may also be caused by psychological or supernatural factors (Ngubane, 1977).

Hammond-Tooke (1989:p.46) divided the South African world-view (Nguni, Sotho, Venda and Tsonga) into “four broadly-defined sets of theories purporting to explain illness and misfortune”: witchcraft, spirits and ancestors, Supreme Being and pollution³. Debates over which cause predominates in sub-Saharan Africa are ongoing, with some researchers finding the personalistic (i.e. witchcraft) models of illness more dominant (Stayt, 1968; Hammond-Tooke, 1989; Caldwell & Caldwell, 1994; Azevedo, Prater, & Lantum, 1991; Ajai, 1990), whilst others such as Green (1999), Good, (1987) and Feierman (1984) argue that the naturalistic (i.e. pollution) explanations of illness are more widespread. Green (1999) argues that the wide use of emetics and purgatives, which are usually used to rid the body of the pollution are an important indicator of the importance of illnesses caused by pollution in South Africa.

In determining the cause of the illness, anthropologists have found that healers distinguish between different levels of cause: immediate (proximate) versus ultimate or instrumental, efficient and ultimate (Green, 1999). Because many health beliefs are passed on from one generation to another orally, contradictions and illogicalities may occur (Goody & Watt, 1963), particularly in urban areas where more heterogeneous patterns of belief are found (Kleinman, 1980). Although competing theories of causation and treatment may exist, general patterns can usually be found amongst healers (Green, 1999), as well as in the popular sector where a ‘public ideology’ is made up of shared beliefs (Kleinman, 1980:p.95).

Patterns of symptoms “produce culture-bound disorders” which Kleinman (1980: p.77) interprets as “illnesses associated with culturally unique patterns of meaning superimposed on diseases that are universal.” In many cases where a naturalistic agent is expected to be the cause and the patient does not respond to the treatments given, then a personalistic cause may be suspected (Green, 1999). In other cases, “disorders are of indeterminate aetiology until treatment begins.” (LeBeau, 1998:p.3). Illnesses which are “bound up with African ways of viewing health and disease” are usually referred to as *ukufa kwabantu* (diseases of the African peoples) (Ngubane, 1977). Wessels (1989) lists these as: spirit possession, sorcery, poisoning, pollution, environmental hazards, ancestral wrath and disregarding cultural norms. In contrast to Western medicine, *who* and not *what* caused the illness must therefore be ascertained (Gumede, 1990). According to Felhaber & Mayeng, (1997) diagnosing what caused the illness (immediate cause), who caused the illness (efficient cause) and why (ultimate cause) may involve observation, asking the patient about their symptoms as well as divination. Information from family members may also be obtained.

³ Pollution in this context refers to a person or place that is in an impure or ‘polluted’ state which is usually associated with birth or death. It does not refer to contaminating the environment.

2.3.1 Supernatural / personalistic causes

Personalistic causes of illness include “the active, purposeful intervention of an agent, who may be human (a witch or sorcerer), nonhuman (a ghost, an ancestor, an evil spirit) or supernatural (a deity or other very powerful being).” (Foster, 1976:p.775). Witchcraft in the form of *idliso* (poisoning) or *ilumbo* (spell), spirit possession, ancestral wrath, neglect of cultural rites or practices and defilement are all supernatural causes of illness (Gumede, 1990; Mgobozi, 1974).

2.3.1.1 Ancestral cause of illness

A strong bond is maintained between the living and the more recently dead (grandparents or great-grandparents) through customary rites and rituals to honour the ancestors (Ngubane, 1977; Gumede, 1990) known as the *amadlozi* in Zulu and *badimo* in Sotho. If these customs are not performed, if the family name is sullied or if junior members of the family show disrespect towards their elders, ill-health or misfortune may occur as a result of the ancestors withdrawing their protection (Ngubane, 1977). This serves as a gentle reminder (Hammonde-Tooke, 1989) to their descendants, although ancestral-related illnesses are probably not as common as other aetiological causes and usually not as serious (Hammond-Tooke, 1981a; 1989). Within the first year of a child's life, a sacrifice (usually a goat) known as *imbeleko* is carried out, a goat-skin wrist band (*isiphandla*) is normally made for the child, the ancestors are informed of the child's birth, thanked and asked to protect the child (Ngubane, 1977).

2.3.1.2 Witchcraft and bad spirits

When considering the existence and power of witchcraft, Kato (1970) draws on an analogy of God being a powerful force for those who believe, whilst for the atheist God does not exist. According to Hammond-Tooke (1989), witchcraft (*ubuthakathi* in Zulu and *bolôyi* in Sotho) is believed to be one of the commonest causes of illness in South Africa, although this is disputed by Green (1999). Regardless of its prevalence, it is nevertheless still believed to be a cause of illness, even in urban areas. In fact fears of witchcraft and sorcery are said to have increased in urban areas undergoing rapid economic and social change across the developing world (Bourdillon, 1991; Geschiere, 1977; Kohnert, 1996; Maxwell, 1995 as cited in Pfeiffer, 2002) as it provides an idiom “for addressing new social tensions that develop in ‘modern’ contexts of inequality” (Pfeiffer, 2002:p.192). Witches are believed to inherit their mystical powers and are able to change shape, become invisible and usually have ‘familiars’ (usually small animals such as owls, snakes or wildcats or folkloric dwarves such as the *tokoloshe*) working for them. Sorcerers on the other hand do not have mystical powers like the witches but use traditional medicine for wrong-doing (Hammond-Tooke, 1989) and have given traditional medicine bad press over the years. There are many forms of sorcery including poisoning people's food (*idliso*) or putting *umbhulelo* / *ibekelo* (something lain down) or ‘*muthi* traps’ on paths where people walk (Hammond-Tooke, 1989; Ngubane, 1977). Traditional medicine with an anti-social use is usually referred to as *abuthi* (destructive medicines) (Hammond-Tooke, 1989) or *umuthi wokubulala* (medicine for killing) (Ngubane, 1977). A type of spirit possession known as *ufufunyane* is said to

occur as a result of coming into contact with harmful medicines left by a sorcerer (Ngubane, 1977). If a pregnant mother suffers from *ufufunyane* her baby will be born with *ipleti* (plate), in which the placenta is perceived to be malformed in the shape of a 'plate' rather than a clenched fist (Ngubane, 1977). Protective charms and medicines are usually used to protect homes and individuals against 'bad spirits' and witchcraft. *Intelezi*⁴, urine, or sea water for example is usually sprinkled around the home, incense or traditional medicines can be burnt or scarifications made on the person and traditional powdered medicine rubbed into them (Hammond-Tooke, 1989). If a baby does not sleep at night or cries a lot this may be a sign that there are evil spirits in the house (de Wet, 1998a).

An example of a supernatural illness given by Mgobozi (1974) is that of tuberculosis. Interpreting the illness to be caused by witchcraft through poisoning (*idliso*), the patient would consult a traditional healer. To get rid of the *idliso* emetics would be given and when these fail to cure the illness, the patient might end up going to the clinic or hospital. Even after being successfully treated for tuberculosis, the patient might still return to the traditional healer to drive out the *idliso* which the hospital would not have been able to treat. Not all illnesses treated with traditional medicine need necessarily have a supernatural cause however (e.g. minor ailments such as coughs, colds, flu, headaches, stomach problems (Tyiso & Bhat, 1998) and rashes (Cocks & Dold, 2000)).

2.3.2 Indigenous contagion theory (ICT)

Green (1999) grouped 3 types of aetiologic beliefs within an impersonal and naturalistic framework known as indigenous contagion theory. 'Naturalistic infection', 'pollution' and 'environmental dangers' do not involve a person being singled out by witchcraft or misfortune but are rather contagions that anyone can come into contact with. According to Foster (1976:p.775), "...naturalistic systems explain illness in impersonal, systemic terms. Disease is thought to stem, not from the machinations of an angry being, but rather from natural forces or conditions such as cold, heat, winds, dampness, and above all, by an upset in the balance of the basic body elements." A balance therefore needs to be maintained with the environment, the ancestors and other sources of pollution (Ngubane, 1977).

2.3.2.1 Natural causes of illness

There is generally a lack of agreement on what the natural causes of illness are comprised of in different African societies (Green, 1999). Explanations range from illnesses caused by the natural environment, illnesses that just happen, particularly when it is not thought that evil spirits or humans have been involved (e.g. common colds) and in some cases illnesses caused by God are considered to have a natural cause (Ngubane, 1977; Janzen & Prins, 1981).

⁴ Medicines to make things slippery (Hammond-Tooke, 1989).

In the South African world-view, certain illnesses are believed to occur naturally or 'just happen' such as colds, flu and simple diarrhoea (Green, 1985; Ngubane, 1977) and are collectively referred to as '*umkhuhlane*' (Bryant, 1983; Gumede, 1990). According to Gumede (1990), *umkhuhlane* is the general term for coryza's disease but all infectious fevers such as measles, mumps and chicken pox may be grouped in this category. Ngubane (1977) also includes illnesses due to organ malfunction such as *inyongo* whereby an excessive accumulation of bile can cause headaches, weakness and nausea and general childhood illnesses such as mumps (*uzagiga*), teething and measles. Hereditary illnesses (*uzufo*⁵) might also be viewed as having a natural cause and these include epilepsy (*isithuthwane*), chest problems (*isifuba*) and skin problems (*umzimba omubi*). More serious illnesses may be included in this group including dysentery and malaria (Bryant, 1983; Krige & Krige, 1943), although depending on the healer, the circumstances and the outcome of treatment, they may also be interpreted as having a personalistic or supernatural cause (Hammond-Tooke, 1989). Because traditional healing is individualistic, causations of illnesses as well as therapy and dosages might vary slightly from healer to healer (Good, 1987a). For illnesses which occur 'naturally' traditional as well as Western medicines may be used (Ngubane, 1977). In the case of childhood illnesses, Ngubane (1977) also mentions *isilonda somkhulane* or *somoya*, meaning the sore of the *umkhuhlane* or of the air, which is said to be common amongst babies, particularly those suffering from a cold or fever. The fever is said to eat away at the tissue of the rectal orifice, leaving a large sore and is perceived to be very dangerous. Treatment includes *umphumputho*, a powdered medicine which is inserted into the rectum (Ngubane, 1977).

Other natural causes of illness include worms or tiny insects (Green, 1999). Belief in an internal 'snake' which dwells in the stomach of everyone since birth is a widespread belief through parts of Eastern and Southern Africa (Green, 1999; Krige & Krige, 1943). If the body becomes contaminated (through food or medicine), the invisible snake can cause illnesses in both adults and children including stomach and digestion problems such as diarrhoea, convulsions, as well as STIs and infecundity in adults (Green, Jurg & Dgedge, 1994). In some cases helminthic infections have been associated with the internal snake, and some see the worms or 'little snakes' as necessary for digestion (Junod, 1962b [1926]). A sunken fontanelle in infants means that the *nyoka* (snake) is thirsty (Green & Zokwe, 1993). The internal snake has also been associated with witchcraft amongst the Tswana in South Africa, where the '*kokwana*' may be sent to children and cause serious diarrhoea (Booyens, 1989). The internal snake is also closely associated with pollution beliefs.

2.3.2.2 'Pollution'

The anthropological term 'pollution' denotes an illness contracted from coming into contact with a person or a place that is in a 'polluted' or impure state and is usually associated with birth and death. Polluted states include being a widow, touching a corpse, being unfaithful, just having had sexual intercourse and bodily fluids such as menstruation (Green, 1999; Murdock, 1980). Other

⁵ Meaning 'resemblance' in Zulu.

sources of pollution include travelling long distances as well as coming into contact with foreigners (Murdock, 1980; Green, 1999), visiting a mother who has just given birth (an *umdlezane*), (Schapera, 1940; Ngubane, 1977), abortion, miscarriage and the birth of twins (Junod, 1962 [1926]; Honwana, 1994). In South Africa these pollution concepts are also referred to as heat (*fiša*) (Tsonga and Sotho) or darkness (*umnyama* amongst the Zulu). In Sotho for example, *fiša* may refer literally to having a fever or when a baby has a sunken fontanelle (*hlôgwana* in Sotho and *inyoni* in Zulu) (Hammond-Tooke, 1981a) which is usually accompanied by fever and the child crying a lot (Hammond-Tooke, 1989). The symbolic meaning of *fiša* on the other hand also represents the states of 'pollution' described above.

The pollution concept is sometimes considered to be a personalistic or supernaturalistic cause of illness (e.g. Murdock, Ford, Hudson, Kennedy, Simmons, & Whiting, 1961) because of "the unfamiliar, highly symbolic idiom in which it is expressed" (Green, 1999:p.51). Ngubane (1977:p.78) defines *umnyama* (pollution) as "a mystical force which diminishes resistance to disease and creates conditions of poor luck, misfortune (*amashwa*), disagreeableness and repulsiveness (*isidina*)..." The child may pick up some form of pollution through the mother's breast milk if she had been promiscuous as the breast milk is then said to be 'dirty' or 'contaminated'. The colostrum itself is also sometimes considered 'dirty' and not given to the child (Green, 1999; Edgerton, 1992). Because a newborn is particularly susceptible to pollution, mother and child usually stay indoors for anything from 1 to 60 days depending on the family circumstances (Richter, 1994) or until the baby's cord falls off (de Wet, 1998a). Concepts of pollution and purity have also been incorporated into the beliefs and practices of the Zionist Churches (Green, 1999).

2.3.2.3 Environmental / ecological dangers

Illnesses may also be picked up through the environment, in particular the elements such as the wind (Green, 1999). Ngubane (1977:p.24) writing of Zulu beliefs, describes how going to a different region can make a person ill, "not being adapted to the new atmospheric and environmental conditions". Empirical evidence links this belief to those migrating to malarial areas from zones which lack resistance to local strains (Green, 1999). Oaks, Mitchell, Pearson and Carpenter (1991) also suggest that migrants might also find themselves at increased risk of infection to other diseases through lower living standards. Although many of the beliefs described in this chapter refer to the Zulu culture, similar concepts are used by other ethnic groups in South Africa (de Wet, 1998a).

According to Ngubane (1977), animals and humans leave behind something of themselves in the atmosphere when they move and these are known as *umkhondo* (plural: *imikhondo*) or tracks. These *imikhondo* can be absorbed by others who step over them, a process known as *umeqo* or *ukweqa*. Other environmental contagions include the fumes of strong traditional medicines which can be inhaled or elements of discarded illnesses which can be picked up by those travelling along roads and in particular crossroads. Tracks such as these which may be inhaled are referred

to as *imimoya*, literally meaning spirits, wind or soul, or *imimoya emibi* (bad spirits) if they are harmful (Ngubane, 1977; de Wet, 1998a). Gumede (1990:p.46) defines these as “spiteful, destructive and malevolent spirits who act with unpredictable caprice in a wanton manner with neither rhyme nor reason...” If a child cries throughout the night, *imimoya emibi* are thought to be present (Gumede, 1990). Skin lesions from kwashiorkor are also thought to be burns from these spirits according to Gumede (1990).

Similar concepts of ecological contagions are found amongst other ethnic groups, (i.e. the Tsonga) (Honwana, 1994). Infants, those already in a polluted state and travellers are all particularly susceptible to these types of environmental contagions which can even cause death. Strengthening the individual to protect themselves is therefore necessary, particularly the most vulnerable parts of the body such as the joints and the fontanelle (Ngubane, 1977). If a person who is not strengthened encounters someone who uses traditional medicines they will experience *ukweleka ngesithunzi* (“to feel or suffer the weight of someone’s overpowering influence”) (Ngubane, 1977:p.26). In Swaziland, Green (1985) found *umphezulu* (also called *inyoni*, *kokwana* or *phogwana*, *hlôgwana*) and *kuhabula* to be associated with environmental dangers amongst children. *Umphezulu* was contracted in utero as a result of the mother picking up some form of *umkhondo* and was characterised by green diarrhoea. *Kuhabula* could be picked up by inhaling the fumes of traditional medicines. Any pollution that a mother picks up in the environment can also be easily passed on to her baby through her breast milk (Ngubane, 1977; Jali, 1950). Infants are particularly susceptible to *imikhondo* and *imimoya* in the environment because they have weak joints, in particular the fontanelle (*ukhakhayi*). According to Ngubane (1977), unlike the naturally-caused illnesses, the afore-mentioned ecologically-caused illnesses are mostly identified by cause rather than symptoms. Certain symptoms in a child however point to an ecological cause (Ngubane, 1977): crying a lot or debility may indicate that the child has inhaled *inyamazane* (wild animal tracks); green diarrhoea and a white-coated tongue may be symptoms of the child being contaminated by ‘lightning fumes’, a condition known as *inyoni*, literally meaning ‘bird’ in Zulu. According to de Wet, (1998b:p.167) “there are many regional and cultural variations in the terminology, explanation and treatment of *inyoni*”, although the condition is also usually associated with a sunken fontanelle, green stools or diarrhoea and in some cases this is a result of a snake or worm which is said to be eating the child’s insides (de Wet, 1998b). In earlier research Jali (1950:p.18) describes other symptoms as a white patch on the roof of the mouth, the child usually being frightened without reason and a grumbling or bloated stomach. The illness usually occurs in the first few years of a child’s life and if left untreated the child may die (Jali, 1950). In a rural study in KwaZulu-Natal, Kauchali, Rollins and Van den Broeck (2004) found that *inyoni* was perceived to be potentially fatal and was characterised by the child being upset with a high-pitched cry, looking frightened, having green stools, a distended abdomen with green veins and a sunken fontanelle. Treatment usually included ritual healing, an herbal enema to remove the green stools and a visit to a traditional healer. Infant gastroenteritis with the accompanying sunken fontanelle, green diarrhoea, fever and crying was perceived as a natural disorder and referred to as *nyuni* in Kenya (Good, 1987a). Treatment in the latter case usually involved herbal

medicines, rituals with a chicken, massage and prayer (Good, 1987a). In KwaZulu-Natal, Kauchali and colleagues (2004) identified 11 types of childhood diarrhoea including 5 with a 'supernatural' cause. These included *umphezulu / inyoni* (fontanelle diarrhoea), *amankabeni* (navel diarrhoea), *umhlume* (diarrhoea with perineal rash), *isithakathi / isilonda* (diarrhoea with rectal sores) and *ibala* (diarrhoea with strawberry naevus).

Although not mentioned as much as *inyoni* in the literature, another African childhood illness is *ibala*, (*capillary naevus*) which is thought to move up the head and believed to be fatal. In a rural study in KwaZulu-Natal, Bland and colleagues (2004) found that *ibala* was one of the main reasons for taking a child to a traditional healer. Causes included 'evil tracks' during pregnancy as well as the ancestors being displeased. Treatment usually involved scarification, herbs given orally or as an enema, as well consulting a traditional healer (Kauchali *et al.*, 2004). Signs that the child had *ibala* included crying, a red mark on the back of the head and in some cases loose green stools. According to DermNet NZ (2004), capillary naevus or capillary vascular formations are malformed dilated blood vessels which usually appear as patches of red or purple skin discolouration. The most common are 'salmon patches' (naevus simplex) which occur in approximately 40% of all newborns, usually on the nape of the neck ('stork bite') or on the forehead between the eyebrows ('angel's kiss') or on the eyelids. These become darker in colour when a child cries, which may be the reason why some mothers think that the child is in pain. Most disappear within the first year of life, although in 50% of cases 'stork bites' remain on the neck into adult life.

2.3.3 The role of TMPs and faith healers in the South African health care system

2.3.3.1 Traditional Medical Practitioners

Although traditional healers are generally grouped into the same category, they have many different roles, fields of expertise and many have their own methods of diagnosis as well as



Figure 2.6: TMP standing outside her consultation room

medicines. Furthermore, throughout Africa (as well as other parts of the world), in order to survive, the role of the traditional healer has adapted to the processes of modernisation and the changing expectations of their patients, thereby adopting aspects of biomedicine such as the white coat (v. Figure 2.6) or pharmaceuticals (Semali, 1986; de Wet, 1998b; Landy, 1977), a process

McMillen (2004:p.896) describes as “from old local knowledge to new imported knowledge.” Gumede (1990) divides traditional healers into several categories. These include those who are destructive and evil (e.g. *abathakathi* and witches), the diagnosticians and diviners (e.g. *izangoma*; *izanus* – smellers; *abaloz* – ventriloquists; *amandiki*, *amandawu*), the therapeuticians (e.g. medicine men – *izingedla*; herbalists – *izinyanga*; *zamaxhambi*), the specialists (e.g. skyherds – *izinyanga zezulu*; rainmakers – *izinyanga zemvula* and military doctors – *izinyanga zempi*). There are also a wide range of disease specialists. Although today their roles tend to overlap, and the distinction is not that clear, the two main categories of TMPs are the diviners (*izangoma*) and the herbalists (*izinyanga*).

Izinyanga or herbalists learn the art of medicinal concoctions using roots, barks, leaves and animal parts as an *udibi* (apprentice) and are then able to diagnose certain illnesses and to prescribe medication. Unlike the *izinyangas*, the *izangoma* do not choose their vocation, but are called by the ancestors to act as their messenger or servant (Hammond-Tooke, 1989). The *sangoma* will either enter into a trance or use divination objects such as bones and through mediumistic powers they are able to explain why any illness or misfortune occurs, and in some cases, they also provide the patient with traditional medicine (Hammond-Tooke, 1981a). As with their roles and fields of expertise, techniques, methods of diagnosis, medicines and fees may also vary from one healer to another. Although the fees which some TMPs charge exceed the average treatment cost at most modern practitioners (Abel-Smith & Rawal, 1992), ‘free’ or subsidised treatment is often provided if users cannot afford to pay. Many are also paid an outcome-contingent fee, whereby the remainder of the payment is only received if their patient is cured (Leonard, 2003). Leonard (2003) argues that it is this economic arrangement which governs their success as healers, as the healer has strong incentives to provide high quality care within the boundaries of the illnesses they are able to treat. Within traditional healing itself, an *inyanga* might refer a patient to a *sangoma* to find out the cause of the illness, and they will only refer a patient to another *inyanga* if the patient is a member of their family (Ngubane, 1981; Good, 1987a).

2.3.3.2 Faith healers

Religion has always been closely associated with health and healing (Hammond-Tooke, 1989). Of more recent origin are the prophets or faith healers who divine and heal within the framework of the African Independent Churches (AICs). The *Abathandazeli* or *Abapropheti* have not had as long an history as the traditional healers in South Africa, but the phenomenal growth of the approximate 4000 African Independent Churches (AICs), with a total membership of more than 10 million, bears testament to the popularity of faith healing (U.S. Library of Congress, 2004). In 1948 there were 800,000 members of 800 denominations, by 1960 there were 2000 denominations with 2,100,000 members and in 1980 there were just under 6 million AIC members in 3,270 denominations (Oosthuizen, 1989). The AICs have their roots in the mission Churches and in particular the Pentecostal teachings of the American-based Christian Catholic Apostolic Church of Zion and the Apostolic Faith Mission introduced in 1908 (Hammond-Tooke,

1989). Today, the AICs are broadly split into the Ethiopian and Zionist Churches (Hammond-Tooke, 1989). The Ethiopian Churches are more orthodox in their doctrine, whilst the Zion Christian Church (ZCC) (the largest group with 11.1%) is more radical (Statistics South Africa, 2001b; Hammond-Tooke, 1989; Sundkler, 1961). Oosthuizen (1989:p.73) splits the African Independent Churches into the Ethiopian (*Amatopi*), Zionist (*AmaZioni*) and Apostolic (*Abapostoli*) with the latter 2 emphasizing "healing in a cosmological context". Healing in the Zionist Churches may take place either during the church service, during immersion in a river or stream or by consulting with a prophet from the church (West, 1975), whilst in the Ethiopian Churches, healing is usually restricted to the church service.

The success of the AICs has been attributed to their emphasis on the healing power of the Holy Spirit (*uMoya*) using laying on of the hands (Hammond-Tooke, 1989, Anderson, 1992), however they are also said to understand why the illness has occurred, particularly the African illnesses (West, 1975). There are many other forms of treatment including pricking the body, enemas, emetics, baths, steaming, prayer, candlelight, holy water, sea water, rose water, Epsom salts, vinegar, Vaseline, special tea and coffee, ashes, *isiwasho* (a mixture of water and any of the afore-mentioned ingredients, usually ashes) and protective strings, ropes or copper wires worn around the body (West, 1975; Hammond-Tooke, 1989; Bührmann, 1989; Dube, 1989; Anderson, 1992). Unlike traditional healers, most of the *materia medica* of the faith healers is inorganic and inexpensive (Hammond-Tooke, 1989; Dube, 1989). There are instances however where Zionist faith healers as well as patients make use of herbal remedies (Cocks & Dold, 2000; du Toit, 1980). Prophets (or faith healers) are usually women whom God has given the ability to divine and heal, sometimes with the help of the ancestral spirits (Hammond-Tooke, 1989). As with the *sangomas*, they can prophetically diagnose the cause of the illness (Anderson, 1992; Bührmann, 1989), but unlike the TMPs, they do not use 'traditional medicines' as such. The importance of diagnosing the cause of illness prophetically is illustrated in this quotation from Anderson (1992): "He was supposed to tell me what kind of sickness I was suffering from; but to my surprise, the diviner asked me what was troubling me. I then knew that he was not a true prophet. He did not help me at all." Unlike a Western doctor where the patient is asked many questions and unlike the *sangoma's* 'vumisa' technique where leading questions are asked and the patient expresses agreement, the faith healer is not expected to ask the patient many questions (Oosthuizen, 1989). In some cases the *sangoma* and faith healer have developed interchangeable roles, particularly for those in the Zionist Churches who believe in the power of the ancestors (Anderson, 1992). The Ethiopian Churches on the other hand are said to shun ancestral beliefs (Hammond-Tooke, 1989). As suggested by Singer, Davison and Gerdes (1988:p.381) "indigenous medical systems are changing and no doubt have always changed in response to the transformations of the social and experiential works of patients and practitioners." According to Anderson (1992), as with a traditional healer, people tend to consult a prophet or faith healer for 'African' illnesses, unseen problems including sorcery, witchcraft, evil spirits or if they regarded the faith healer as more powerful. Faith and belief that the healing will work are key factors in the efficacy of faith healing (Anderson, 1992; Becken, 1989). Wessels (1989) found that overall the *umprofeti* thought they

were best able to treat 'Bantu' illnesses because they were helped by God. Those who thought *sangomas* or *inyangas* were best qualified to treat the African illnesses reported that this was because they used *muthi*⁶ and knew what caused the problem, meaning they would know how to cure it (Wessels, 1989). The main problems which faith healers encountered tended to be social ones, such as spouse and work trouble (Wessels, 1989).

In Mozambique, the AICs are also extremely popular, particularly amongst poor mothers with sick children (Pfeiffer, 2002). The popularity of the AICs in this context has been attributed to growing social inequalities which have resulted in heightened social tensions, violence and individual competition for jobs and social improvement, declining social cohesion and increased spousal conflict in poorer families (Pfeiffer, 2002). With traditional healers catering mostly for men wishing to improve their luck and job prospects, many women have turned to the AICs. As well as finding traditional healers too expensive, many women worry that they themselves may be accused of witchcraft. The AICs have offered these women a new healing process which encourages mutual aid and support and avoidance of conflict.

2.3.3.3 *Muthi* shops

A visit to a traditional healer is not always necessary to purchase traditional medicine (Cocks & Dold, 2000). *Muthi* shops or 'African chemists' contain a variety of medicines including roots, bulbs, dried animal parts, prepared traditional remedies, OTCs, Dutch medicines as well as Eastern remedies (Cocks & Dold, 2000). There are a large number of *muthi* shops around Johannesburg which sell traditional medicines ranging from roots, bark and bulbs to dried animal pieces, feathers, animal skins, amulets, beads and traditional healer attire (v. Figures 2.7 and 2.8).



Figure 2.7: A *muthi* shop



Figure 2.8: Bottles containing *muthi*

A study in the Eastern Cape Province of South Africa (Cocks & Dold, 2000) found that customers using *muthi* shops were mostly young and middle-aged adults seeking protection from evil spirits (28%), preparation of mixtures for resale (16%), medicine for rashes and the complexion (14%) and stomach complaints (12%). The main treatments for children were also for protection from evil spirits, chest complaints, rashes and stomach aches, although these treatments tended to be OTC

⁶ Traditional medicine

remedies such as the Dutch Medicines, as herbal remedies are thought to be too strong for infants. Although most of the customers belonged to a mainstream or African Independent Christian Church, they did not feel that the use of traditional medicines was in conflict with their religious beliefs. These types of local pharmacies amongst others, are widely used in developing countries even when free government health services exist to avoid lengthy waiting times (Hardon, 1994, Wolffers, 1987; Cocks & Dold, 2000).

2.3.4 Integration of allopathic and traditional health care

During the 1990s, there was a rapid increase in the number of associations and groups of traditional healers in Africa as a result of WHO promotional policies in the late 1970s and 1980s (Kasilo, 2000). The effectiveness of TMPs as primary health care providers has been acknowledged by many NGOs and governments, particularly in HIV / AIDS education and care (Kabatesi, 1998, as cited in Bodecker, 2000), in delivering child survival messages and in helping Western health care workers to manage diseases (Kasilo, 2000). For this reason, countries such as Uganda, Nigeria, Ghana, Tanzania, Zimbabwe, Zambia and more recently South Africa, have or are developing legislation to define a role for traditional medicine in the allopathic health care system. (Kasilo, 2000; Chavunduka, 1986; Semali, 1986). In the same way, countries such as Botswana are working towards a system of cooperation rather than integration so as not to upset the balance of either system (Burnett, Baggailey, Ndove-MacMillan, Sulwe, Hang'omba, & Bennett, 1999) which some say are incompatible (Freeman, 1991).

The South African Ministry of Health estimates that almost 70% of South Africans consult traditional healers (Department of Health, 2005a), an industry that is estimated to have an annual turnover of about R250 million (£25 million: 2004 exchange rate) (Moodley, 2004). During apartheid, traditional healers were negatively referred to as 'witchdoctors', and more recently traditional medicine's reputation has suffered negative publicity as a result of ritual killings known as '*muthi* murders' to obtain human body parts for medicines (Department of Health, 2003a). Certain traditional healers have also advocated sexual intercourse with a virgin as a cure for AIDS leading to the rape of young girls and even babies (Jewkes, Martin, & Penn-Kekana, 2002; Earl-Taylor, 2002; Richter, 2004). Many healers condemn the above acts however, deeming them unrepresentative of their trade and since 1994 there has been support for the integration of traditional medicine into the modern health care system in South Africa, or at least some form of co-operation between the 2 systems (Pretorius, 1999). There has already been some degree of co-operation, albeit uni-directional (Gumede, 1990), with traditional healers referring their patients to the clinic or hospital if necessary. Peltzer and Khoza (1998) found that although nurse attitudes in the Limpopo Province of South Africa were generally positive to traditional healing, faith healing and complementary medicine, rates of referrals were low to traditional healers (14%), faith healers (22%) and complementary therapists (26%). Referrals from a traditional healer were fairly high (55%) followed by faith healers (33%) and complementary therapists (20%). In general, traditional healers are much more open to alternative systems of health care, whereas "there is,

in modern medicine a drive towards epistemological monism" (Hammond-Tooke, 1989:p.40). Hopa, Simbayi and du Toit (1998) conducted focus groups with psychiatrists, medical doctors, psychologists, traditional healers and patients and most groups revealed a preference for formal cooperation between traditional and Western health care, the registration of healers with an independent body and not allowing medical aid to incorporate traditional health care. Traditional healers felt that they should continue to be paid in cash or in kind as before. No consensus was achieved over the issuing of sick-leave certificates by traditional healers as only the traditional healers group felt they needed to be allowed to issue these.

In 1998, South Africa's Parliament proposed that an Interim Traditional Health Practitioners Council be set up to regulate the *inyangas*, *sangomas*, traditional surgeons (*ingcibi*) who mainly carry out circumcisions (Baleta, 1998) and traditional birth attendants (TBAs) (*ababelithisi*) (Spogter, 1999). Despite the availability of Western health care facilities in urban and semi-urban areas, TBAs or older female relatives are still used by many mothers, either for advice concerning prenatal or postnatal matters or for assistance during birth (Troskie, 1997; Sodi, 1996). Under the Traditional Health Practitioners Act, 2004 all traditional healers will have to register and declare themselves before being allowed to practise traditional medicine (Geguld, 2003; Department of Health, 2003b; Department of Health 2005b). Although much work is yet to be done, it is proposed that traditional healers may be able to claim fees from certain medical aid societies, but they will no longer be able to diagnose or treat terminal illnesses such as AIDS and cancer (Department of Health, 2003b; Department of Health, 2005b).

One of the main reasons for regulating the practice of traditional healing is to ensure the safety and efficacy of traditional medicines and that only those with adequate rigorous training are practising. In 1995, it was surmised that only about 10% of Gauteng Province's estimated 80,000 TMPs were genuine healers (i.e. not charlatans), (Louw & Pretorius, 1995) and cases of poisoning with *umuthi* are not uncommon (Venter & Joubert, 1988; Hutchings & Terblanche, 1989; Joubert, 1990; Wood, Mills, Knobel, Hurlow, & Stokol, 1990; Bye & Dutton, 1991; Michie, Hayhurst, Hayhurst, Knobel, Stokol, & Hensley, 1991; McVann, Havlik, Joubert, & Monteagudo, 1992; Reed, 1995; Kasilo & Nhachi, 1992; Steenkamp, Stewart, Curowska, & Zuckerman, 2002). Breaking the law may lead to a fine or even imprisonment (Department of Health, 2005b).

Although the Bill has been widely supported, opponents such as the organisation Doctors For Life International (DFL), representing approximately 1000 professionals, claim that traditional medicine is unscientific, that traditional medicines are potentially harmful to patients and that the system may be open to abuse, with traditional healers prescribing time off work for reasons associated with the ancestors (Doctors for Life, 2004). Several medical aid companies already recognise compensation claims for traditional healers (Campbell; 1998). Medscheme for example has introduced limited benefits for alternative health care, while Eskom, the national electric utility since 1994, has allowed employees to claim a limited number of visits to traditional healers on the company's medical aid plan (Ndaki, 2004). The Chamber of Mines and the National Union of

Mineworkers have also granted their employees three days' leave to consult a selected panel of traditional healers (Ndaki, 2004).

2.3.5 Medicines

So far, beliefs related to the cause of illness have been examined in relation to the choice of health care providers. It is also necessary however to take a more detailed look at beliefs in the context of medicines, the use of which does not always require a visit to a health care provider. Medical anthropologists attribute the popularity of medicines in the treatment of illnesses to their multi-dimensionality (they can be put in the body or rubbed on it) (de Wet, 1998a) and their power means they have the ability to prevent and cure as well as kill (Bledsoe & Goubaud, 1988; Michel, 1985). They also have symbolic and magical meanings which are seen in the use of protective talismans worn around the neck, waist, wrists or ankles (van der Geest, Reynolds White, & Hardon, 1996). Good (1987a) attributes much of the prestige of biomedicine to the success of the injection and its perceived efficacy in treating many illnesses. Side-effects such as pain or the efficacy of a medicine such as strength are culturally constructed and the way medicines are used may therefore vary (Melrose, 1982; Etkin, 1988, 1992; van der Geest & Reynolds Whyte, 1989). One way to explain the power of medicines is to look at what Helman (1996) describes as the 'total drug effect', including characteristics of the medicine such as colour, taste, texture, provenance or packaging, the user, the provider and the context. Medicines also help to diagnose illness (van der Geest & Reynolds Whyte, 1989). According to Nichter & Vuckovic (1994:p.1514) the severity or type of illness (natural or supernatural) is "often framed in terms of the type, strength and quantity of medications consumed", as well as whether the individual, friends or relatives respond to the medicine or not (Bledsoe & Goubaud, 1988).

Foreign medicines or medicines that are well-packaged are usually perceived to be more expensive and thus more effective than generic or local versions (van der Geest & Reynolds White, 1988). For this reason, medicines at pharmacies in Mauritius were thought to be stronger than those from government dispensaries (Sussman, 1988). In Sierra Leone, Bledsoe and Goubaud (1988) found that the Mende also judged the efficacy of Western medicines by their physical characteristics such as quantity. Larger pills were thought to be more powerful and better value for money for example, and the pain associated with injections meant that the treatment was even more powerful than pills. Capsules were thought to be more potent than tablets and were favoured for treating wounds as the tablets could be broken open and the powder poured over the wound. Bitter medicines were thought to be good for fever or to kill worms, whilst strong-smelling or tasting medicines were thought to soothe the throat.

Although medicines were generally used as prescribed by health staff in Sierra Leone, if no improvements were seen then treatments were sought along the lines of the believed aetiology of the disorder. Believing the body to be suffering from excess cold for example, treatment for the chills associated with fever meant the patient should be wrapped up warmly. White medicines were

also popular for fever because of an analogy with chalk which is traditionally rubbed on the body for fever. However rubbing chalk on the body has become a symbol of poverty and backwardness, hence white medicines are used instead. Traditionally the colour of the medicine was important amongst the Mende and Western pharmaceuticals have been incorporated into these beliefs. Red medicines were good for the blood, whilst yellow tablets were good for malaria which made a person's urine more yellow. The fact that capsules are usually made up of two colours led some people to believe that there were two different types of medicine within the capsule (Bledsoe & Goubaud, 1988). In traditional South African health care, medicines which treat the cause of the illness are also classified according to colour: black, red and white. The meanings of these colours are discussed further on, however it is not clear whether any of these aspects have spilled over into the use of Western medicines. Self-medication with Western over-the-counter medicines is an under-researched area in South Africa (de Wet, 1998a). Western pharmaceuticals that have been reinterpreted in terms of local culture include the antacid Muthi Wenyoni and the Dutch Medicines. These are discussed in the following section.

2.3.5.1 Western over-the-counter medicines and home treatment

De Wet (1998a:p.166) categorises the medicines aimed at the South African infant market as 'soothers' (e.g. Gripe Water or antacid) or 'protectors' (e.g. the Dutch medicines and Muthi Wenyoni). A large range of over-the-counter medicines (OTCs) are available for children under 6 in South Africa from pharmacies, supermarkets, traders on street corners and certain medicines such as Panado analgesic syrup, Gripe water for wind and colic and Dutch medicines have become popular with mothers (de Wet, 1998a). Dutch medicines were introduced into South Africa by early Dutch settlers in the 19th Century and have been in use ever since, with remedies being handed down through the generations (de Wet, 1998a). Different Dutch medicines are available to treat a variety of ailments ranging from minor kidney and bladder complaints, constipation, to colds and flu (v. Table 2.3 for examples). Drops of one or more Dutch Medicines are either added to milk or water or put into the bath. As with several other 'Western' medicines, *Stuips*, *Ditaipi*, or *Druppels* as they are more commonly known have been indigenised into traditional health care practices so that they no longer solely fall under the umbrella of '*umuthi wesilungu*'⁷ (White people's medicine) (de Wet, 1998a). Their application has been modified to incorporate African childhood illnesses such as *inyoni* and *ibala*, the protection of infants from bad spirits, being 'suppressed' as a result of supernatural contagions and witchcraft, particularly when taking the child outside the home, healing of the umbilical cord and stomach problems (de Wet, 1998a; du Toit, 1998). The key ingredient however is faith that they will work (de Wet, 1998a).

⁷ In Sotho: *Ditlale tsa Sesotho / Sotho* (Medicine of African culture) and *Ditlale tsa Sekgoa* (Medicine of White culture) (de Wet, 1998a:p.124).

Table 2.3: Pharmacological action of a selection of Dutch Medicines

Medicine	Pharmacological Action
Balsem-Kopiva*	Kidney / bladder / backache
Balsem Sulphuris*	Constipation
Balsem vita wit	Colic / stomach ache / wind / mild colds
Behoedmiddel vir kinders	Winds / stomach ache / colic / diarrhoea
Borsdruppels	Coughs / croup / bronchitis
Doepa	Wind / Flatulence / Colic / Minor kidney & bladder complaints
Duiwelsdrekdruipels	Flatulence
Entressdruppels*	Nervousness / restlessness / sleeplessness
Essens Groen Amara‡	Improves appetite
Haarlemensis*	Kidney / bladder
Jamaika Gemmer	Colic / winds / pain in stomach / indigestion
Krampdruppels*	Nervous conditions / colic / cramps / flatulence
Pepermentdruppels‡	Flatulence
Rooilaventol	Winds / indigestion / stomach ache
Staaldruipels‡	Iron deficiency anaemias / stopping bleeding from minor wounds
Stuipdruppels‡	Flatulence / gripes / colic
Turlington*	coughs / chronic bronchitis / antiseptic for cuts and wounds
Verstekdruppels*	Restores vitality and appetite
Witdulsies*	Colds / fever / mild asthma attacks and dizziness
Wonderkroonessens*	Constipation / winds / indigestion
‡ Should not be used for children * No indication on leaflet for a child's use	

In a survey (n=211) conducted by de Wet (1998a), 80.1% of Sowetan mothers used between 1 and 10 different types of Dutch medicines for their infant, the most popular ones being Haarlemensis (92.3%), Stuipdruppels (69.2%), Groen Amara (47.9%) and Entressdruppels (46.7%). Although Haarlemensis is intended for urinary problems, it is believed to be very strong and is also used to protect a baby and keep away evil spirits due to its sticky and oily properties (du Toit, 1998; de Wet, 1998a). Stuipdruppels are also believed to be strong and are not meant to be given to children under 2 years of age. Although they are usually rubbed onto the child or used in the bath, some children are also given Stuipdruppels in their milk (de Wet, 1998a). Over 80% of mothers combined 2 or more Dutch medicines together, most often Haarlemensis, Stuipdruppels and Groen Amara or Entressdruppels. However the perceived strength of certain *Stuips* - Haarlemensis, Entressdruppels and Stuipdruppels in particular, means that they are sometimes used on their own. The main reason for using Dutch Medicines amongst Sowetan mothers was to protect and strengthen the child from inhaling bad spirits, being frightened by evil spirits, contracting childhood illnesses such as *inyoni*, and so that they would not be affected by other people using strong medicines (de Wet, 1998a). The main reason why some mothers did not use Dutch Medicines (15.3%) is because they thought the medicine was too strong for a small child. Although the Dutch medicine Doepa (Benzoin B.P) was mostly burnt in Soweto, in the Eastern

Cape Cocks and Dold (2000) found that Doepa was rubbed onto the fontanelle and the pungent smell was thought to stop evil spirits from entering the child. Other manufactured products which were used for the same purpose in the Eastern Cape were the synthetic concoctions *Amafuta Enjayowandle* (the fat of the sea-dog [seal]), which was rubbed over all body orifices and *Vimbela*⁸, which was rubbed over the infant's face at night, as its luminous glow in the dark was believed to ward off evil spirits (Cocks & Dold, 2000). The Dutch medicines Duiwelsdrekdruppels and Haarlemensis were also believed to ward off evil spirits.

De Wet's study (1998a; 1998b) in Soweto also highlights how local ideas about health and illness may be exploited by the pharmaceutical industry. The name of the African childhood illness *inyoni* has been used by several different manufacturers of antacids in their product's name: 'Muthi Wenyoni'. Traditionally, this is the name given to the herbal remedy used by traditional healers to treat *inyoni*, although at a higher price de Wet found, than the pharmaceutical product of the same name. In the Sowetan study, nearly half of the mothers interviewed had used a pharmaceutical brand of Muthi Wenyoni for their child. In 54% of cases, Muthi Wenyoni was used as a prophylactic against the child getting *inyoni* (most mothers had administered it daily in the first year of the child's life, with some continuing to use it until the child was 2 to 3 years of age). Even 6 years after de Wet's study, there are still no instructions on the most popular brand, *Muthi Wenyoni Mixture*, about how long the treatment should be given for before a doctor's advice should be sought. Since the active ingredients in the antacid are only harmful if consumed in large doses, the prolonged use of the medicine is unlikely to have adverse effects for a healthy child. More worrying however, are the third of mothers who had used Muthi Wenyoni when they believed their child had *inyoni*, to get rid of the green stools, or dirt in the child's stomach, leaving the child even more dehydrated (de Wet, 1998b). These mothers were mostly young, unmarried, had secondary education and were not particularly religious. In 68.3% of cases, the women's mother or grandmother had told them about Muthi Wenyoni. The reasons medicines become dangerous are not so much as a result of their properties, but how they are used (van der Geest, 1987). In the case of treatment for childhood fever in rural Kenya for example, only 4% of children given chloroquine bought from the shop had received an adequate total dose and only 2% were treated over the recommended 3-day period (Marsh, Mutemi, Mutiri, Haaland, Watkins, Otieno & Marsh, 1999). Aspirin was widely used for the treatment of childhood fevers and 22% of children were given potentially toxic doses over 24 hours.

In looking at the determinants of use of non-prescribed medicine in the first 3 months of life in a rural district in KwaZulu-Natal, Bland and colleagues (2004) found that more educated women were more likely to administer oral medications. The influence of marketing strategies of manufacturers and by their peer group were likely to influence this finding, although non-prescribed medicines were given universally irrespective of socio-economic group. The most common oral OTC given was Gripe Water which was usually given once a day for wind or colic. The authors warn that this contravenes the WHO (1991) definition of exclusive breastfeeding as the

⁸ Resembles petroleum jelly.

medications are not prescribed. The popularity of some of the OTC medicines has in part been attributed to the sleep-inducing properties of those which contain alcohol or antihistamines and which can therefore mask problem behaviours such as crying, particularly in overcrowded dwellings (Nichter & Vuckovic, 1994; de Wet, 1998a; Bland *et al.* 2004). Each 5ml of Panado for example contains Ethanol 10% v/v and many of the Dutch medicines contain up to 50% v/v alcohol and in some cases more (e.g. Entressdruppels 74% v/v alcohol; Rooilaventol 90% v/v alcohol). De Wet (1998b:p.16) found that it is common practice in Soweto to “*mudrugga*” (drug) the child with Dutch medicines, Gripe Water or Panado paediatric syrup. In a different Sowetan study, Richter (1994) found that 66% of mothers had given their child a medicine for crying, such as Panado Syrup, Muthi Wenyoni, Baby's Own Tummy Tablets, Woodward's Gripe Water, the Dutch medicines Haarlemensis and Stuipdruppels, as well as burning Doepa or *imphepha*⁹. Silencing a baby with medicines is not a new phenomenon, although pharmaceutical products are now more commonly used. Zulu mothers for example used to wash their baby with the *uMalali*¹⁰ plant “to make it a quiet child, not given to crying...” (Krige, 1950:p.65, as cited in de Wet, 1998a).

Self-medication and home treatments are the most common first line of treatment for illness management (Nyamongo, 2002; Ryan, 1995, 1998; Kroeger, 1983; Weller *et al.*, 1997; Hammond-Tooke, 1989; Sussman, 1988), but also the least researched (Good, 1987a; de Wet, 1998b; van der Geest, 1987; van der Geest & Reynolds White, 1988). Lam, Catarivas, Munro and Lauder (1994:p.1641) define self-medication as: “the use of any systemic or topical substance reported by the user as being used for health-related purposes that is not prescribed by a registered doctor specifically for the person or condition.” They may be used for the treatment of illness (medicines), or the promotion of health (tonics). The popularity of self-medication stems from its convenience and availability and although it is thus said to give poorer people a greater sense of control over their health, how strong an influence pharmaceutical marketing claims have over this ‘control’ is unknown (de Wet, 1998a; Nichter & Vuckovic, 1994). Self-medication is usually the first strategy people employ when they become ill because it requires the least effort. More expensive strategies requiring more effort are tried if self-medication is not successful (van der Geest, 1988).

Purchasing medicines from vendors in South Cameroon which were of lower quality, less variety and of which the vendors had little knowledge can be explained by this ‘hierarchy of resort’ (Schwartz, 1969; Romanucci-Ross, 1977 as cited in van der Geest, 1988). In a household survey in Burkina Faso, community health workers (CHW) were not used for children under 1 year of age (although n=31) and only 2% of 1 to 4 year olds (n=164) used these community health services. In both cases, mothers or families provided the majority of care (Sauerborn *et al.*, 1989). The authors posit that the preferential use of mothers for under 5s may be due to the fact that females are the traditional providers of care whilst the CHWs were mostly male. Another possible reason is age-specific perceptions of illness and what kind of care this entails, although the authors do not elaborate. Difficulty in accessing services as well as the severity of the illness, were other factors found to influence the use of a professional health care provider. Similarly, Hardon (1987) found

⁹ *Helichrysum cymosum*.

¹⁰ Translation not known.

that the majority of mothers in a Filipino village preferred to treat their children with OTC medicines than consult a doctor. Forty-two percent of children were given no medicines, 38% were treated at home, 15% were taken to a hospital and 5% to a health centre. Doctors were usually consulted in the case of severe illnesses. The same author found similar results in urban poor communities in Metro in the Philippines (Hardon, 1991). Although self-reliance is encouraged in primary health care (Hardon, Boonmongkon, Streefland, Tan, Hongvivatana, van der Geest, van Staa & Varkevisser, 1994), the use of non-essential Western medications may be ineffective or even harmful. In the Philippines for example, anti-diarrhoeal combination products which contain antibiotics were more popular for treating simple childhood diarrhoea than oral rehydration (Hardon, 1987). Many cough syrups contain both cough suppressors as well as expectorants and although popular in the Philippines, are not suitable for the treatment of coughs and colds in infants.

In some cases the use of home remedies for common childhood illnesses such as coughs, colds, constipation and diarrhoea, overlap with traditional medicines or OTC medicines, the only difference being where they are obtained or how they are viewed by the caregiver. In urban Mexico, Logan (1988) found that respondents viewed OTC and home remedies as discrete forms of treatment which were seldom used in combination. According to Logan (1988), OTC medicines have not replaced home remedies but have become a new type of treatment which can be used at the household level. In fact OTCs were used more often than household remedies for common illnesses. In the case of diarrhoea and stomach pain for those who did not choose OTCs as a first line of treatment, younger women, those with more education and above average family income, were more likely to consult a physician than use home remedies. Logan (1988) attributes this to the younger mothers' lack of knowledge about home treatments. In Mauritius, Sussman (1988) found a 38% mean loss of knowledge of medicinal plants from mothers to daughters due to the availability and convenience of biomedicine, the more technical equipment found in biomedical health care facilities compared to traditional ones, as well as the inability of traditional practitioners to issue sick notes.

In South Africa *sputis* (enemas using a syringe) with Sunlight soap are very popular for cleaning out the child's system, but other ingredients may also be used (Bland *et al.*, 2004). Bland and colleagues (2004) observed that 89% of children had been given an enema either with Zulu medicines or Sunlight soap. A selection of other folk remedies which have been documented by du Toit (1998) include the use of household products such as Jeye's Fluid (disinfectant) for an infected tooth, Dassie (*Hyrax capensis*) urine for kidney and 'female problems', as well as a baby tonic for jaundice and gripes made up of a nip of brandy and the leaves of 4 different plants steeped in water.

Although perhaps not generalisable to other countries, studies from the United States and Britain looking at the correlates of mothers' use of non-prescription medication, including leftover prescriptions for their children, produced findings of interest to researchers looking at health-seeking behaviour (Maiman *et al.*, 1986; Jefferys, Brotherston & Cartwright, 1960; Maiman,

Becker, Cummings, Drachman & O'Connor, 1982). Mother-initiated medication behaviour was found to be higher in smaller families, amongst mothers of a high socio-economic status, older mothers, mothers with older children, mothers who perceived their child to be more vulnerable to ill-health and mothers who believed in the efficacy of OTCs. The evaluations of the mothers' management of illnesses by a panel of paediatricians found that as a mother's SES increases, so did the quality of mother-initiated treatment. A study of self-medication in Addis Ababa found that higher use of OTCs for illnesses traditionally treated with home remedies was found in groups with higher education (Kloos *et al.*, 1988). These groups also tended to store medicines in their house more than lower educated groups, where there was a common belief that drugs lost their strength after a few weeks or months.

2.3.5.2 Traditional medicines

Traditional medicines (Zulu: *umuthi*¹¹; plural: *imithi*) have been prescribed over many generations. *Imithi* are prepared from various natural substances (animal, mineral and vegetable) as well as synthetic substances (e.g. metals, standard pharmaceuticals, solvents, agri-chemicals) (Hammond-Tooke, 1989; Stewart, Moar, Steenkamp & Kokot, 1999). The *muthi* may have curative, protective or preventive elements, although some drugs are used as placebos (Gumede, 1990). Forms of treatment include strengthening through the use of charms; cuts and incisions with medicine rubbed in (*ukuzawula*); burning of incense, dried medicines or plants (*ukushunqisela*); medicine rubbed on the body; steaming (*ukugquma*) and cleansing through the use of *muthi* for washing; emetics and purgatives (generally known as an *imbiza*) for *ukuphalaza* (vomiting) and *ukuchatha* (enema); ancestral rituals and sacrifices (Felhaber & Mayeng, 1997; Thale, 2003; Gumede, 1990). Very young children are usually given an enema rather than an emetic as purposive vomiting is thought to be difficult for young children (Ngubane, 1977; Gumede, 1990).

As well as the herbal medicines used to treat the symptoms of the illness (*amakhambi*), there are medicines known as *amakhubalo* which are said to treat the cause of the illness. These are classified according to colour: black medicines (*imithi emnyama*) and red medicines (*imithi ebomovu*) are usually used to discard the illness and protect against reoccurrence, whilst white medicines (*imithi emhlophe*) restore health in the body (Ngubane, 1977). *Amakhubalo* include *insizi* which is powder made up of dried bark, roots or *inyamazane*¹² (belonging to the black medicines); red, black or white emetics known as *ubulawo* and *intelezi*, a white medicine to guard against witchcraft. *Intelezi* is never taken orally, but sprinkled around the home (*ukuchela intelezi*) or used to wash with (Ngubane, 1977). Although white medicines can be used on their own, black or red medicines should always be followed with a white medicine (Ngubane, 1977).

¹¹ In Sotho, traditional medicine is called *dihlare*. Both *umuthi* and *dihlare* mean 'tree'.

¹² Dried fat, skin or feathers from wild animals compounded into a powder.

2.3.5.2a Protection and strengthening the child

Although a lot of traditional medicines are aimed at adult use, there is a big market for infant medicines (de Wet, 1998a; 1998b). Treatment for the most common African childhood illness *inyoni* include prophylactics to strengthen the child and purgatives to get rid of *inyoni* from the body (Jali, 1950). In some cases the child must be taken out of town to be given an enema (Hammond-Tooke, 1981b). Prophylactics include medicines which can be burnt (e.g. *inyamazane*) for the child to inhale, medicines to rub on the body, scarifications on the anterior fontanelle and joints of the body, as well as the antacid Muthi Wenyoni (Jali, 1950; de Wet, 1998a ;1998b).

In order to protect the child, particularly the vulnerable newborn from the afore-mentioned causes of illness, prophylactics include wearing an amulet containing traditional medicines such as *izinyamazane* ashes, scarifications with powder rubbed into them, and burning traditional medicines such as *imphepho*, Doepa or *inyamazane* to ward off evil spirits (de Wet, 1998a; Richter, 1994; Ngubane, 1977). Doepa, although a Dutch medicine, has been “incorporated into the local African healing tradition through a process of reinterpretation in terms of local beliefs”, and is therefore used interchangeably with *imphepho* (de Wet, 1998a:p.138). Other Dutch medicines are rubbed onto vulnerable areas such as the fontanelle, nose, nostrils, anus, genitals, under the feet or the palms of the hands for protection or put in the child's bath (de Wet, 1998a). As well as the ceremonial rituals of slaughtering a sheep or goat for the *amadlozi* to protect the child, smaller rituals may also be performed. If 2 babies come into contact where one has been strengthened with traditional or Dutch medicines and another one hasn't, “the two infants are put back to back and both mothers take turns to pull on both babies' finger joints” in order to balance the power between them (de Wet, 1998a:p.124).

2.3.5.2b Cleaning out the body

One of the major categories of traditional medicines is the emetics and purgatives. They are used for a wide variety of health problems, including diarrhoea and other stomach problems, chest problems, menstrual problems, STIs, childbirth, headaches, influenza and an excessive accumulation of gall or bile (Green, 1999; Ngubane, 1977; Bryant, 1909). Zionist faith healers also administer enemas with holy water (Green, 1999).

There are usually several different types of childhood diarrhoea which are identified by colour, consistency, as well as other symptoms which accompany it. These symptoms include a sunken fontanelle, sunken eyes, dry skin or blood in the stools (Green, 1999; Hogle & Prins, 1991; Yoder, 1991). The main causes of childhood diarrhoea tend to be naturalistic as a result of teething, eating the wrong food or water that is contaminated, pollution from the mother's breast milk or picked up in the atmosphere (Green, 1999; Freund, 1989; de Zoysa, Carson, Feachem, Kirkwood, Lindsay-Smith & Loewenson, 1984; Yoder, 1995; Hogle & Prins, 1991). In the case of childhood diarrhoea caused by pollution, emetics and purgatives are usually used to get rid of the dirt inside the child (Green, 1985; Green *et al.*, 1994).

A study in the Transkei region of the Eastern Cape in the late 1990s recorded over 53 different plant species used for children between birth and 12 years of age (Tyiso & Bhat, 1998). These were used in enemas particularly after birth and during the weaning period (e.g. *umphompo*¹³; *intlungunyembe*¹⁴; *isicakathi / ibutha*¹⁵; *umsintsi / umsinzi*¹⁶), for chasing away evil spirits (e.g. *imphepho*¹⁷), as well as herbal remedies for minor ailments such as coughs, colds and flu (e.g. *umhonlanye*¹⁸), rashes or measles (e.g. *isihlungu sehlati*¹⁹; *umthombothi*²⁰), headaches (e.g. *itshongwe*²¹), diarrhoea (e.g. *umafumbuka / umavumbuka*²²), fever (e.g. *ubadlalanga*²³), tapeworm (e.g. *uhlunguhlungu*²⁴), and constipation (e.g. *umbhurhuza*²⁵). Other health problems treated include infections, toothache, bloody stools, weakness, earache, ringworm and *ipleyiti*, which the authors define as a form of malnutrition as a result of pollution passed from the mother to the child during pregnancy. Symptoms include an old look on the baby's face, a swollen stomach with green veins, green stools and a lot of crying. In a study in the Eastern Cape, the only two herbal remedies which were bought for children from *muthi* shops were *umthombothi*²⁶ for rashes and *iYeza lamas*²⁷ for removing the old or sour milk from a weaning child's stomach (Cocks & Dold, 2000). Depending on where studies are conducted and with whom, results may differ slightly as to the type or parts of plants used, methods of preparation and the illnesses they are used to treat (Tyiso & Bhat, 1998).

2.3.5.2c Regimen and pharmacopoeia of *muthi*: Potentially adverse health effects

Despite the acknowledged psychological and health benefits of many traditional medicines which have been used for centuries and have preceded modern medicine, there is often only a fine line between traditional remedies which are helpful, those which are harmful and those which act as placebos (Joubert, 1982; Veale, Furman & Oliver, 1992). Biomedical and traditional treatments may also contradict each other in terms of their intended actions (Smyth, Martin, & Cairns, 1995; Geissler *et al.*, 2002). In the case of childhood diarrhoea for example, traditionally purgatives are generally used in the belief that it is essential to clean out the cause of diarrhoea from the system, however this may leave the child even more dehydrated (Ngubane, 1977) and resulting complications are seen regularly at hospitals (Pantanowitz, 1994). According to Pantanowitz (1994), a Swazi infant may receive about one enema per week and a Zulu child may receive as many as 3 per week.

¹³ *Scadoxus puniceus*.

¹⁴ *Acokanthera oblongifolia*.

¹⁵ *Myrsiphyllum asparagoides*.

¹⁶ *Erythrina caffra*.

¹⁷ *Helichrysum cymosum*.

¹⁸ *Artemisia afra*.

¹⁹ *Acokanthera oppositifolia*.

²⁰ *Spirostachys Africana*.

²¹ *Xysmalobium undulatum*.

²² *Sarcophyte sanguinea*.

²³ *Senna didymobotrya*.

²⁴ *Brachylaena elliptica*.

²⁵ *Plectranthus barbatus*.

²⁶ *Spirostachys Africana* [Euphobiaceae].

²⁷ *Senecio coronatus* [Asteraceae].

As well as containing harmful ingredients such as agri-chemicals, metals or solvents, a small number of plants and their extracts found in enemas and other remedies, if taken in excess, can lead to morbidity and even death (Stewart *et al.*, 1999). Between 1991 and 1995, 206 fatalities of poisoning with an unknown substance or traditional medicine in the Gauteng Province of South Africa were forensically analysed and in 43% of cases herbal substances were found to be the cause of death (Stewart *et al.*, 1999). *Scadoxus puniceus*, more commonly known by its Xhosa name *umphompo* for example, is given to the child to drink to loosen the stomach and induce vomiting (Tyiso & Bhat, 1998), although features of poisoning such as dizziness, visual disturbance and depression or excitation have been documented (Hutchings & Terblanche, 1989). Other studies have also reported the negative health effects of enemas in KwaZulu-Natal (Moore & Moore, 1998; Wittenberg & Bonnici, 1998; Kibukamusoke & Coovadia, 1984 as cited in Bland *et al.*, 2004). In a study in rural KwaZulu-Natal for example, Vanneste (2003 as cited in Bland *et al.*, 2004) found that out of 156 deaths, 4 occurred after the administration of an enema, with no other evident cause.

The toxicity of the multi-purpose remedy *Callilepis laureola* or '*impila*' (Zulu word for 'health') has been known since 1909 (Bryant, 1909; Popat, Shear, Malkiewicz, Stewart, Steenkamp, Thomson, & Neuman., 2001; Wainwright, Schonland, & Candy, 1977; Candy, Pegel, Brookes, & Rodwell, 1978; Brookes, Candy, & Pegel, 1985), yet despite its toxicity, mostly due to incorrect dosage, it is still very popular (Steenkamp, Stewart, & Zuckerman, 1999; Bye & Dutton, 1991) and most commonly used for its magical properties, particularly in young children to offer protection from evil spirits or pollution and more especially if a sibling has died (Popat *et al.*, 2001; Watson, Coovadia, & Bhoola, 1979; Steenkamp *et al.*, 1999). *Impila* is also administered by TBAs to pregnant women during labour to ensure the health of the mother and the newborn, despite an association with low birth weight in infants and other maternal-foetal toxic effects (Larsen, Msane, & Mohnke, 1983a; Mitri, Hofmeyer, & van Gelderen, 1987; Morris & Mdlalose, 1991; Mabina, Pitsoe, & Moodley, 1997). *Isihlambezo*, another pregnancy tonic, is also supposedly implicated in pregnancy complications such as meconium passage and reduced infant birth weight (Larsen, Msane, & Monkhe, 1983b; Mitri *et al.*, 1987; Morris & Mdlalose, 1991). According to the traditional rules governing the use of *impila*, it should never be given to a child under the age of 10, should never be given as an enema and should only be used in a weak decoction when swallowed (Bodenstein, 1977; Popat *et al.* 2001). It has been found that one of the major determinants of the toxicity of *impila* is the dosage given (Seedat & Hitchcock, 1971; Bodenstein, 1977) and a lack of knowledge of how *impila* should be administered has contributed to the high morbidity and mortality associated with its use (Popat *et al.*, 2001). One of Okwu's (1979) arguments is that traditional medicine had no precise measurement, neither do TMPs use identical preparations (Good, 1987a).

In some cases, certain traditional practices are viewed as maladaptive if they potentially cause more harm than good, such as not allowing a newborn to receive colostrum or ingesting harmful chemical compounds (Edgerton, 1992). Reasons for the continued use of potentially harmful

traditional medicines relate much to the deep-seated belief that people have in their ability to cure and prevent illness and misfortune and resulting deaths are readily attributed to the aetiological cause rather than the medicine (Bye & Dutton, 1991). Care should be taken however when ascribing morbidity to a traditional remedy as the true cause may be due to a substance which is not part of a traditional medicine (Stewart *et al.*, 1999). Furthermore, as Green (1999:p.268) suggests, "we must be cautious about categorical discouragement of any aspects of indigenous medicine and healing until we know what we are interfering with." He elaborates that much of the negative publicity surrounding the harmful effects of traditional medicine is usually from a skewed sample. Emetics and purgatives for example are usually discouraged in the case of childhood diarrhoea although the roots of *Mirabilis jalapa*, used to treat diarrhoea in South Africa are now known to have antibacterial agents capable of destroying many pathogens (Chifundera, Kizungu, & Mbuyi, 1991).

2.3.6 Summary

As well as giving an overview of the main models of health-seeking behaviour in Section 2.1, the previous sections (2.2) have also attempted to highlight the main predictors and barriers to health-seeking behaviour that have been found in the literature and which may also be applicable to the study under investigation. In the case of South Africa, these may include characteristics of the caregiver and the household, characteristics of the child, characteristics of the disorder and their perception, characteristics of the health service as well as outcome and patient satisfaction. A significant proportion of this chapter has been devoted to the explanation of health beliefs in South Africa (2.3) and what is known about health-seeking behaviour for childhood illnesses beyond the clinic walls. This includes how some childhood health problems are attributed to non-biomedical causes as a result of the world-view in which they are defined. In the case of South Africa, these explanations include witchcraft, spirits and ancestors, God or a Supreme Being and pollution. Traditional medical practitioners as well as faith healers continue to remain popular sources of health care as Western providers are not able to treat these illnesses. Some Western medicines such as the Dutch medicines and Muthi Wenyoni however, have been indigenised into the South African world-view and are particularly popular preventative home treatments. Based on this background literature, the aim of the present study is to examine differences in interviewee responses at different types of health care providers. This was done in order to ascertain if any of the variables found in the literature are important determinants of health-seeking behaviour for Black children under 6 in Johannesburg and Soweto. Chapter 3 provides an outline of how this study was carried out.

3. Methodology

Chapter 3 begins with an overall summary of the methods used, followed by an overview of the preliminary work, which included training the fieldworker, conducting focus groups, in-depth interviews and piloting questionnaires. An outline of the quantitative methods discusses the utilisation-based survey method (including its inherent advantages and disadvantages), how the data was prepared for analysis and lastly the statistical methods used.

3.1 Introduction

Data collection took place during a 10-week period between March and June 2004 with Black mothers who had a child under 6 years of age at 2 public hospitals (Johannesburg / Soweto), 1 public clinic (Soweto), 2 private clinics (Johannesburg) and 2 traditional healers (Johannesburg / Orange Farm) using a mixed method approach. These health facilities were chosen purposively and represent a selection of different types of facilities where a caregiver might take their sick child. Focus groups and in-depth interviews with caregivers as well as health care providers were used to guide the design of the semi-structured questionnaire and describe the context in which the utilisation-based survey took place, thus informing quantitative results. An utilisation-based survey was chosen because it is less costly than a population-based survey (there was only a small budget available for the fieldwork) and also to allow differences in characteristics, beliefs, knowledge and actions of caregivers attending different health care providers to be examined.

3.1.2 Funding

Research was conducted under the auspices of Birth to Twenty. Funding was obtained through the Department of Human Sciences, Loughborough University and the Parkes Foundation.

3.1.3 Ethical permission

Ethical permission was obtained from Loughborough University (including a Criminal Records check (Disclosure number: 001065412276) to work with minors) and from the University of the Witwatersrand (03-11-32). Permission was obtained to conduct interviews from Dr M. Mazizi, Chief Director of the Johannesburg & West Rand Health Region, CEOs, Matrons, and traditional healers at the various health care facilities.

3.2 Preliminary work

3.2.1 Introduction

Preliminary work was carried out to identify potential problems in the proposed study. A small-scale exploratory study was first conducted using focus group discussions with caregivers, in-depth interviews with key informants and piloting of the questionnaire to determine whether the data collected would be reliable, relevant, how much time was needed to administer the questionnaire, whether revisions needed to be made in the wording of questions and whether there was a need to adjust how the variables were coded. Fieldworker training also took place during the preliminary work.

3.2.2 Fieldworker training

A fieldworker training manual (v. Appendix A) based on the United Nations University's and WHO's field guide for the study of health-seeking at the household level (Dawson, Manderson & Tallo, 1993) was given to the female fieldworker prior to the start of data collection and the objectives of the project were explained. Due to delays in obtaining a fieldworker, fieldworker training was 'on-the-spot' during pilot interviews. The researcher was also present during all focus groups and interviews and could therefore oversee questions and responses and follow these up if necessary. Because the fieldworker was involved in the focus group discussions and in-depth interviews prior to the start of the survey, this meant that she became very familiar with the interview schedule, the intent, as well as the meaning of questions. The fieldworker had no prior experience in the field, however she did possess excellent communication skills (also speaking Zulu, Xhosa and Sotho) as well as other important interviewer skills including an acceptable level of literacy and numeracy, clear handwriting and ability to follow instructions (Bowling, 1997). Positive attitudes included willingness to listen, openness towards other opinions, being non-judgemental, preparedness to work at irregular times, preparedness to travel and the ability to create rapport and establish confidence.

3.2.3 Qualitative research

The qualitative element of the research involved the use of focus group discussions (FGD) and in-depth interviews (IDI). These were used to investigate treatment options in a pluralistic setting where different health care paradigms co-exist and various factors influence the management of childhood illnesses. Traditionally research into health, illnesses and health-seeking has been based on quantitative methodology, based on 'positivism' (Ogden, 2004). Some anthropologists and social scientists argue that behaviour cannot be measured just quantitatively, but the researcher should rather aim to understand how the individual's experiences, interpretations and beliefs have been constructed (Bowling, 1997; Foster & Anderson, 1978) and how these might influence the course of action taken. Anthropological studies on health-seeking behaviour have

therefore provided clarification for the rationality of decisions made, as well as describing the context in which people make these decisions (Janzen, 1978; Lane & Millar, 1987; Pelto, Bentley, & Pelto, 1990; Young, 1981). Where measuring patient satisfaction is involved, quantitative methods tend to report high levels of patient satisfaction regardless of the target population or the site they are surveyed (Sitzia & Wood, 1997; Bernhardt, Wiadnaya, Wihardjo, & Pohan, 1999). Qualitative tools are more successful however in eliciting patient dissatisfaction with a service (Sitzia & Wood, 1997; Williams, Coyle & Healy, 1998), most likely due to the open nature of the focus groups and in-depth interviews which allows respondents to express themselves more freely (Huby, 1997).

3.2.3.1 Aims of qualitative work

The aims of the qualitative work were to:

- Guide the design of the survey questionnaire.
- Describe the socio-cultural context in which the survey took place, thus informing quantitative results.
- Improve the validity of the results and maximise the quality of the data by using triangulation (Maxwell, 1996).

3.2.3.2 Objectives of qualitative work

The qualitative findings were therefore expected to:

- Elicit a multiplicity of views within a group context (focus groups) on traditional and Western medicines and determinants of choice of health care. This would either justify including or removing certain questions from the questionnaire.
- Provide some explanations for observed associations in the quantitative analysis, e.g. why some poorer caregivers might use private health care facilities, why more educated caregivers might take their child to a traditional healer or why the public hospital is perceived to be better than the public clinic.

3.2.3.3 Focus group discussions

FGDs were used to gauge community perceptions of different paradigms of health care and treatment (access, cost, quality, appeal, acceptability, communication) as well as concepts of illness, characteristics of the disorder and their perception (chronic or acute, severe or trivial, aetiological model (natural or supernatural) and expected benefits of treatment (modern vs. traditional). This was intended to give insight into the determinants of choice of health care (traditional, allopathic or both, self-treatment or no treatment) and the perceived positive and negative aspects of both traditional and Western medicine.

3.2.3.3a Development of the focus group question lines

The focus group question lines (v. Appendix B) were developed according to the following broad themes, based on data that the survey questionnaire aimed to capture:

- Childhood illnesses, causes and treatment
- The health care system in South Africa (allopathic and traditional)
- Traditional medicine
- Future health services

These themes were intended to explore variations of experiences and understandings within the focus groups on health care systems available to children under 6 in South Africa (i.e. caregiver opinions and ideas on their choice of particular services, as well as experiences which may have led them to make those choices and beliefs about illnesses). This was also done in order to build up a vocabulary of locally-identified illnesses and medicines, to gain a preliminary understanding of the patterns of resort to treatment and to check whether the survey questionnaire needed amending. A pile sort of medicines was also conducted in the FGDs to learn about caregivers' use of both allopathic and traditional medicines.

3.2.3.3b Pile sort of medicines

The main part of the focus group was centred around pile sorting both traditional and Western medicines into groups according to how they were used by mothers for their children under 6. These were selected based on advice from a pharmacist, an anthropologist and a *muthi*¹ shop. Caregivers were then asked why the medicines had been grouped accordingly and about other medicines they might use which were not on the table (Hardon *et al.*, 1994). To allow more time for discussion, the final 2 focus groups did not include medicines which were not well-known in the first 3 groups or not used for children, such as Bruindulsies, Balsem Vita Wit Dutch medicines, Umthuthuzeli "Ma Ma", ENO, *intelezi*, *umathunga*, and *binneruit*. Medicines not available for the focus groups were also discussed. These medicines are by no means exhaustive of the wide selection of both traditional and OTC medicines available for childhood illnesses in Johannesburg and Soweto.

3.2.3.3c Sampling

An ideal sampling strategy for the focus groups would have been theoretical, enabling saturation of new ideas, concepts and information to occur (Glaser & Strauss, 1967; Hennink & Diamond, 1999). As resources did not permit this however, sampling was purposive with only 5 FGDs held. Three focus groups were held prior to the survey with Black Birth to Twenty (BT20) caregivers. Ninety-five Black children who had a sibling under 6 years of age were identified in the Birth to Twenty cohort. Caregivers were contacted by telephone until there were at least 8 caregivers per group (11, 8, and 10). The actual numbers who attended each group were 7, 8 and 9.

¹ Shop where you can buy traditional medicines.

Two further focus groups were held during the survey with Black caregivers recruited from the paediatric dispensary queue at a public hospital in Soweto. The main recruitment criterion was that the mother had a child under 6. These focus groups were limited to 6 participants to make sure that everyone had a chance to speak and to sort the medicines. This was based on experience from the first 3 larger focus groups. These 2 focus groups took place after the commencement of the survey and therefore did not influence the design of the survey instrument. Background questionnaires were filled in before the focus groups to get an idea of the composition of the groups. Informed consent was also obtained prior to the start of each focus group.

3.2.3.3d Organisation

The focus groups were lead by the researcher and an interpreter (fieldworker), with participants seated around a table, with the medicines in the centre (Stewart & Shamdasani, 1990). The first 3 focus groups had a note-taker and all focus groups were recorded with informed consent from the participants. As a result of delays in obtaining a fieldworker which minimised the training able to be given, the researcher acted as the moderator and questions were first asked in English. The question was then asked in Zulu and participants were free to answer in whichever language they felt most comfortable, given that in this setting most people are multilingual. This limited the involvement of the researcher in the focus groups but the fieldworker helped to summarise what was being said. Acknowledging that the caregivers present were either busy or had a sick child with them, focus groups were limited to one hour.

3.2.3.4 In-depth interviews (IDIs)

Since combined methods are better able to illuminate the complexity of health service utilisation, particularly at a micro level (Rogers & Nicholaas, 1998), in addition to the focus group discussions, IDIs were also held with caregivers, traditional healers, nurses, a Western pharmacist and a traditional pharmacist. IDIs were able to contribute more in-depth information on specific individuals such as traditional healers and nurses and allowed more discussion with caregivers who had more information than the survey instrument or the focus groups were able to capture. Interviewing health workers also enabled the providers' perspectives to be taken into account. FGDs also tend to generate group norms and when looking at actual behaviour, in-depth interviews are more suitable (Hardon *et al.*, 1994). Participant recruitment was therefore purposive.

One of the main aims of the qualitative work was to guide the quantitative survey. The qualitative data therefore needed to be centred around the more structured format of the survey instrument to help explain the results that this captured. This meant that much of the interview themes were already framed for the respondents by the researcher, with the exception of the caregivers whose interviews were based on information they had revealed during the survey.

IDIs were conducted with the following (v. Appendix C for question guides):

6 representatives of traditional medicine

Representing the beliefs of those who consult them, interviews with traditional healers (TMPs) focused on their treatment of childhood illnesses and how they interact with the modern health care system. Key themes investigated included:

- Socio-demographic characteristics of the TMPs
- Characteristics of the clientele (i.e. who is using their services)
- Illnesses treated and cost of treatment
- Causes of illnesses and treatment
- Perceptions of the allopathic health service and referrals
- Knowledge of other non-qualified TMPs working in the area and the toxicity of herbal remedies

Most importantly, interviews with traditional healers also allowed a rapport to develop, thereby enabling permission to interview caregivers from their facilities to be sought.

5 nurses of Western medicine

In order to obtain a range of nurses' perspectives, IDIs were held with 3 public hospital, 1 private clinic and 1 public primary health care clinic nurse at the facilities where the caregivers were interviewed. Key themes investigated include:

- Socio-demographic characteristics of the nurses
- Characteristics of the clientele (i.e. who is using their services)
- Characteristics of the specific health care provider (e.g. case load, reasons for consultation, cost of treatment)
- Perceptions of TMPs and the toxicity of herbal / home remedies
- Quality of care in the public and private sectors

2 pharmacists

One traditional pharmacist from a *muthi* Shop and 1 Western pharmacist were interviewed. Key themes investigated include:

- Characteristics of the clientele (i.e. who is using their services)
- Characteristics of the specific health care provider (e.g. reasons for consultation, cost of treatment, popular treatments)
- Perceptions of TMPs and the toxicity of herbal / home remedies

5 caregivers (during the survey)

Three public hospital caregivers, 1 private clinic caregiver, and 1 public primary health care clinic caregiver from the quantitative survey were interviewed in more depth. The focus was on personal experiences of childhood illness and how this is managed within different socio-economic groups. A private clinic caregiver who used traditional medicine and a public clinic caregiver who did not use traditional medicine were included in these in-depth interviews to explore deviant or atypical cases (Maxwell, 1996). Caregivers' interviews also provided a more

detailed narrative of how previous experiences with health care providers shaped their social expectations and present actions.

Informal interviews with key informants

Informal interviews were also held with a toxicologist, a botanist, a sociologist, and an anthropologist. These key informants were able to contribute useful information on traditional medicine and health-seeking behaviour in this setting, which helped in the design of the questionnaire, as well as making contact with traditional healers. 'Screening'² in Paediatric Casualty at one public hospital was also observed which allowed a brief but useful insight into the doctor-patient relationship.

3.2.3.5 Analysis of FGDs and IDIs

Within the timescale available, no in-depth analysis of the FGDs and IDIs could take place prior to the survey, however preliminary results were discussed with the fieldworker. This allowed some amendments to be made to the questionnaire. A section was included which looked at how 10 common childhood health problems, including *inyoni*, *ibala*, crying and teething are managed. *Abantu* illnesses were also included in other codes where illnesses or symptoms were asked about. Based on the nurse interviews, caregivers were asked what they thought about saline drips (their use and why are considered important) and whether they thought that their usual provider of Western medicines explained the instructions clearly to them. Given the importance of Dutch medicines which was indicated in the FGDs, a section was included which asked the caregiver which Dutch Medicines she gave to her child and whether she mixed these or not. With low levels of exclusive breastfeeding in South Africa, instead of asking how long the child was exclusively breastfed for, the caregiver was asked when the child was first given a bottle. A section was also included on what traditional medicine the child had been given and the reason for its use. Some questions which were pre-coded were asked in focus groups (e.g. what improvements caregivers would like to see in the health service) and this enabled some codes to be added or removed. A memory aid which was used in the focus groups was also incorporated into the survey to reduce recall bias.

Transcription and translation into English of the focus groups and in-depth interviews were cross-checked by another transcriber / translator for errors. 'Scissor and sort' (or 'cut and paste') technique and coding schemes (Stewart & Shamdasani, 1990; Ulin, McNeill, & Tolley, 2002) for the qualitative work were performed manually by the researcher for the FGDs and using QSR NVivo for the IDIs. Once translated, transcriptions were read several times by the researcher to identify general themes and issues based on the research questions investigated in the main survey, as well as the pile-sort results (Hardon *et al.*, 1994; Weller & Kimball Romney, 1988). After each batch of transcriptions (FGDs, caregiver IDIs, TMP IDIs and Nurse IDIs) had been read, transcriptions were reread to check for further themes and subthemes. Consistency checks

² Inspection of referral letter and brief assessment of whether the child's condition warrants hospital treatment or not.

were performed on a sub-sample (1 transcription from each batch) by a different analyst. As well as themes being 'coded up' from the data, diagrams were developed to enable the researcher to summarise the findings (Hardon *et al.*, 1994). Pile sort results were grouped according to use of the medicines concerned, and other medicines not present but commonly used by mothers were also noted.

3.2.4 Piloting the questionnaire

After amendments following the first 3 FGDs, the questionnaire was piloted with 6 caregivers who had attended the FGDs. One of the main aims of the pilot was to time how long it took to administer the questionnaire, with the maximum time limit being 30 minutes. As a result, certain sections had to be reduced, in particular the 2 week morbidity section, as well as the section on the management of 10 childhood illnesses. Delays in the recruitment of a fieldworker reduced the time available to pilot, change and translate the final versions of the lengthy questionnaires into Zulu, Xhosa and Sotho. They were therefore left in English (v. Appendix D). Because only 1 fieldworker was used however and because she was fluent in Xhosa, Zulu, Sotho and English, this minimised interviewer bias. The researcher was also present during all interviews and was able to monitor the answers given and prompt for further information if necessary. Issues which arose whilst piloting the questionnaire can be found in the discussion section on methodological issues and limitations.

3.3 Quantitative research

3.3.1 Survey design

Because population-based studies are costly, an utilisation-based survey was used which focuses on the population that actually visit a particular health care provider. As well as permitting a deeper locational analysis of patient characteristics, it also tries to overcome the under-reporting of the use of traditional medicine by finding out about the behaviour of traditional healers' patients (Good, 1987a).

3.3.2 Sampling

The aim of the survey was therefore not to measure levels of health-seeking behaviour, but to find out why caregivers follow different patterns of resort. For this reason a selection of public, private and traditional facilities were selected purposively. Once interviews had commenced at the public hospitals it became apparent that mothers viewed public hospitals and public primary health care (PHC) clinics differently, therefore they were sampled separately. Black caregivers of children under the age of 6 years were recruited (n = 206; 66% male and 34% female children) from 1 public clinic in Soweto (n = 50), 2 private clinics (n = 50) in Johannesburg, 2 public

hospitals (n = 53) from Johannesburg and Soweto and 2 traditional healers (n = 53) from Johannesburg and Orange Farm, an informal settlement on the outskirts of Johannesburg.

With the exception of the traditional healers' patients, participants were selected from queues at the various health care facilities. Sampling was not random because of the difficulties in interviewing mothers who have a sick child and are concerned that they may lose their place in the queue. If patient lists are used as a sampling frame, these are often not up-to-date (Houghton, Bowling, Clarke, Hopkins & Jones, 1996). Exit interviews were not possible because of the length of time a caregiver had already been waiting with their sick child. Selection was therefore determined by the caregiver's position in the queue. With this type of convenience sampling there is potential for selection bias in the unconscious selection of friendlier-looking participants. However it is unlikely that participant characteristics would vary by their place in the queue. At the private clinic, all caregivers were usually interviewed as their children were admitted and there was not a high turnover of patients.

Sampling from the traditional healers could not be undertaken in the same way as for the other facilities as no queue or in-patients existed at these providers. Participants were therefore recruited using two key 'gatekeepers' to respondents, 1 TMP from a market in inner-city Johannesburg and 1 TMP from Orange Farm, an informal settlement on the outskirts of Johannesburg. The main criterion was that the caregivers should recently have taken their child under 6 to a traditional healer. Given that only 2 TMPs were used however, a flexible approach was required. For this reason, 4 traditional healer's patients had not been seen by the traditional healer in the 2 weeks prior to interview, although their child had been given traditional medicine in the past. There was clearly the increased potential for recruitment bias from the traditional healers compared to other health care providers as the TMPs may have only chosen to put us into contact with certain individuals. By using 2 gatekeepers, the study sought to reduce such biases. It was not possible to recruit in any other way because the budget and timing of the study meant that at least 6 respondents had to be interviewed per day.

3.3.3 Sample size

The sample size was not calculated at the design stage of the study because differences in health-seeking behaviour between groups was not known. The utilisation-based survey can provide estimates on which sample size calculations can be conducted for a larger-scale survey. The sample size was also restricted by financial and time constraints. Power calculations at the 5% level with 2-tailed significance were however performed retrospectively in Stata 8.0 to assess how much chance the study results had of detecting a significant difference for some of the main variables of interest (v. Table 3.1).

As can be seen in Table 3.1, the risk of type II (beta) error occurring is increased because of the small sample size and this needs to be taken into account when interpreting the findings of the

study. Because non-random methods of sample selection were used, inferences cannot be made about the population from which the sample came. Furthermore, not everyone who has an illness or medical condition consults a doctor, so it is difficult to generalise results from health service-based surveys.

Table 3.1: Sample size calculations for selected variables

Variable	Sample 1 (n1)	p1**	Sample 2 (n2)	p2**	Power*	Required sample size	
						n1	n2
Use of traditional medicine	PHC (50)		Public hospital (53)	0.64	0.0407	2911	3086
	PHC (50)	0.68	Private (50)	0.58	0.1276	508	508
	PHC (50)		TMP (53)	1.00	0.9925	31	33
Use of Dutch medicines	PHC (50)		Public hospital (53)	0.81	0.0603	1163	1233
	PHC (50)	0.86	Private (50)	0.60	0.7814	67	67
	PHC (50)		TMP (53)	0.83	0.0345	3036	3219
Treats at home first for diarrhoea	PHC (50)		Public hospital (53)	0.81	0.2621	213	226
	PHC (50)	0.92	Private (50)	0.72	0.6541	86	86
	PHC (50)		TMP (53)	0.87	0.0708	805	854
Mother perceives illness is not serious on day of interview	PHC (50)		Public hospital (53)	0.30	0.1518	401	426
	PHC (50)	0.20	Private (50)	0.70	0.9995	23	23
	PHC (50)		TMP (53)	0.85	1.0000	13	14
Caregiver is in low or very low SES group	PHC (50)		Public hospital (53)	0.66	0.1301	503	534
	PHC (50)	0.56	Private (50)	0.06	0.9999	20	20
	PHC (50)		TMP (53)	0.89	0.9543	41	44
* alpha 0.05 ** proportion							

3.3.4 Survey instrument

An interviewer-administered semi-structured questionnaire was used to capture quantitative information on childhood morbidity and health-seeking behaviour in the first 6 years of children's lives. Outcomes investigated in the main survey were based on the conceptual framework from background literature and qualitative interviews. These outcomes include differences in characteristics, beliefs, knowledge and actions of caregivers attending different health care providers. Existing scales of measurement were used from the surveys identified below, as these have been previously tested for reliability and validity.

- The South African DHS survey (Department of Health *et al.*, 1998)
- The Consumer Assessment of Health Plans (CAHPS) 2.0 Child Core questionnaire (Agency for Health Care Policy and Research, 1998)
- Demand for Medicinal Plants in KwaZulu-Natal questionnaires (Mander, 1998)
- A National Household Survey of Health Inequalities in South Africa (Community Agency for Social Enquiry (CASE) for the Henry J. Kaiser Family Foundation)
- The South African Census (2001) Metadata (Statistics South Africa, 2001a)

- United Nations University's and WHO's "Field Guide for the Study of Health-Seeking at the Household Level" (Scrimshaw & Hurtado, 1984)
- The 2-week morbidity section was adapted from the calendar design implemented in the 1995 Guatemala Survey of Family Health (Heuveline & Goldman, 2000; Goldman *et al.*, 2002)

3.3.4.1 Sequence and sensitivity of questions

A funnelling technique was used which ordered questions from broad to more specific (Bowling, 1997), with more sensitive questions asked as late as possible (e.g. income). Caregivers were shown several bands of incomes and asked which corresponded to their household income. In this way caregivers did not have to think of an exact figure and say it out aloud, but simply had to point or say the category number. The section on the use of traditional medicine was also left as late as possible in the questionnaire. Because several general aspects of traditional medicine had already been mentioned indirectly (e.g. what caregivers did for specific 'African' illnesses), this topic was introduced gradually.

3.3.4.2 Content of questionnaire

The questionnaire (v. Appendix D) was composed of the following sections:

A. Socio-demographic data of primary carer In this section data were collected on: main language; age; sex; weight; height; religion; marital status; education; place of birth; area of residence; length of residency in Johannesburg / Soweto; number of people in household; child deaths and causes; parity and ages of children alive; support from friends or relatives; household employment; caregiver employment; head of household employment; frequency of household hunger; ownership of consumer durables; household income; type of dwelling; rooms in house; medical aid coverage.

B. Socio-demographic and health data of child < 6 years In this section data were collected on: reason for attending health care facility; age; sex; current weight; current height; birth weight; birth length; breastfeeding / bottle-feeding; health status since birth; immunisation.

C. Knowledge of childhood illnesses, treatment and general behaviour In this section data were collected on: who makes decisions when child is not well; most common health problems experienced by child; symptoms caregiver would consider to be serious for child; when caregiver thinks the child would need a drip, and why this is important; use of Dutch medicines for child; which Dutch medicines are used; mixing of Dutch medicines; where Caregiver normally gets Western medicine from; understanding of explanation of medicine instructions; what caregiver normally does first (provider / treatment) and then second for 10 common child health problems. This survey did not measure causes of illness but 'type of treatment' provides an indicator of natural or supernatural cause of disease.

D. Personal experience of childhood illnesses in last 2 weeks In this section data were collected on: when illness began; symptoms; severity today; when caregiver was most worried and why; advice from others; treatment given; who recommended treatment; reason for choice of health care provider. Since this was not a morbidity survey, disease misclassification was not a major issue. Nevertheless, caregivers were asked both why they were at the health care provider as well as what symptoms the child had. A 2-week recall period was used as this is normally considered adequate for recalling data (McKinlay, 1972; Ross & Vaughan, 1986, as cited in Ryan, 1998), although if an illness had started prior to this, this information was also captured.

E. Use of traditional medicine In this section data were collected on: ever-use of traditional medicine for child; where caregiver normally gets the traditional medicine from; main medicines used; reason for use of medicines; order of treatment (Western / traditional); mixing of Western / traditional medicines; caregiver use of traditional medicine; reasons for change in caregiver use of traditional medicine; reasons for / for not taking a child to a traditional healer. A small section on pregnancy-related questions was then asked: antenatal clinic attendance; help from traditional birth attendant (TBA) or older relative; herbal remedies / medicine taken during pregnancy.

F. Perceptions of health service (opinions / feelings / personal experience) In this section data were collected on: where the caregiver would take their child for treatment if money was not a problem (i.e. if they won the lottery) and why; where the best place to take their child is in terms of affordability and why; distance to providers (closest and furthest); mode of transport; why some caregivers bypass the primary health care clinic in favour of the public hospital; the most important factor when deciding where to take their sick child; cost of traditional medicine; how a caregiver might find a good traditional healer; what caregivers think about faith healing and if they have ever taken their child to a faith healer; what the doctors and nurses are like at their usual health care facility; what the antenatal care nurses are like; whether caregiver would complain if she was not satisfied with service or treatment; who the caregiver would complain to and whether they thought this made a difference; and lastly, how health care could be improved for children under 6 in Johannesburg and Soweto.

3.3.5 Measures

In order to obtain a general picture of the health of the caregivers and their children, respondents and children were weighed using portable scales and height / length was measured with a tape measure (v. Figure 3.1). If the clinic had already weighed or taken the height of the child on this visit, this was used instead. Shoes and heavy items of clothing were removed where possible. If the child was under 3 years, or was too ill to stand they were measured in the recumbent position and weighed in their mother's arms.



Figure 3.1: Practising taking length and weight measurements

At the primary health care clinic, the public hospitals and the traditional healers respondents were interviewed in a separate room (v. Figure 3.2). The private clinic interviews took place in a ward, with some mothers in private cubicles and others in the main ward. There was sufficient space between beds however to ensure privacy.

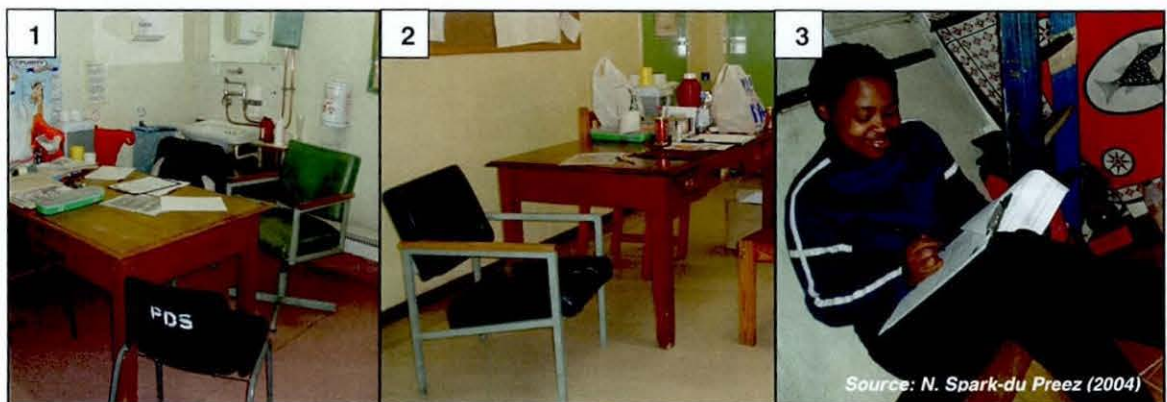


Figure 3.2: Examples of interview rooms used at public hospital (1), PHC (2) and TMP (3)

3.3.6 Incentives

Participants were provided with refreshments and a R50 (£5) food voucher was given for taking part in the study.

3.3.7 1-week diary

According to Elliot (1997) and Wiseman, Conteh and Matovu (2005), diaries have been neglected as a sociological research method, despite their power to capture data that the standard interview may miss. If filled in everyday, diaries are less subject to recall bias with their proximity to the present (Whitty & Jones, 1992). In fact, diaries are argued to be one of the best ways of collecting data on health-seeking (Verbrugge, 1985; Mechanic, 1989), especially as more trivial symptoms are easily forgotten, particularly if they have not been treated by a health care professional (Elliott, 1997). In developing countries where literacy rates are lower than developed countries the use of the diary is obviously problematic (Bowling, 2002). However this can be overcome by asking a friend or relative to help fill in the diary (Wiseman *et al.*, 2005), particularly if it is not intimate narrative but simply a log of events with little commentary. Literacy is not always the problem, but the willingness to record everyday events. According to Sheridan (1993), some people are more natural diarists than others and take to the task more easily. 'Fatigue' and less complete entries may also occur when respondents become tired of keeping the diary (Verbrugge, 1980).

To overcome issues of recall bias and to test the diary as a data-collection method in this setting, 1-week diaries were given to caregivers to obtain prospective data on patterns of resort for treatment (v. Figure 3.3). An evaluation of how well these diaries had been filled in was performed.



Figure 3.3: 1-week diaries on health-seeking

The diaries were structured and guidance was given on how to fill the diary in. These had been translated into Zulu and Sotho (and back-translated into English to check for accuracy) (v. Appendix E). Diarists were asked to record any health problems their child had had and any action they had taken. As well as care from health professionals, diarists were also encouraged to

comment on any informal care, self care and alternative therapies they had used. Illiterate caregivers were given the diary and asked if someone else could help them to fill it in. When the diary was completed, caregivers were asked to return it to the researchers which was logistically challenging. Caregivers were then given R20 (£2) for transport and a R30 (£3) voucher for Nandos (fast-food outlet) if the diary had been completed. On returning the diary, the fieldworker or researcher (if diaries were in English) checked the diary with the respondent for omissions or inconsistencies.

3.3.8 Preparation of data for analysis

3.3.8.1 Coding, data entry and verification

- A coding frame was created by listing all of the answers in the questionnaires. These were subsequently collapsed into fewer categories and recoded.
- New codes were written on all of the questionnaires and these were entered into SPSS.
- Most of the data checks took place during coding, recoding and data entry. Age for example, was re-checked against the date of birth given. In the few cases where there were discrepancies the date of birth was used to recalculate the age of the child or caregiver. This led to one traditional healer's patient being excluded from analysis as they were above the 5.99 age-threshold. The child's weight and height were also much higher than other children aged 5 years.
- Consistency checks were performed during recoding using cross-tabulations, particularly for the variables with many categories such as church, symptoms, illness, treatments and perceptions of providers. Frequency counts were also compared with manual counts performed in Excel whilst the coding frame was drawn up.
- 10% of the questionnaires (every 10th questionnaire after questionnaire 1) were also checked for data entry and coding errors. By the time this verification was done, the questionnaires had already been checked during the creation of the coding frame and recoding which minimised the amount of errors found. Only 2 questionnaires contained errors. The first questionnaire contained 2 coding errors in relation to how fever is treated and the second questionnaire contained one coding error.
- Data was transferred to Stata 8.0 for analysis and subsequent recoding.

3.3.8.2 Missing data

Missing data was minimised by the researcher checking the questionnaire for any omissions, errors or discrepancies whilst the interviewer explained to the caregiver how to fill in the diary. Caregivers could also be cross-questioned when they returned their diary, or if this was not possible they were telephoned. Information was collected from the Road to Health Chart (40% of caregivers had this with them) on immunisation, birth weight and length. Data was not able to be collected on birth length for 59% of children, on birth weight for 24% of children and on birth head circumference for 62% of children.

3.3.8.3 Recoding of variables

Presented below are the explanations of the categories created for the variables needing the most restructuring. Tables of the coding process for these variables can be found in Appendix F.

3.3.8.3a Child-related variables

Child's age group (adjusted for TMP patients)

To adjust for the sampling design at traditional healers (i.e. health-seeking data was based on the last time that the caregiver had brought their child under 6 to a traditional healer), the child's age was adjusted to reflect this, as shown in Table 3.2.

Table 3.2: Recoding of child's age

Age	Freq. before recoding	Freq. after recoding
<= 6 months	50	55
7-12 months	38	36
13-23 months	49	48
24+ months	69	67

Body Mass Index (BMI)

For infants (birth to 24 months), sex appropriate length-for-age CDC growth charts were used to plot the percentiles. At age 24 months and older, BMI (wt / ht²) CDC growth charts were used to plot percentiles. These percentiles rank the position of the child by indicating what percent of the reference population the individual would equal or exceed. These growth charts were developed by the National Centre for Health Statistics (2000) as a clinical tool for health professionals to determine if the growth of a child is adequate and are used by the World Health Organization for international use. Children were classified as underweight if their NCHS percentile group was <P3, normal weight if their NCHS percentile group was P3-P97 and overweight if their NCHS percentile group was >P97.

Common illnesses since birth

Forty-eight unique common illnesses were first identified and these were then grouped into the categories found in Appendix F. Gastro-intestinal problems included any stomach pains, diarrhoea and vomiting. ENT-related problems included any upper-respiratory infections such as colds, runny nose, blocked nose, tonsillitis and ear infections. Chest-related problems included any lower respiratory infections such as broncho-pneumonia, breathing problems, coughing and asthma. African illnesses included *inyoni*, *ibala* and problems with the umbilical cord. 'Other' included teething, jaundice and injuries.

3.3.8.3b Illness-related

Reason for attending health care provider

Seventy-one reasons (if caregiver did not know the illness then the symptom / s were given) were identified and these were grouped broadly according to the ICD-10 disease classification (National Center for Health Statistics, 2004), modified to include an 'African' health problem category (v. Figure 3.4). Reasons for which there were not sufficient cases to form a category on their own were grouped in an 'other' category. The intention was not to diagnose the child's illness but to try and group "discomforts roughly in terms of popular cultural perspectives" (Chrisman & Kleinman, 1983:p.576). Caregivers were not always aware of what illness the child was suffering from, therefore combinations of symptoms and illness were recorded. It is acknowledged that trying to group symptoms can lead to disease misclassification, particularly as some symptoms might fall into several groups (Gesler, 1979a). Fever for example, may be a symptom of an upper respiratory infection, an ear infection, a gastro-testinal infection or a viral infection of the central nervous system such as meningitis (Swift, 1998; Madeley & Peiris, 1998; Shears & Hart, 1998; Amor & Mehta, 1998). As only 7 cases of fever were mentioned as a reason for being at the provider and a variety of agents may have caused this, fever was grouped with upper respiratory infections according to clinical profiles of acute respiratory infections (Kibel, 2001).

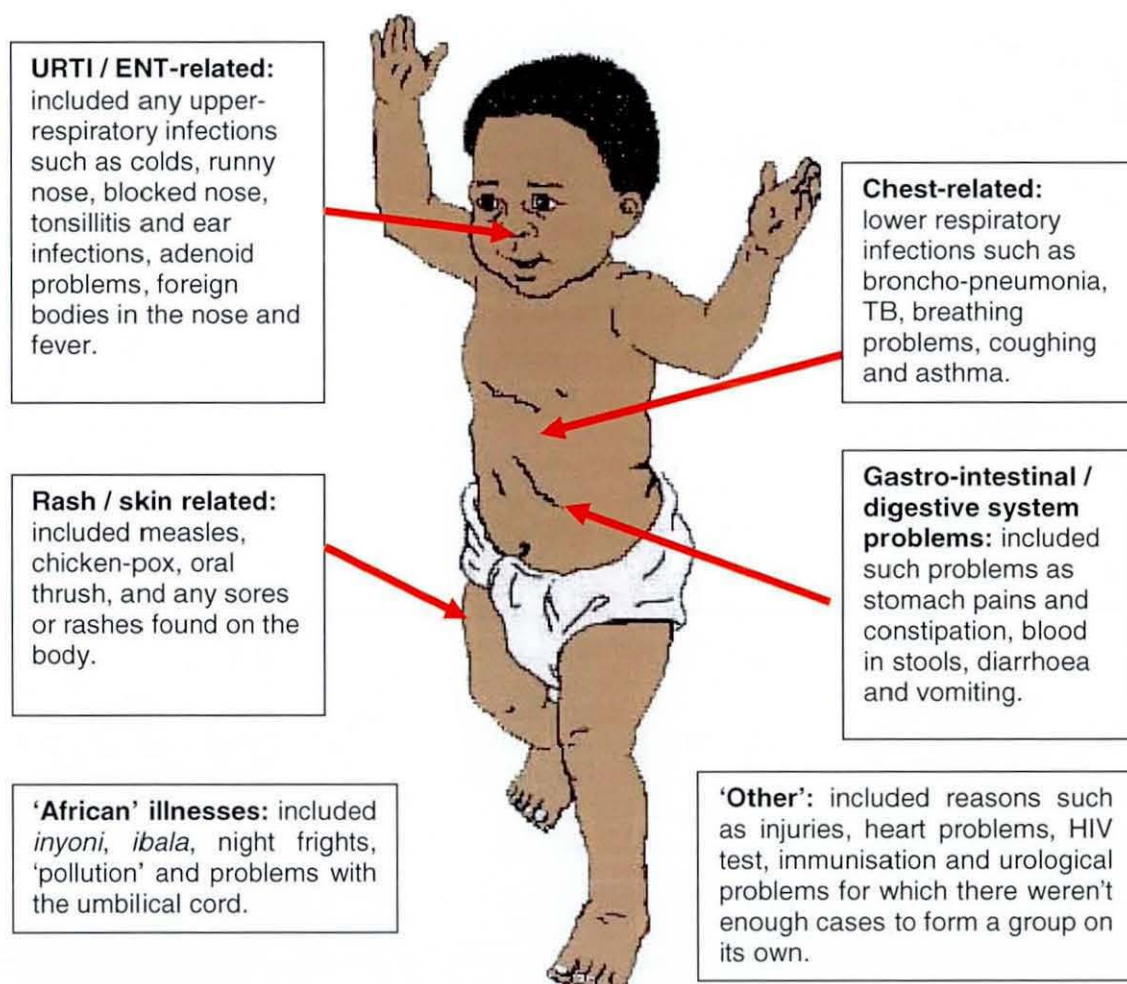


Figure 3.4: Groupings of reasons for attending health care provider

Symptoms

Given that “what families actually observe and react to is most likely to be children’s symptoms”, (Goldman *et al.*, 2002:p.1701), caregivers were also asked about symptoms their child had experienced for that health problem on the day of interview. It is acknowledged that there is potential recall bias for this question. In total, 141 symptoms were identified, including ‘not applicable’ for reasons such as immunisation. Several levels of coding were performed for descriptive analysis. These were broadly grouped according to the same criteria as outlined for ‘reasons for bringing child to health care provider’. African illnesses / problems were however categorised according to symptoms, e.g. *ibala* (capillary naevus) was grouped with rashes and skin problems and *inyoni* symptoms were grouped with the gastro-intestinal problems for example. Crying / malaise and unhappiness were grouped on their own as they may be applicable to any health problem and are interesting symptoms in their own right (v. Figure 3.5).

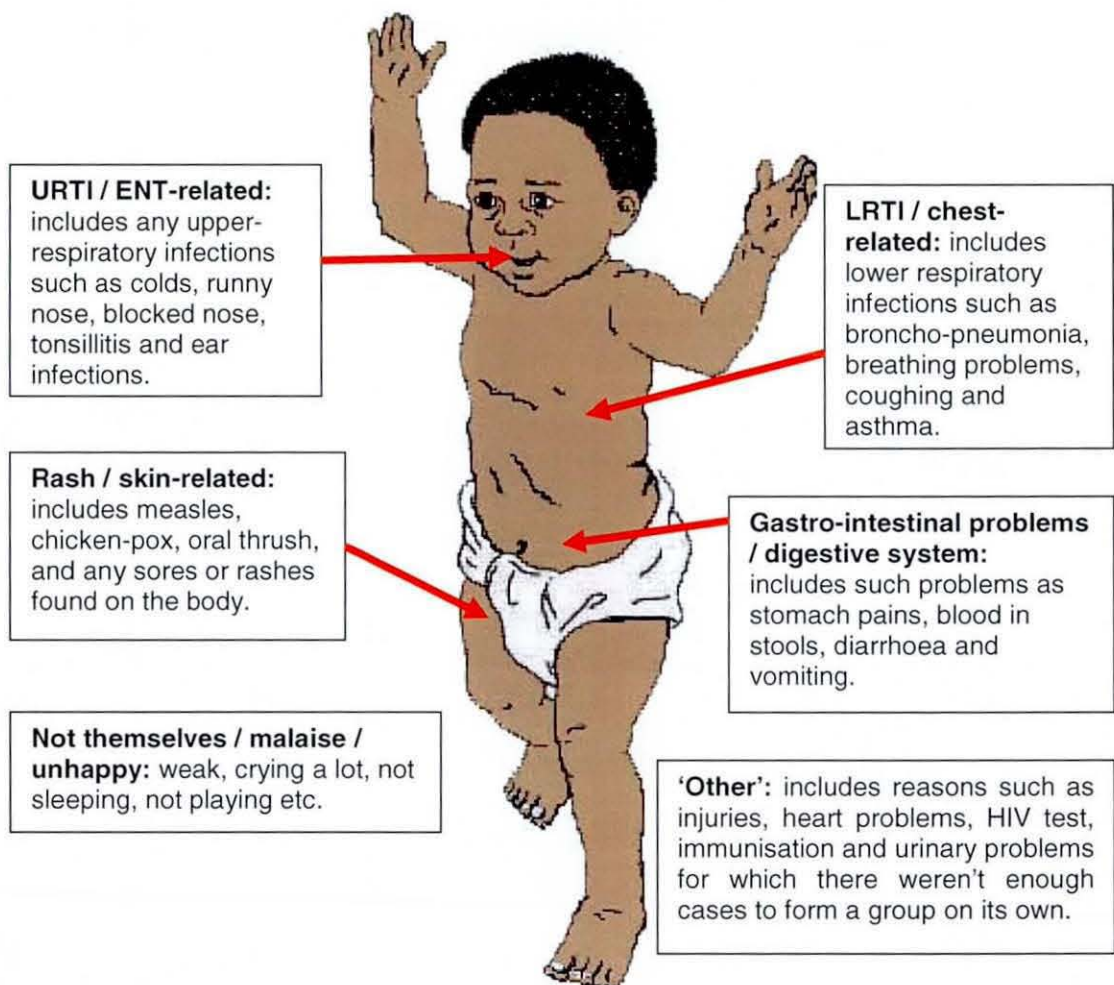


Figure 3.5: Groupings of symptoms on day of illness

Why caregiver was worried

Another variable captured what day of the illness the caregiver was most worried. The caregiver was also asked why she was most worried on that day and 108 reasons were grouped into chest-

related problems; pain or restlessness; weakness; severity; gastro-intestinal related; fever and loss of appetite / weight loss. All other small groups were grouped into the 'other' category.

3.3.8.3c Belief-related and use of traditional medicine

Religion

There were 55 churches alone recorded in this study and respondents often did not know how their church was broadly defined (e.g. African Independent Church). Some names were not given in full within these 55 churches (e.g. Full Gospel *versus* Faith Ways Full Gospel Church). There were therefore 46 different churches. It was difficult to find references after the study to know how to group these into denominations (Catholic, Protestant, African Independent Church) and extensive internet searches were performed to find out more about the churches recorded in the study. Although The Zion Christian Church (ZCC) is an African Independent Church (AIC), this were kept separate to reflect more radical attitudes found in the ZCC compared to other AICs (Sundkler, 1961).

Traditional medicines given

The maximum number of different traditional treatments a caregiver could remember having given to their child was 10. Explanations of the Zulu, Sotho or Xhosa terms are given in the results section. Traditional medicines were grouped according to how they were administered, with the exception of 'Church' medicines which were grouped on their own. Most medicines fell under the broad label of '*imbiza*' (a mixture of traditional medicines, usually acting as an emetic or purgative). Mouth and nose drops were included in this group. Any *imbiza* or concoction used as a *sput* (enema) was grouped separately. Further grouping included cuts and incisions, medicine rubbed on the child; 'Church' medicine; medicines for burning / inhaling; amulets / beads / ropes and lastly a group labelled as 'other'.

Reasons for giving child traditional medicine

The main reasons for using traditional medicine were grouped in the broadest categories as follows: *inyoni* and *ibala* were grouped together as they were the most commonly mentioned and were sometimes seen as part of the same illness; any problems associated with the child's digestive system or cleaning out the child; any problems associated with bad spirits and pollution (including restlessness and crying); chest, ear, nose and throat problems were grouped together, including fever; any rashes or sores were grouped together; teething and lastly an 'other' category.

Why caregiver has changed personal use of traditional medicine

Caregivers were asked if their use of traditional medicine had changed in the last 10 years and if so why. Groupings included: not being needed at present; having experienced good outcomes in the past; having experienced bad outcomes or the medicine not helping in the past; religious

reasons and lastly an 'other' category whose variables had too few responses to create categories of their own.

Why caregiver has / would take child to a traditional healer

As well as asking about traditional medicine that the child had been given (as this may come from any source), caregivers were asked if they had or would take their child to a traditional healer and reasons for this. In the broadest groupings, all variables relating to protection, the supernatural and African health problems were grouped together. The second category included the efficacy of traditional medicine or the inability of Western medicine to help. Family and background-related variables such as the influence of relatives or culture were grouped together and provider or access-related variables were grouped. Reasons for not taking a child to a traditional healer were grouped according to the following: not believing; religious-related variables; background and family-related variables and finally traditional medicine being dangerous or Western medicine being better.

Traditional medicines used during pregnancy

Traditional and herbal medicines used during pregnancy were grouped in the same way as traditional medicines given to the child (i.e. how they are administered). '*Isihlambezo*' was grouped separately from the '*imbiza*' category because it is one of the most popular tonics used during pregnancy. '*Isiwasho*' was also kept separate from the '*imbiza*' category because of its associations with faith healing. Medicines which were not ingested (medicine to bath in, to rub on the body and to burn) were grouped together as there were not enough of each to form their own categories.

Reasons for use of traditional medicine during pregnancy

The main reasons for using traditional or herbal medicines during pregnancy were divided according to their use: to aid labour; for protection and strengthening; for reasons related to the foetus such as positioning and preventing jaundice and lastly mother-related reasons, including pains and swelling.

3.3.8.3d Provider-related

Reasons why some caregivers might bypass the primary health care clinic

Caregivers were asked if they knew why some caregivers might bypass the PHC clinic in favour of the public hospital. As respondents could give more than one answer, binary variables were created for the various groupings of variables. These were broken down into medicine-related issues including equipment; seeing a doctor or specialist; how the child is examined; issues surrounding waiting times and opening hours; emergencies or serious cases; and the service and help given.

If caregiver won the lottery where would be the best place to take child if they are sick?

Where is the best place to take your sick child in terms of affordability?

The caregivers were asked a series of hypothetical questions, the first one being where the best place would be to take their sick child if they won the lottery (i.e. if money was not a problem). The caregiver was then asked why that chosen provider would be the best. Binary variables were created as a caregiver could give more than one response. The broadest groupings of variables were medicine-related; staff-related; seeing a specialist; the medical process (i.e. examination); accessibility (i.e. availability of staff and waiting times); facility-related variables; cost-related variables; outcomes in the past / efficacy and lastly belief and habit-related variables. Cost-related variables (provider fees) were grouped in with facility variables for the provider chosen if the caregiver won the lottery as there were only 5 cost-related responses.

Most important factor(s) when deciding where to take child when they are sick

Caregivers were asked what the most important factor would be when considering where to take their child when they are sick (any illness). Responses (of which more than one could be given) were grouped into the following categories: cost-related; belief-related; waiting-time (including urgency); medicine-related; staff attitudes; the medical process (i.e. examination); seeing a specialist or doctor and lastly distance to the provider.

How could health services be improved in Johannesburg / Soweto?

Caregivers were asked how health care could be improved in Johannesburg and Soweto for children under 6 in particular. This was another question which aimed to find out indirectly what was important to a caregiver, and more than one answer could be given. Variables were grouped into the following categories: improving staff attitudes; improving staff numbers; improving waiting times; integrating Western and traditional medicine; improving facility characteristics including resources available; improving services and procedures. The 'other' group included patient-staff relations and user fees.

Why did you choose to come to this health care provider today?

As well as finding out the medical reason for bringing their child to the health care provider, the caregiver was also asked why they had chosen that particular health care provider. Variables were grouped into the following categories: staff-related issues; illness-related issues; efficacy; being recommended; being referred by another provider; cost; check-up or collecting results and finally enabling factors (access / distance / availability).

3.3.8.3e General health-seeking behaviour

Health-seeking for 10 common child health problems

For 10 common health problems, caregivers were shown a picture grid (v. Figure 3.6) of health care providers and other places where you might get traditional and Western medicines, to help mothers remember the options available when their child was not well. This was a very useful

memory aid during the survey and it also introduced the topic of traditional medicine without the interviewer having to mention it outright. The options were: public hospital; home; pharmacy; market; *inyanga*; friends; *sangoma*; faith healer; *muthi* shop; relatives; primary health clinic; GP; private clinic; the bush; supermarket; and garden. Mothers were simply asked where they would go or what they would do first if their child had a particular health problem. If they did not know they were asked who they might seek advice from. If they knew what treatment they would give this was also noted. Mothers were then asked, if their child did not get better after treatment / provider 1, then what would they do / where would they go.



Figure 3.6: Memory aid: Picture grid of sources of health care / treatment

The 10 common health problems include: diarrhoea, cough, fever, vomiting, constipation, cold / flu, *inyoni*, *ibala*, crying / restlessness, teething. *Inyoni* and *ibala* were included as examples of the 2 most common 'African' illnesses children experienced. Crying was included for 2 reasons. Firstly, as well as being a sign of pain, discomfort, hunger or unhappiness, it may also be a sign that there are bad spirits in the house, that the ancestors are not happy, that the child has picked up some form of 'witchcraft' or has come into contact with others who have used traditional medicine or who are 'polluted'. This can be seen in the type of treatment or provider a mother

might choose. Secondly, some studies (de Wet, 1998a; Bland *et al.*, 2004) have reported that mothers may tend to mask problem behaviours such as crying with alcohol-based medicines such as Panado, so it was interesting to see how often Panado would be used as a first course of action. Teething was included to see how many mothers would resort to traditional forms of treatment such as grey beads for example.

How the different providers and treatment were grouped for each of the 10 health problems can be found in Appendix F. If the traditional healer was a relative, the provider was grouped in the TMP category to denote the type of treatment which is used. Church / faith healers were also grouped in the traditional category to denote non-allopathic treatment. For *inyoni* and *ibala*, church was also looked at on its own to be able to differentiate between types of traditional providers. For certain illnesses, it was also interesting to look at type of public and type of private providers used. Examples of how providers were grouped include:

- Relative / self / friend: Home; garden; relative; friend.
- Traditional: Inyanga; *muthi* shop; sangoma; church; relative who is TMP / Herbalist.
- Public: PHC clinic; public hospital.
- Private: GP; paediatrician.
- Over-the-counter: Pharmacy; supermarket.

Treatments were grouped according to the following:

- OTC: medicines from a pharmacy or supermarket (includes Dutch medicines)
- Home: diet-related, including food (custard; porridge) or liquid given (ORS; fish oil and vinegar) as well as care-related (keep child warm; cool child down; comfort child)
- Traditional: any remedy made at home or obtained from a traditional provider. In some cases it was difficult to decide whether a treatment should be 'home' or 'traditional', given that some traditional treatments can easily be made at home (e.g. *umhlonyane* boiled for cough or boiled chicken gizzards). Any remedies which were known to be used for 'African' health problems or which involved the use of plants were grouped as traditional.

As in the case of providers, certain types of treatments are also highlighted if they were popular amongst caregivers (e.g. the *spuit* for constipation, Panado for crying and grey beads for teething).

3.3.9 Statistical methods

3.3.9.1 Univariate and bivariate analysis

Univariate and bivariate data analysis was carried out using Intercooled Stata 8.0. The chi-squared test of independence was used to explore associations between the outcome of interest (health care provider on day of interview) and the characteristics of the users at the different health facilities. P-values of less than 0.05 were regarded as significant. The Fisher's exact test was used if the expected value of a cell was less than 5, however in some cases it was not

possible to calculate the p-value if tables contained a large number of zeros, therefore no p-value is reported for these tables.

3.3.9.2 Principal Components Analysis – Socio-economic status

As there were many variables denoting socio-economic status in the dataset, Principal Components Analysis (Townend, 2004) was used as a method of data reduction to create wealth indices (Filmer & Pritchett, 2001).

Socio-economic variables available include:

- Caregiver employment: unemployed; employed.
- Household employment: no one working; > half unemployed; half working; > half working; all working.
- Income per month: <R400; R400-R800; R800-R1500; R1500-R2500; R2500-R6000; R6000-R12000; R12000-R18000; R18000-R30000; R30000+ .
- Rooms per household member (density): Less than half a room per person; half to almost 1 room per person; 1 room+ per household member (combination of number of rooms in house and number of people living in household).
- Type of dwelling: Shack; room in shared accommodation / hostel; bond (4-room township) house; flat / townhouse; big house.
- Experience of household hunger: often; sometimes; seldom; never.
- Ownership of assets (in working condition): car; TV; cellphone; fridge; electric stove; microwave; bicycle; CD player; computer; radio; landline telephone (dichotomous: No / Yes).

The first index used all SES information: caregiver employment; income; number of rooms per household member; type of dwelling; experience of household hunger and ownership of assets. These 17 indicator variables measuring the construct of wealth were tested for unidimensionality using Cronbach's alpha. Alpha was equal to 0.8572 demonstrating unidimensionality. Quartiles of relative poverty were created based on scoring only for the first principal component. As all eigenvectors were positive, an increase in one of these variables was relevant to an increase in the others. The second index created used just ownership of assets information.

4. FGDs, illness management & immunisation

The results have been divided into 2 chapters. Chapter 4 looks at results from the FGDs (4.1), including background information on the study participants, the pile sort of medicines, health problems which were discussed during the FGDs, as well as treatments (over-the-counter, home and traditional) and how these are used. Section 4.2 focuses on the management of 10 childhood illnesses which caregivers were asked about during the quantitative survey. Section 4.3 considers child immunisation in this sample. Chapter 5 of the results is devoted to the qualitative and quantitative results which delineate potential factors influencing patterns of resort in this setting.

4.1 Focus group discussions

The following sections are composed of the results from 5 focus groups with mothers which aimed to find out more about Black South African caregivers' current health-seeking behaviour for their children under 6 years. Background information on the caregivers is firstly presented, followed by the medicine pile sort results. The pile sort results are broken down into a section on 'health problems' which focuses on *inyoni* and *crying* and a section on the matrix of medicines which discusses various aspects of the medicine groupings in the focus groups.

4.1.1 Participants' background information

Participants filled in background questionnaires which allowed data to be collected on the composition of the groups (v. Table 4.1 demographics; v. Table 4.2 household information; v. Table 4.3 social support & SES).

4.1.1.1 Focus Group 1

Seven mothers, all from the Gauteng Province in which Johannesburg is situated came to FG1: 1 in the 30 - 34 age group, 4 in the 35 - 39 age group and 2 in the 40+ age group. Four mothers categorised themselves as single, 1 was married, 1 was divorced and 1 was living with her long-term partner. All mothers were educated - 3 with some secondary, 3 with completed secondary and 1 with higher education. The majority (5) of mothers in this group were the decision-makers when their children are not well. Four caregivers received support from relatives when it came to their children under 6 years and 3 received no support. Three of the participants' households were headed by themselves, 2 by their partner and 2 by the maternal grandmother of the child. Five caregivers were employed and 2 were unemployed. The 2 households headed by the maternal grandmother of the child experienced hunger either sometimes or often. Two caregivers had medical aid in the household which also covered the child. Four of the caregivers lived in a Bond house (4-roomed house in township), 1 lived in a big house and the other in a rented room. Several churches were found in the group including St John's Apostolic Church, the Catholic Church, the African Congregational Church and the Bostol Church.

Table 4.1: Focus group participant demographic characteristics

Variable	FG1 (n=7)	FG2 (n=8)	FG3 (n=9)	FG4 (n=6)	FG5 (n=6)	TOTAL
<i>Caregiver age group</i>						
20 - 24		1			3	4
25 - 29			1	1	1	3
30 - 34	1	1	3	3	1	9
35 - 39	4	2	3	2	1	12
40+	2	4	2			8
<i>Church</i>						
Catholic	1		2			3
Protestant (Anglican; IPC; Grace Bible Church; Methodist; Nazarene; Church of Christ; Lutheran; Christian; New reformed; Born Again)	3	5	5	6	2	21
African Independent (Zion Christian Church (ZCC); 12 th Apostolic / Old Apostolic / St Johns Apostolic; AFM)	1	2	1		4	8
New Hope			1			1
Roma		1				1
ACC	1					1
None	1					1
<i>Marital status</i>						
Single	4	4	2	5	2	17
Married	1	3	5	1	4	14
Divorced / Separated	1	1	1			3
Co-habiting	1		1			2
<i>Education level</i>						
None / Complete primary		2				2
Some secondary	3	2	3	1	2	11
Complete secondary / Grade 12 / Std 10	3	3	6	5	4	21
Higher	1	1				2
<i>Place of birth</i>						
Gauteng	7	7	6	5	4	29
Limpopo Province			2		1	3
North West Province		1				1
KwaZulu-Natal				1	1	2
Free State			1			1
<i>Length of residency</i>						
1 - 5 years					2	2
10 years +		1	2	1		4
All my life	7	7	7	5	4	30

4.1.1.2 Focus Group 2

Eight mothers attended FG2: 1 in the 20 - 24 age group, 1 in the 30 - 34 age group, 2 in the 35 - 39 age group, 4 in the 40+ age group. As in FG1, 4 mothers categorised themselves as single, 3 were married and 1 was separated. One mother had never been to school, 1 had completed primary school, 2 had some secondary schooling, 3 had completed secondary school and 1 had higher education. Most (7) were from Gauteng, and 1 was from the North West Province. The majority of mothers in this group (6) were also the decision-makers when their children under 6 years are not well, and only 1 caregiver did not receive any support from friends or relatives with

their child's upbringing. A large proportion of this focus group also headed their households (5) and were employed full-time (5). Half of the group were either sometimes or often hungry. Half of the group lived in a Bond house, 2 in shacks, 1 in a big house and 1 in a flat. Half of the group's children were covered by medical aid. Zionists, Methodists, Anglicans, Lutherans and Roma Church faiths were found in this group.

Table 4.2: Focus group participant household and social support characteristics

Variable	FG1 (n=7)	FG2 (n=8)	FG3 (n=9)	FG4 (n=6)	FG5 (n=6)	TOTAL
<i>No. of children < 16 in household</i>						
1		2	1	2	2	7
2	4	4	2	2	1	13
3+	3	2	6	2	3	16
<i>No. of adults in household</i>						
1		1		1		2
2	3	2	4	2	3	14
3	2	2	4		1	9
4+	2	3	1	3	2	11
<i>Decision-maker about child health care</i>						
Mother of child	5	6	4	5	3	23
Father of child					1	1
Both parents	1	2	4	1	2	10
Aunt			1			1
Missing	1					1

4.1.1.3 Focus Group 3

Nine caregivers attended FG3: 1 in the 25 - 29 age group, 3 in the 30 - 34 age group, 3 in the 35 - 39 age group and 2 in the 40+ age group. A larger proportion of caregivers were married in this group (5 caregivers), 2 were single, 1 was living with her long-term partner and 1 was separated. The caregiver's partner was the head of household in 4 cases, the mother of the respondent in 2 cases, the caregiver herself in 2 cases and the caregiver and her husband in 1 case. Three caregivers had some secondary education and 6 had completed secondary school. Six caregivers were from the Gauteng Province and 2 were from the Limpopo Province but had lived in Gauteng for longer than 10 years. More mothers in this group (4) make decisions jointly with their partner when their child is not well. Three-quarters of the group got some sort of support from friends or relatives for their children under 6 years. Unlike FG1 and FG2 there was more unemployment in this focus group's families, although frequency of hunger did not appear to be any higher. Most of the group (8) lived in a bond house, apart from 1 whose family lived in a rented room. A third of the group received some form of medical aid for their children under 6 years. Churches present included the Old Apostolic Church, the Roman Catholic Church, New Hope Church, a Born again Christian and several non-specified Christian Churches.

Table 4.3: Focus group participant SES and social support characteristics

Variable	FG1 (n=7)	FG2 (n=8)	FG3 (n=9)	FG4 (n=6)	FG5 (n=6)	TOTAL
<i>% unemployment in household</i>						
None	1	1	2	1		5
33.3%	1	1	1			3
50 - 57%	2	3		2	3	10
67 - 75%	1	2		1	3	7
92% / All unemployed	2	1	6	2		11
<i>Who is the head of the household</i>						
Respondent	3	5	2			10
Partner	2	2	4	2	4	14
Relative of respondent	2	1	2	4	2	11
Respondent & partner			1			1
<i>Caregiver employment</i>						
Unemployed	2	2	5	5	5	19
Self-employed			2			2
Employed part-time			1		1	2
Employed full-time	5	5	1	1		12
Missing		1				1
<i>Occupation of person who earns most</i>						
Professional	2	1	1			4
Administrative / secretarial	2	4	1		1	8
Retail / services	1					1
Construction / manual labour				1		1
Transport			1	1	1	3
Armed forces / police / security					1	1
Unemployed	1		6			7
Cleaning / domestic work		2			3	5
Retired	1			1		2
Self-employed		1				1
Missing				3		3
<i>Frequency of household hunger</i>						
Often	1	2	2		1	6
Sometimes	1	2	1	4	2	10
Seldom			2			2
Never	4	4	4	2	3	17
Missing	1					1
<i>Type of dwelling</i>						
Bond house	4	4	8	5	5	26
Flat		1				1
Big house	2	1		1		4
Shack		2			1	3
Rented room	1		1			2
<i>Medical insurance</i>						
Caregiver has medical aid	2	2	3			7
Caregiver has no medical aid	5	6	6	6	6	29
Child has medical aid	2	4	3			9
Child has no medical aid	5	4	6	6	6	27
<i>Any support from friends / relatives</i>						
No support	3	1	3		2	9
Support from friends		1		1	1	3
Support from relatives	4	4	4	3	2	17
Support from friends & relatives		2	2	2	1	7

4.1.1.4 Focus Group 4

Six participants were invited to FG4 at a public hospital in Soweto: 1 caregiver fell in the 25 - 29 age group, 3 in the 30 - 34 age group and 2 in the 35 - 39 age group. Five mothers were single and 1 mother was married. Two mothers had some secondary schooling and 4 mothers had completed secondary school. Five mothers were from Gauteng and 1 mother was from KwaZulu-Natal but had lived in Gauteng for longer than 10 years. All mothers received some form of support from friends or relatives. None of the participants were the head of their household. This was either their partner or a relative. Most of the mothers (5) were unemployed, but someone else in the household had a job. Despite this, 4 out of 6 participants reported sometimes being hungry in their household. Most (5) of the participants lived in a Bond house, 1 lived in a big house and none of the participants or their children were covered by medical aid. Caregivers belonged to the Nazarene Church, the Anglican Church, the Interpentecostal Church, the Central Methodist Church and the Church of Christ.

4.1.1.5 Focus Group 5

Six caregivers were invited to FG5 at a public hospital in Soweto. This was the youngest group of all 5 focus groups: 3 caregivers were in the 20 - 24 age group, 1 was in the 25 - 29 age group, 1 was in the 30 - 34 age group and 1 was in the 35 - 39 age group. Two mothers were single and 4 were married. Four of the 6 mothers were from Gauteng, 1 was from Limpopo Province and 1 was from KwaZulu-Natal. The 2 mothers not from Gauteng had lived in Gauteng for 1 - 5 years. Half of the mothers made the decisions when their children were not well, 2 did not get any support from friends or relatives for their children while the rest did. The households of the married mothers were headed by their husbands whilst the single mothers were living with their sister and mother. As with FG4, most of the participants (5) were unemployed and lived in a Bond house. Half of the group also experienced hunger either often or sometimes although somebody in the household had a job. None of the participants or their children were covered by medical aid. Caregivers belonged to the Zion Christian Church, the New Reform Church, the Twelfth Apostolic Church, the Grace Bible Church and the African Faith Mission Church.

4.1.2 Pile sort introduction

A selection of over-the-counter (OTC) and traditional medicines were grouped according to how mothers used them at home for different illnesses or health problems (v. Figure 4.1, Tables 4.4 to 4.7). If only one mother mentioned that they used a medicine for a particular illness, the medicine was still grouped. Mothers were not expected to recognise all the medicines, neither was the group of medicines exhaustive. It was not possible to say how prevalent the use of various treatments was, as this was not the aim of the qualitative work. Section 4.1.3 provides an outline of the health problems mentioned in the focus groups whilst Section 4.1.4 highlights some of the key features of Tables 4.4. to 4.7.

Table 4.4: Matrix of treatments and their use: Dutch medicines

Treatment	Indicated use	FG5	FG4	FG3	FG2	FG1
Balsem Kopiva	Kidney / bladder / backache	<i>Inyoni</i> - green stools / stomach cramps / heal umbilicus	Not used / not grouped	Operations / kidneys	Not used / not grouped	Stomach cleaning
Behoedmiddel vir Kinders	Winds / stomach ache / colic / diarrhoea	Diarrhoea	Constipation / cramps	Not used / not grouped	<i>Inyoni</i> / colds	Not used / not grouped
Borsdruppels	Coughs / croup / bronchitis	Cold/flu / chest problems / cough	Breathing / flu / fever / cough	Cough	Not used / not grouped	Going out (protection) / cough
Duiwelsdrekruppels	Flatulence	Not used / not grouped	Restlessness / bad spirits	Not used / not grouped	Not used / not grouped	Not used / not grouped
Entressdruppels	Nervousness / restlessness / sleeplessness	Not used / not grouped	Restlessness / bad spirits	Colic	Not used / not grouped	Not used / not grouped
Essens Amara of Groen Amara	Improves appetite	<i>Inyoni</i> - green stools / diarrhoea / teething / heal umbilicus	Restlessness / bad spirits	Colic	<i>Inyoni</i>	Not used / not grouped
Haarlemensis	Kidney / bladder	Bad spirits / restlessness	Constipation / cramps / restlessness / bad spirits / pollution / <i>umilo wamadlozi</i>	Constipation / protection in pregnancy / protection from bad spirits / if child has inhaled bad spirits / pollution / heal umbilicus	Not used / not grouped	Going out (protection) / <i>Inyoni</i>
Hoffmansdruppels	Dizziness / asthma / tight chest / colds / fever / stomach ache	Not used / not grouped	Not used / not grouped	Cough	Not used / not grouped	Not used / not grouped
Jamaika Gemmer	Colic / winds / pain in stomach / indigestion	Diarrhoea	Colds / flu	Not used / not grouped	Not used / not grouped	Not used / not grouped
Roilaventel	Winds / indigestion / stomach ache	Constipation / cramps / teething	Wind / scratch or minor injury	<i>Inyoni</i> / colic	Not used / not grouped	Going out (protection)
Staalsdruppels	Iron deficiency anaemias / stopping bleeding from minor wounds	Cold / flu	Not used / not grouped	Constipation	<i>Inyoni</i>	Not used / not grouped
Stuipdruppels	Flatulence / gripes / colic	Colic / constipation / cramps	Restlessness / bad spirits	Colic	Not used / not grouped	Not used / not grouped
Turlington	Coughs / chronic bronchitis / antiseptic for cuts	Cold / flu	Colds / flu	Constipation	Not used / not grouped	Not used / not grouped
Verstekdruppels	Restores vitality & appetite	Not used / not grouped	Breathing / flu / fever	Appetite	Not used / not grouped	Stomach cleaning
Witdulsies	Colds / fever / mild asthma attacks & dizziness	Not used / not grouped	Restlessness / bad spirits	Cough	Chest problems	Not used / not grouped
Wonderkroonessens	Constipation / winds / indigestion	Not used / not grouped	Not used / not grouped	Constipation	Not used / not grouped	Constipation
Balsem Sulphuris	Constipation	Cold/flu / chest problems	Restlessness / bad spirits	Not used / not grouped	Not used / not grouped	Not used / not grouped
Pepermentdruppels	Flatulence	Not used / not grouped	Colds / flu	Not used / not grouped	Not used / not grouped	Not used / not grouped
Krampdruppels	Nervous conditions / colic / cramps / flatulence	Stomach cramps	Constipation / cramps	Not used / not grouped	Not used / not grouped	Not used / not grouped
Doepa	None indicated on tin	Restlessness / bad spirits	Restlessness / bad spirits / pollution	<i>Inyoni</i> / protection pregnancy / so child is flexible / protection bad spirits / if inhaled bad spirits / pollution / heal umbilicus	Not used / not grouped	Protection

Table 4.5: Matrix of treatments and their use: Over-the-counter / Western medicines / other products

Treatment	Indicated use	FG5	FG4	FG3	FG2	FG1
Woodwards Gripe Water	Gripes	Colic / constipation / cramps	Constipation / cramps	Colic	Colic / constipation	Cramps / colic
Chamberlains Traditional Colic Remedy	Colic	Colic / constipation / cramps	Constipation / cramps	Not used / not grouped	Not used / not grouped	Cramps / colic
Muthi Wenyoni	Antacid	Teething / <i>inyoni</i> & <i>ibala</i>	Constipation / cramps / <i>inyoni</i>	Constipation / pollution / heal umbilicus	<i>Inyoni</i>	<i>Inyoni</i>
Sput (enema syringe)	Constipation / bowel worms	Diarrhoea / fever / environment / constipation	Constipation / cramps / <i>inyoni</i>	Constipation	Not used / not grouped	Constipation / diarrhoea / <i>inyoni</i>
Panado Paediatric Syrup	Fever	Cold/flu / fever	Diarrhoea / fever	Cough	Cough	Pain / fever / crying
Baba Suur	Relief of hyperacidity	Teething	Teething	Colic	Child hyperactive / crying	Cramps/ colic
Electrona	Oral treatment for dehydration	Not used / not grouped	Diarrhoea	Not used / not grouped	Not used / not grouped	Not used / not grouped
Umthuthuzeli "Ma Ma"	Baby comforter - hyperacidity / colic / gripes	Not used / not grouped	Not used / not grouped	Colic	Constipation	Not used / not grouped
Kem-o-dene	Stomach cramps / nausea / colic	Not used / not grouped	Diarrhoea	Colic	Not used / not grouped	Not used / not grouped
Panado tablets	Not recommended for under 6 - pain relief	Cold/flu / fever	Colds/flu / fever	Cough	Not used / not grouped	Not used / not grouped
TCP	Antiseptic	Tonsils	Tonsils	Cough / tonsils	Not used / not grouped	Not used / not grouped
Woodwards Diarrhoea Mixture	No longer on sale. Diarrhoea suspension	Diarrhoea	Diarrhoea	Diarrhoea	Not used / not grouped	Stop diarrhoea
Chamberlains cough remedy	Coughs	Cold / flu	Colds / flu	Cough / tonsils	Cough	Cough
Milk of Magnesia	Antacid - laxative	Diarrhoea / constipation / cramps	Constipation / cramps	Constipation	Constipation	Constipation / heart burn
Vaseline	Not used / not grouped	Rash	Restlessness / bad spirits / pollution	Rash / massage when pregnant for protection - makes you break wind	Protection	Not used / not grouped
Strepsils	Throat lozenges	Not used / not grouped	Tonsils	Cough	Not used / not grouped	Not used / not grouped
Karvol	Decongestant inhalation capsules	Cold / flu	Breathing / flu / fever	Cough	Cough	Blocked nose
Cepacol	Antibacterial throat lozenges	Not used / not grouped	Tonsils	Cough / tonsils	Not used / not grouped	Not used / not grouped
Valoid	Prevents nausea & vomiting	Tongue cleaner	Not used / not grouped	Not used / not grouped	Not used / not grouped	Not used / not grouped
Imodium	Diarrhoea	Not used / not grouped	Diarrhoea	Diarrhoea	Diarrhoea	Not used / not grouped
Baby's Own Tummy Tablets	Antacid & mild laxative	Constipation / teething	Teething	Teething	Constipation	Teething
Disprin	Pain relief	Not used / not grouped	Breathing / flu / fever	Cough	Not used / not grouped	Not used / not grouped
Zambuk	Herbal treatment for all skin injuries - sprains, cuts, bruises, sores, burns, stings etc	Cold / flu	Scratch or minor injury	Rash / mosquitoes	Not used / not grouped	Not used / not grouped
Brooklax	Laxative	Constipation	Constipation / cramps	Constipation	Not used / not grouped	Not used / not grouped
Pure Sunlight soap (<i>sputi</i>)	N/A	Constipation / fever	Constipation / cramps	Constipation	Not used / not grouped	Constipation
Gastrolyte	ORS	Diarrhoea	Diarrhoea	Diarrhoea	Diarrhoea	Not used / not grouped
Rehidrat	ORS	Diarrhoea	Diarrhoea	Diarrhoea	Diarrhoea	Diarrhoea / dehydration
Salbutamol inhaler	Asthma	Not used / not grouped	Asthma	Cough / asthma	Not used / not grouped	Not used / not grouped
Roopoeier	Constipation	Teething	Teething	Teething	Not used / not grouped	Constipation

Table 4.6: Matrix of treatments and their use: Traditional medicines

Treatment	Indicated traditional use	FG5	FG4	FG3	FG2	FG1
Blue stone (copper sulphate)	Sprinkle in room / house to protect	Not used / not grouped	Tonsils	Not used / not grouped	Not used / not grouped	Not used / not grouped
Ostrich egg	Ground for hiccups	Pregnancy (protection)	Easy labour / if overdue	Colic / hiccup	<i>Inyoni</i> / traditional	Not used / not grouped
Grey beads	Teething & diarrhoea	Teething	Teething / diarrhoea	Teething	Not used / not grouped	Not used / not grouped
Amulet (bottle)	Protection	<i>Tokoloshe</i> (bad spirits)	Restlessness / bad spirits	Not used / not grouped	Not used / not grouped	Not used / not grouped
Amulet (bag)	Protection	<i>Tokoloshe</i> (bad spirits)	Restlessness / bad spirits	Teething	Protection	Not used / not grouped
<i>Vimbela</i>	Protection from bad spirits	Bad spirits	Restlessness / bad spirits / pollution	Not used / not grouped	Protection	Not used / not grouped
<i>Isihlambezo</i>	Protection during pregnancy	Pregnancy	Protection during pregnancy / easy labour	Protection during pregnancy / easy labour	Not used / not grouped	Not used / not grouped
<i>Stan-tanyana</i>	Veins in stomach	Diarrhoea / teething / gives energy	Not used / not grouped	Not used / not grouped	Not used / not grouped	Not used / not grouped
<i>Iscimamilo (Pentanisia variabilis)</i>	To put out fire (fever)	Not used / not grouped	Not used / not grouped	Not used / not grouped	Fever	Not used / not grouped
<i>Umhlonyane (Artemisia afra)</i>	Children's appetite	Cold/flu / chest problems / after birth	Colds / flu	Not used / not grouped	Asthma	Enema
<i>inGcino / letshwetlane (Albica setosa / Scilla nervosa)</i>	Protection from <i>inyoni</i> & <i>ibala</i> . Keeps baby healthy & fat. <i>Spuut</i> or drink for diarrhoea.	Not used / not grouped	Not used / not grouped	Constipation / traditional	Constipation / colic / traditional	Not used / not grouped
<i>iMphapho (Helichrysum cymosum)</i>	Incense to burn (<i>umkhondo / hatelletswe</i>) - ancestors / bad spirits / restlessness	Restlessness / bad spirits	Restlessness / bad spirits / pollution	Not used / not grouped	Not used / not grouped	Not used / not grouped
<i>inDawulothi / Kalmoes / iKalamuzi (Acorus calamus)</i>	Chest / cough. Use with ground ostrich egg. Mix with breast milk	Not used / not grouped	Not used / not grouped	Not used / not grouped	Traditional	Not used / not grouped
<i>iQhuma (actually Intuma - Solanum species)</i>	Teething	Teething (also in pharmacy pink box)	Constipation (red one from pharmacy)	Teething / <i>inyoni</i>	Not used / not grouped	Not used / not grouped
<i>Ugobo (Gunnera sp.)</i>	Protect in pregnancy / part of <i>isihlambezo</i>	Not used / not grouped	Clean stomach after birth / also child	Not used / not grouped	Pregnant women	Not used / not grouped
<i>Lesoko / ikhatazo (Alepidea amatymbica)</i>	Cough	Not used / not grouped	Not used / not grouped	Constipation / traditional	Asthma / traditional	Not used / not grouped
<i>Isiphepheto / serokolo (Siphonochilus aethiopicus)</i>	Chest / coughing / colds / ward off evil	Bad spirits / pollution	Restlessness / bad spirits / pollution	<i>Inyoni</i> / traditional	Traditional	Not used / not grouped
<i>umThombothi (Spirostachys africana)</i>	Rashes / stomach	Not used / not grouped	Not used / not grouped	Not used / not grouped	Newborn rash	Not used / not grouped
<i>Inyamazane</i>	Ground dried animal parts (burn)	Bad spirits	Restlessness / bad spirits / pollution	Not used / not grouped	Not used / not grouped	Not used / not grouped
<i>Izinyo lehashe</i> (horse' tooth)	Teething (hang around neck)	Teething	Teething / diarrhoea	Not used / not grouped	Teething	Not used / not grouped
<i>Intelezi</i> (taken out for FG4 & 5)	Sprinkle in room / house or in bath to protect against witchcraft.	N/A	N/A	Not used / not grouped	Not used / not grouped	Cough
<i>Sansevieria aethiopica</i> (root)						
<i>uMathunga</i> (taken out for FG4 & 5)	Operations / caesareans / broken bones	N/A	N/A	Broken bone / operation (also kids)	Not used / not grouped	Adults - operations
<i>(Eucomis autumnalis)</i>						
<i>isiNwazi</i> (taken out for FG4 & 5)	Prevents caesareans / keeps baby healthy. Also used to feed child when mother is not at home	N/A	N/A	Blood purifier	Not used / not grouped	Not used / not grouped
<i>(Rhoicissus tridentata / cuneifolia or digitata)</i>						

Table 4.7: Matrix of treatments and their use: Treatment not present but mentioned during specific focus groups

Treatment	Indicated use	FG5	FG4	FG3	FG2	FG1
Baby powder or aqueous cream	Rash			Heat rash		
Telament Paediatric Drops	Flatulence & colic in infants	Dewormer / constipation				
Boiled record	N/A	Pregnancy (easy labour)				
Pure Glycerine & Borax	Non-toxic cleansing agent	Tongue cleaner				
Mint	N/A	Blocked nose				
Halls	Cough syrup or drops	Cold / flu (blocked nose)				
Ashton & Parsons Infants Powders	Teething powders	Teething				
Honey / Borstol mixture / Turlington	N/A		Flu / asthma			
Prayer	N/A		<i>Inyoni</i>			
Black velvet	Protection / teething		Teething / diarrhoea			
<i>Spuil</i> with warm water	Enema		Constipation			
Children's heads touch	Protection		Pollution			
Stretch babies joints	Protection		Pollution	Pollution		
<i>Spuil</i> with <i>imbiza</i>	Enema with traditional medicine		<i>Isilonda</i> (sore on bottom)			
<i>Imbiza</i> to drink	Unknown traditional medicine		<i>Inyoni</i>	Protection when pregnant	<i>Inyoni</i>	
Jeyes Fluid	Household cleaning product			Constipation (with <i>spuil</i>)		
<i>Mohlabele</i>	Black <i>umuthi</i> - rub on head & in incisions		Strengthen baby / pollution	<i>Inyoni</i>		
Prophet rope (waist)	Protection				Strengthen	
<i>Umuthi wo bisi</i>	If child's stomach is bloated from breast milk				Milk which bloats stomach	
Home made solution (ORS)	Dehydration				Diarrhoea / dehydration	Diarrhoea / dehydration
Painamol	Analgesic					Painkiller
Castor oil	Ease constipation & induce vomiting			Constipation		
Binneruit (taken out for FG4 & 5)	Not known			Cough / tonsils / traditional	Traditional	
Teejel	Teething gel			Teething		
Original white Colgate	Toothpaste	<i>Isilonda</i> (+Sunlight soap)		<i>Isilonda</i> on bottom & restless		
Bedbug (squashed)	N/A				Teething	
Small dog to lick mouth of child	N/A				Teething	
Goats faeces	N/A				Newborn rash	

4.1.3 Pile sort: Health problems

Respondents were asked as a group (not individually) to group the medicines shown in Figure 4.1 according to the health problem they were used for. A summary of the main illnesses according to which different medicines were grouped is presented in Table 4.8.



Figure 4.1: Medicines used for pile sort in focus groups

Health problems which were mentioned in all five groups include colds / flu and chest problems; colic / cramps; constipation; cough; diarrhoea; fever; *inyoni* and teething. Problems which were mentioned in 4 out of 5 groups include bad spirits / restlessness; pregnancy; protection (strengthening); protection (pollution); cleansing the stomach and tonsillitis.

The most common health problems which can be treated at home include respiratory infections (colds / flu, chest problems, coughs, tonsillitis); gastro-intestinal problems (diarrhoea, constipation, stomach cramps and colic); fever and teething. Less commonly mentioned uses for the medicines included *umlilo wamadlodzi*¹; worms; scratches / wounds; *isilonda*²; sores in the mouth; operations / broken bones; hyperactivity; hiccups; energy-booster; blood purification; increasing appetite and tongue cleaning. Classification of illnesses or health problems needing traditional or home remedies included *inyoni*³; *ibala*⁴; *umlilo wamadlozi*; *isilonda*; purging the stomach; protection from *imimoya emibi*⁵ and 'pollution'; teething and healing the umbilicus.

¹ 'Burns from the Ancestors' – Kwashiorkor.

² Sore around the anus.

³ African childhood illness characterised by sunken fontanelle, green diarrhoea amongst other symptoms.

⁴ Capillary naevus (red mark on back of neck).

⁵ Bad / evil spirits.

Table 4.8: Health problems according to which medicines were grouped

FG1	FG2	FG3	FG4	FG5
	Asthma	Appetite		
	Bad spirits / restlessness	Asthma	Asthma	
Breathing / blocked nose		Bad spirits / restlessness	Bad spirits / restlessness	Bad spirits / restlessness
			Breathing / blocked nose	Breathing / blocked nose
		Blood purifier		
Colds / flu / chest	Colds / flu / chest	Colds / flu / chest	Colds / flu / chest	Colds / flu / chest
Colic / cramps	Colic	Colic	Colic / cramps	Colic / cramps
Constipation	Constipation	Constipation	Constipation	Constipation
Cough	Cough	Cough	Cough	Cough
Dehydration	Dehydration			
Diarrhoea	Diarrhoea	Diarrhoea	Diarrhoea	Diarrhoea
				Energy
Fever	Fever	Fever	Fever	Fever
Healing umbilicus		Healing umbilicus		Healing umbilicus
		Hiccups		
	Hyperactivity			
<i>Inyoni</i>	<i>Inyoni</i>	<i>Inyoni</i>	<i>Inyoni</i>	<i>Inyoni & ibala</i>
		Operations / broken bones		
Pain				
	Pregnant women	Pregnant women	Pregnant women (protection)	Pregnant women (protection)
			Pregnancy (easy labour if overdue)	Pregnancy (easy labour if overdue)
Protection	Protection (strengtheners)	Protection (strengtheners)	Protection (strengtheners)	
Protection (Pollution)		Protection (Pollution)	Protection (Pollution)	Protection (Pollution)
	Rash	Rash / Mosquitoes		Rash
	Sores / sores in mouth			
			<i>Isilonda</i>	<i>Isilonda</i>
			Scratches / minor injury	
Stomach cleaning	Stomach bloated		Stomach cleaning after birth (mother and child)	Stomach cleaning after birth (mother)
Teething	Teething	Teething	Teething	Teething
				Tongue cleaner
	Tonsils	Tonsils	Tonsils	Tonsils
	Traditional	Traditional	<i>Umlilo wamadlozi</i>	
				Worms

Shaded areas indicate that a health problem was not mentioned in that particular group

Due to the time limit on the focus groups not all illnesses were discussed in detail. The main illness and its treatments which will be discussed in this section, the African childhood illness *inyoni*, is one whose interpretation does not exist in the Western world-view and which the participants elaborated on in sufficient detail to present a taxonomy (although by no means exhaustive). Crying, although a symptom and not a health problem *per se*, was also of interest because of the different ways in which caregivers interpret this sign. Other illnesses and their treatments are discussed in the following section.

4.1.3.1 Inyoni

Of all the African childhood illnesses mentioned, *inyoni* was the illness that most mothers had either experienced or heard of. Table 4.9 presents a taxonomy of *inyoni* (Zulu), *phogwana / hlôgwana* (Sotho) (also referred to / associated with *ipleyiti* (plate)⁶ in Xhosa). The main symptoms include diarrhoea (usually green) and a sunken fontanelle, but the child may present with other symptoms.

Table 4.9: Taxonomy of *inyoni*

Cause	Dirt inside child Things on mothers vagina - transferred through breastfeeding Born with it Something to be cleansed out of stomach Something eating inside (cramps). Starts at fontanelle Food eaten whilst in womb Walking over area where muthi has been poured Don't know
Main symptoms	Fontanelle sinks in Green stools Diarrhoea Grey things in stomach Stomach cramps in older children
Other symptoms	Coughing <i>Ishashaza</i> ⁷ Opens mouth but doesn't want to suck bottle Runny eyes Vomiting
Treatment	Cut things from vagina, burn them, mix with muthi, rub on child Balsem Kopiva (Dutch medicine) Behoedmiddel vir Kinders (Dutch medicine) Doepa (Dutch medicine) Essens Amara of Groen Amara (Dutch medicine) Haarlemensis (Dutch medicine) <i>Imbiza</i> ⁸ to drink iQhuma (both a traditional medicine ⁹ and OTC antacid) <i>Isiphepheto / Serokolo</i> ¹⁰ <i>Mohlabele</i> ¹¹ rubbed on head & cuts Muthi Wenyoni (OTC antacid) Ostrich egg Prayer Rooilaventel (Dutch medicine) <i>Spuut</i> ¹² Staaldruppels (Dutch medicine)

⁶ In the literature (Ngubane, 1977; Ellis, 2004) and by TMP4 in this study, *iplate / ipleti* is referred to as a perceived malformed placenta.

⁷ Mouth rash.

⁸ General term for purgative medicines (Varga & Veale, 1997).

⁹ Actually *Intuma* - *Solanum* species.

¹⁰ *Siphonochilus aethiopicus* (root).

¹¹ Black *umuthi* with shoe polish-like texture.

¹² Enema.

Sometimes *ibala* (capillary naevus) (v. Figure 4.2) and *inyoni* were seen as part of the same condition:



Figure 4.2: *Ibala* (capillary naevus)

R1: You will recognise it with the green faeces and the red mark at the back of the neck. (FG5)

R2: It shows that the child has got *inyoni*.

R3: It must be red.

R4: It's either it comes out from here [forehead] or here [back of neck] so you must check your baby.

Focus group caregivers were not clear on what causes *inyoni*, but it was acknowledged that 'dirt' in the child's system needs to be cleaned out. For this reason, a *sput* (v. Figure 4.3) is usually used to clean out the child's system. Treatment for *inyoni* can also be done at home with OTCs such as the antacid Muthi Wenyoni (v. Figure 4.4), or *Stuips* (Dutch medicines) can also be used in the child's bath, rubbed on various parts of the body or put in milk or water to drink.



Figure 4.3: *Sput* (syringe bulb)



Figure 4.4: Muthi Wenyoni

Not every child will get *inyoni* however and some children may have it worse than others:

"The first one had *inyoni* but these 2 no." (FG5)

"The first one didn't but the second one, yo [was serious]!" (FG5)

4.1.3.2 Crying

Crying or restlessness is one of the main signs that the child is unhappy or unwell, but is multifactorial in its interpretation by caregivers:

"...it cries all the time, so when it's happy and healthy it doesn't cry all the time." (FG1)

"If he / she cries a lot, it means there is something wrong happening with the child." (FG2)

"When the child cries from the morning until the evening you can see that the child has got a problem. It's your child, you know him / her." (FG2)

"The way they cry changes as well. You can hear it if he / she is crying differently." (FG2)

The perceived cause of the crying or restlessness will govern what treatment is given to the child. In the South African world-view, one interpretation of crying is that it may indicate that the child is not of the father's clan. It was not clear whether this means that the child did not biologically belong to the father or that no rituals had been performed for the ancestors to welcome the child into the family:

Moderator: *And what happens if your child doesn't belong to your husband's clan? (FG4)*

R1: *They say he is getting sick all the time.*

The following quotations carry sinister undertones, particularly regarding the Ngubane custom. Although it is not clearly stated what happens to the child, we are told that it is 'bad':

"Traditionally, if the child is not of this family, talk to the child outside. We are mothers, you go outside, isn't it? These are serious things we do. If the child is not of this family, not the same surname, take the child outside. Tell him that he is not of this family, stop making noise here..." (FG3)

"These are customs. There's a Ngubane custom. The Ngubane custom is bad, they cut you here [not indicated]. You tell yourself that this child is a Ngubane and I'm married to the Ngubanes. The child is always crying, they tell you to say the truth about this child. We go to the kraal. If the child is not a Ngubane he doesn't come back. We go to the kraal at dawn to do a ritual. If the child is not of this family he doesn't come back. They cut him but if he is cut and he is of the Ngubane family he comes back. But if he is not a Ngubane he doesn't come back." (FG3)

A baby crying may also be a sign that there are evil / bad spirits around or that someone has been using strong medicines which will 'suppress' or 'weigh heavily' on the child:

- R1:** *I believe when there is witchcraft around, then the child feels it, she can feel something, like evil spirits. (FG4)*
- R2:** *Evil spirits, yes.*
- R3:** *Maybe somebody is using muthi, and you don't use muthi at all. As soon as that person arrives the baby will just go that way [cry] and then you'll know definitely there's something wrong. He will sense...*

"Hayi, they say it's dangerous [Duiwelsdrekdruppels] when someone has used it and when you come in with a child, the child cries and gets sick and can even die. But it is said it is not right for children. If someone uses it the child will cry." (FG5)

Popular OTC medicines for crying include Panado, Gripe Water, Baba Suur (v. Figure 4.5) and the *Stuips*. Although not harmful to the child in small doses, they may not always be addressing the underlying cause of the problem.

- Moderator:** *So if the baby is crying all the time what would you do? (FG1)*
- Group:** *Something's wrong.*
- Moderator:** *Is there anything you would give the child or... what would you do?*
- R1:** *Give Panado.*



Figure 4.5: Panado, Gripe Water and Baba Suur

- Moderator:** *So if the baby cries which ones are the good ones - to make the baby not cry? [Referring to medicines on the table] (FG2)*
- R1:** *Baba Suur.*
- R2:** *The Stuips.*
- R3:** *Ja, the Stuips.*
- R2:** *...Drops drops drops, one drop drop drop. If the child cries continually you use Stuips in drops, maybe giving it to him in water or in milk bottles.*

If a caregiver and her child come into contact with someone who is using traditional medicine or strong medicines, rituals may also be performed. This involves stretching the child's limbs (joints), or if one child uses medicines and another does not, the backs of their heads should be touched. In this way the child will not be 'suppressed':

R1: *When she use muthi [traditional medicine]..., and I'm carrying the baby, she has to come and stretch the arms and legs... If I am going to stay close like this, I have to tell her that let me stretch your child because mine is doing this. (FG4)*

R2: *Or if you don't stretch the child, you take the child, you just turn him around and take the head of the other child - that one must touch each other...*

R3: *So it won't affect the child.*

R1: *Ah, if it's not crying there's no problem.*

R2: *Sometimes if it's not crying, when she get at home, the child will start... [Group: Ja]*

Although some Dutch medicines are perceived by some caregivers to be 'strong', such as Duiwelsdrekdruppels above, others believe they can help the child:

"Stuipdruppels for sleeping, when the child, you see the child isn't sleeping very well. You just put a drop with Haarlemens [Haarlemensis]." (FG4)

Lastly, as well as the Dutch medicines, *umuthi ukushunqisa*¹³ such as *imphepho*¹⁴, *inyamazane*¹⁵, *isiphepheto*¹⁶ and *Doepa*¹⁷ are burnt in the room if *imimoya emibi*¹⁸ are thought to be the cause of the child's restlessness (v. Figure 4.6):

"You use imphepho when the child is restless, and when the child is sleepless, you use isiphepheto. Inyamazane works like imphepho. If the child is restless, you burn it, undress the child, and then you make the child inhale the smoke from the burning inyamazane, by lifting him up and circulating his body around the burning inyamazane. Vimbela you just smear the child." (FG4)

¹³ Medicinal fumes.

¹⁴ *Helichrysum* species.

¹⁵ Powder made up of various dried animal parts (e.g. hedgehogs, baboons).

¹⁶ *Siphonochilus aethiopicus*.

¹⁷ Benzoin B.P.

¹⁸ Evil / bad spirits.



Figure 4.6: *Umuthi ukushunqisa*

4.1.4 Matrix of Medicines:

This section discusses various issues that arose during the pile sort of medicines including indication and dosage of medicines, terminology, traditional medicines and home remedies.

4.1.4.1 Indication and dosage

The matrix of medicines (Tables 4.4 to 4.7) reveals that medicines are not always used for the purpose they were pharmacologically intended, which is probably one of the reasons why clinic staff may not promote their use:

"The druppels are good for children, although the clinic doesn't want us to give them to children, but they are very good." (FG1)

Their use can vary between groups and indeed mothers. Muthi Wenyoni for example is an antacid, but is also used to treat *inyoni*, one of the main symptoms of which is diarrhoea. The intended and actual use of *Stuips* (Dutch Medicines) also differ. Balsem Kopiva for example is intended for kidney / bladder complaints or backache (no mention is made of children's dosage in the insert), yet it is also used by caregivers to treat *inyoni*, heal the umbilicus and clean the stomach. The popular Dutch medicine Haarlemensis, also intended for kidney and bladder complaints, is used by caregivers for a host of other reasons, including protection from *imimoya emibi*¹⁹ or *tokoloshe*²⁰, treatment for *inyoni*, healing the umbilicus, constipation and cramps. Many of the Dutch medicines do not mention if the medicine can be used for children. These include Balsem Kopiva, Entressdruppels, Haarlemensis, Turlington, Verstekdruppels, Witdulsies, Wonderkroonessens, Balsem Sulphuris and Krampdruppels (v. Figure 4.7). Caregivers in the focus groups did however use them for childhood illnesses (v. Table 4.4).



Figure 4.7: *Stuips* with no instructions for children

Other Dutch medicines do contain more detailed instructions for use and those which should not be used for children include Groen Amara, Staaldruppels, Stuijdruppels and Pepermentdruppels (v. Figure 4.8). The dosage instructions for Staaldruppels for example indicate that “A dose of as little as 1g should be considered toxic in children.” Some of the Dutch medicines are simply rubbed on the child or put in the bath, and therefore harmless, but others are put in milk, breast milk or water and ingested.



Figure 4.8: *Stuips* not for children

¹⁹ Bad / evil spirits.

²⁰ Water sprite used by witches / folkloric dwarf.

"For a newborn, I mix the Stuips and apply them. For example when I go out I will also apply it on the fontanelle..." (FG1)

"On the head and under the nose [Haarlemensis]." (FG1)

"You include all of these [Stuips] when you wash her to get rid of evil spirits." (FG2)

"You know normally we use it when we bath the baby...you know especially when he doesn't feel OK, and when you wash him and he doesn't look OK, then he just goes to sleep [Group agree]. OK, but I can give him Haarlemans [Haarlemensis] with milk as well." (FG4)

Groen Amara, usually used in adults for improving appetite was used in 4 of the focus groups for, *inyoni* (green stools), diarrhoea, teething, healing the umbilicus, restlessness and bad spirits, as well as colic. Staaldruppels for which the indicated use is iron deficiency anaemias and stopping bleeding from minor wounds was used in 3 groups for colds and flu, constipation and *inyoni*. Stupidruppels which is used in adults for flatulence, gripes and colic was also reportedly used for children in 3 groups for colic, constipation, cramps, restlessness and bad spirits. Pepermentdruppels, indicated for flatulence in adults was only used in 1 focus group for colds and flu.

Dutch medicines whose instructions indicate that they can be used for children include Balsem vita wit, Behoedmiddel vir Kinders, Borsdruppels, Bruindulsies, Duiwelsdrekdruppels, Hoffmansdruppels, Jamaika Gemmer and Rooilaventel (v. Figure 4.9). The only Dutch medicines mothers did not recognise were Bruindulsies and Balsem vita wit. Again, these medicines are not always used according to the accompanying instructions. Although Borsdruppels was mostly grouped according to its correct indication (cough and chest problems), it was also used for protection when going out. Although Behoedmiddel's and Jamaika Gemmer's indicated use is for stomach problems, they were also grouped with cold remedies. Rooilaventel, also for stomach aches and indigestion was also used for teething, scratches or minor injuries, *inyoni* and for protection when going out. Duiwelsdrekdruppels (for flatulence) was grouped in Focus Group 4 for restlessness and bad spirits. Behoedmiddel vir Kinders was mostly used for its indicated use (stomach complaints) but was also grouped with cold remedies in Focus Group 2. The diverse uses of these medicines can be found in Table 4.4.



Figure 4.9: *Stuips* which can be used for children

Another example of a medicine which may be used inappropriately at times, as it is not recommended for children under 6 years, is the chocolate-flavoured laxative Brooklax. (v. Figure 4.10). The following passages from FG3 and FG5 show how caregivers may have completely different knowledge and ways of administering medicines and interpreting dosages:

Moderator: *So the Brooklax?*

[Moderator asking about uses of different medicines] (FG5)

R1: *For stomach....*

R2: *No, it's not for children under 6 years.*

Moderator: *Do you use this?*

R1: *Half yes.*

R2: *But it's too dangerous for children.*

R3: *Just because 12 years old takes the whole pill, 6 years it's half.*

R4: *In fact there is a child who has been admitted for taking Brooklax.*

R1: *She has overdosed the child...*

You use a little bit or a quarter when the child is constipated.



Figure 4.10: Brooklax laxative

R1: *And Brooklax...(FG3)*

R2: *For a child?*

R1: *Brooklax from 3 years.*

R2: *Do you know Brooklax today doesn't work for children? Do you know what it does to them? They bleed. The child easily goes to the toilet, but ends up bleeding.*

R3: *I prefer castor oil...*

R4: *Brooklax chocolate tablets are dangerous...*

Justification for the use of a medicine is usually made by the dosage being given in accordance with the instructions, as seen in the example of Brooklax and the following example of substituting Panado paediatric syrup with half a Panado tablet:

"You do if you don't have a syrup [Panado]... by breaking it into 2 halves, put one half in a teaspoon with water and give it to the child." (FG5)

If a treatment has no instructions, then only a small amount might be used, however this is based on what the caregiver's definition of a small dose is:

"When using Stuips you shouldn't mix a lot of the medicines. You must use it in drops." (FG1)

R2: *Even the Colgate [toothpaste] is not OK [harmful]... With the Colgate, they say the child's bottom is being eaten [rash around anus after diarrhoea] you see, they say they put Colgate in the child's bottom. (FG3)*

R3: *The original one, the white one [Colgate].*

R2: *Don't put too much, a little bit...*

The use of a *sput* or enema syringe bulb is also controversial, given the ingredients that are used for the enema (Sunlight soap or Jeyes household detergent for example) and the reasons for its use. Feelings were therefore mixed amongst caregivers in the focus groups with regards to the way in which *sputs* are used for children:

"This is for constipation, but you see some African people we believe that when a child has a running tummy they think they must clean the stomach of the child, by using this, and then that makes a child dehydrated. This is, I don't really... we do use it, but you must be very careful. It's only for constipation but some people they use it wrong." (FG3)

"Some of us we do use Jeye's Fluid [household detergent] [Group whistle]. But you use a pinch." [Background: They do use that] (FG3)

"Like let's say the sput, like me I can't use that one. If you overuse the Sunlight or whatever then it's not good. So you have to know the dosages you use." (FG1)

Despite the inherent dangers involved in giving children enemas containing irritants (some highly toxic), paediatric enemata are seen to be very effective, even for treating diarrhoea:

"Sometimes with diarrhoea, because like my daughter had diarrhoea, and we took her to the clinic and it wouldn't stop, and we took her to the doctor - it wouldn't stop and we took her to this auntie and she used only that [sput with Sunlight soap]. She used that and then she puts everything and after that there was no diarrhoea at all." (FG1)

Treatments for constipation and diarrhoea are therefore used interchangeably by some caregivers. This may be because diarrhoea is perceived by some caregivers as something which should be cleaned from inside the child and constipation remedies such as Milk of Magnesia (v. Figure 4.11) prove effective as purgatives.

R1: No it's wrong for diarrhoea [Milk of Magnesia]. (FG5)

R2: But this one it stops diarrhoea, this one stops it.

R3: People, Milk of Magnesia it's not for diarrhoea.

R1: It's for constipation this one. This one is for constipation.



Figure 4.11: Milk of Magnesia

The appropriate use of medicines is an important issue, not just in the home, but also in the medical environment, as is illustrated in the following quotation:

"This thing happened to me last year, I lost my baby after 3 months. So I took her to the clinic and the clinic just give me just cough mixture. After 2 days medicine she doesn't come well and I take her to Bara [hospital]. And the doctor said they were not supposed to give me this medicine - she's too young." (FG1)

4.1.4.2 Terminology

Differences in classification of medicines between groups, particularly the traditional ones, may be due to different labels being used in different languages:

"You see we will use different names. As in Xhosa you will find that we know about the muthi you're talking about but it is not the same name in Xhosa you understand..." (FG2)

The medicine (traditional) may therefore have been used by the respondent but under a different name. There was also some confusion over the Zulu and Sotho terms for *inyoni*:

R1: *Isn't igôgwana and inyani the same thing? (FG2)*

R2: *Ho, ho, ho, sister, the difference is that when the child is young they develop inyani and when they are older they develop igôgwana. When the child is older, they get stomach cramps. It's as if there is something eating the inside of their stomach. This first starts at the fontanelle. Igôgwana is one side.*

R3: *But they are not different because in seSotho when the child has a problem on his head we call it with the same name. Even if he has a problem in his behind we still say it is igôgwana. I thought in Zulu it is different unlike in Sotho but it seems its the same...*

Some traditional and Western medicines may also have the same name. For example *iqhuma*²¹ for teething bought at the *muthi* shop and Quma antacid which mothers also use for teething (v. Figure 4.12). As 'quma' means to come out or grow (teeth or breasts) in Zulu, it is easy to see why caregivers might use it for teething.

"Ja, iquma, ja, iquma, you know on TV. There is some... you don't have it here - there is a medicine, called iquma, it is red, it is similar, like you see this one [Roipoier]... It stays like this in the bottle, you will see that red colour being concentrated at the bottom end of the bottle... When the child is constipated and you give him this to drink, he is better within ten minutes." (FG4)

R1: *For teething, and this one iqhuma? (FG5)*

R2: *Not for childrens.*

R1: *What is it for then?*

R2: *There is that other one, iqhuma, for teething, it's in a pink box. That one it's a raw one it seems...*

Figure 4.12:
Quma antacid
and what the
muthi shop
labelled
'iquma /
iqhuma'



Source: N. Spark-du Preez (2004)

²¹ Actually *Intuma* - *Solanum* species.

4.1.4.3 Traditional medicines

This section describes the traditional medicine discussed during the focus groups.

4.1.4.3a Prophylactics for protection and strengthening

Many of the medicines used for 'traditional' problems were prophylactics:

"So the use of all these muthis [medicines] make our children not to fall sick at all..." (FG2)

Examples include the grey beads, a horses tooth (*izinyo lehashe*) and black velvet worn around the neck for teething (v. Figure 4.13). As well as aiding dentition, they also help to prevent teething-related illnesses:

- R1:** *It [izinyo lehashe] works for the pains. (FG4)*

R2: *But it eases the pains.*

R3: *It makes the teeth come very fast.*

R4: *Very very very fast.*

R1: *And the child will not have diarrhoea, nothing.*



Another example of a prophylactic is the *ncweba*, a small bag containing medicines or charms and worn around the neck for protection from bad spirits and to strengthen the child (v. Figure 4.13).



Figure 4.13: *Ncweba* (1), *izinyo lehashe* (1), grey beads (1&2) and 'black velvet' (3&4)

'Prophet' ropes are also used as prophylactics, particularly amongst caregivers belonging to African Independent Churches. These strengthen the child against traditional health problems.

"... then you go and tie his waist with a prophet rope so that he become strong." (FG2)



Figure 4.14: Prophet ropes and grey beads

Prophet ropes may be worn around various parts of the child's body as shown in Figure 4.14.

Vimbela (v. Figure

4.15), a Vaseline-based traditional

medicine which is also used as a prophylactic and can be smeared on the child's body for

protection from bad spirits and pollution. As seen in previous sections, the Dutch medicines (v. Figure 4.16), although mostly perceived as Western medicines by caregivers, are also used to protect the child and prevent them from getting traditional African childhood illnesses.



Figure 4.15: Vimbela



Figure 4.16: Dutch medicines in a pharmacy

4.1.4.3b Traditional medicines for pregnancy



Figure 4.17: Isihlambezo

Medicines in the pile sort were also grouped for use during pregnancy for protection against bad spirits, witchcraft and to facilitate labour. These included *isihlambezo*²² (v. Figure 4.17), *ugobo*²³ (v. Figure 4.18) and ostrich egg ground into powder, as well as Dutch medicines such as Haarlemensis and Doepa. Plants which were not recognised by the caregivers but which a *muthi* shop had recommended for use during pregnancy included *umathunga*²⁴ and *isiNwazi*²⁵ (v. Figure 4.18).

"When somebody is pregnant and she doesn't give birth until over 9 months or 10 months, then she uses an ostrich egg. If she exceeded her months of giving birth." (FG4)

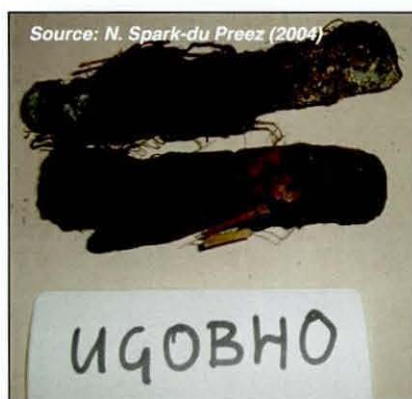


Figure 4.18: Ugobo, uMathunga and isiNwazi

²² Herbal decoction used as preventative health tonic during pregnancy (Varga & Veale, 1997).

²³ *Gunnera* species.

²⁴ *Eucomis autumnalis*. Species of pineapple-like lily with many little green flowers, with poisonous bulbs.

²⁵ *Rhoicissus tridentata*.

4.1.4.3c Traditional medicines for chest problems

Although *isiphepheto*, *indawulothi*, and *ikhatazo* (v. Figure 4.19) were identified as being used for coughs by the *muthi* shop, these were not as well-known to caregivers as *umhlonyane* in Figure 4.20.



Figure 4.19: *inDawulothi*, *ikhathazo*, *isiPhepheto*

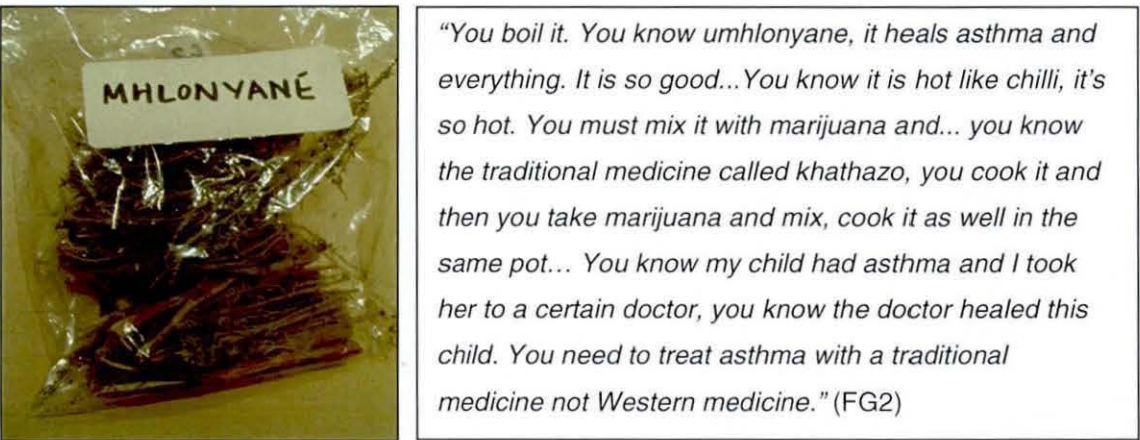


Figure 4.20: *Umhlonyane*

4.1.4.3d Traditional medicines for stomach problems and rashes

*Umthombothi*²⁶ and *stan-tanyana*²⁷ (v. Figure 4.21) were only recognised by mothers in 2 separate focus groups, *umthombothi* for rash (Focus Group 2) and *stan-tanyana* (Focus Group 5) for diarrhoea / teething. *InGcino*²⁸ (v. Figure 4.21) was recognised in 2 focus groups (2 and 3). Although the *muthi* shop recommended it for diarrhoea, both groups thought it might be for constipation. The Zulu English dictionary (Doke, Malcolm, Sikakana & Vilakazi, 2001) also states that it can be used as a purgative in children.



Figure 4.21: *inGcino*, *stan-tanyana* and *umthombothi*

²⁶ *Spirostachys Africana*.

²⁷ Not known.

²⁸ *Albuca setosa*.

4.1.4.3e Scarifications

Traditionally, scarifications behind the ears (v. Figure 4.22), on the forehead (v. Figure 4.23), around the belly button and on joints are usually treated with a traditional medicine known as *mohlabelo*²⁹ (v. Figure 4.24) rubbed into them to strengthen the child and small incisions are also made to treat illnesses such as *inyoni* and *ibala*. Not all caregivers in the focus groups knew the Sotho name *mohlabelo* and the following passage shows how easy names and therefore remedies may be confused:



Figure 4.22: Scarification behind ear almost healed

- R1:** And some of them we don't know what they give us the sangomas - it's a black stuff that they put there [Laughing in the group]. They chuck it on the head... He or she [traditional healer] calls it *mohlabelo*, I don't know the other name... (FG3)
- R2:** Umhlabelo sounds like the one used for operations or joining bones.
- R3:** Mathunga...?
- R2:** That is umhlabelo [Zulu word].
- R4:** Most of the time, *mohlabelo* is used for accidents.
- R2:** Not for children.
- R3:** For *inyoni*.



Figure 4.23: Scarification on forehead which had almost healed



Figure 4.24: Different traditional powders including *mohlabelo*

²⁹ *Mohlabelo* (Sotho) and *umhlabelo* (Zulu) is any *muthi* used for rubbing into incisions, remedy a fracture or sprain.

4.1.4.4 Home remedies

This final section presents the home remedies which were not known to the researcher ahead of the study and which were brought up during discussion in the focus groups. Home remedies such as the use of pure Sunlight soap in water as an enema, or the original white Colgate toothpaste on its own or mixed with Sunlight soap for *isilonda*³⁰ were seen as highly effective by some caregivers:

R1: *Pure Colgate. If ever my child has sores in his bottom, I mix... I take a bit of the Colgate and then I put a bit of the Sunlight, and I just put it on a pen, then I round it over like this, then I put at the back and it helps. (FG5)*

R2: *Ja, it helps.*

R3: *Ja, it helps. I took my child to the clinic I think 3 times with the same problem until I applied this thing and he was healed. Sunlight, pure Sunlight and Colgate.*

R4: *Pure Colgate?*

R3: *Ja, Colgate, Colgate. He had a big wound. You take the Sunlight and mix it with Colgate, the original Colgate. Yes the original, the white one.*

Boiling a vinyl record at home and drinking the water from that was used for protection in pregnancy and to ensure an easy labour:

"Also an old LP helps. You break a piece from it and boil it and drink that water." (FG5)

Other 'old wives' tales' include letting a small dog lick a child's mouth, as well as using squashed bed bugs for teething:

"Because we in Xhosa, for teething medicine, when the child is maybe 1 year and a couple of months you take a small dog and then you put it in front of the baby and then it licks the baby's mouth [Agreement in group]. Or you take a bedbug and squash it. (FG2)

Home-made oral rehydration solutions using salt and sugar were also used instead of the ORS ready-made packet solutions. Caregivers also referred to the latter as 'Sorol water' (a make of ORS) or 'drip':

R1: *And then I like to do the home made solution. (FG1)*

R2: *Oh! The sugar and salt ones.*

R1: *I prefer that one because children like it – I don't know why. So you'll get it at the clinic, they'll give it to you that one [ORS], but children don't want it at all.*

Other home remedies include castor oil for constipation, honey for colds, mint for congestion and glycerine and borax for cleaning the tongue.

³⁰ Sores around anus.

4.1.4.5 Mixing traditional and Western medicines

Groups 2, 4 and 5 were asked about mixing traditional and Western medicines. Caregivers had different views on whether these could be mixed or used at the same time. Respondent 1 in Focus Group 2 was an older lady and knew a lot about traditional medicines:

R1: You see this one sister? [inGcino] You boil it in water. Then you pour it in the child's bottle, measure milk, put some more water and give it to the child. Then you put a little bit of Gripe Water into this medicine mixture. They work hand in hand. Gripe Water makes the bowels loose so the child can go to the toilet. (FG2)

Moderator: So you can mix the Gripe Water and...?

Group: Ja....and the traditional, ja [Chuckling in group].

Moderator: So you can mix traditional and Western together?

Group: Mmm...

R1: Yes, you can mix traditional and Western together. You can mix them together.

Moderator: And what about Panado or Baba Suur? Can you mix it at the same time with traditional?

Group: - [Talking all at once and difficult to transcribe – this is an idea of what is said]

- No, not really, you can't mix that one.
- What's this?
- This is syrup.
- So this is Panado that we use to bring the child's temperature down.
- And you cannot mix them...

Moderator: So when you give your child the Panado syrup, you don't give any other medicine?

Group: No.

Moderator: Why is that? Is there a reason?

R1: Yes, because you would want to know which one works best isn't? You have to use Western medicine first and check how it works on a child and then and if it doesn't work you have to switch to traditional medicine and give it to a child and see which one works best. There has to be a difference between medicines.

Seeing which medicine works best was also given as a reason for not mixing medicines in Focus Group 4:

Moderator: Can you mix, do you know if people can mix the traditional and the Western medicine? (FG4)

Group: - Ja, they do, some do.

- I don't like that.

Moderator: You don't like it?

R1: No I want to use the one at the same time, so that I can see the improvement, where it's coming from [Background: Ja].

In Focus Group 5, following one type of medicine with another was also accepted, with Western medicines usually tried first:

R1: Like umhlonyane, you can use it with Western medicines. It has no harm, you can use it. (FG5)

Moderator: So you mix the traditional and the Western medicines at the same time?

R1: No we don't mix them. We use the Western medicines first and follow with the traditional ones. But these [Dutch medicines] are not traditional medicines.

4.2 Results: Management of 10 childhood health problems

Caregivers in the quantitative survey were asked hypothetically how they would respond to 10 different child health problems: diarrhoea, coughs, fever, vomiting, constipation, colds / flu, *inyoni*, *ibala*, crying and teething. Symptoms were mostly used so that the respondent could define the illness themselves (Logan, 1988). Logan also included a locally defined illness *susto* which many symptoms could be used to diagnose. *Inyoni* and *ibala* were included in this survey as locally defined illnesses. The hypothetical method has been used in other health care studies (Young, 1980; Weaver, 1970; Herskovits, 1950 as cited in Logan, 1988). According to Logan (1988:p.113) an advantage of collecting information on hypothetical questions is that "it allows for the collection of data that would not be easily observed because the topics under investigation are so commonplace that they are taken for granted by informants." Caregivers interviewed at each of the 4 different health care providers were asked what they would do or where they would go first, and then if the child did not get better what they would do.

4.2.1 Diarrhoea

For diarrhoea, the majority of caregivers would give some form of home treatment first (v. Table 4.10). As can be seen in Table 4.13, this is usually a salt and sugar solution. For those caregivers interviewed at the private clinic, 14% would normally go to a pharmacy or supermarket and 14% would seek advice from a private provider. Fifteen percent of caregivers interviewed at the public hospitals would first take their child to a public provider. For caregivers interviewed at the TMP caregivers, 11.3% would seek help from a traditional healer, compared to 0% for those interviewed at the private clinic and public hospitals and 2% from the PHC.

Table 4.10: First provider that caregiver reports using if child has diarrhoea

Interview setting	First provider or type of treatment if not known where it is obtained						Total n (%)
	Home ¹ n (%)	TMP n (%)	Public n (%)	Private n (%)	OTC ² n (%)	DK n (%)	
PHC	46 (92)	1 (2)	2 (4)	0 (0)	1 (2)	0 (0)	50 (100)
Public hospital	43 (81)	0 (0)	8 (15.1)	0 (0)	1 (1.9)	1 (1.9)	53 (100)
Private clinic	36 (72)	0 (0)	0 (0)	7 (14)	7 (14)	0 (0)	50 (100)
TMP	46 (86.8)	6 (11.3)	1 (1.9)	0 (0)	0 (0)	0 (0)	53 (100)
Total	171 (83)	7 (3.4)	11 (5.3)	7 (3.4)	9 (4.4)	1 (0.5)	206 (100)

¹ Home¹ refers to anything done at home, including using OTC medicines already in the house.

² The 'OTC' provider refers to pharmacies or supermarkets where a caregiver might obtain treatment.

If the child's condition did not improve or worsened, 86% of PHC and 77.4% of public hospital caregivers would take their child to the clinic (v. Table 4.11). Only 49.1% of TMP caregivers would go to a PHC, with 47.2% opting for a traditional healer. Sixty percent of private clinic caregivers

would take their child to a paediatrician if their condition did not improve. Just 2% of caregivers interviewed at the PHC and TMP and 5.7% of caregivers interviewed at the public hospital would take their child to a GP. Few caregivers were able to name a second treatment.

Table 4.11: Second provider that caregiver reports using if child's diarrhoea persists

Interview setting	Second provider or type of treatment if not known where it is obtained							Total n (%)
	Home n (%)	TMP n (%)	PHC n (%)	Pub hosp n (%)	Paed n (%)	GP n (%)	OTC n (%)	
PHC	2 (4)	0 (0)	43 (86)	1 (2)	0 (0)	1 (2)	3 (6)	50 (100)
Public hospital	3 (5.7)	0 (0)	41 (77.4)	5 (9.4)	0 (0)	3 (5.7)	1 (1.9)	53 (100)
Private clinic	3 (6)	0 (0)	3 (6)	1 (2)	30 (60)	8 (16)	5 (10)	50 (100)
TMP	0 (0)	25 (47.2)	26 (49.1)	0 (0)	0 (0)	1 (1.9)	1 (1.9)	53 (100)
Total	8 (3.9)	25 (12.1)	113 (54.9)	7 (3.4)	30 (14.6)	13 (6.3)	10 (4.9)	206 (100)

As can be seen in Table 4.12, the lowest SES group had the highest proportion of caregivers who would use home treatment for diarrhoea as a first resort (91.5%). The second lowest SES group contained the highest proportion of TMP users (9.1%) and the medium SES group had the highest proportions of public sector users (9.8%) and OTC users (9.8%). The highest SES group had the highest proportion of private sector users (16.7%) and the lowest proportion of home treatment users (71.4%) for diarrhoea.

Table 4.12: First provider that caregiver reports using if child has diarrhoea by SES

SES group	First provider or type of treatment if not known where it is obtained						Total
	Home	TMP	Public	Private	OTC	DK	
Very low	43	1	2	0	0	1	47
	91.5%	2.1%	4.2%	0%	0%	2.1%	100%
Low	57	6	2	0	1	0	66
	86.4%	9.1%	3%	0%	1.5%	0%	100%
Medium	41	0	5	0	5	0	51
	80.4%	0%	9.8%	0%	9.8%	0%	100%
High	30	0	2	7	3	0	42
	71.4%	0%	4.8%	16.7%	7.1%	0%	100%
Total	171	7	11	7	9	1	206
	83%	3.4%	5.3%	3.4%	4.4%	0.5%	100%

Table 4.13 provides more detailed information on the different types of treatment that the caregivers could name as either a first or second line of treatment for diarrhoea. Packets of ORS were the most commonly named OTC, whilst home made salt and sugar solution was the most popular home treatment, as well as the most popular treatment overall (79.9%). Traditional treatments were varied and included emetics and enemas which may leave the child even more dehydrated.

Table 4.13: Different types of Western, home and traditional treatments administered by caregivers for diarrhoea

Description	No.	%
OTC / Clinic		
Behoedmiddel	1	0.5
Immodium	1	0.5
Milk of Magnesia	1	0.5
Oral Rehydration Solution (ORS) (packet)	13	6.5
Total	16	8.0
Home		
Black tea	1	0.5
Cook Maltabella porridge	1	0.5
Cook vegetables	1	0.5
Cook custard (stops diarrhoea)	1	0.5
Custard powder (raw) and water to drink	3	1.5
Give fluids	1	0.5
Maize meal and cold water to drink	1	0.5
ORS salt & sugar solution	159	79.9
Stop formula milk	1	0.5
Sugar & salt & carrot & water	1	0.5
Total	170	85.4
Traditional treatments		
<i>Imbiza yokuphalaze</i> ¹	1	0.5
<i>Ingwavuma</i> ² boil to drink	1	0.5
<i>Unganu</i> ³ & <i>umavumbuka</i> ⁴ (drink & spuit)	1	0.5
<i>Ilitshe lomgodi</i> ⁵ & water to drink	2	1.0
<i>Ilitshe lomgodi</i> and sugar to drink	1	0.5
<i>Inyongo yesibankwa</i> ⁶ - burn and mix with boiled water to drink	1	0.5
<i>Umuthi</i> ⁷ for spuit	1	0.5
Spider web in boiled water to drink	1	0.5
<i>Umhlonyane</i> ⁸ boiled to drink	1	0.5
<i>Umuthi obomvu</i> ⁹	1	0.5
Take plain water to Church and pray for it - give to child	1	0.5
Grey beads	1	0.5
Total	13	6.5
Total	199	100%

¹ Emetic.

² *Cassine papillosa* (bark) (Doke et al., 2001) / *Cassine transvaalensis* (Mander, 1998).

³ Species of large tree, *Sclerocarya caffra*. (Doke et al., 2001) / *Sclerocarya birrea* (Mander, 1998).

⁴ *Sarcophyte sanguinea* Sparm. Swollen rootstock used in decoction for diarrhoea (Tyiso & Bhat, 1998) / *Hydnora Africana* (Mander, 1998).

⁵ Ground stone.

⁶ Lizard entrails.

⁷ Traditional medicine.

⁸ African wormwood (*Artemisia afra*) – usually used for enemas.

⁹ Red medicine – along with Black medicines are used to expel 'bad' from the body and strengthen it. Usually followed by white medicines to regain health (Ngubane, 1977).

4.2.2 Cough

For coughs, medicine obtained from pharmacies or supermarkets would be the first main source of treatment for all caregivers (35.4%), closely followed by going to the PHC clinic (25.2%) and then home treatment (19.9%) (v. Table 4.14). Half of private caregivers would obtain medicine from a pharmacy or supermarket, 14% would go to a GP and 20% to a paediatrician. A large proportion (44%) of PHC caregivers also obtain treatment from pharmacies / supermarkets, followed by the PHC (32%). For public hospital caregivers, the main course of action is to take the child to the PHC (37.7%), followed by home and over-the-counter treatments (28.3% each). TMP caregivers mostly use some form of traditional / herbal medicine.

Table 4.14: First provider that caregiver reports using if child has a cough

Interview setting	First provider or type of treatment if not known where it is obtained							Total n (%)
	GP n (%)	Paed n (%)	OTC n (%)	Pub hosp n (%)	PHC n (%)	Home n (%)	TMP n (%)	
PHC	1 (2)	0 (0)	22 (44)	0 (0)	16 (32)	11 (22)	0 (0)	50 (100)
Public hospital	2 (3.8)	0 (0)	15 (28.3)	1 (1.9)	20 (37.7)	15 (28.3)	0 (0)	53 (100)
Private clinic	7 (14)	10 (20)	25 (50)	0 (0)	1 (2)	7 (14)	0 (0)	50 (100)
TMP	1 (1.9)	0 (0)	11 (20.8)	0 (0)	15 (28.3)	8 (15.1)	18 (33.9)	53 (100)
Total	11 (5.3)	10 (4.9)	73 (35.4)	1 (0.49)	52 (25.2)	41 (19.9)	18 (8.7)	206 (100)

The second main course of action is the PHC for all caregivers, with the exception of the private clinic caregivers, 64% of whom would take their child to a paediatrician and 30% to a GP if the condition worsened or did not improve (v. Table 4.15). A high proportion (24.5%) of public hospital caregivers would go to the hospital and 35.9% of TMP caregivers would go to a TMP.

Table 4.15: Second provider that caregiver reports using if child's cough persists

Interview setting	Second provider or type of treatment if not known where it is obtained							Total n (%)
	GP n (%)	Paed n (%)	OTC n (%)	Pub hosp n (%)	PHC n (%)	Home n (%)	TMP n (%)	
PHC	1 (2)	0 (0)	3 (6)	0 (0)	45 (90)	1 (2)	0 (0)	50 (100)
Public hospital	3 (5.7)	0 (0)	4 (7.6)	13 (24.5)	31 (58.5)	1 (1.9)	1 (1.9)	53 (100)
Private clinic	15 (30)	32 (64)	2 (4)	0 (0)	0 (0)	1 (2)	0 (0)	50 (100)
TMP	2 (3.8)	0 (0)	1 (1.9)	4 (7.6)	24 (45.3)	3 (5.7)	19 (35.9)	53 (100)
Total	21 (10.2)	32 (15.5)	10 (4.9)	17 (8.3)	100 (48.5)	6 (2.9)	20 (9.7)	206 (100)

Table 4.16 provides more detailed information on the different types of treatment that the caregivers from the 4 different health care providers could name as either a first or second line of treatment for coughing. OTC medicine is mostly composed of cough mixtures and analgesics such as Panado. Various home treatments to soothe the cough include oil, vinegar and sugar solutions. TMP caregivers mostly use some form of traditional / herbal medicine, the most popular being African wormwood (*Artemisia afra*), otherwise known as *umhlonyane* which is boiled and

given to the child to drink. Caregivers from other health facilities also reported they would use *umhlonyane* from the garden.

Table 4.16: Western, home and traditional treatments administered by caregivers for coughs

Description	No.	%	Description	No.	%
OTC			Home treatment		
Stopain	1	0.8	Cooking oil & vinegar	2	1.5
Scotts Emulsion	2	1.5	Cooking oil & vinegar & sugar & warm water	2	1.5
Panado	12	9.2	Fish oil	1	0.8
Panado & cough mixture	2	1.5	Fish oil & vinegar & sugar	2	1.5
Tussi Tot cough mixture	1	0.8	Fish oil (warm to drink)	1	0.8
Woods Peppermint cough mixture	1	0.8	Honey & lemon in hot water	1	0.8
Unnamed cough mixture	43	32.8	Keep child in warm house	1	0.8
Borstol cough mixture	4	3.1	Warm water to drink	3	2.3
Calpol cough mixture	1	0.8	Keep warm and give fluids	1	0.8
Cough mixture from clinic previously	1	0.8	Total	14	10.7
Bronchodialator	1	0.8	Traditional / church treatments		
Vicks in warm water to drink	4	3.1	Cough remedy (herbal)	1	0.8
Vicks rub chest / child	1	0.8	<i>Khathazo</i> ¹⁰ & Ngcaluchwatha ¹¹ & <i>Isibaha</i> ¹²	1	0.8
Borsdruppels	1	0.8	<i>Khathazo</i> boiled to drink	1	0.8
Borsdruppels with breast milk	1	0.8	<i>Lengala</i> ¹³ boiled to drink	1	0.8
Honey & lemon & Borsdruppels	1	0.8	<i>Lesalo</i> ¹⁴ boiled in water to drink	1	0.8
Haarlemensis and breast milk	1	0.8	Mixes herbs	1	0.8
Behoedmiddel	1	0.8	<i>Munyana</i> ¹⁵ to drink	1	0.8
Sweet oil	1	0.8	<i>Umhlonyane</i> ¹⁶ & Peppermint (boil)	1	0.8
Humidifier	1	0.8	<i>Lengana</i> ¹⁷ / <i>umhlonyane</i> boiled to drink	11	8.4
Physiotherapy at surgery	4	3.1	<i>Umuthi ubomvu</i> ¹⁸	1	0.8
Previous medicine from clinic	3	2.3	<i>Sput</i> (intlaba)	1	0.8
Medicines	4	3.1	<i>Sput</i> (Sunlight soap & warm water)	3	2.3
Total	92	70.9	Water with Blue Sea Oil	1	0.8
			Total	25	19.1
			Total	131	100%

¹⁰ An umbelliferous plant (*Alepidea amatybica*), roots used for colds and influenza.

¹¹ Translation not known.

¹² *Warburgia salutaris* (bark).

¹³ Translation not known. May be Lengana?

¹⁴ Translation not known.

¹⁵ Translation not known.

¹⁶ African wormwood (*Artemisia afra*) – usually used for enemas.

¹⁷ Sotho or Tsonga word for African wormwood (*Artemisia afra*).

¹⁸ Red medicine – along with Black medicines are used to expel 'bad' from the body and strengthen it. Usually followed by white medicines to regain health (Ngubane, 1977).

Table 4.17 shows that in terms of SES, the highest SES group once again had the lowest proportion of caregivers who would use home treatment as a first resort for coughs (11.9%), but the highest proportion who would use OTC treatment (52.4%) and paediatricians (19.1%). The high and medium SES groups had the highest proportions who would use a GP (9.5% and 7.8% respectively). The 2 lowest SES groups had the highest proportions of caregivers who would use public clinics (46.8% very low; 28.8% low).

Table 4.17: First provider that caregiver reports using if child has a cough by SES

SES group	First provider or type of treatment if not known where it is obtained							Total
	GP	Paed	OTC	PHC	Public hosp	Home	TMP	
Very low	2	0	8	22	0	10	5	47
	4.3%	0%	17%	46.8%	0%	21.3%	10.7%	100%
Low	1	1	23	19	0	12	10	66
	1.5%	1.5%	34.9%	28.8%	0%	18.9%	15.2%	100%
Medium	4	1	20	8	1	14	3	51
	7.8%	1.9%	39.2%	15.7%	1.9%	27.5%	5.9%	100%
High	4	8	22	3	0	5	0	42
	9.5%	19.1%	52.4%	7.1%	0%	11.9%	0%	100%
Total	11	10	73	52	1	41	18	206
	5.3%	4.9%	35.4%	25.2%	0.5%	19.9%	8.7%	100%

4.2.3 Fever

As can be seen in Table 4.18, pharmacy / supermarket treatment (OTC) and home treatment are the first main options when a child has fever for most caregivers, although for PHC and TMP caregivers the first main option is the public sector, where Panado can be obtained for free (38% and 22.6% respectively). The private clinic caregivers followed by the caregivers interviewed at the public hospital have the highest proportion who would use OTC providers (64% and 37.7% respectively).

Table 4.18: First provider that caregiver reports using if child has a fever

Interview setting	First provider or type of treatment if not known where it is obtained						Total
	Public n (%)	OTC n (%)	Private n (%)	Home n (%)	TMP n (%)	DK n (%)	
PHC	19 (38)	12 (24)	1 (2)	18 (36)	0 (0)	0 (0)	50 (100)
Public hospital	12 (22.6)	20 (37.7)	0 (0)	20 (37.7)	0 (0)	1 (1.9)	53 (100)
Private clinic	2 (4)	32 (64)	5 (10)	11 (22)	0 (0)	0 (0)	50 (100)
TMP	20 (37.7)	15 (28.3)	0 (0)	14 (26.4)	4 (7.6)	0 (0)	53 (100)
Total	51 (25.7)	79 (38.3)	6 (2.9)	63 (30.6)	4 (1.9)	1 (0.49)	206 (100)

Table 4.19 shows that the second main course of action for most caregivers is the PHC (43.2%). Forty-six percent of private clinic caregivers however would use a paediatrician and 24% a GP if their child's condition did not improve or worsened and a growing number (nearly a third) of TMP caregivers would go to a TMP. Nine non-private caregivers, mostly at the public hospital stated that they would use a private provider (mostly GP) in the case of a fever which did not improve. Overall, a smaller proportion of caregivers (mostly public hospital and TMP) would go to a public hospital.

Table 4.19: Second provider that caregiver reports using if child's fever persists

Interview setting	Second provider or type of treatment if not known where it is obtained							Total n (%)
	PHC n (%)	Pub hosp n (%)	OTC n (%)	Paed n (%)	GP n (%)	Home n (%)	TMP n (%)	
PHC	36 (72)	1 (2)	0 (0)	1 (2)	1 (2)	11 (22)	0 (0)	50 (100)
Public hospital	28 (52.8)	5 (9.4)	4 (7.6)	0 (0)	6 (11.3)	10 (18.9)	0 (0)	53 (100)
Private clinic	1 (2)	0 (0)	2 (4)	23 (46)	12 (24)	11 (22)	0 (0)	50 (100)
TMP	24 (45.3)	3 (5.7)	0 (0)	0 (0)	1 (1.9)	10 (18.9)	15 (28.3)	53 (100)
Total	89 (43.2)	9 (4.4)	6 (2.9)	24 (11.7)	20 (9.7)	42 (20.4)	15 (7.3)	206 (100)

Table 4.20 shows that for fever, the 2 lowest SES groups had the highest proportions who would use public sector care as a first resort (36.2% very low; 33.3% low). The lowest SES group again had the highest proportion of caregivers who would use home treatment (38.3%) and the second lowest SES group had the highest proportion who would use traditional health care providers (4.6%). The highest SES group had the highest proportion who would use OTC treatment (64.3%) and the lowest proportion of home treatments (26.2%).

Table 4.20: First provider that caregiver reports using if child has a fever by SES

SES group	First provider or type of treatment if not known where it is obtained						Total
	Public	OTC	Private	Home	TMP	DK	
Very low	17	9	1	18	1	1	47
	36.2%	19.2%	2.1%	38.3%	2.1%	2.1%	100%
Low	22	24	0	17	3	0	66
	33.3%	36.4%	0%	25.8%	4.6%	0%	100%
Medium	11	19	4	17	0	0	51
	21.6%	37.3%	7.8%	33.3%	0%	0%	100%
High	3	27	1	11	0	0	42
	7.1%	64.3%	2.4%	26.2%	0%	0%	100%
Total	53	79	6	63	4	1	206
	25.7%	38.4%	2.9%	30.6%	1.9%	0.5%	100%

The main named OTC medicine for fever and the main treatment overall is Panado Syrup (57% of all treatments). Simple home treatments include cooling the child down by undressing them (14% overall) or using a cold towel or sponge (17.8% overall) (v. Table 4.21). The few traditional treatments named for fever mostly take the form of a *sput* (enema) or burning traditional medicines.

Table 4.21: Western, home and traditional treatments administered by caregivers for fever

Description	No.	%
OTC		
Calpol	1	0.4
Disprin	2	0.9
Fevapar Syrup	2	0.9
Panado	134	57
Paracetamol / Stopain	2	0.8
Rub Vicks / Rub Western stuff	2	0.8
Umthuthuzeli	1	0.4
Total	144	61.3
Home treatment		
Undress child / Keep child cool	33	14
Bath child in cold water	2	0.9
Bath child with warm water / Bath Child	2	0.8
Wrap / sponge child in cold damp towel	42	17.8
Cold water to drink	1	0.4
Total	80	34
Traditional / church treatment		
Burn <i>imphepho</i> ¹⁹ / Burn <i>imphepho</i> & <i>umzane</i> ²⁰	2	0.8
Burn Stuijdruppels for child to sweat off bad spirits	1	0.4
Mix medicines to steam	1	0.4
Boil <i>imphepho</i> & <i>sput</i> child	1	0.4
<i>Sput</i> with Sunlight soap & warm water	2	0.9
Boil something to drink	1	0.4
Prayer	1	0.4
<i>Sput</i> - <i>isiwasho</i> ²¹ / <i>Sput</i> - Water & Blue Sea Oil	2	0.8
Total	11	4.7
Total	235	100%

¹⁹ *Helichrysum* spp.

²⁰ Translation not known.

²¹ Ash-based medicine.

4.2.4 Vomiting

As can be seen in Table 4.22, vomiting would be mostly dealt with at home first of all (40.8% of cases). For 40% of private caregivers however, advice is usually first sought from a paediatrician, leaving 24% who would use home treatment and 24% who would consult a GP. Just over half of PHC caregivers would use a public provider as their first main course of action, 43.4% of TMP caregivers would use home treatment, followed closely by 32.1% who would go to a TMP.

Table 4.22: First provider that caregiver reports using if child vomits

Interview setting	First provider or type of treatment if not known where it is obtained							Total n (%)
	Public n (%)	Paed n (%)	GP n (%)	OTC n (%)	Home n (%)	TMP n (%)	DK n (%)	
PHC	26 (52)	0 (0)	1 (2)	2 (4)	21 (42)	0 (0)	0 (0)	50 (100)
Public hospital	18 (33.9)	0 (0)	1 (1.9)	2 (3.8)	28 (52.8)	1 (1.9)	3 (5.7)	53 (100)
Private clinic	1 (2)	20 (40)	12 (24)	5 (10)	12 (24)	0 (0)	0 (0)	50 (100)
TMP	10 (18.9)	0 (0)	1 (1.9)	2 (3.8)	23 (43.4)	17 (32.1)	0 (0)	53 (100)
Total	55 (26.7)	20 (9.7)	15 (7.3)	11 (5.3)	84 (40.8)	18 (8.7)	3 (1.5)	206 (100)

Table 4.23 shows what caregivers would do if the child's vomiting did not improve after their first course of action. The majority (96%) of private clinic caregivers would take their child to a paediatrician (72%) if their condition deteriorated or did not improve. More non-private caregivers would use a private provider (GP) for vomiting than reported doing so with fever as the second course of action. Three-quarters of PHC caregivers, just over half of public hospital and 39.6% of TMP caregivers would use a PHC as a second course of action. Caregivers interviewed at the TMP most commonly reported seeing the TMP as a second course of action for treating vomiting (45.5%).

Table 4.23: Second provider that caregiver reports using if child's vomiting persists

Interview setting	Second provider or type of treatment if not known where it is obtained							Total n (%)
	PHC n (%)	Pub hosp n (%)	Paed n (%)	GP n (%)	OTC n (%)	Home n (%)	TMP n (%)	
PHC	38 (76)	2 (4)	0 (0)	6 (12)	3 (6)	0 (0)	1 (2)	50 (100)
Public hospital	28 (52.8)	13 (24.5)	0 (0)	4 (7.6)	4 (7.6)	4 (7.6)	0 (0)	53 (100)
Private clinic	0 (0)	0 (0)	36 (72)	12 (24)	1 (2)	1 (2)	0 (0)	50 (100)
TMP	21 (39.6)	2 (3.8)	0 (0)	3 (5.7)	0 (0)	3 (5.7)	24 (45.3)	53 (100)
Total	87 (42.2)	17 (8.3)	36 (17.5)	25 (12.1)	8 (3.9)	8 (3.9)	25 (12.1)	206 (100)

Most home treatments for vomiting take the form of salt and sugar solutions (47.5%) or plain warm water to drink (11.9%) (v. Table 4.24). Popular named traditional treatments for vomiting include chicken *ingingila* (gizzards), which are usually dried and ground into a powder and drunk with water. Other ingredients which can be dried and ground include lizard entrails and egg shells.

Table 4.24: Western, home and traditional treatments administered by caregivers for vomiting

Description	No.	%
OTC		
Medicine	3	3.0
Medicine to stop vomiting	4	4.0
Muthi Wenyoni	1	1.0
ORS	3	3.0
Panado	3	3.0
Total	14	13.9
Home treatment		
Bicarbonate of soda with warm water to drink	1	1.0
Blow in child's face to give air	1	1.0
Change to lactose-free formula / Change formula	2	2.0
Coke + spoon of sugar	1	1.0
Coke to drink	2	2.0
Cold milk to drink	1	1.0
Cooked porridge	1	1.0
Cooked potatoes	1	1.0
ORS - salt & sugar solution	48	47.5
Warm water to drink	12	11.9
Total	70	69.3
Traditional treatment		
Boil a leaf (folha delaror ²²) and drink like tea	1	1.0
<i>Inyongo yesibankwa</i> ²³ - burn and mix with boiled water to drink	1	1.0
<i>Isinama</i> ²⁴ to drink	1	1.0
<i>Isiwasho</i> ²⁵	1	1.0
Mixes traditional medicines	2	2.0
Ostrich egg / Ostrich egg boiled to drink / Ostrich egg grind to drink	4	4.0
Spider web & cold water to drink	1	1.0
<i>Umhlonyane</i> ²⁶	1	1.0
Boil chicken gizzards (<i>ingingila</i>)	1	1.0
Burn chicken egg shell & gizzards (<i>ingingila</i>). Drink ashes and water	1	1.0
Grind dry gizzards (<i>ingingila</i>) and put in boiled water to drink	1	1.0
Total	15	14.9
Nothing	2	2.0
Total	101	100%

For half of the highest SES group, and 23.5% of the medium SES group, private treatment would be used as the first option if a child was vomiting (v. Table 4.25). For around half of the very low and low SES caregivers the first resort would be treatment at home. Once again the highest proportion of caregivers who would use TMPs as a first choice are found in the low SES category.

²² Translation not known. Caregiver was from Angola.

²³ Lizard entrails.

²⁴ Sp. Of grasses, *Setaria verticillata*, whose spiky seeds cling to clothing.

²⁵ Ash-based medicine.

²⁶ African wormwood (*Artemisia afra*) – usually used for enemas.

Table 4.25: First provider that caregiver reports using if child is vomiting by SES

SES group	First provider or type of treatment if not known where it is obtained						Total
	Public	Private	OTC	Home	TMP	DK	
Very low	15	0	2	25	4	1	47
	31.9%	0%	4.3%	53.2%	8.5%	2.1%	100%
Low	18	2	2	32	10	2	66
	27.3%	3%	3%	48.5%	15.2%	3%	100%
Medium	16	12	3	16	4	0	51
	31.4%	23.5%	5.9%	31.4%	7.8%	0%	100%
High	6	21	4	11	0	0	42
	14.3%	50%	9.5%	26.2%	0%	0%	100%
Total	55	35	11	84	18	3	206
	26.7%	17%	5.3%	40.8%	8.7%	1.5%	100%

4.2.5 Constipation

As can be seen in Table 4.26, over half of the sample of caregivers would first use some form of home treatment for constipation, followed by obtaining treatment from a pharmacy or supermarket (25.2%). Just over a quarter of TMP caregivers would use some form of traditional medicine.

Table 4.26: First provider that caregiver reports using if child has constipation

Interview setting	First provider or type of treatment if not known where it is obtained					Total
	Public ¹ n (%)	OTC n (%)	Private n (%)	Home n (%)	TMP n (%)	
PHC	7 (14)	15 (30)	1 (2)	27 (54)	0 (0)	50 (100)
Public hospital	6 (11.3)	13 (24.5)	0 (0)	33 (62.3)	1 (1.9)	53 (100)
Private clinic	1 (2)	18 (36)	5 (10)	25 (50)	1 (2)	50 (100)
TMP	3 (5.7)	6 (11.3)	0 (0)	30 (56.6)	14 (26.4)	53 (100)
Total	17 (8.3)	52 (25.2)	6 (2.9)	115 (55.8)	16 (7.8)	206 (100)

¹Public sector treatment includes PHC and public hospital as only 2 public hospital caregivers would go to a public hospital first of all.

As can be seen in Table 4.27, the second course of action for constipation for three-quarters of PHC caregivers, 58.5% of public hospital and 45.3% of TMP caregivers would be the PHC clinic. Private clinic caregivers would mainly seek advice from a paediatrician (34%), 24% would consult a GP and 24% would use home treatment. Just over 35% of TMP caregivers would go to a TMP. For public hospital caregivers OTC treatment (15.1%) as well as the public hospital (13.2%) also constitute secondary options if the constipation does not improve or gets worse.

Table 4.27: Second provider that caregiver reports using if child's constipation persists

Interview setting	Second provider or type of treatment if not known where it is obtained								Total n (%)
	PHC n (%)	Pub hos n (%)	OTC n (%)	Paed n (%)	GP n (%)	Home n (%)	TMP n (%)	DK n (%)	
PHC	38 (76)	0 (0)	4 (8)	0 (0)	0 (0)	5 (10)	3 (6)	0 (0)	50 (100)
Public hospital	31 (58.5)	7 (13.2)	8 (15.1)	0 (0)	1 (1.9)	5 (9.4)	0 (0)	1 (1.9)	53 (100)
Private clinic	2 (4)	0 (0)	7 (14)	17 (34)	12 (24)	12 (24)	0 (0)	0 (0)	50 (100)
TMP	24 (45.3)	4 (7.6)	2 (3.8)	0 (0)	1 (1.9)	3 (5.7)	19 (35.9)	0 (0)	53 (100)
Total	95 (46.1)	11 (5.3)	21 (10.2)	17 (8.3)	14 (6.8)	25 (12.1)	22 (10.7)	1 (0.49)	206 (100)

Most of the home treatments are diet-based, usually involving fruit or liquids (v. Table 4.28a). The *sput* could be grouped as either traditional or home treatment depending on the ingredients. This was the most widely-used first treatment, particularly for TMP caregivers. There are many different enemas used in a *sput*, the most common one being Sunlight soap and warm water (25.4%).

Table 4.28a: Home and traditional treatments administered by caregivers for constipation

Description	No.	%	Description	No.	%
Home treatment			Home treatment (continued)		
Warm water / water to drink	22	10.7	<i>Sput</i> with Sunlight soap & warm water	52	25.4
Warm water & brown sugar / sugar	9	4.4	<i>Sput</i> with warm water	3	1.5
Sugar & salt solution	2	1.0	Piece of Sunlight soap in rectum	2	1.0
Orange juice / squeezed orange	12	5.9	<i>Sput</i> with maize meal & water	1	0.5
Fluids to drink	2	1.0	<i>Sput</i> with Muthi Wenyoni	1	0.5
Prune juice	1	0.5	<i>Sput</i>	1	0.5
Warm milk / milk	2	1.0	Total	132	64.4
Water & fruit	1	0.5	Traditional treatment		
Boiled / Warm water & Gripe Water	3	1.5	<i>Sput</i> with <i>imbiza</i> ²⁷	3	1.5
Change diet / change formula	2	1.0	<i>Sput</i> with boiled <i>Lengana</i> ²⁸	1	0.5
Castor oil	3	1.5	<i>Sput</i> with <i>intelezi</i> ²⁹ from garden	1	0.5
Pears to eat	1	0.5	<i>Sput</i> with <i>umuthi</i> & milk	1	0.5
Prune Purity	1	0.5	<i>Sput</i> with <i>umsuzwane</i> ³⁰	1	0.5
Mango to eat	2	1.0	<i>Imbiza yabantwana</i> ³¹	2	1.0
Mashed banana	1	0.5	Mixes traditional medicines	2	1.0
Cereal / Weetbix	2	1.0	<i>Letshwetlane</i> ³²	1	0.5
Cooked custard	1	0.5	<i>Isihlambezo</i> ³⁴	1	0.5
Cooked potatoes	1	0.5	<i>Ilitshe lomgodi</i> ³⁵	1	0.5
'Cotton' ³³ sandwiches	1	0.5	Total	14	6.8
Rub child's tummy	1	0.5			
Rubs child's back	1	0.5			
Yoghurt or water	1	0.5			

²⁷ General term for purgative medicines (Varga & Veale, 1997).

²⁸ Sotho or Tsonga word for African wormwood (*Artemisia afra*).

²⁹ *Sansevieria aethiopica* (root).

³⁰ Sp. of shrub, *Lippia asperifolia*, having a very disagreeable smell.

³¹ Purgative for children.

³² *Albuca setosa*.

³³ Inside part of bread (without crust).

³⁴ Herbal decoction used as preventative health tonic during pregnancy (Varga & Veale, 1997).

³⁵ Ground stone.

The main OTC treatments are Milk of Magnesia, Gripe Water as well as a variety of Dutch Medicines (v. Table 4.28b).

Table 4.28b: OTC medicines administered by caregivers for constipation

<i>OTC medicines</i>	No.	%	<i>OTC medicines (continued)</i>	No.	%
Milk of Magnesia	18	8.8	ENO	1	0.5
Gripe Water	13	6.3	Liquid Paraffin to drink	1	0.5
Medicine for constipation	3	1.5	Groen Amara	2	1.0
Laxative (Laxect / Laxon / Brooklax)	5	2.4	Borsdruppels	1	0.5
Muthi Wenyoni (antacid)	2	1.0	Wonderkroonessens	1	0.5
Baby's Own / Tummy tablets (antacid)	2	1.0	Haarlemensis & Entressdruppels mixed with breast milk	1	0.5
Quma (antacid)	1	0.5	Haarlemensis / <i>Stuips</i> mixed	1	0.5
Suppository	2	1.0	Stuipdruppels & Gripe Water	1	0.5
Buscopan	1	0.5	<i>Stuips</i> (can't remember)	1	0.5
Dalpa leg (Vitamin E?)	1	0.5	Krampdruppels & Groen Amara	1	0.5
			Total	59	28.8

With the exception of 16.7% of the low SES group who would use TMPs, Table 4.29 shows that no significant difference was found between SES groups in terms of their first choice of provider for constipation (χ^2 P value = 0.125).

Table 4.29: First provider that caregiver reports using if child has constipation by SES

SES group	First provider or type of treatment if not known where it is obtained					
	Public	OTC	Private	Home	TMP	Total
Very low	5	10	1	28	3	47
	10.6%	21.3%	2.1%	59.6%	6.4%	100%
Low	5	16	0	34	11	66
	7.6%	24.2%	0%	51.5%	16.7%	100%
Medium	3	15	2	29	2	51
	5.9%	29.4%	3.9%	56.9%	3.9%	100%
High	4	11	3	24	0	42
	9.5%	26.2%	7.1%	57.1%	0%	100%
Total	17	52	6	115	16	206
	8.3%	25.2%	2.9%	55.8%	7.8%	100%
χ^2 P value = 0.125						

4.2.6 Colds / Flu

As can be seen in Table 4.30, the main first course of action for colds or flu for caregivers interviewed at the PHC, public hospital and TMP would be to take the child to the PHC clinic (56%, 39.6% and 41.5% respectively). For PHC and public hospital caregivers, another main option would be to go to a pharmacy or supermarket for treatment (28% and 32.1% respectively). For TMP caregivers, going to a TMP provider would be another main option (26.4%). Private clinic caregivers would mostly use OTC treatment from a pharmacy or supermarket as a first option (46%) or go to a private provider (32%).

Table 4.30: First provider that caregiver reports using if child has a cold / flu

Interview setting	First provider or type of treatment if not known where it is obtained						Total n (%)
	Public ¹ n (%)	Private n (%)	OTC n (%)	Home n (%)	TMP n (%)	Nothing DK n (%)	
PHC	28 (56)	0 (0)	14 (28)	8 (16)	0 (0)	0 (0)	50 (100)
Public hospital	21 (39.6)	0 (0)	17 (32.1)	13 (24.5)	0 (0)	2 (3.8)	53 (100)
Private clinic	2 (4)	16 (32)	23 (46)	9 (18)	0 (0)	0 (0)	50 (100)
TMP	22 (41.5)	3 (5.7)	5 (9.4)	9 (16.9)	14 (26.4)	0 (0)	53 (100)
Total	73 (35.4)	19 (9.2)	59 (28.6)	39 (18.9)	14 (6.8)	2 (0.97)	206 (100)

¹Only 1 public hospital caregiver would go to the hospital, and for this reason they are grouped as 'public'

As seen in Table 4.31, if the child's cold or flu does not get better or gets worse, most PHC, public hospital and TMP caregivers would go to a PHC clinic (82%, 60.5% and 39.6% respectively). The TMP caregivers would be even more likely to use the TMP (39.6%). Private clinic caregivers (88%) would go to a private provider. The main users of the public hospital would be the public hospital caregivers and the TMP caregivers. Twelve non-private clinic attendees would go to a private provider if the child did not get better.

Table 4.31: Second provider that caregiver reports using if child's cold / flu persists

Interview setting	Second provider or type of treatment if not known where it is obtained							Total n (%)
	PHC n (%)	Pub hos n (%)	Paed n (%)	GP n (%)	OTC n (%)	Home n (%)	TMP n (%)	
PHC	41 (82)	1 (2)	0 (0)	4 (8)	2 (4)	2 (4)	0 (0)	50 (100)
Public hospital	32 (60.4)	9 (16.9)	1 (1.9)	4 (7.6)	5 (9.4)	2 (3.8)	0 (0)	53 (100)
Private clinic	0 (0)	0 (0)	31 (62)	13 (26)	4 (8)	2 (4)	0 (0)	50 (100)
TMP	21 (39.6)	4 (7.6)	0 (0)	3 (5.7)	1 (1.9)	3 (5.7)	21 (39.6)	53 (100)
Total	94 (45.6)	14 (6.8)	32 (15.5)	24 (11.7)	12 (5.8)	9 (4.4)	21 (10.2)	206 (100)

OTC treatments mostly include cough mixtures and analgesics such as Panado, as well as decongestants such as Vicks to rub on the child (v. Table 4.32). Panado was the most popular named treatment overall (21.4%). Home treatments are similar to that for coughs, as are the traditional treatments, in particular the use of *umhlonyane*.

Table 4.32: Western, home and traditional treatments administered by caregivers for colds / flu

Description	No.	%		No.	%
OTC			Home treatment		
Borsdruppels	1	1.0	Keep child warm	2	1.9
Entressdruppels	1	1.0	Fish oil & vinegar & sugar	1	1.0
Behoedmiddel	1	1.0	Honey & lemon	1	1.0
Adco - Sufedrin	1	1.0	Honey & lemon & Borsdruppels	1	1.0
Bactrium from hospital before	1	1.0	Honey on its own	1	1.0
Borstol	3	2.9	Humidify room	1	1.0
Calpol	2	1.9	Lemon juice	1	1.0
Cough syrup / Cough mixture	14	13.6	Observe	1	1.0
Disprin	1	1.0	Orange juice squeezed	1	1.0
Flu medicines / flu remedy	1	1.0	<i>Spuut</i> with Sunlight soap & warm water	1	1.0
Inhaler	1	1.0	Water vapour with salt water	1	1.0
Karvol	1	1.0	Keep warm & give fluids	1	1.0
Panado	22	21.4	Rub Vaseline	2	1.9
Paracetamol	1	1.0	Rub Vaseline on chest & nose	1	1.0
Previous medication from GP	2	1.9	Total	16	15.5
Previous medication from Paed	1	1.0	Traditional treatment		
Previous medication from PHC	3	2.9	<i>Imbiza</i> ³⁶ to drink	1	1.0
Scott's Emulsion	1	1.0	<i>Isihlahla</i> ³⁷ <i>segumplin</i> ³⁸	1	1.0
Stilpain	1	1.0	<i>Kalmuzi</i> ³⁹ - boil to drink	1	1.0
Rub Vicks on back of head	1	1.0	Leaves from bush boiled and rub child	1	1.0
Vicks	5	4.9	Mixes traditional medicines	1	1.0
Water vapour with Vicks	1	1.0	<i>Lengana</i> ⁴⁰ / <i>umhlonyane</i> ⁴¹ to drink	5	4.9
Undress child & give Panado	1	1.0	<i>Lengana</i> / <i>umhlonyane</i> boiled from garden	4	3.8
Panado & flu remedies	1	1.0	Mix medicines to steam	1	1.0
Panado & Painamol & Woods	1	1.0	Total	15	14.6
Rub Western stuff	1	1.0	Total		
Cough mix & Panado & Stopain	1	1.0			
Panado & Cough mixture	1	1.0			
Total	72	69.9			

When a child has a cold or flu, the lowest SES group has the highest proportions who would use public sector health care (51.1%) and home treatment (25.5%) (v. Table 4.33) whilst the highest SES group had the highest proportions who would use OTC treatment (45.2%) and private sector treatment (21.4%). The low SES group again has the highest proportion who would use TMP treatment as a first choice.

³⁶ General term for purgative medicines (Varga & Veale, 1997).

³⁷ Bush / shrub.

³⁸ Translation not known.

³⁹ *InDawulothi* / *Kalmoes* / *iKalamuzi* (*Acorus calamus*) (bulb).

⁴⁰ Sotho or Tsonga word for African wormwood (*Artemisia afra*).

⁴¹ African wormwood (*Artemisia afra*) – usually used for enemas.

Table 4.33: First provider that caregiver reports using if child has a cold / flu by SES

SES group	First provider or type of treatment if not known where it is obtained						Total
	Public	Pvt	OTC	Home	TMP	Nothing/ DK	
Very low	24	1	5	12	4	1	47
	51.1%	2.1%	10.6%	25.5%	8.5%	2.1%	100%
Low	28	3	14	11	9	1	66
	42.4%	4.6%	21.2%	16.7%	13.6%	1.5%	100%
Medium	14	6	21	9	1	0	51
	27.5%	11.8%	41.2%	17.7%	2%	0%	100%
High	7	9	19	7	0	0	42
	16.7%	21.4%	45.2%	16.7%	0%	0%	100%
Total	73	19	59	39	14	2	206
	35.4%	9.2%	28.6%	18.9%	6.8%	1%	100%

4.2.7 Inyoni

For *inyoni*, the first main courses of action would be going to a TMP (36.9%), followed by OTC treatment from a pharmacy or supermarket (27.7%) and seeking advice from a relative (14.1%) (v. Table 4.34). For TMP caregivers, a TMP would be the main provider (81.1%), whereas for PHC and private clinic caregivers, slightly more would buy OTC treatment from a pharmacy or supermarket. The public hospital and private clinic caregivers have the largest proportions (22%) who would seek advice from a relative. A smaller proportion of caregivers (mostly PHC and private) would go to a Western provider first.

Table 4.34: First provider that caregiver reports using if child has *inyoni*

Interview setting	First provider or type of treatment if not known where it is obtained							Total n (%)
	TMP n (%)	Church n (%)	Relative n (%)	OTC n (%)	Public n (%)	Private n (%)	Nothing/ DK/ Doesn't believe n (%)	
PHC	14 (28)	3 (6)	4 (8)	22 (44)	6 (12)	0 (0)	1 (2)	50 (100)
Public hospital	17 (32.1)	2 (3.8)	12 (22.6)	16 (30.2)	3 (5.7)	0 (0)	3 (5.7)	53 (100)
Private clinic	9 (18)	5 (10)	11 (22)	13 (26)	2 (4)	7 (14)	3 (6)	50 (100)
TMP	43 (81.1)	2 (3.8)	2 (3.8)	6 (11.3)	0 (0)	0 (0)	0 (0)	53 (100)
Total	73 (36.9)	12 (5.8)	29 (14.1)	57 (27.7)	11 (5.3)	7 (3.4)	7 (3.4)	206 (100)

As can be seen in Table 4.35, if the *inyoni* symptoms persist or get worse, a larger proportion of the total sample would go on to choose the TMP as the second provider than the first. However, higher proportions of PHC, public hospital and private clinic caregivers would also go to a Western provider compared with the first course of action (cf. Tables 4.34 and 4.35).

Table 4.35: Second provider that caregiver reports using if child's *inyoni* persists

Interview setting	Second provider or type of treatment if not known where it is obtained								Total n (%)
	TMP n (%)	Church n (%)	Relative n (%)	OTC n (%)	PHC n (%)	Pub hos n (%)	Private n (%)	Nothing/ DK/ Doesn't believe n (%)	
PHC	17 (34)	3 (6)	1 (2)	1 (2)	23 (46)	4 (8)	0 (0)	1 (2)	50 (100)
Public									
hospital	14 (26.4)	7 (13.2)	3 (5.7)	2 (3.8)	16 (30.2)	8 (15.1)	1 (1.9)	2 (3.8)	53 (100)
Private									
clinic	12 (24)	5 (10)	9 (18)	5 (10)	0 (0)	0 (0)	19 (38)	0 (0)	50 (100)
TMP	48 (90.6)	0 (0)	0 (0)	2 (3.8)	2 (3.8)	1 (1.9)	0 (0)	0 (0)	53 (100)
Total	91 (44.2)	15 (7.3)	13 (6.3)	10 (4.9)	41 (19.9)	13 (6.3)	20 (9.7)	3 (1.5)	206 (100)

Table 4.36 shows that for *inyoni*, half of the very low and the low SES group would go to a TMP as their first choice of provider. The highest proportion who would use OTC treatment is the highest SES group (33.3%) as are those who would use private treatment (14.3%). As with the very low and low SES groups, the medium SES group would mostly use TMP providers (37.3%) and OTC treatment (25.5%) as their first choice.

Table 4.36: First provider that caregiver reports using if child has *inyoni* by SES

SES group	First provider or type of treatment if not known where it is obtained							Total
	TMP	Church	Relative	OTC	Public	Private	Nothing/ DK	
Very low	23	4	7	11	2	0	0	47
	48.9%	8.5%	14.9%	23.4%	4.3%	0%	0%	100%
Low	33	3	6	19	3	0	2	66
	50%	4.6%	9.1%	28.8%	4.6%	0%	3%	100%
Medium	19	3	9	13	3	1	3	51
	37.3%	5.9%	17.7%	25.5%	5.9%	2%	5.9%	100%
High	8	2	7	14	3	6	2	42
	19.1%	4.8%	16.7%	33.3%	7.1%	14.3%	4.8%	100%
Total	83	12	29	57	11	7	7	206
	40.3%	5.8%	14.1%	27.7%	5.3%	3.4%	3.4%	100%

As can be seen in Table 4.37, the antacid 'Muthi Wenyoni' is the main OTC treatment used for *inyoni* (52.1%), besides various Dutch medicines. In terms of the traditional and church treatments that caregivers could name, these included *sputis* (enemas) and *imbizas* (mixtures) to drink, burning incense such as Doepa, incisions, prophet ropes around the body as well as prayer.

Table 4.37: Western, home and traditional treatments administered by caregivers for *inyoni*

Description	No.	%	Description	No.	%
Clinic / Hospital			Traditional treatment (cont....)		
Drip & other medication	1	0.7	<i>Inungu</i> ⁴²	1	0.7
Drip in head to stop beating fontanelle	1	0.7	Rub black stuff	1	0.7
Total	2	1.4	Something to rub	3	2.2
OTC			Crushed tomato leaves & original Colgate (the white one)	1	0.7
Haarlemensis	2	1.5	Insert ground plant in bottom, ears etc	1	0.7
Haarlemensis (rub)	2	1.5	<i>Imbiza</i> - <i>sput</i> & drink	2	1.5
Mix <i>Stuips</i> with breast milk	1	0.7	<i>Sput</i> with <i>isiwasho</i> ⁴³	1	0.7
<i>Stuips</i>	3	2.2	<i>Sput</i> with Sunlight soap & water	1	0.7
Groen Amara	1	0.7	<i>Sput</i>	4	3.0
Gripe Water	2	1.5	<i>Sput</i> for 3 days + <i>umuthi</i> rubbed in	1	0.7
Mix Gripe Water & Muthi Wenyon	1	0.7	<i>Sput</i> with bulb like onion (ngcino?)	1	0.7
Muthi Wenyon	62	46.3	<i>Sput</i> with <i>imbiza</i> & milk & other <i>umuthi</i> to bath / rub / burn	1	0.7
Total	74	55.1	<i>Sput</i> with <i>umuthi</i> / <i>imbiza</i>	3	2.2
Home treatment			Throw bones to find cause then go back to inyanga	1	0.7
Boil water to drink	1	0.7	Black tea & water & prayer	1	0.7
Salt & sugar solution or ORS	3	2.2	Prophet ropes / rope around waist	2	1.5
Glucose	1	0.7	Prayer	3	2.2
Total	5	3.6	Total	40	28.9
Traditional / Church treatment			Don't know / nothing	13	9.7
Boil herbs from bush	1	0.7	Total	134	100%
Ginger & other green leaves from garden	1	0.7			
<i>Imbiza</i> ⁴⁴ to drink	3	2.2			
<i>Imbiza yabantwana</i> ⁴⁵	1	0.7			
Burn Doepa	1	0.7			
Burn Doepa or <i>imphepho</i> ⁴⁶	1	0.7			
Burn something	1	0.7			
Cuts	2	1.5			
Cuts with <i>umuthi</i> ⁴⁷ rubbed in	1	0.7			

⁴² Porcupine quills.

⁴³ Ash-based medicine.

⁴⁴ General term for purgative medicines (Varga & Veale, 1997).

⁴⁵ Child's medicine.

⁴⁶ *Helichrysum* spp.

⁴⁷ Medicine.

4.2.8 Ibala

Table 4.38 shows that the TMP as well as relatives would be consulted more for *ibala* than for *inyoni* in this sample as the first course of action. There were caregivers who did not believe in *ibala* however and would just leave it and do nothing (8.3% of sample). Caregivers at the private clinic had the highest proportion of non-believers (20%), followed by the public hospital (9.4%).

Table 4.38: First provider that caregiver reports using if child has *ibala*

Interview setting	First provider or type of treatment if not known where it is obtained							Total n (%)
	TMP n (%)	Church n (%)	Relative n (%)	OTC n (%)	Public n (%)	Private n (%)	Nothing/ DK/ Doesn't believe n (%)	
PHC	22 (44)	5 (10)	7 (14)	9 (18)	3 (6)	2 (4)	2 (4)	50 (100)
Public hospital	21 (39.6)	5 (9.4)	14 (26.4)	2 (3.8)	5 (9.4)	1 (1.9)	5 (9.4)	53 (100)
Private clinic	14 (28)	2 (4)	15 (30)	1 (2)	1 (2)	7 (14)	10 (20)	50 (100)
TMP	52 (98.1)	0 (0)	1 (1.9)	0 (0)	0 (0)	0 (0)	0 (0)	53 (100)
Total	109 (52.9)	12 (5.8)	37 (17.9)	12 (5.8)	9 (4.4)	10 (4.9)	17 (8.3)	206 (100)

If the child's condition gets worse or does not improve, most TMP caregivers (94.3%) would go to a TMP (v. Table 4.39). Over half of PHC caregivers would seek treatment from a Western public provider and nearly a third would go to a TMP. A third of public hospital caregivers would go to a TMP and a third would access a Western public provider. A fifth however, would seek help from their church. Nearly a third of private caregivers would go to a TMP, a quarter would go to a private provider and a fifth would do nothing.

Table 4.39: Second provider that caregiver reports using if child's *ibala* persists

Interview setting	Second provider or type of treatment if not known where it is obtained							Total n (%)
	TMP n (%)	Church n (%)	Relative n (%)	OTC n (%)	Public n (%)	Private n (%)	Nothing/ DK/ Doesn't believe n (%)	
PHC	14 (28)	5 (10)	1 (2)	0 (0)	28 (56)	1 (2)	1 (2)	50 (100)
Public hospital	18 (33.9)	11 (20.8)	2 (3.8)	0 (0)	17 (32.1)	2 (3.8)	3 (5.7)	53 (100)
Private clinic	16 (32)	6 (12)	5 (10)	1 (2)	0 (0)	12 (24)	10 (20)	50 (100)
TMP	50 (94.3)	0 (0)	0 (0)	0 (0)	3 (5.7)	0 (0)	0 (0)	53 (100)
Total	98 (47.6)	22 (10.7)	8 (3.9)	1 (1.9)	48 (23.3)	15 (7.3)	14 (6.8)	206 (100)

The main named traditional treatments that caregivers knew of were cuts and incisions, usually on the red mark on the back of the neck, *imbizas* for the child to drink and a *sput* (v. Table 4.40). Muthi Wenyoni is a popular OTC treatment, along with Dutch medicines, although they would not be used as much as for *inyoni*. In the case of *ibala*, 15% of caregivers specifically named Muthi Wenyoni as a treatment compared to 52.1% for *inyoni*.

Table 4.40: Western, home and traditional treatments administered by caregivers for *ibala*

Description	No.	%
OTC		
Haarlemensis (rub)	3	3.8
Mix <i>Stuips</i> with breast milk	1	1.3
Stuipdruppels / Duiwelsdruppels / Entressdruppels with water	1	1.3
Muthi Wenyoni	12	15.0
ORS	1	1.3
Vicks - Rub	1	1.3
Total	19	23.8
Home treatment		
Crushed tomato leaves & original Colgate	1	1.3
Garlic & boiled water to drink	1	1.3
Total	2	2.5
Traditional / Church treatment		
Insert ground plant in bottom, ears etc	1	1.3
Boil herbs from bush	1	1.3
<i>Imbiza</i> ⁴⁸ to drink	4	5.0
<i>Umtholo</i> ⁴⁹	1	1.3
Burn something	1	1.3
Cuts / incisions	6	7.5
Cuts made at back of head	5	6.3
Makes cuts and <i>spuit</i>	1	1.3
Something to rub	1	1.3
<i>Spuit</i> for 3 days + <i>muthi</i> rubbed in	1	1.3
<i>Spuit</i> with bulb like onion (<i>ngcino?</i>)	1	1.3
<i>Spuit</i> with traditional medicine	1	1.3
<i>Inungu</i> ⁵⁰	1	1.3
Ritual you do once	1	1.3
Black tea & water & prayer	1	1.3
Prayer	4	5.0
Prayer & oil ointment	1	1.3
Total	32	40.0
Massage and it disappears	1	1.3
Left it - just like a birth mark / just leave it / nothing	26	32.5
Total	27	33.8
Total	80	100%

In the case of *ibala*, Table 4.41 shows that the highest SES group has the highest proportion of caregivers who would consult a relative (28.6%), use Western treatment / providers (26.2%) and not do anything or not know what to do (19.1%). The very low and low SES groups have the highest proportions of caregivers who would take their child to a TMP (61.7% and 65.2% respectively).

⁴⁸ General term for purgative medicines (Varga & Veale, 1997).

⁴⁹ *Acacia caffra* (root).

⁵⁰ Porcupine quills.

Table 4.41: First provider that caregiver reports using if child has *ibala* by SES

SES group	First provider or type of treatment if not known where it is obtained					Total
	TMP	Church	Relative	Western	Nothing/ DK/ Doesn't believe	
Very low	29	4	8	4	2	47
	61.7%	8.5%	17%	8.5%	4.3%	100%
Low	43	5	7	7	4	66
	65.2%	7.6%	10.6%	10.6%	6.1%	100%
Medium	26	3	10	9	3	51
	51%	5.9%	20%	17.7%	5.9%	100%
High	11	0	12	11	8	42
	26.2%	0%	28.6%	26.2%	19.1%	100%
Total	109	12	37	31	17	206
	52.9%	5.8%	18%	15.1%	8.3%	100%

χ^2 P value = 0.003

4.2.9 Crying

Caregivers were asked how they would respond to their child if they were crying. Nearly half said that they would treat the child at home first (v. Table 4.42). OTC medicines were mostly given by private clinic and public hospital caregivers, whilst nearly half of TMP caregivers would use traditional medicine. A quarter of PHC and public hospital caregivers report that they would take their child to the PHC clinic as a first course of action.

Table 4.42: First provider that caregiver reports using if child is crying

Interview setting	First provider or type of treatment if not known where it is obtained						Total
	PHC n (%)	Private n (%)	OTC n (%)	Home n (%)	TMP n (%)	Nothing / DK n (%)	
PHC	14 (28)	0 (0)	5 (10)	27 (54)	4 (8)	0 (0)	50 (100)
Public hospital	13 (24.5)	0 (0)	11 (20.8)	25 (47.2)	2 (3.8)	2 (3.8)	53 (100)
Private clinic	1 (2)	2 (4)	17 (34)	27 (54)	2 (4)	1 (2)	50 (100)
TMP	2 (3.8)	1 (1.9)	4 (7.6)	22 (41.5)	24 (45.3)	0 (0)	53 (100)
Total	30 (14.6)	3 (1.4)	37 (17.9)	101 (49)	32 (15.5)	3 (1.4)	206 (100)

As can be seen in Table 4.43, if the child continues to cry, two-thirds of PHC and public hospital caregivers would take their child to a PHC clinic. Only 22.6% of TMP caregivers would go to a PHC clinic and 67.9% would consult a traditional healer. Most private clinic caregivers (68%) would go to a private provider.

Table 4.43: Second provider that caregiver reports using if child continues to cry

Interview setting	Second provider or type of treatment if not known where it is obtained							Total n (%)
	PHC n (%)	Pub hos n (%)	Private n (%)	OTC n (%)	Home n (%)	TMP n (%)	Nothing / DK n (%)	
PHC	33 (66)	2 (4)	1 (2)	3 (6)	9 (18)	2 (4)	0 (0)	50 (100)
Public hospital	33 (62.3)	4 (7.6)	1 (1.9)	0 (0)	9 (16.9)	5 (9.4)	1 (1.9)	53 (100)
Private clinic	2 (4)	0 (0)	34 (68)	1 (2)	11 (22)	2 (4)	0 (0)	50 (100)
TMP	12 (22.6)	1 (1.9)	0 (0)	1 (1.9)	3 (5.7)	36 (67.9)	0 (0)	53 (100)
Total	80 (38.8)	7 (3.4)	36 (17.5)	5 (2.4)	32 (15.5)	45 (21.8)	1 (1.9)	206 (100)

For crying, Table 4.44 shows that although caregivers in all 4 SES groups had similar proportions who would use home treatment, the 2 lowest SES groups have higher proportions who would consult a TMP (25.4% very low; 22.7% low) and the medium and high SES groups have higher proportions who would use OTC treatment (23.5% medium; 33.3% high).

Table 4.44: First provider that caregiver reports using if child is crying by SES

SES group	First provider or type of treatment if not known where it is obtained						Total
	Public	Private	OTC	Home	TMP	Nothing/ DK/ NS	
Very low	7	0	3	23	12	2	47
	14.9%	0%	6.4%	48.9%	25.5%	4.3%	100%
Low	12	1	8	30	15	0	66
	18.2%	1.5%	12.1%	45.5%	22.7%	0%	100%
Medium	7	1	12	26	4	1	51
	13.7%	2%	23.5%	51%	7.8%	2%	100%
High	4	1	14	22	1	0	42
	9.5%	2.4%	33.3%	52.4%	2.4%	0%	100%
Total	30	3	37	101	32	3	206
	14.6%	1.5%	18%	49%	15.5%	1.5%	100%

As can be seen in Table 4.45, non-medical home treatment mostly involves comforting the child, checking the child's temperature, changing its nappy or bathing or feeding it. The most common type of treatment given however would be OTC medicines, the most popular being Panado, Dutch medicines and colic remedies. Traditional medicines mostly include incenses to burn such as Doepa, *imphepho* or *inyamazane*. Other rituals to appease the ancestors or ward off evil spirits were also mentioned. Although Doepa is a Dutch medicine and therefore an OTC medicine, it is viewed in the same way as *imphepho* and *inyamazane* and is therefore grouped with the traditional medicines in this analysis.

Table 4.45: Western, home and traditional treatments administered by caregivers for crying

Description	No.	%	Description	No.	%
OTC			Home treatment		
Panado	49	23.4	Ask child what's wrong	2	1.0
Buscopan / Umthuthuzeli for colic/cramps	4	1.9	Bath and feed child	1	0.5
Propain / Stopain / Paracetamol	3	1.4	Bath child	4	1.9
Previous medicines from Paed	1	0.5	Change nappy / check nappy	1	0.5
Gripe Water & <i>Stuips</i>	1	0.5	Check breathing	1	0.5
Entressdruppels	6	2.9	Check temperature	2	1.0
Stuipdruppels / Haarlemensis / Behoedmiddel / Borsdruppelss / Entressdruppels / Groen Amara / Balsem Kopiva / Rooilvental	1	0.5	Check what the problem is (check nappy / feed child etc)	12	5.7
<i>Stuips</i> in the bath - Stuipdruppels / Balsem Kopiva / Rooilavental	1	0.5	Comfort the child / calm child down	30	14.4
<i>Stuips</i>	2	1.0	Feed child	9	4.3
Haarlemensis	2	1.0	Play with child	1	0.5
Haarlemensis & water / breast milk	2	1.0	Put child in cold water	1	0.5
Haarlemensis in bath	1	0.5	Put child on stomach	1	0.5
Cough mixture	1	0.5	Ride in the car	1	0.5
Karvol decongestant	1	0.5	<i>Spuut</i>	1	0.5
Stuipdruppels / Haarlemensis / Groen Amara	1	0.5	Undress child & calm her down	2	1.0
Total	76	36.4	Burn camphor	1	0.5
Nothing - depending on cry	1	0.5	Total	70	33.5
Nothing at first	2	1.0	Traditional / Church treatment		
Total	3	1.5	<i>Umuthi ukushunqisa</i> ⁵¹	19	9.1
			Burn Doepa	18	8.6
			Burn <i>inyamazane</i> ⁵²	10	4.8
			Burn Doepa or <i>imphepho</i> ⁵³	5	2.4
			Burn Entressdruppels & <i>imphepho</i>	1	0.5
			Doepa or <i>Vimbela</i> ⁵⁴	1	0.5
			Call family names (ritual)	1	0.5
			Get dust from middle of road and put in child's bath	1	0.5
			<i>Intelezi</i> ⁵⁵	1	0.5
			Something to put in porridge like sticks	1	0.5
			Prayer	2	1.0
			Total	60	28.7
			Total	209	100%

⁵¹ Treat with medicinal fumes.

⁵² Powder made up of various dried animal parts (e.g. hedgehogs, baboons).

⁵³ *Helichrysum* species.

⁵⁴ Vaseline-based rub used for protection.

⁵⁵ *Sansevieria aethiopica* (root) or mixture of plants - *Adenia gummifera*, *Foeniculum vulgare*, *Berkheya* spp., *Clivia* spp., *Drimea* sp., *Urginea* sp., *Disocorea* spp., *Eriosepermum cooperi*, *Cephalaria natalensis*, *Kalanchoe* spp.

4.2.10 Teething

Nearly three-quarters of all respondents would access some form of OTC provider to obtain treatment for teething (v. Table 4.46). Nearly a third of TMP caregivers would access some form of traditional provider for teething treatment. When this is broken down by treatment type, 63.1% of all respondents would use an OTC medicine and 23.8% would use beads, an amulet or a prophet rope.

Table 4.46: First provider that caregiver reports using if child is teething

Interview setting	First provider or type of treatment if not known where it is obtained						Total n (%)
	OTC n (%)	Public n (%)	Private n (%)	Home n (%)	TMP n (%)	Nothing / DK n (%)	
PHC	39 (78)	7 (14)	0 (0)	1 (2)	2 (4)	1 (2)	50 (100)
Public hospital	42 (79.3)	3 (5.7)	0 (0)	1 (1.9)	4 (7.6)	3 (5.7)	53 (100)
Private clinic	41 (82)	1 (2)	2 (4)	5 (10)	1 (2)	0 (0)	50 (100)
TMP	28 (52.8)	3 (5.7)	1 (1.9)	2 (3.8)	17 (32.1)	2 (3.8)	53 (100)
Total	150 (72.8)	14 (6.8)	3 (1.5)	9 (4.4)	24 (11.7)	6 (2.9)	206 (100)

If the child's teething problems get worse, more advice is sought from health care providers (v. Table 4.47). Less than half of all respondents state that they would get medicine from a pharmacy or supermarket, although this is still the main course of action for PHC, public hospital and private caregivers. More TMP caregivers (45.3%) would obtain medicine from a traditional provider, whilst 32% of PHC and 24.5% of public hospital caregivers would go to a PHC clinic. Although most (66%) caregivers at the private clinic would obtain medicine from a pharmacy or supermarket, 22% would go to a private provider. More PHC and private clinic caregivers report that they would use beads or amulets as their second course of action than as the first.

Table 4.47: Second provider that caregiver reports using if teething problems persist

Interview setting	Second provider or type of treatment if not known where it is obtained						Total n (%)
	OTC n (%)	Public n (%)	Private n (%)	Home n (%)	TMP n (%)	Nothing / DK n (%)	
PHC	25 (50)	16 (32)	4 (8)	1 (2)	4 (8)	0 (0)	50 (100)
Public hospital	25 (47.2)	13 (24.5)	2 (3.8)	4 (7.6)	3 (5.7)	6 (11.3)	53 (100)
Private clinic	33 (66)	1 (2)	11 (22)	2 (4)	2 (4)	1 (2)	50 (100)
TMP	17 (32.1)	3 (5.7)	1 (1.9)	3 (5.7)	24 (45.3)	5 (9.4)	53 (100)
Total	100 (48.5)	33 (16)	18 (8.7)	10 (4.9)	33 (16)	12 (5.8)	206 (100)

χ^2 P value = 0.000

As can be seen in Table 4.48, treatments for teething mostly comprise teething powders, gels, as well as pain relievers. Ten caregivers reported that they would use Baby's Own tummy tablets which are crushed and rubbed on the gums. These tablets actually work as an antacid and mild laxative. A quarter of all caregivers would put beads or an amulet known as *ncweba* around the child's neck or waist. The distinctive green 'Prophet' ropes are also worn around the neck, waist, upper torso, ankles or wrists. This group was mostly composed of public hospital and TMP

caregivers. These treatments can be obtained from both Western and traditional providers. Most commonly used are the grey beads or a black velvet / copper wire necklace with a small amulet sewn into it. An horse's tooth included with the grey beads was also popular.

Table 4.48: Western, home and traditional treatments used by caregivers for teething

Description	No.	%	Description	No.	%
OTC			Traditional treatment		
Teething powders	76	24.1	<i>Sput</i> if child has diarrhoea	1	0.3
Ashton & Parsons Infants Powders	8	2.5	Grind <i>ingingila</i> ⁵⁶ then rub on teeth	1	0.3
Vidol (powders)	7	2.2	Dekgong ⁵⁷ - rub on gums	1	0.3
Teething tablets	5	1.6	Rub ashes on forehead if fontanelle is sunken	1	0.3
Rooipoier (constipation powders)	5	1.6	<i>Sput</i> & <i>umuthi</i> ⁵⁸	1	0.3
Quma / iQhuma / iqhuma (antacid)	9	2.8	Amulet around body	2	0.6
Baby's Own Tummy tablets (antacid and mild laxative)	10	3.2	Prophet rope around waist to stop diarrhoea	1	0.3
Give medicines to stop diarrhoea	1	0.3	Black rope with Doepea around neck and waist	1	0.3
Baba Suur (for hyperacidity)	2	0.6	Green rope with Doepea in amulet	1	0.3
Teejel / Bongela / Teething gel	26	8.2	<i>Imfibia</i> ⁵⁹ necklace with 2 white beads inbetween	2	0.6
Teething rubbers	7	2.2	<i>Imfibia ncweba</i> ⁶⁰	1	0.3
Panado	19	6.0	Black velvet / copper wire <i>ncweba</i>	30	9.5
Calpol	2	0.6	Cut piece of toothbrush handle for necklace	1	0.3
Zamoflour drops	1	0.3	Necklace with 5 cent coin	1	0.3
Crush Disprin and rub child's gums	1	0.3	Brown and black beads	1	0.3
Total	179	56.6	Grey beads	56	17.7
Home treatment			Fig tree stem	1	0.3
Bush tea (Rooibos)	1	0.3	Grey beads & fig stem necklace	1	0.3
Comfort child	1	0.3	Grey beads & <i>izinyo lehashe</i> ⁶¹	3	0.9
Fluids	1	0.3	<i>Izinyo lehashe</i>	7	2.2
Sugar & salt solution	2	0.6	Total	114	36.1
<i>Door clara</i> ⁶² from garden	1	0.3	Neighbour advised don't use teething gels	1	0.3
Teething biscuits	1	0.3	Nothing	14	4.2
Boil mealies and give that water to drink	1	0.3	Total	15	4.7
Total	8	2.5	Total	316	100%

⁵⁶ Gizzards.

⁵⁷ Charcoal from burnt branch.

⁵⁸ Traditional medicine.

⁵⁹ Cowrie shell.

⁶⁰ Small bag containing medicines or charms and worn around the neck.

⁶¹ Horse's tooth.

⁶² Translation not known.

For teething, the very low SES group had the highest proportion who would use TMP treatment (23.4%) and the lowest proportion who would use OTC treatment (53.2%) (v. Table 4.49). Around 89% of low, medium and high SES caregivers would use OTC treatment. The very low and low SES caregivers had the highest proportions reporting that they would use public sector care as a first choice for teething (10.6% and 9.1% respectively).

Table 4.49: First provider that caregiver reports using if child is teething by SES

SES group	First provider or type of treatment if not known where it is obtained						Total
	OTC	Public	Private	Home	TMP	Nothing/ DK/ NS	
Very low	25	5	0	3	11	3	47
	53.2%	10.6%	0%	6.4%	23.4%	6.4%	100%
Low	51	6	0	1	7	1	66
	77.3%	9.1%	0%	1.5%	10.6%	1.5%	100%
Medium	40	1	2	1	5	2	51
	78.4%	2%	3.9%	2%	9.8%	3.9%	100%
High	34	2	1	4	1	0	42
	81%	4.8%	2.4%	9.5%	2.4%	0%	100%
Total	150	14	3	9	24	6	206
	72.8%	6.8%	1.5%	4.4%	11.7%	2.9%	100%

4.3 Results: Immunisation

Although all 206 caregivers in the sample reported that their child had been vaccinated, it was difficult for caregivers to remember exactly which vaccinations the child had had. For this reason, if the caregiver had the child's Road to Health (RTH) Chart⁶³ then this was checked to see if the child's vaccinations were up-to-date. Overall, 40.3% of caregivers had their child's RTH Chart with them on the day of interview. These were mostly from the public hospital (39.8%) and the TMP (34.9%). Two caregivers did not have the RTH Chart on them but they remembered which injections their child had had. Table 4.50 shows the children for whom data was available and whether or not their immunisations were up-to-date.

Table 4.50: Vaccinations

Vaccine	Age	No RTH card	Had a RTH card / knew answer		
			Had injection	Too young	Missed injection
BCG*	Birth	121	84	0	1
Polio 0	Birth	121	85	0	0
Polio 1	6 weeks	121	73	10	2
Polio 2	10 weeks	121	67	15	3
Polio 3	14 weeks	121	60	21	4
Polio 4	18 months	Not collected			
Hib 1**	6 weeks	121	72	10	3
Hib 2	10 weeks	121	67	15	3
Hib 3	14 weeks	121	59	21	5
DTP 1***	6 weeks	121	73	10	2
DTP 2	10 weeks	121	68	15	2
DTP 3	14 weeks	121	60	21	4
DTP 4	18 months	Not collected			
Hep B 1****	6 weeks	121	73	10	2
Hep B 2	10 weeks	121	68	15	2
Hep B 3	14 weeks	121	60	21	4
Measles 1	9 months	121	43	39	3
Measles 2	18 months	Not collected			

* Bacillus Calmette-Guerin – Mycobacterium bovis attenuated tubercle organism)

** Haemophilus influenza B

*** Diptheria, Pertussis, Tetanus

**** Hepatitis B

⁶³ A card which records growth and immunisation, appointment dates and hospital admissions (Wagstaff, 2001).

Data were only collected on the primary schedule of vaccinations and not for the boosters Polio 4 and 5, DTP 4, Measles 2 and DT 1. Overall, there were 11 children who had not received at least one of their injections on time. The largest proportion not vaccinated on time are the vaccinations at 14 weeks (Hib 3, Hep B 3 and Polio 3). It should be remembered however that the Road to Health Charts are also open to error and these children may have received the appropriate vaccinations, but they may not have been recorded on the chart by the health worker (Wagstaff, 2001).

Table 4.51 provides information on the facility on the day of interview and characteristics of the caregivers for the 11 children whose primary schedule of vaccinations were not up-to-date. When looking at this information it should be remembered that these data are biased in terms of who had a Road to Health Chart available on the day of interview.

Five of the children were at the public hospital, 3 were at the PHC clinic and 3 were at the traditional healer. Two caregivers were from the very low SES group, 4 were from the low SES group, 4 were from the medium SES group and 1 was from the highest SES group. Four caregivers were under the age of 25, 6 were between 25 and 34 years of age and 1 caregiver was in the 35+ age group. Six caregivers had some secondary education, 4 caregivers had completed their secondary education and 1 caregiver had higher education. In terms of employment, only 2 of the caregivers were working (factory and retail).

Table 4.51: Facility and caregiver characteristics of those children whose primary vaccination schedule was not up-to-date

ID	Facility	SES group	Caregiver's age group	Caregiver's highest education level reached	Caregiver's employment
9	Public Hospital	low	<25	Some secondary	Unemployed
44	Public Hospital	medium	35+	Higher	Unemployed
48	Public Hospital	very low	<25	Some secondary	Unemployed
52	Public Hospital	low	25-34	Completed secondary	Unemployed
53	Public Hospital	low	25-34	Some secondary	Unemployed
84	PHC clinic	high	25-34	Completed secondary	Unemployed
89	PHC clinic	medium	25-34	Completed secondary	Employed
90	PHC clinic	medium	<25	Completed secondary	Employed
137	TMP	medium	<25	Some secondary	Unemployed
138	TMP	low	25-34	Some secondary	Unemployed
143	TMP	very low	25-34	Some secondary	Unemployed

5. Results: Spheres of influence

Key findings from the focus groups and subsequent in-depth interviews were used to develop an initial framework of health-seeking behaviour in the South African context which has its basis in other health-seeking models discussed in Chapter 2 (Andersen, 1995; Janz & Becker, 1984). Figure 5.1 shows the basic elements of these models and how they overlap.

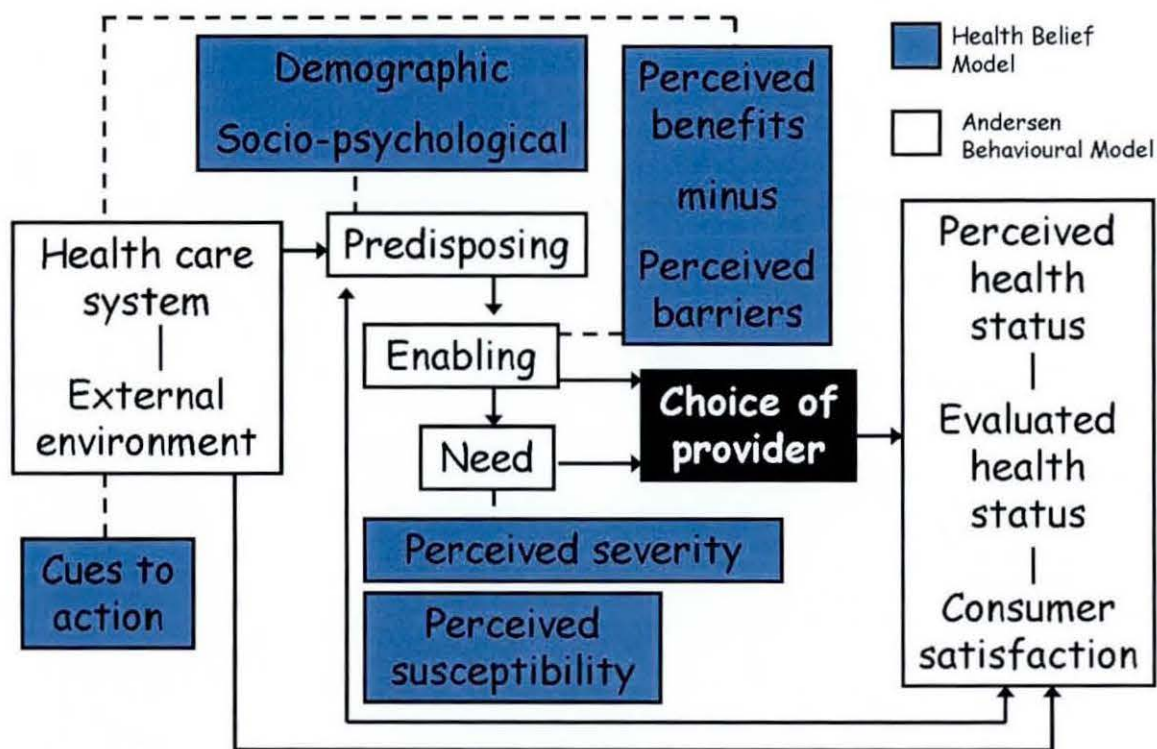


Figure 5.1: Initial framework of health-seeking behaviour

Chapter 5 presents results on these and other spheres of influence found in both the qualitative and quantitative data. Results will be structured around caregiver beliefs (5.1), characteristics of the child (5.2), characteristics of the illness (5.3), characteristics of the caregiver and the household (5.4), enabling factors (5.5), characteristics of the provider (5.6) and the effectiveness or outcome of the treatment (5.7).

5.1 Caregiver beliefs

This section presents both qualitative and quantitative results where applicable on the factors affecting caregiver beliefs: world-view, religion, family beliefs and social networks.

5.1.1. Illnesses and treatment in the context of world-view

In the South African world-view, surrounding the baby are threats to its health in the form of natural and supernatural causes of illness which need to be prevented or treated. Illnesses caused by witchcraft, supernatural causes or 'pollution' are said to be "*Abantu* illnesses" or 'diseases of the African Peoples' because of how they have been culturally constructed in the South African world-view (Ngubane, 1977; Hammonde-Tooke, 1989). The reason why illness aetiology is so important is because it tells the caregiver whether traditional or Western medicine should be used, however this will depend on their beliefs:

"It's just like you cannot go to a GP and then go to an inyanga for the same illness you know." (FG1)

"I will ask people for the right one [healer] because she know the ibala and inyoni. You must go to the witchdoctor - that one is for the witchdoctor. They say there are some doctors who knows how to treat fast because at the clinic they won't do." (CG2 – public hospital)

[Moderator: So you've never experienced anything like that [inyoni]?] R1: "No I haven't believed in that...that's why." (FG3)

Illness aetiology may be determined by the efficacy of one type of medicine. If Western medicine fails to cure the illness, then traditional medicine may be required:

"The illness determines whether you take the child to a traditional healer or the doctor. The doctor will give an injection to the child and Panado and it will depend on whether the child gets better whether you take him to a traditional healer." (TMP2)

A summary of the principal child health problems and their traditional treatments that in-depth interview respondents (caregivers, nurses and traditional healers) discussed is presented in Figure 5.2. In the following sections causes, treatment and prevention of these childhood illnesses will be discussed.

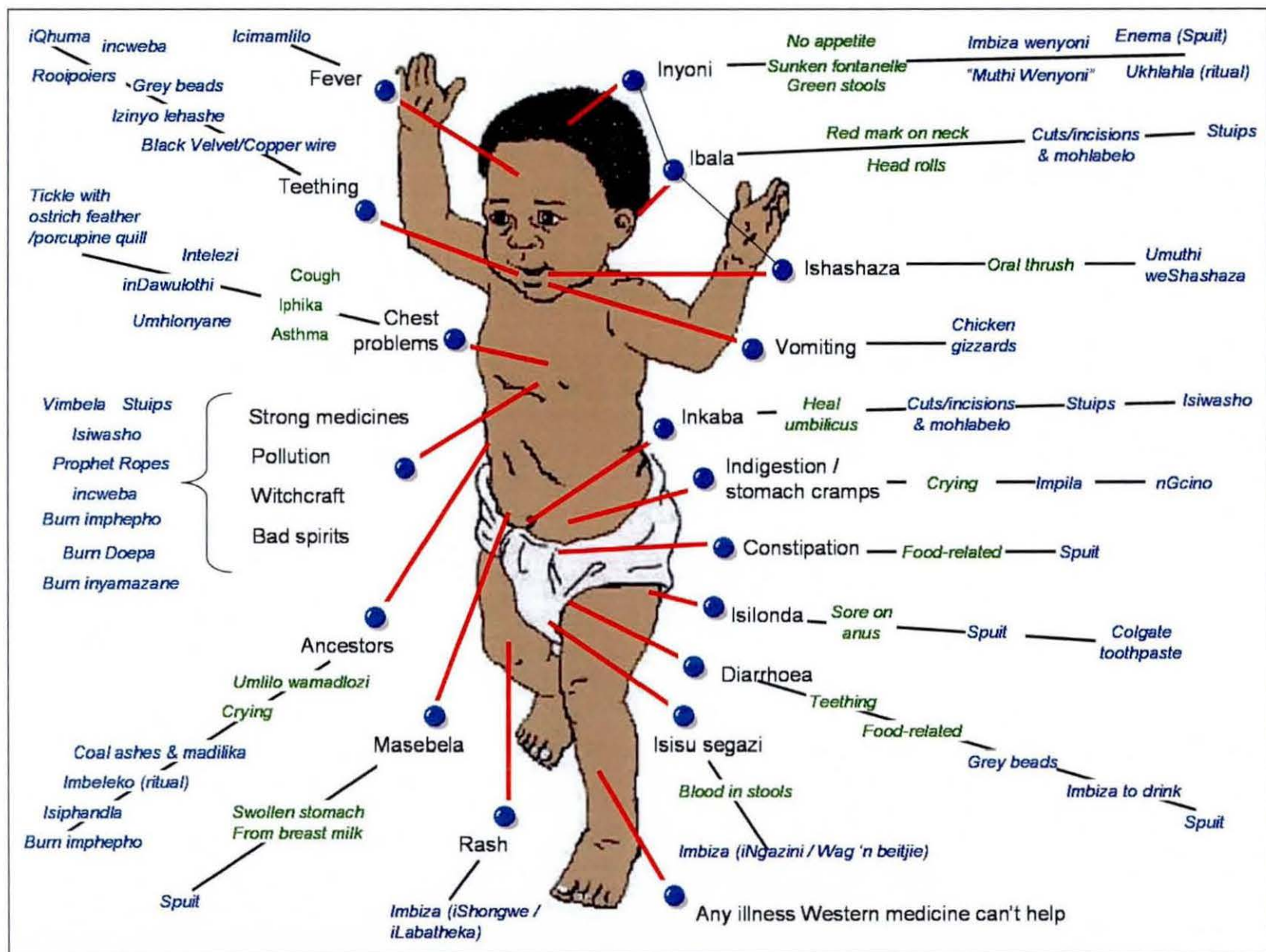


Figure 5.2: Childhood problems traditional medicine can treat (■ Health problem ■ Symptoms ■ Treatment)

In traditional healing, rather than treating just the symptoms, the cause of the problem needs to be treated:

"You discharge your child today with diarrhoea and vomiting, treated for 3 days and the child becomes well and they still go to the traditional healer. The reason being that they're going to heal the inyani now... Ja, they believe that the hospital can't heal here, the hospital can only heal the dehydration and give water and whatever and make the child strong, but they cannot heal inyani. Inyani must be cured in the traditional way."
(Nurse2 – public hospital)

"What causes diarrhoea in children is ibala and inyani. Once you treat that the diarrhoea stops." (TMP4)

Western doctors are not able to diagnose the *Abantu* (African) illnesses. This is confirmed through nurses' quotations on causes of illness throughout this section, since a Western health care provider would probably have a different diagnosis:

"It really would not help to take them to the doctor, because you will take them to the doctor and the doctor would probably check for the temperature, check for whatever vital signs that they look at when using their Western medication. They wouldn't even notice the mark. So you will take the child to the doctor. You would come back from the doctor and overnight you could probably wake up with your child dead and you would be asking yourself what went wrong because I did take my child to the doctor. Only you find that it's not something that a doctor can see or diagnose. It's something traditional."
(CG4 – private clinic)

Although Western doctors were reported not to be able to diagnose *Abantu* illnesses, traditional healers were able to diagnose some non-*Abantu* illnesses, e.g. jaundice, worms and measles:

"This can be seen in the child's eyes. The eyes become yellow, and you will see that this one has got jaundice... That is what makes us realise that the child has got jaundice. It is easy to see when the child has got jaundice. She or he becomes yellow in colour." (TMP1)

"When the child has got a big stomach they are born having worms, and they make the child look like he's got a big stomach... the child has got worms. These were caused by the mother during her pregnancy. She used to eat lot of meat during pregnancy. So those things do affect the child. It is just like women who drink alcohol during pregnancy. Things like that have a negative impact on the child's wellbeing." (TMP6)

"We treat measles because it's a well known disease, and chicken pox as well we treat it, as long as you brought the child here, I treat them." (TMP6)

If TMPs could not treat an illness, they reported referring the patient on to a Western provider:

"No I don't treat jaundice, I just refer them to the clinic... Like you might find that you are trying to attend a patient and you don't manage to heal the patient, then you will end up referring her to the hospital." (TMP1)

"I examine the child and if I find that the child has flu, I refer them to the doctor, because I don't treat flu." (TMP5)

"Diseases such as polio. I am lying if I said I could treat it." (TMP6)

The following results outline how the South African world-view affects the management of childhood illnesses and health problems. In terms of the cause of an illness, caregivers identified similar themes to the illness aetiology groupings of Hammonde-Tooke (1989): 'pollution', evil spirits, witchcraft, strong medicine, God, the ancestors and non-supernatural causes of illness, although there is considerable overlap between these groups. This section provides qualitative information from TMPs, caregivers and nurses on some of the reported causes of different illnesses and their subsequent treatment.

5.1.1.1 'Pollution'

In some cases, illnesses may be caused by being in a state of ritual impurity (Hammond-Tooke, 1989). From the results of this study, states of ritual impurity mentioned include having a child who has died, being pregnant, promiscuous young women or menstruating women as well as attending a funeral.

"It's like when someone's child has died, isn't it? We are not the same and then, we don't have the same beliefs - they don't want you to hold another baby." (FG3)

"Others don't want you to hold a child when you are pregnant." (FG3)

"And these girls that sleep too much with the boys. Before 10 days we don't allow them to walk into the baby's room." (FG3)

"You take this thing and chew it [isiphepheto] and apply it on the child's fontanelle. It protects the child against evil spirits and even women who are having their period – when for example they play with the child while on their period the child is not affected. ...Even in cases where a person is from a funeral, if he wants to hold the child he must first chew it." (FG5)

There were also negative beliefs regarding the effect of breast milk on the child's health. This may cause a bloated stomach, sometimes accompanied by green veins, which was referred to as 'masebela':

"But they have this notion that it's from the dirty milk, that's why the child is getting this bloated stomach and the green veins." (Nurse1 – public hospital)

Usually purgatives are given. One cited treatment was *utshwala-bezinyoni*¹, a type of marijuana. Another type of treatment to get rid of the green veins or *imithambo* is referred to as 'Stan-tanyana', although it is not known exactly what this is:

"Istan-tan removes the green 'imithambo' from the child's body and it makes the child to look fresh with the healthy body." (TMP1)

"That is from the breast milk the child has in his tummy. That medicine is called utshwala benyoni... It happens when the child has had a lot of breast milk and it stays in the tummy and becomes bloated." (TMP2)

"It is caused by breasts. If a child stops breastfeeding masebela should be taken out with umasango [could be insangu (Cannabis sativa)] in a sput. With some children it is the culture, others it is not... If the child is no longer breastfed the stomach will start swelling when the child is aged 3-4 and that means amasebela were not taken out. It does not happen when the child is being breastfed, but you usually see children with stomachs swollen at the ages 3-4." (TMP5)

'Dirty' breast milk also falls under the concept of pollution because of the way it might become contaminated. A caregiver from Focus Group 1 had also been told by a traditional healer that her child had caught *inyoni* from her breast milk as a result of something in her vagina:

"I went to this lady and she treated more especially me than the child because like I was breastfeeding, that's how it was being transferred. So they had to cut some things under my vagina, they said that's the cause of that thing, that inyoni." (FG1)

"Because a child who has a bloated stomach, it's because when a mother is pregnant she breastfeeds that child or runs [sleeps] around and comes back to breastfeed. That child's stomach gets bloated so they should take a sput with milk and give that child a sput. They call the child 'serathane' [translation not known]." (TMP3)

¹ Red dagga [marijuana], *Leonatis leonurus*.

TMP6 described a similar process to that described in FG1 in which *ishashaza* is cut from the mother's vagina to prevent the child from getting *ibala* or *inyoni*:

"It [ibala] cannot be prevented because in Venda culture before the child's mother conceives they go and cut this ishashaza that's in her vagina. They cut it so when the child is born it doesn't appear." (TMP6)

Following birth there are therefore beliefs that the child needs to be given a purgative or the 'dirt' left inside will cause illness:

"On children especially immediately after birth, cleaning all dirty things in their stomach. Maybe she can do that twice in a week." (TMP3)

From a Western perspective however, the swollen stomach may be a sign of Kwashiorkor or liver disease.

"But commonly that thing it goes with Kwashiorkor, and marasmic. Commonly it's kwashiorkor. And they'll have the huge stomach, it's because of the diet. They'll be eating this pap [stiff maize meal porridge] pap, you know, nothing, or plain porridge only. That's the thing." (Nurse3 – private clinic)

"It could be something else, it could be malnutrition, it could be some other liver problems, it's a lot of things. You have to investigate to find out what is causing this. But they have this notion that it's from the dirty milk, that's why the child is getting this bloated stomach and the green veins. Obviously veins will be exposed if the child's stomach goes like big, you will have those veins showing. But you need to investigate what is causing the bloated..." (Nurse1 – private clinic)

'Pollution' is also one way that a child may develop *inkaba*² problems. If 'polluted' friends or family members enter the child's room before the umbilical cord has fallen off then it will have problems healing.

"They come inside (the room) before the child's umbilical cord falls off...it doesn't heal." (FG3)

Humans and animals are said to leave *umkhondo* or *mohlahla* which are invisible tracks either on the ground or in the air which can be absorbed by others who walk over them or inhale them. These supernatural contagions can be picked up by travelling long distances, coming into contact with many people or by being in places which are more likely to have them such as funerals and weddings.

² Umbilicus.

Traditionally a vulnerable new-born should therefore not be taken out of the house for a few months, although in urban Johannesburg and Soweto this traditional practice appears to be less common according to Focus Group 3 respondents. This form of 'protection' would depend on the family's beliefs and their working arrangements, as pointed out by Caregiver 4:

R2: Not these days. (FG3)

R1: They are born today, tomorrow you see them in town.

R3: But not ours, because we ourselves we used to stay 3 months.

R2: For a boy, they give you 3 months, and then a girl 5 months.

R1: But not really now.

"Eh, iya, there is a difference [how long you should stay indoors] but it depends on what the family prefers and what is convenient for you. But normally it will be like 3 months if you are not working, but then it can also be cut down to a month." (CG4 – private clinic)

5.1.1.2 Evil spirits and witchcraft

In some cases, the afore-mentioned 'tracks' (*imikhondo / inyamazane*) are left on purpose through witchcraft to cause harm to others. These are known as 'muthi traps' and children are particularly susceptible to them, even if they were targeted at someone else:

"...you know people who like interfering in other people's affairs, people are just naughty, they can bewitch you... because there are some people who do things intentionally, especially those people who likes other people's things..." (TMP6)

"Sometimes you find that, that muthi trap was not meant for you, but it can affect a child." (TMP5)

"Some are there [disabilities] not because the child was born with it; they are just things being created intentionally by jealous people." (TMP6)

"Ja, for instance like the CPs which is Cerebral Palsy..., then the mothers will go to the traditional healer and that is a condition that cannot be changed...Ja, and they take them to the traditional healer as if maybe it's something like they've been bewitched. And then after they've seen that it's not helping they'll decide to come to hospital. And in hospital there's nothing that you do for a CP, but just to rehabilitate the child and physio until maybe..." (Nurse2 – public hospital)

Imimoya emibi or bad spirits in the air can also cause a child great distress. An affected child is restless and fretful and crying a lot is therefore a sign that there are evil spirits around:

"I believe when there is witchcraft around, then the child feels it, she can feel something, like evil spirits." (FG4)

"Let's say a child cries in the night between 12 or maybe 2am. You try to give her a bath, you try to make her sleep but she can't sleep. This is a sign that there are evil spirits around the house." (CG5 – public hospital)

"Then I will. I can do anything for this child because now if they say it's OK but it's still crying that makes me worried because he's still crying and they say there's nothing with him or maybe there's the witch thing somewhere." (CG2 – public hospital)

*Tokoloshe*³ may also be sent to cause mischief. Infants and pregnant women are more vulnerable to these contagions and the Dutch medicines, in particular *Haarlemensis*, are commonly used for protection:

"Yes, they can be bewitched, you can find them being sent tokoloshe and find that the child doesn't sleep for the whole night or has a sleepless night." (TMP1)

*"When the child has got tokoloshe, obviously the child will end up dying. You can heal the child when she has got tokoloshe... Yes, there are those medicines which you have to mix, *Stuipdruppels* and *Haarlemensis*... Mix with *Doepa* as well, and smear the child with it, by that you will make the child drunk." (TMP6)*

5.1.1.3 Strong medicines

In contrast to Western beliefs about taking medicine to reduce contagion, in South Africa taking strong 'African medicines'⁴ can be harmful to anyone else you come into contact with, and thus 'contagious'. This is because of traditional medicine's association with spells and witchcraft, such as *idliso* (poisoning):

"There are some people that believe that I can make my husband from the muthi [medicine] to love me. I can make you to be not successful from the muthi. Those people don't come out because of that, but if I use a plain herb like this one, cooking it and drinking it, I wouldn't hide. But those who are hiding it, they are using it against other people." (FG3)

"So people don't want to say they do go to traditional healers because mostly it is associated with witchcraft, that's the problem." (FG1)

*"Yes, many people suggested that this thing is not TB, it's the witch thing that maybe they've done something to her and told us maybe it's *idliso*..." (CG2 – public hospital)*

³ Water sprite used by witches.

⁴ Sotho speakers make a distinction between *Ditlare tsa Sesotho* or *Setho* (medicine of African culture) and *Ditlare tsa Sekgoa* (medicine of White culture) (de Wet, 1998a).

If a baby has not been properly strengthened and they come into contact with someone who has used strong traditional medicine, or indeed if they themselves do not use traditional medicine and someone else does, they experience what is known as 'ukweleka ngesithunzi'⁵. Symptoms include crying and restlessness and according to TMP3 may lead to death if untreated:

"The kind of medicine you are talking about is used when a child was 'overpowered' because of someone who uses bad spirits or strong muthi then we use these kinds of medicines." (FG2)

"Maybe somebody is using muthi, and you don't use muthi at all. As soon as that person arrives, the baby will just go that way [start crying] and then you'll know definitely there's something wrong. He will sense..." (FG4)

"There is this thing, like somebody may come to visit, only to find that the person's body has got strong medicines on it. When that person leaves your place, the child may start to have a problem and end up dying. It is even easy when that kind of a person finds the child being weak. When the child is weak it is easy that they might die from those muthis." (TMP3)

Children are said to 'inhale' the strong medicines, also referred to by TMP3 and TMP1 as 'bad spirits', a process known as *kuhabula*⁶:

"Yes, because those people who are using muthi - sometimes the muthi is too strong for the child. Maybe the child can inhale it and get sick, you see." (CG2 – public hospital)

"Like for example, you may find that somebody is having strong muthi, and you are coming across that person. At night the child can't sleep. The child will cry for the whole night because of those muthi. Children can easily sense things that are not good... When they say khabula [kuhabula], they refer to when the child has been affected by the evil spirits. Khabula [kuhabula] is when you have travelled with the child and they inhaled bad spirits from other children." (TMP3)

⁵ To feel or suffer the weight of someone's overpowering influence (Ngubane, 1977:p.26).

⁶ Translator left these as *rhabula* or *khabula*. Term '*kuhabula*' found in Green (1985).

Dutch medicines can also have an overpowering effect on a child and fall into the category of 'strong medicines':

"Hayi, they say it's dangerous [Duiwelsdrekdruppels]. When someone has used it and when you come in with a child, the child cries and gets sick and can even die... But it is said it is not right for children. If someone uses it the child will cry." (FG5)

And this thing falls in [fontanelle]... you see if the child was suppressed or was exposed to strong medicines his food comes through his nose - it's a sign that the child is suppressed. The other thing you will see when the child starts having running stomach that he is suppressed and it is like he was exposed to Stuips. Then you must make sure you strengthen the child..." (FG2)

"...you will find that your child inhaled Stuips to an extent that they might end up suffocating. You see this bottle of Stuips? Some people use it in the bath and when they come into contact with children, children inhale it... Yes, due to those evil spirits... you will see the child will have igwebu [foam] when they cry, there is some foam coming out of their mouth." (TMP1)

5.1.1.4 God and the Ancestors

The ancestral spirits are held in high esteem and customary rites are usually performed to honour them. If these are not carried out, then the ancestors may show their disapproval through ill-health, misfortune, or even death of a family member:

"Because if you just do it [name child without ceremony] and you don't request the name, the child could get sick or the child could die..." (CG4 – private clinic)

"Maybe the ancestors are just making the mother aware that they don't like things that she is doing. Maybe the mother is doing things that are out of order." (TMP3)

"It is not bad luck, but a lesson they will have to learn to inform them that their child is not their child. They share the child with the ancestors... Like your mother or grandmother she loves you too much, and then now she's gone but she looks after you. You get the baby, now she wants that baby to share with you. Now if you don't think about that then she wants to show you that she's here. She will show you through the baby to let you know that she's here. If you go to the sangoma she will throw the bones and tell you what to do." (TMP5)

If the child is crying a lot for no apparent reason, this may be a sign from the ancestors that they are not pleased. Rituals include slaughtering a sheep or goat at a ceremony where *umqombothi*⁷ is drunken and an *isiphandla*⁸ is tied around the child's wrist:

"Yes, if I have money I have to slaughter a sheep for him, like now he's crying we think and know because with my first born it was the same. He was crying a lot, but after I slaughtered the sheep and talked to the ancestors he stopped crying.." (CG2 – public hospital)

"...like with her [the child] - because her granny on her father's side she is her namesake Busisiwe. So because she had passed on we had to request that name. You cannot just name a child, especially if it is an eldest person's namesake. So you have to request that name that she be allowed to take on that name. So we had like, with her first birthday party, it was the naming ceremony, because when she was named, my husband wasn't with us. So it was like what I had to do. I made traditional beer, umqombothi and I made a request that I be allowed to call her Busisiwe up until such time where I can afford to make the normal naming ceremony for her... I slaughtered a goat...and what happened is that a part of a goat's skin you have to cut it in a certain way and it's round like this and you put it on her wrist. It's called isiphandla." (CG4 – private clinic)

One such childhood illness which some believed to be caused by the ancestors is '*umlilo wamadlozi*'⁹:

"The ancestors can make the child to have umlilo wamadlozi. When the child has got umlilo wamadlozi, she becomes pink in colour, and look as if there is something in her stomach that makes her thin. The child will look like she is burned. At the hospital they call it cauliflower [Kwashiokor]. You will find that she doesn't even have appetite for food, she doesn't eat. But when we look at the child, we will realise that the child has got umlilo wamadlozi and she needs traditional treatments." (TMP1)

"It means that the ancestors are not happy about something bad that a person had done. Those burns will then appear on both old and young people." (TMP5)

⁷ Traditional beer.

⁸ Goat's skin bracelet.

⁹ Burns from the ancestors.

A noticeable difference can be seen in the afore-mentioned TMPs' explanation with that of the nurses' perspectives in which *umlilo wamadlozi* is known as Kwashiorkor:

"Usually they talk of, oh I forgot even Kwashiorkor. They will tell you it's the ancestors, the ancestors' burns. Because they come in like, they look like they've been burnt with boiling water. And when you ask them they'll tell you it's the ancestors' burns. They don't heal because the ancestors are fighting them for whatever reason... We call it weeping dermatitis, medical term. The skin goes black and peels off, and the child is bloated, and you look at them, they look like a Bulldog... They wouldn't just out of their own tell you. It's when you start and probe and say this is Kwashiorkor, a protein deficiency disease. It means you are giving your child too much carbohydrate. Do you ever give milk? Then she'll go ja I do, when I have money I do. Do you give vegetables? No, this child does not like vegetables. Then you have to find out, listen that's why the child is like this, because of this protein deficiency, that is why the child is bloated and is having burnt-like things, and then she says, no, it's the ancestors' burns. There's something wrong at home, I have to go and fix it so that the child will be OK..."
(Nurse1 - public hospital)

"You know what is umlilo wamadlozi? From Kwashiorkor. Isn't it I was filled with this fluid, only it's not a good fluid, then when the child starts to be fine. Now that the child is adapting to antibiotic whatever, and that useless fluid is moving out of the body then she's going back to the normal body. Then it will be like shrinking and then peeling off of that skin. Then they'll say it's umlilo wamadlozi. I used to see that when I was at the provincial [hospital]." (Nurse 3 – private clinic)

The presence of the ancestors therefore influences whether traditional or Western help is sought. In some cases respondents suggested that they had been contacted by the ancestors through dreams, meaning it was necessary to seek help from a traditional healer:

"Sometimes while you are sleeping, having told yourself that you will take the child to the doctor, your ancestors would reveal to you the cause of your child's sickness. You will have to take the child to a traditional healer." (CG5 – public hospital)

In the same way that the ancestors may cause a child's ill health, some caregivers also suggested that God may also have influence over the child's health:

"Yes, but me I don't take it like that, I take it maybe God wanted to show him how big [powerful] he was. You know. I just bought a kid without an oesophagus and an anus. But I can make him to have that anus and that oesophagus after, after giving birth..."
(FG4)

5.1.1.5 Health problems with unknown or non-supernatural causes and their treatment

Depending on the circumstances, certain illnesses such as measles, influenza, injury, mumps and whooping cough are believed to occur 'naturally' and these are known as 'umkhuhlane'¹⁰:

"...like normally if those kids are at crèche or whatever it's really common because one kid gets chicken pox and all, like every year at the day care centre or whatever there's always that thing." (FG1)

"Yes, like if you take a child to a doctor or wherever and you are going to use a taxi - because well to me it's logical because when you really think of it. Germs are everywhere and it is not only for the negative side of everything, and negative energies, it is also for any ailments that might be floating out there, because in the house the conditions are sterile. The house is clean, it's warm and everything. So when you are going out and mixing with different people, the person sitting next to you might be having flu or whatever virus, you know sneezing." (CG4 - private clinic)

They may often be treated with home remedies or bio-medicine, without consulting a traditional healer (Gumede, 1990). However caregivers can go to traditional healers and get advice or treatment for non-supernatural causes of illness, although they vary in the scope of illnesses they are able to treat, as evidenced in the interviews held with these providers. As interviews with TMPs and caregivers were fairly open, they were not all asked about specific illnesses, but about which illnesses they could or could not treat. Therefore not all healers have a response for the following sections on measles / rash, diarrhoea and constipation caused by diet, pregnancy-related illnesses and diarrhoea associated with teething.

5.1.1.5a Measles / Rash

TMP1 believed that measles may be caused by dirt and for her, symptoms include a high temperature, red eyes and a headache:

"Measles, it is caused by negligence and if a feeding bottle is not taken care of like closing the cap. Because if it is not covered flies can just sit on the teat and leave germs... the symptoms will be a high temperature and eyes that turn red... and the child cries non-stop because this sickness also develops a headache." (TMP1)

¹⁰ General appellation for all sicknesses which are accompanied by fever or coughing, such as cold, cough, flu, pneumonia, pleurisy, malaria. (Doke *et al.*, 2001).

TMP6 treated both measles and chicken pox and part of TMP6's treatment involved the mother abstaining from sex and fasting which would help the child's condition to improve. If she did not it would get worse. TMP3 knew how to treat measles but did not specify how. Rashes were also treated with traditional medicines such as an *imbiza* of *iShongwe*¹¹ with *iLabatheka*¹². TMP5 thought that rashes were caused by the child coming into contact with other children who had it or through 'dirt' during child birth. This is discussed more in the section on *ishashaza*.

"We treat measles because it's a well-known disease, and chicken pox as well we treat it. As long as you brought the child here, I treat them. But the mother should abstain from sex, she should be alone and no one should enter the sick child's room. She must fast and the child will be healed..." (TMP6)

"And then you get sores... you get rash. You know there's some powders we use for eczema, we use for children, and the same powder, what's it? Calamine lotion's got the same basis..." (Herbalist - muthi shop)

"They get infected [rash] sometimes because they come into contact with another child who has it. Sometimes it's from dirt from their parents during birth. So there's an imbiza that a child should be given... I mix iShongwe with iLabatheka." (TMP5)

5.1.1.5b Diarrhoea caused by diet

As with Western diarrhoeal aetiology, in the South African world-view, diarrhoea will have different causes. A natural cause of diarrhoea according to TMP2 is eating the wrong type of food and the treatment suggested would be similar to a Western-style of treatment. A caregiver from Focus Group 2 reported that making the child's formula milk too weak could also upset the stomach. Diet was not discussed as a cause of diarrhoea however by other respondents.

"Another diarrhoea is caused by the food that the child eats, or the formula. So you can change that and the child becomes OK." (TMP2)

"At times it develops when you do weak milk for your child, when you didn't mix the milk well." (FG2)

¹¹ (Xhosa) *Xysmalobium undulatum*. Milk bush or Wild Cotton. Rootstock used. Dried and powder sniffed to relieve headaches (Tyiso & Bhat, 1998).

¹² Medicine for causing madness or excitement. Two sp. of Liliiflorae with poisonous qualities: a) *Dioscorea Dregeana* b) *Hypoxis latifolia* also used as a love charm (Doke *et al.*, 2001).

5.1.1.5c Constipation caused by diet

As with diarrhoea, constipation may also be caused by food. In the following examples, TMP5 and caregiver 3 suggested that poor diet or the wrong food could cause constipation:

"It [constipation] is caused by poor diet or nutrition and if a child eats food not meant for its age. If I see that it is suitable for a child, I usually advise the parent to use it [Sunlight soap sput]." (TMP5)

"And if you give the child wrong food he will have constipation. I believe in things like that, not what they say that you can give a newborn porridge - he gets constipation. Then you come and say a child has hlogwana [inyoni]. Why? It's because the child is constipated." (CG3 - PHC)

5.1.1.5d Pregnancy-related causes of illness

According to traditional healers, certain childhood illnesses may be caused if the mother experiences that problem during pregnancy (e.g. a heart attack or asthma). What a mother eats during pregnancy may also have an effect on the child's health. If a lot of meat is eaten for example, the child may have worms or a bloated stomach. If she drinks Coke or eats lemon the child may get jaundice:

"Well, sometimes when you are pregnant and you have a heart attack, your child will also inherit that problem from you. Even asthma does the same; the child will be born having asthma." (TMP3)

"When the child has got a big stomach, he is born having worms and they make the child to look like he's got a big stomach. And when he is like that, the child seems to have some kind of disease called 'valeka' [translation not known]... the child has got worms, this was caused by the mother during her pregnancy. She used to eat lots of meat during pregnancy. So those things do affect the child, it is just like women who drink alcohol during pregnancy. Things like that have a negative impact on the well-being of a child." (TMP6)

"Things like Coke and lemon cause jaundice, especially during pregnancy. If the pregnant woman keeps on drinking Coke and eating lemon that will affect the child, she will have jaundice." (TMP1)

5.1.1.5e General diarrhoea / diarrhoea associated with teething

Diarrhoea often accompanies teething and much of the traditional treatments for teething such as the grey beads are also to prevent / stop diarrhoea. According to TMP3, the grey beads did not stop diarrhoea but stopped the child's fever and according to TMP2 the grey beads prevented fever and diarrhoea. Other treatments for diarrhoea include *umavumbuka*¹³ *ingwavuma*¹⁴, *umganu*¹⁵, *Kalmoes*¹⁶, and an unknown medicine *uDwavu*:

"It [diarrhoea] is caused by teething and because the child is changing stages and adapting to its new stage. They can take the child to hospital and at hospital they would put a drip in and if the condition doesn't change they bring them here." (TMP5)

"Diarrhoea is not a sign of sickness - it's just that there's that change that is happening." (TMP3)

"It [grey beads] helps the child not to have diarrhoea and fever." (TMP2)

"If the child doesn't have the beads when he has diarrhoea, he has fever. But when he has the beads he just has diarrhoea and he is playing..." (TMP3)

"I give them a sput to stop the diarrhoea and another herb to drink to stop vomiting. I combine what is called uDwavu and what is called ingwavuma and then pour hot water in a cup and stir. When the medicine is lukewarm I give the child a sput while the medicine is still thick and strong." (TMP5)

5.1.1.5f Blood in stools

*Isisu segazi*¹⁷ or blood in the stools may be a sign of dysentery. Traditional healers did not seem to know the cause (although one healer thought it might be related to *ushobishobi*¹⁸), but they were able to treat it with *ingazini*¹⁹ or 'wag'n beitjie'²⁰:

"It's [isisu segazi] caused by water. Maybe water that has insects called ushobishobi – if a child is swimming..." (TMP2)

"I also don't know the cause but I usually give them medicine to stop the bleeding... It is called iNgazini. You crush it and pour it in water..." (TMP5)

[Do you ever see children with blood in their stools?]. "They call it isisu segazi We cook 'imbiza' for her; we cook imbiza that is called 'waga'... wag'n beitjie, it stop isisu Mama." (TMP1)

¹³ *Sarcophyte sanguinea* Sparm. Swollen rootstock used in decoction for diarrhoea (Tyiso & Bhat, 1998) / *Hydnora Africana* (Mander, 1998).

¹⁴ *Cassine papillosa* (bark) (Doke et al., 2001) / *Cassine transvaalensis* (Mander, 1998).

¹⁵ Species of large tree, *Sclerocarya caffra* (Doke et al., 2001) / *Sclerocarya birrea* (Mander, 1998).

¹⁶ *inDawulothi* / *Kalmoes* / *iKalamuzi* (*Acorus calamus*).

¹⁷ *Isisu* (Zulu: stomach); *segazi* (Zulu: referring to the blood).

¹⁸ Wriggling creature found in water (e.g. tadpole, larva of gnat, minnow) (Doke et al., 2001).

¹⁹ Species of forest tree whose bark exudes a red sap (Doke et al., 2001).

5.1.1.6 Abantu illnesses

African or *Abantu* illnesses are defined as those requiring traditional treatment. From interviews with caregivers, TMPs and nurses, the causes of the following illnesses were not always clear as many *Abantu* illnesses were said to 'just occur'.

5.1.1.6a *Inyoni*

In terms of childhood African illnesses, the most widely known is *inyoni*, which literally means 'bird' in Zulu. Other names include *phôgwana*, *kogkwana*, *hlogwana*, and *ikhakhay²¹*. In a Western world-view *inyoni* is associated with serious diarrhoea and dehydration, including a sunken fontanelle:

"Ja, the inyoni's the gastro. It's just that they have this belief that there's this inyoni, that's why the fontanelle is sunken. So they call it inyoni, the healing prophets [faith healers] or whatever they call them, they say this is inyoni, but it's pure gastro." (Nurse 1 – public hospital)

"Ja, I hear the mothers calling it inyoni, but this is what is really happening - the diarrhoea and vomiting, then they call it inyoni... The cause of this diarrhoea is the infection in the stomach, which is caused by the mothers. When they prepare the food for the kids they don't wash their hands which is causing infection to infect the kids. And preparing the bottles, if they are not properly prepared - prepared with cold water, not previously boiled." (Nurse2 – public hospital)

"Inyoni, they tell you that they give the child, like when it's diarrhoea, within 10 months or so they say no, you see in the stools they are very green, it's inyoni, this is inyoni. Then they'll buy Muthi Wenyoni..." (Nurse3 – private clinic)

In the South African world-view, *inyoni* is associated with green stools / diarrhoea:

"..and they will give you something to give the child to drink and then it would be flushed out and the poo is different, it's green, like the child has been eating leaves, so you can see that inyoni." (CG4 - private clinic)

"Inyoni can affect anyone though we may not know the cause. But a person who has it is frightened and when he goes to the toilet he excretes green stools." (TMP5)

"You know how the child looks when they've got inyoni? They've got a running stomach or diarrhoea, and it is green in colour, then through this, you will know that the child has got inyoni." (TMP3)

²⁰ Afrikaans for 'wait a little bit'.

²¹ Fontanelle.

Other symptoms include a sunken fontanelle, *ishashaza*²², and restlessness:

"If he has inyani he becomes dull and has ishashaza and the fontanelle sinks in."

(TMP4)

"You see, 1, 1, OK, put 2 out of 10 children suffer. You see the continuous beating of the... you know the soft part of the skull? When a child is born the skull hardens within - I think within ninety days...that's medically proven. So the continuous beating, when it beats fast it's a myth and a traditional belief that this affects the tummy. Right? So the continuous beating... So that is related to tummy. But inyani and kogwana it's the same thing... Same symptoms. The crabiness, crying, cramps, stomach cramps." (Herbalist - muthi shop)

"Inyani is something which is inside your stomach, making your stomach dirty. And when it's dirty, you are supposed to get some medicines to clean it." (TMP3)

"When the child has got it, it will reflect from her eyes. Yes, it is not the same thing with diarrhoea, if it's a painful running stomach, you will see that there is something wrong with the child, she will be restless." (TMP1)

Besides dirty breast milk, the bloated stomach with green veins may also be caused by *inyani*. Similar to the name of the treatment cited by TMP1 '*stan-tanyana*', TMP6 referred to the swollen stomach with green veins as '*tantanyana*':

"They call it ditantanyana. To get healed they need to be treated in a traditional way, it can be treated... A child starts being affected by these types of children's diseases such as inyani and so on. And afterwards, she suffers from this... The stomach develops some green veins which are very visible, even on the head." (TMP6)

"He has inyani if he has the green veins [in the stomach]. Yes, it happens that a child can have green veins in the tummy and it becomes bloated and doesn't like eating when he's like that." (TMP2)

Although the cause of *inyani* was not generally known, one theory is that there is a worm or snake inside the child.

"They say it's a worm [cause of inyani]. They heal it mostly in Natal." (TMP5)

²² Oral thrush / rash in mouth.

TMP 6 believed that the diarrhoea associated with *inyoni* occurred because the umbilicus (*inkaba*) had not healed properly:

"The child vomits and has a running stomach It [diarrhoea] is caused by inkaba." (TMP6)

In some cases such illnesses may however be a result of witchcraft (*isithakathi*), although this view was not widely spread:

"Like I have told you that children of ages starting from ten days to five months, when she is sick or when bewitched, most of the time they suffer from diseases such as hlogwana." (TMP6)

"Isithakathi is also in the child's stomach, it's called inyoni." (TMP2)

TMP2 mentions that '*isithakathi*' is in the child's stomach. This may be translated from Zulu as meaning 'witchcraft', but it may also mean 'tapeworm' or is another word for *inyongo* (bile). When respondents spoke of having the condition '*inyongo*' this referred to a feeling of lethargy:

"She'll [friend] make some muthi, ja for diarrhoea, like my child is lethargic, maybe she's got inyongo – they say inyongo... Most Blacks they can say ooh, I've got headache, I feel dizzy, oh it's inyongo." (Nurse3 – private clinic)

As discussed previously, some caregivers and traditional healers view *inyoni* and the red mark on the head associated with *ibala*, or *ibala* and *iplate* as part of the same illness. There is therefore an overlap in symptoms between many of the childhood *Abantu* illnesses:

"This one had a red mark on her neck and that most definitely is inyoni, and I haven't heard anyone being cured by a doctor up to so far so I had to take her." (CG4 – private clinic)

"It's inyoni and ibala mostly. There's this new illness called ibala these days. In the olden days we called it umankabeni... Yes, now they call it ibala. It's here and here and the fontanelle sinks in." (TMP2)

"It's the same thing [inyoni & ibala]. ibala goes with 'iplate' when the child is born with a big 'plate', what we call 'umzanyana' [placenta] in Zulu. If there was something the mother passed over the umzanyana grew and it got big... now when the child is born this thing wants to break him here." (TMP4)

A difference was generally acknowledged in the symptoms of the 2 illnesses however:

"Ja, they are not together. Inyoni is inyoni and that thing, it's something like ulcers... The inyoni it's inyoni; she can have inyoni but not have the red mark." (TMP3)

As well as the OTC medicine 'Muthi Wenyoni', which was discussed as a treatment for *inyoni* during the focus groups, several traditional treatments are available. Either purgatives may be given in the form of *imbizas*²³ to drink, or as *sputis* (enemas):

"It is called imbiza wenyoni. You would take a child to an open field, dig a hole and let the child excrete into that hole and close it again and then it will be gone." (TMP5)

"I mix 2 iscibidwanes [translation not known] and then I boil them to make imbiza and then I put in salt and sugar and boil it. After it has boiled then the child drinks and starts to have diarrhoea and all the dirt from the child comes out." (TMP4)

"If you want it to go quickly go, you take Blue Seal [Vaseline] and ibovu [red soil]." (TMP4)

Rituals such as *ukhlala*²⁴ may also be performed:

"The healer will request that you either bring a child's vest, nappy or trousers. You then choose one item from the 3 and it should be an item that the child first wore after birth and then you take it to the healer. You are also requested to bring a sput. When you arrive at his house the healer will then mix his muthi. Whilst doing that he also asks me to undress the child and the child would remain naked. Using a razor blade he then cuts the child on the head, the arms, right around the belly button and the child's feet will also be cut. The healer then twists wool to make a thing for the child which will then be put on the child's shoulder and around the child's ribs. From there we leave his house to go to the mountain. The healer wipes the blood from the cuts and with a bucket full of umuthi, he will splash the child then he will give the child the sput and the child's faeces will come out. After that he will say something whilst holding the child. He will say something we don't know or understand." (CG5 – public hospital)

"They just use a sput. Yes. And they take them to the veld [open grassland], that's where they use a sput. They dig. After the sput the child has to help himself [excrete] in the hole, after they've dug the hole. And they close the hole. He must leave maybe something like a vest, an old thing. Then that's where you're going to put that vest in. Then you close everything. Then after you come back you don't turn around..." (CG1 – public hospital)

²³ "Imbiza means a concoction of herbs. Ja, that's called imbiza. Now imbiza could be cooked and either drank or syringed. Right. So imbiza is a mixture of herbs, it's not one herb. So when you go to a, a traditional shop, you say I want imbiza, they don't give you one thing, they'll give you a concoction of... Imbiza for chest, imbiza for stomach, imbiza for ulcers, imbiza for liver..." (Herbalist - muthi shop).

²⁴ To bury.

Traditional healers such as TMP3 do refer patients to Western health facilities, even for *Abantu* illnesses if they feel this is also necessary (e.g. for *inyoni* (*ikhakhayi* [fontanelle])). However once the symptoms are gone, the child still needs traditional treatment to get rid of the cause of the problem:

"Like children who are suffering from ikhakhayi [fontanelle]. If I see that it is what I should do I just send them to the hospital, especially when the child is worse. I send the child to the hospital to be put on drips for more water, since their body needs more water. From the hospital, when the child is better, then I can start giving him some medication for ikhakhayi." (TMP3)

5.1.1.6b *Ibala*

In the Western world-view, *ibala* is capillary naevus, malformed dilated blood vessels which occur in 40% of all newborns (Dermet NZ, 2004). They are referred to as 'salmon patches' because of the characteristic patch of pink or red skin usually found on the nape of the neck (known as a stork bite) or on the forehead between the eyebrows or on the eyelids (known as angel's kiss). These marks deepen in colour if the child is crying. Most salmon patches disappear within the first year of life but about 50% will not disappear:

"They usually call it ibala that thing, traditionally our Blacks in fact. But that is just a birth mark and nothing else. So they take it, it's like if your child has got that red mark, he's got this ibala and he's going to die if he's not treated immediately and you take traditional medicines which eventually is going to cause diarrhoea and vomiting and after all they die... It's nothing like that. Our doctor always tells the mothers, this has nothing to do with pain, nothing to do with diarrhoea and vomiting, it's just a birth mark, it goes away after a while." (Nurse2 – public hospital)

In the South African world-view however, *ibala* is thought to move up the head and can be fatal. Symptoms include weakness of the neck such as the head rolling and a red mark on the nape of the neck. Although some respondents thought that the child was just born with it, one TMP thought it was because of inhaling *inyamazane* (bad spirits) during pregnancy:

"Sometimes it's a red mark at the back of the neck. That mark is dangerous because it moves." (TMP5)

"Yes they are born with it. It's dangerous if a child has it and once the child bleeds through the nose he ends up dying... Yes, whatever she [mother] has eaten [or inhaled during pregnancy] – that can cause that inyamazane called ibala... Maybe she met with people who were using strong medicines that are dangerous that can cause the child's fontanelle to sink in, while it was in the mother's tummy. And you'll find that that the mother doesn't carry the child full term because she came across these bad spirits." (TMP2)

TMP3 and TMP6 associated *ibala* with a mother having *ishashaza* (blisters) on her genitals and passing this on to her child during birth:

"Ja there's a red mark at the back but that is caused by, there's a sore they call it, what do they call it? In Venda and Shangaan...the mom develops a sore in the private parts, and the child gets infected from the mom... It's something like ulcers. It look like somebody has been beaten - the bruises look like somebody has been beaten." (TMP3)

"What causes ibala, is when you have ishashaza on your private parts. But though you can't see that you have it, when they check, they will find that you have one. You can't see it, you will only feel it itching, as if you may keep on scratching, but when you try to check yourself, you can't see it. Ishashaza makes the child to be green, especially after birth." (TMP6)

"The red mark usually is situated at the back on the neck, sometimes on the fontanelle as they say, because I'm not familiar with it... It is red in colour and usually depresses the child and the child becomes weak, restless and not active." (CG5 – public hospital)

5.1.1.6c *Isilonda / Umtwana udliwe*²⁵

Isilonda, is a sore painful spot or wound, and in this context it refers to the area around the child's anus, which from a Western perspective is associated with diarrhoea:

"Ja at the bottom when the child has got some red things... Constant diarrhoea and it causes prolapse of the rectum." (Nurse1 – public hospital)

In the South African world-view *isilonda / umtwana udliwe* has both a natural (*isilonda umkhuhlane*²⁶) and a supernatural cause (*isilonda somoya*²⁷).

"There's also isilonda somkhuhlane and isilonda somoya. You push your finger in the child's bottom [to check for isilonda somkhuhlane]. He closes his eyes and he sleeps a lot when he has isilonda somkhuhlane... His stools are loose if he has isisu somkhuhlane and when you open his bottom you'll find that it's red – then you know... They [stools] are yellow. They are like sour milk [stools for isilonda somoya]. It's white and like sour milk if he has isilonda somoya. And his mouth you can see its red and the bottom turns red and is pushed out." (TMP2)

²⁵ Literally: the child is being eaten.

²⁶ 'Mkhuhlane' is a general term referring to naturally-caused illnesses or colds / flu.

²⁷ 'Moya' refers to the spirit world.

Traditional treatments for *isilonda* include *alima*²⁸ mixed with *ilitshe lomgodi*²⁹ and *umphuphuto*³⁰. The focus group pile sort revealed that Sunlight soap in warm water is also used as an enema and that Colgate toothpaste can be applied. These treatments are applied using a *sput*, although TMP4 did not like to use a *sput* if the problem was serious. As well as syringe bulbs, pens are used to apply the medication if *uhlanga* (reed / dry stalk) is not available:

"It happens when a child has a sore – there's this one called isilonda somoya, that goes up to here that makes the child have diarrhoea and nothing stays in the stomach... I check the child's bottom and see that he has isilonda somoya and it also shows in the mouth when it's very serious... I take alima and mix it with ilitshe lomgodi... Yes, I mix it with umphuphutho and take Sunlight and clean it with my fingers. I use uhlanga... If you don't have the one that you get from the bushes you can use a ballpen – the fine point one. The sharp side you can push it inside the child's bottom and push it slowly using Vaseline. And the muthi that you are going to use you keep it in your mouth, then after putting the pen in the child's bottom, you can push the muthi that's in your mouth through the pen that is in the child's bottom." (TMP2)

"If the child has a serious sore in the bottom I don't use a sput because he has lost strength." (TMP4)

5.1.1.6d *Inkaba*

Inkaba occurs if the umbilicus does not heal properly on the inside of the child. According to TMP2 this was because of the clotted blood burning the child. Dutch medicines such as Groen Amara can be given to the child and incisions can be made around the umbilicus with black ashes or a similar ointment rubbed into the cuts to treat it:

"Sometimes, when the child is 2-3 months old, maybe it will be [crying non-stop] because of the umbilical cord which has not yet healed." (TMP5)

"It doesn't heal from the inside, the outside might be healed but the inside is still sore." (TMP6)

"A newborn comes just after it's been discharged from the hospital, after the umbilical cord has been cut. Then I make cuts on it and take out the blood that is blocked by the clip that the hospital puts on. The child cried a lot because of that blocked blood. It's called ivangazi that blood that burns the child inside. Then we make cuts and rub black ashes to stop the child crying and it also helps with isithakathi [witchcraft]." (TMP2)

Groen Amara it's for - I don't know how to say 'inkaba'. He was drinking a drop for 'inkaba' before ten days." (CG1 – public hospital)

²⁸ Translation not known.

²⁹ Ground stone.

³⁰ Species of herb *Graderia scabra* used as cough medicine (Doke et al., 2001).

5.1.1.6e *Ishashaza*

The Zulu-English dictionary (Doke *et al.*, 2001) defines *ishashaza* as a 'blister or pustule containing matter', although it was often referred to by caregivers as a rash in the mouth which nurses speculated to be oral thrush. In this context it was used to refer to a white rash in the mouth which from a Western perspective may be oral thrush. It may also be as a result of the child vomiting:

"No, you know what, they become dry. And there are those because of this condition, the RVD, the HIV, they always have the oral thrush, it's white stuff in the mouth, the thrush." (Nurse 2 – Public Hospital)

"It [ishashaza] is oral thrush usually... when they have gastro they come with a dry, fat tongue, it's very red. Thrush is different because you come with a coated tongue, it's white when it's oral thrush. Whereas with gastro it's very red and very dry." (Nurse 1 – Public Hospital)

In the South African world-view, *ishashaza* is caused by having dirty blood, may go hand in hand with *inyoni*, or occurs because the child was not cleaned properly after birth. An herbalist from a *muthi* shop described *ishashaza* as fever blisters. Some caregivers thought it may be caused by dirt from the baby's teat:

"There's another one called ishashaza. It's here. It makes the child vomit and not eat and nothing stays in the stomach." (TMP2)

If he has inyoni he becomes dull and has ishashaza and the fontanelle sinks in." (TMP4)

"Yes, ishashaza goes hand in hand with inyoni." (TMP3)

"The child gets ishashaza from birth... In the olden days when a child was born they used to clean the child's anus and dirt would come out but today's children suffer from this illness because they don't clean them... This [ishashaza] normally develops when one has got dirty blood." (TMP6)

"It is also a sickness, just like ibala. You will find that the child's neck is not stable and the child becomes weak... I give them a medicine for ishashaza... I don't know [what it was called], but I crush it and using a drop as a measure, I apply it in the nostrils and the mouth." (TMP5)

"You know what, it's [ishashaza] eh, eh, fever blisters. So we use, eh, eh, maybe it's very commonly calamine or, or Glycerine and Borax." (Herbalist - *muthi* shop)

"Teats, ja teats... that could be the thing that causes mouth rash." (FG2)

5.1.1.7 South African world-view: Strengthening and protection

5.1.1.7a Pregnancy and childbirth

Having outlined a selection of supernatural and natural causes of illness, it is necessary to highlight the importance of strengthening and protection for the African infant in the health-seeking process. This starts whilst the child is still in the womb and immediately after birth. Mothers need to be protected and strengthened so that their baby will not be affected by 'pollution', witchcraft or evil spirits:

"Yes, from birth, even whilst the mother is still pregnant, they do come whilst attending clinics." (TMP5)

"Ja, they go to the traditional healers and get some concoctions there to make them strong so they shouldn't have problems during delivery and all that." (Nurse1 – public hospital)

Burning *imphepho*, *inyamazane* or Doepa or rubbing Dutch medicines such as Haarlemensis are also good preventatives during pregnancy:

"It prevents bad spirits from affecting you during your pregnancy, even if you enter in houses where they use muthi it won't affect you." (FG5)

"And I can use Doepa or Haarlemensis, while I'm still pregnant... I burn it and then I jump over it ...so that the child can be flexible [strong]." (FG3)

Although it is said that traditional birth attendants are not common in the urban areas, older relatives such as a grandmother or aunt may play a similar role. In the survey, 15% of caregivers had been to a 'traditional birth attendant', and of those, 42% were caregivers at the TMP, 26% were from the public hospital, 23% were from the private clinic and 10% were from the PHC:

"Actually before when you are pregnant there is another way that we use. You go to somebody that they massage you... Ja, they use Vaseline and then they massage you and then you... I don't want to use a rude word but you break a lot of wind. You know they take out winds.... That's what we do before the baby is born, that's also protecting the baby. The people that do it, they know that now they are in a right position, if they are in the wrong position, they try to move the baby. [Moderator: So who does that?]. Older people, like me now, I'm old enough to do it... Yes, even in the urban areas we still do it... Ja, just an older relative because we believe that they are more experienced than us. That's why we go to them. That's the only way and when we, like they believe that when maybe I'm going to walk a long distance or I'm going to meet a lot of people like going to the clinic, there is something that maybe somebody gives me to drink so that I don't, like, you know like evil spirits they don't attack you." (FG3)

Nearly a third of caregivers in the sample had taken some form of traditional medicine during pregnancy and 70% of these were caregivers interviewed at the traditional healers. As can be seen in Table 5.1, the most popular traditional medicine is *isihlambezo*, an herbal decoction.

Table 5.1: 'Traditional' medicines used during pregnancy	No.	%
<i>Isihlambezo</i>	46	51.7
<i>Imbiza</i>	6	6.7
<i>Imbiza emnyama</i>	1	1.1
Ostrich egg	2	2.2
Ostrich egg and <i>umchamo wemfene</i> ('Baboons urine') boiled	3	3.4
<i>Umchamo wemfene</i>	2	2.2
<i>Ugobho</i>	1	1.1
<i>Isiwasho</i>	3	3.4
<i>Isiwasho</i> - bath for protection	1	1.1
<i>Isiwasho</i> - <i>sput</i>	2	2.2
<i>Isiwasho</i> - Sunlight soap & water to drink	1	1.1
<i>Isiwasho</i> - water from Church with salt & ashes	1	1.1
Something for bath	1	1.1
<i>Sput</i>	3	3.4
Steaming	1	1.1
Every 3 months take rope out of water & tie knot then put back in water	1	1.1
Water & prayer	2	2.2
Water & something	1	1.1
Burn something / Doepa	2	2.2
Red <i>muthi</i> to rub / Rubbing stuff	2	2.2
Prophet (green) rope	1	1.1
Fish oil	1	1.1
Haarlemensis	1	1.1
Liquid paraffin	2	2.2
Mixture of things from chemist (+ Senepots & Seneleaves)	1	1.1
Sekete (like iron supplement)	1	1.1

In this survey, traditional medicines for pregnancy were mainly used to facilitate labour, for protection and to cleanse the child in the womb (v. Table 5.2). *Isihlambezo* in particular was mainly used (59%) to facilitate labour. A variety of treatments are used for protection, such as a rope in water, *isiwasho*, ostrich egg, ground ostrich egg with *umchamo wemfene*, Doepa, the prophet ropes and various *imbizas*.

Table 5.2: Reasons for use of 'traditional' medicines in pregnancy	No.	%
Make birth easier / easy labour	43	48.9
Pregnancy overdue	1	1.1
Protection / protection from bad spirits / stepping over things	18	20.5
For good luck	1	1.1
Strengthening	1	1.1
Clean system - water in womb / cleaning the child in the womb	9	10.2
Cleans blood and stops child having jaundice	2	2.3
Back aches / pains and cramps / labour pains	4	4.5
Swollen body / legs / feet	3	3.4
Right positioning of child in tummy / prevent a breach	2	2.3
Movement of child / to make child move freely in stomach	2	2.3
To stop bleeding	1	1.1
So baby doesn't come out of womb dry	1	1.1

5.1.1.7b Protection and strengthening in infancy

One of the main reasons why a caregiver might take her child to a TMP is for strengthening and protection soon after birth:

"You have to bring your child immediately after 10 days, that is why we are saying, what we do. Immediately when the child's umbilical cord is off, we do whatever we can do so that the child cannot easily be affected or catch any disease, like for example, inyoni. She can't suffer from inyoni because we have already treated it." (TMP3)

"To be safe for 2 years [until] they strong enough." (TMP5)

Infancy – pollution and strong medicines

Strengthening and protection is needed when taking the child out of the house so that they are not affected by others, particularly those using strong medicines:

"So that the child should not be easily affected by other illnesses when travelling with them and that they should stay strong." (TMP5)

"Some they take their children to the traditional healers to make them strong. They tell you, I was going to make my child strong so that when they mix with other children, she doesn't khabula [inhale bad spirits / strong medicine], you know... bad spirits or whatever that are around." (Nurse1 – public hospital)

"When the child is affected by khabula, she needed to be treated in a traditional way, to remove or take out that Stuiip [strong medicines which have been inhaled]". (TMP1)

Dutch medicines such as Haarlemensis are particularly effective in protecting the infant, either being put in the bath when washing the child or rubbed directly onto the skin:

"So that he cannot inhale, we Blacks think that there's something wrong in the air that the child he can inhale and get sick, so the protection [Haarlemensis / Stuips / Doepa] is for that." (CG2 – public hospital)

"But some of our people do use Stuips. They say if you bath your baby with Stuips then when going out they won't get diseases. That's the belief I know." (Nurse4 – private clinic)

"...especially when you're like travelling around places with your child, you just smear the child with it [Haarlemensis]." (FG4)

Rituals can be performed by the person or caregiver of another child using 'strong *muthi*'. This includes the person using the medicine or the mother of another child stretching the child's limbs, as well as touching the children's heads together:

"You are supposed to stretch the baby's hands." (FG3)

"When he use muthi – he, and I'm carrying the baby, he has to come and stretch the arms and legs." (FG4)

"Sometimes, if I am going to stay close like this, I have to tell her that let me stretch your child because mine is doing this..." (FG4)

"Or if you don't stretch the child, you take the child, you just turn him up and take the head of the other child. That one must touch each other... So it won't affect the child." (FG4)

In other situations where a child might pick up supernatural contagions, such as at a funeral, rituals can also be performed:

"And if there's a funeral at your place, and you have a small child, you are supposed to take the child and pass the child where the coffin has passed." (FG3)

Muthi rubbed on incisions or scarifications made on joints, around the umbilicus, on the forehead or behind the ears is another form of protection and strengthening for the child, as these are weak points on the body:

"Even if you would mix with other children it won't affect your child." (FG4)

"Because it is not, eh, I don't believe that you can cure it with Western medication. It has to be traditional because what happens is, they will give the child the medicine but they will also have to cut the child so that they suck out that blood, but it's not on that one spot only. A child has to be made very strong so that when they cut out it doesn't kill the child. So it should get those cuts on all her joints so that her joints are strong and those cuts are filled in with muthi... with traditional medication..." (CG4 - private clinic)

"A child after being discharged from the hospital, you should bring him for cuts. Get a razor that is new and make cuts in the umbilical cord and here and there... There are ashes that we use when making cuts on the child... For a newborn we make incweba [amulet] from a goat's skin and ashes and rub it on the child if he cries a lot or doesn't sleep at night. We use this goat skin and we buy it from the Indian chemist [muthi shop] and mix with inyamazane and rub it on the child and the child will sleep peacefully. We don't usually use Entress [druppels]." (TMP2)

Amulets containing ashes or traditional medicine can also be hung around the child's body or neck, and 'prophet ropes' can also be used for protection:

"And then with this one you will create something like a pocket to strengthen the child."
(FG2)

"Yes, like this weekend I'm going to their father's place. The grandfather he's going to put the beads, that one I told you, the grey beads in the rope. He will make a small rope for the neck and the waist - they say that is for protection too... Yes it is also for other stuff and it is also for protection. Like at first I thought it's teething but they say no it is also for protection, like the rope they have to do - a nice little rope - and you put the beads here and you put here on the child." (CG2 – public hospital)

Infancy – protection from bad spirits

One of the main treatments used for *imimoya emibi* are *umuthi ukushunqisa*³¹ such as Doepa, *imphepho* or *inyamazane*. These are burned at night to help the child sleep peacefully:

"You take that coal, burn it. While it is still burning, you pour Doepa into it. So when they are busy burning, then you make your child to inhale its smoke, by inhaling that smoke. The evil spirit will be thrown out of his or her body. When you are finished, you then prepare this small sack containing medicines and tie it on her body, this is to make the child strong, and not to get easily affected by evil spirits." (TMP1)

"And at night as well, before the child sleeps, or after the bath whatever, they will give you something - it is called inyamazane. It is for the kids and then you burn that for a child and the child would be able to sleep through the night." (CG4 – private clinic)

"Crying, restlessness can be divided into two. We use something to burn... Doepa or imphepho... We believe also that a child sees bad spirits and evil before adults see, so we use those kinds of things to burn and so forth." (Herbalist – muthi shop)

"Like when the baby can't sleep at night. So that maybe it's because of the house it's not strong ne? And then the baby, you need to burn something for the baby and then you make a rope for the baby, to tie around the waist." (TMP3)

"Imkhondo izinyamazane are different. There are the ones that are used for making children to be strong, protecting them against witchcraft, evil spirits etc... There are things that roam around the yard at night, if your child is not strong or treated with proper traditional medications to protect the child from things like that - the one that roam around the yard at night trying to bewitch." (TMP6)

³¹ Medicines which are inhaled.

Other ways of warding off the evil spirits include the Xhosa tradition of sweeping dust from a crossroads and putting it in the child's bath, using *intelezi*³² (in the bath or sprinkling it in the yard), and making an ointment from Vaseline, *inyamazane* and Doepa:

"Let's say a child cries in the night between 12 or maybe 2am. You try to give her a bath, you try to make her sleep but she can't sleep. This is a sign that there are evil spirits around the house. So you go out of the house and you take your broom, go out and sweep the street... so this sand weighs heavy on these evil spirits just because you have taken it from the street that is used by cars, different people using different muthi. Others use strong muthi. These evil spirits also walk around and they also inhale the very same air. So that is why in Xhosa we are told to go in the middle of the street, take that sand and use it to bath the child." (CG5 – public hospital)

"We use it [intelezi] for children to protect them from bad spirits." (TMP2)

"That is the one [intelezi] that's only used when you are inside the house, you can't drink it when you are outside. It is medicine to counteract evil spirits... Yes, you have to put it in your yard because you have children in your yard." (TMP1)

"For instance, if you take the Doepa and you mix it with inyamazane and you pour it on a hot plate and you take the ashes and mix them with Vaseline so they become like a paste, then you can also use that as protection." (CG4 – private clinic)

As well as inhaling, young children are susceptible to 'pollution', strong medicine and evil spirits through the soft *ikhakhayi* (fontanelle) and orifices such as the nose and ears. Dutch medicines such as *Haarlemensis* are used to protect these parts of the child by applying it directly to the child or putting it in the bath:

"Yes where there are holes because it's still soft. Anything can go there and at the back... everywhere inside the head I put it [Haarlemensis]." (CG2 – public hospital)

"This one [Haarlemensis] you mix so that you can harden the top of the head of the child, you chase away the evil spirits." (FG2)

"I use Haarlemensis to protect the child against evil spirits. If you are going to travel with the child for a long distance. You use a drop of it and a drop of Rooilaventel into the water, mix well and then you bath the child with that water. And then you also mix them, you apply it on the child so that even if you meet a person who uses muthi, the child is protected against those evil spirits." (CG5 – public hospital)

"What one needs to do is to strengthen the child's khakhayi [fontanelle], to protect the child from inhaling evil spirits." (TMP6)

³² *Sansevieria aethiopica* (root).

Infancy – Ancestors

The ancestors are extremely important in the South African world-view and when a child is born several rituals and customs need to be performed to appease them. Although the traditional healers may be able to treat ancestral-related illnesses in the child such as *umlilo wamadlozi* with ashes and *madilika*³³ and restlessness with *imphepho* or Doepa, it is up to the families themselves to prevent further occurrences.

"If a child is sick, it is because the dead have a hand in the child's sickness. Sometimes the dead also have a hand in the birth of a child and the child becomes problematic. In such cases you will have to burn imphepho and speak to the ancestors and plead with them." (TMP5)

"In children? It happens if the parents didn't obey the ancestors and the child can even be disabled if you don't obey them... A child can be normal but then become disabled and be taken to specialists but later find out that he doesn't get better. And the family would gather and slaughter a goat, try to speak or ask the ancestors to make that child well. And you will find that the child starts to walk after that ceremony has been performed... We speak to the parents of the child and tell them that we can't help that child. They should sit as a family and talk to the ancestors." (TMP2)

"It's the ancestors' illness. The child develops a bad skin, as if it was burnt... It's like the skin is burnt and the child has watery sores... We use coal ashes from a stove and mix them with madilika. You take that and mix it with madilika." (TMP2)

5.1.1.8 Traditional medicine given to children under 6

Table 5.3 presents a summary of the different medicines that caregivers considered to be 'traditional' which had been given to their child under 6 (that the caregiver could remember). The most common type of medicine given is an *imbiza*, although most caregivers do not generally know what it contains, hence the general appellation '*imbiza yabantwana*'³⁴. *Imbizas* can be given for many different health problems, although the most common are for *inyoni* and *ibala*. The names of plants which were used for coughs and colds were the most well-known, such as *umhlonyane*. Cuts or *ukunquma* also serve several purposes, but one of the main reasons cited by caregivers in this sample was for *ibala*, followed by *inyoni*. Using a *sput* or burning some form of incense are other popular methods of treating / preventing *inyoni* or *ibala*. Burning Doepa, *imphepho*, or *inyamazane* for example will also help to ward off the bad spirits which can make a child fretful and restless. The traditional medicines mentioned in the survey by caregivers also include 'church' medicines such as the prophet ropes, oil, Blue Sea oil and water, *isiwasho* and various mixtures of tea or coffee, all of which have been prayed for or blessed.

³³ Species of papilionaceous herb used as a love-charm. *Rhynchosia nervosa* etc. (Doke *et al.*, 2001).

³⁴ Medicine mixture for children.

Table 5.3a: Traditional medicines given to children under 6 and their use

Traditional medicines given to children under 6	Reasons for using traditional medicine*	Frequency
Aloe	Cough 1	1
Boiled mint leaves	Cough 1	1
Garlic drink (Nigerian) after introduction of solids	Clean system if constipated 1	1
<i>Umhlonyane</i> ³⁵ / <i>lengana</i> boiled	Cough 19; colds & flu 4; stomach problems 1; fever 1	25
<i>Umhlonyane</i> & peppermint	Chest problems 1	1
<i>Imbiza</i> ³⁶ - Double nonsense (<i>nGcino</i> / <i>letshwetlane</i> ³⁷)	<i>Inyoni</i> 1; <i>inyoni</i> & <i>ibala</i> 3; constipation 2	6
<i>Imbiza</i> - <i>Ilitshe lomgodi</i> ³⁸	<i>Inyoni</i> & <i>ibala</i> 1; constipation 1; diarrhoea 1	3
<i>Imbiza yabantwana</i> ³⁹	<i>Inyoni</i> & <i>ibala</i> 36; <i>inyoni</i> 25; <i>ibala</i> 11; diarrhoea 5; stomach problems 2; clean system if constipated 2; cough 6; chest problems 2; colds & flu 3; <i>isilonda</i> 1; rash 1; vomiting 1; fever 2; mouth sores 1; crying & restlessness 1; ear infection 1; teething 1; bleeds a lot when gets cut 1	102
<i>Imbiza</i> cooked with soft porridge	<i>Inyoni</i> 1	1
<i>Imbiza</i> for appetite	Appetite 1	1
<i>Imbiza</i> for <i>inyoni</i>	<i>Inyoni</i> 1	1
<i>Imphepho</i> ⁴⁰ & <i>umzane</i> (translation unknown) boiled	Fever 1	1
<i>Intsizi</i> (translation unknown) & milk to drink	<i>Ibala</i> 1	1
<i>Isinama</i> (translation unknown)	Vomiting 1	1
<i>Kalmuzi</i> ⁴¹	Colds / flu 1	1
<i>Khathazo</i> / <i>lesoko</i> ⁴² - boil to drink	Cough 2	2
<i>Khathazo</i> & <i>ngcaluchwatha</i> (translation unknown) & <i>isibhaha</i> ⁴³	Cough 1	1
<i>Molemo</i> (translation unknown)	<i>Inyoni</i> & <i>ibala</i> 1	1
<i>Muthi</i> to clean child's mouth	<i>Ishashaza</i> 1	1
<i>Ingwavuma</i> ⁴⁴ - boil to drink	Diarrhoea 1	1
<i>Qhumisa</i> (translation unknown)	<i>Ibala</i> 1	1
<i>Ungaru</i> ⁴⁵ & <i>umavumbuka</i> ⁴⁶	Diarrhoea 1	1
Not sure what	<i>Inyoni</i> & <i>ibala</i> 2; <i>inyoni</i> 1; <i>ibala</i> 1; <i>ucindezelelelele</i> ⁴⁷ 1; <i>uhlaba</i> 1; colds / flu 2	8
Water mixed with something	Stomach cramps 1	1
Ostrich egg ground	Vomiting 3	3
Chicken egg shell & gizzards ashes in water	Vomiting 1	1
<i>Inyongo yesibankwa</i> ⁴⁸ ashes in water	Vomiting 1	1
Sticks in porridge	Crying / restlessness 1	1

* Number indicates how many caregivers reported using the medicine for this purpose

³⁵ African wormwood (*Artemisia afra*) – usually used for enemas.

³⁶ General term for purgative medicines (Varga & Veale, 1997).

³⁷ *Albica setosa*.

³⁸ Ground stone.

³⁹ Purgative for a child.

⁴⁰ *Helichrysum* spp.

⁴¹ in Dawulothi / Kalmoes / Kalamuzi (*Acorus calamus*) (bulb).

⁴² An umbelliferous plant (*Alepidea amatymbica*), roots used for colds and influenza.

⁴³ *Warburgia salutaris* (bark).

⁴⁴ *Cassine papillosa* (bark) (Doke et al., 2001) / *Cassine transvaalensis* (Mander, 1998).

⁴⁵ Species of large tree, *Sclerocarya caffra* (Doke et al., 2001) / *Sclerocarya birrea* (Mander, 1998).

⁴⁶ *Sarcophyte sanguinea* Sparr. Swollen rootstock used in decoction for diarrhoea (Tyiso & Bhat, 1998) / *Hydnora africana* (Mander, 1998).

⁴⁷ Bad spirits pressing down upon child.

⁴⁸ Lizard entrails.

Table 5.3b: Traditional medicines given to children under 6 and their use

Traditional medicines given to children under 6	Reasons for using traditional medicine*	Frequency
<i>Sput</i>	<i>Inyoni</i> 15; <i>inyoni</i> & <i>ibala</i> 13; stomach problems 2; chest problems 1; colds & flu 2; <i>ibala</i> 5; stomach cramps 2; healing umbilicus 1; diarrhoea 1; cough 1; vomiting 1; constipation 1	45
<i>Sput</i> with Blue Sea Oil	Fever 1	1
<i>Sput</i> with green medicine mixed with milk	<i>Inyoni</i> 1	1
<i>Sput</i> with <i>lengana</i> ⁴⁹	Constipation 1	1
<i>Sput</i> with <i>umsuzwane</i> ⁵⁰	Constipation 1	1
<i>Sput</i> with <i>umuthi ubomvu</i> ⁵¹	<i>Inyoni</i> & <i>ibala</i> 1	1
<i>Sput</i> with Double Nonsense (<i>nGcino</i> / <i>letshwetlane</i>)	<i>Inyoni</i> & <i>ibala</i> 1	1
<i>Sput</i> with <i>imbiza</i>	<i>Inyoni</i> 6; <i>inyoni</i> & <i>ibala</i> 3; <i>ibala</i> 1; constipation 2; rash 1,	13
<i>Sput</i> with milk or water	<i>Inyoni</i> 1,	1
<i>Sput</i> with onion-like bulb (<i>nGcino</i> ?)	<i>Inyoni</i> & <i>ibala</i> 1	1
<i>Sput</i> with <i>isiwasho</i> ⁵²	<i>Inyoni</i> 2; <i>inyoni</i> & <i>ibala</i> 1,	3
Cuts (<i>ukunquma</i>)	<i>Inyoni</i> 6; <i>ibala</i> 19; <i>ibala</i> & <i>inyoni</i> 13; <i>ihlahla</i> 1; heals umbilicus 3	42
Cuts (<i>ukunquma</i>) on back of head	<i>Ibala</i> 2; not sleeping 1	3
Cuts (<i>ukunquma</i>) on stomach / umbilicus	<i>Ibala</i> 2; <i>inyoni</i> & <i>ibala</i> 1	3
Cuts (<i>ukunquma</i>) & black <i>muthi</i> to rub on	<i>Ibala</i> 12; <i>inyoni</i> & <i>ibala</i> 4; <i>inyoni</i> 1; strengthening 1; protection 1	19
Cuts (<i>ukunquma</i>) & <i>umuthi ubomvu</i>	<i>Ibala</i> 1	1
Cuts (<i>ukunquma</i>) & <i>Vimbela</i> ⁵³	<i>Ibala</i> 1	1
Something to rub on child	<i>Inyoni</i> 2; <i>ibala</i> 4; <i>inyoni</i> & <i>ibala</i> 4; heal umbilicus 1	11
Something to rub on head / fontanelle	Strengthening 1; <i>inyoni</i> & <i>ibala</i> 1; <i>ibala</i> 1; sores on head 1	4
Black <i>muthi</i> to rub	<i>Inyoni</i> & <i>ibala</i> 2; <i>ibala</i> 1	3
<i>Umuthi ubomvu</i>	Protection 1; cough 1; diarrhoea 1	3
Colgate and black shoe polish	<i>Isilonda</i> 1	1
Cut nails & hair - burnt then and mixed with <i>muthi</i> - rub joints and head	<i>Inyoni</i> & <i>ibala</i> 1	1
Chicken egg smeared with something / rub child's chest / return egg to chicken	Chest problems 1	1
<i>Vimbela</i>	Help sleep 1; protection 2; <i>inyoni</i> & <i>ibala</i> 1	4
<i>Umsuzwane</i> (translation unknown) / <i>umsuzwane</i>	Colds & flu 1	1
Burnt something for child to inhale - <i>imphepho</i> / <i>Doepa</i> / <i>umsuzwane</i> / <i>inyamazane</i> ⁵⁴ / <i>isiphepheto</i> ⁵⁵	Chase bad spirits away / protection 10, crying & restlessness / night frights 15, <i>inyoni</i> 7, <i>inyoni</i> & <i>ibala</i> 8, <i>ibala</i> 5; fever 1; vomiting 1; strengthening 1; <i>isilonda</i> 1; heal umbilicus 1	49

* Number indicates how many caregivers reported using the medicine for this purpose

⁴⁹ Sotho or Tsonga word for African wormwood (*Artemisia afra*).

⁵⁰ Sp. of shrub, *Lippia asperifolia*, having a very disagreeable smell.

⁵¹ Medicine that is red.

⁵² Ash-based medicine.

⁵³ Vaseline-based rub used for protection.

Table 5.3c: Traditional medicines given to children under 6 and their use

Traditional medicines given to children under 6	Reasons for using traditional medicine*	Frequency
Amulet	<i>Inyoni</i> 1; protection 1; teething 1	3
Green rope with amulet	<i>Ibala</i> 1; protection 1; strengthening 1	3
Green ropes	<i>Ibala</i> 3; <i>inyoni</i> & <i>ibala</i> 1,	4
Grey beads	Teething 3	3
Bracelets, water & prayer	Protection 1	1
Rope around waist	<i>Inyoni</i> & <i>ibala</i> 1; diarrhoea 1; protection 3; strengthening 1	6
Rope / bracelets around wrist	<i>Inyoni</i> 1	1
Oil from church	Anything 1	1
Blue Sea oil & water	Cough 1	1
<i>Isiwasho</i> & water to drink	<i>Inyoni</i> 3; clean system if constipated 1; <i>inyoni</i> & <i>ibala</i> 2	6
Water & prayer / Water from Church	Crying & restlessness 1, anything 2	3
No name - has eggs and coffee	<i>Inyoni</i> 1	1
Tea / tea & prayer	Stomach cramps 1, anything 1	2
Water, coffee, fish oil every day until 4 months old	<i>Inyoni</i> & <i>ibala</i> 1	1
<i>Imithi</i> for bath	<i>Inyoni</i> & <i>ibala</i> 4; <i>ibala</i> 1; <i>inyoni</i> 1, rash 1	7
<i>Isiwasho</i> for bath	<i>Inyoni</i> & <i>ibala</i> 1; <i>ibala</i> 1	2
Oil from water animals for ear	Ear infection 1	1
Insert ground plant in orifices	<i>Inyoni</i> & <i>ibala</i> 1	1
Ear, nose & mouth drops	<i>Inyoni</i> & <i>ibala</i> 1	1
Behoedmiddel	Stomach cramps 1; vomiting 1	2
Rub <i>Stuips</i> until it disappears	<i>Ibala</i> 1	1
<i>Stuips</i>	<i>Inyoni</i> 2	2
<i>Ukhala</i> ⁵⁶ (ritual they perform)	<i>Inyoni</i> & <i>ibala</i> 1; <i>inyoni</i> 1; heal umbilicus 1	3
Porcupine quills - prick child	<i>Inyoni</i> & <i>ibala</i> 1	1

* Number indicates how many caregivers reported using the medicine for this purpose

As can be seen in Table 5.4, caregivers who use / have used what they considered to be traditional medicine for their child at the PHC, public hospital and private clinic tend to obtain it mostly from their own garden / the bush or from a relative (44% - 47%; χ^2 P value < 0.001). The traditional healers' patients obtain theirs mostly from a traditional healer (96.2%; χ^2 P value < 0.001). The public hospital and private clinic caregivers had larger proportions obtaining traditional medicine from a church or faith healer (about 15%) than the PHC and TMP caregivers (about 8%). Respondents were able to give more than one response therefore row percentages are used as these were dichotomous variables.

⁵⁴ Powder made up of various dried animal parts (e.g. hedgehogs, baboons).

⁵⁵ *Siphonochilus aethiopicus* (root).

⁵⁶ Zulu meaning 'to bury'.

Table 5.4: Where caregiver normally obtains traditional medicine from*

Where caregiver normally gets traditional medicine*	Facility on day of interview					χ^2 P value
	PHC	Pub hosp	Pvt clinic	TMP	Total	
TMP	18 (36%)	19 (35.9%)	13 (26%)	51 (96.2%)	101 (49%)	0.000
Church / Faith healer	4 (8%)	8 (15.1%)	7 (14%)	4 (7.6%)	23 (11.2%)	0.487
Muthi shop	3 (6%)	3 (5.7%)	3 (6%)	0 (0%)	9 (4.4%)	0.296**
Relative / garden / bush	22 (44%)	25 (47.2%)	26 (52%)	3 (5.7%)	76 (36.9%)	0.000

* Respondent may give more than one response, therefore column % are not applicable

**Indicates that the Fishers exact test was used as the expected cell count was < 5

5.1.1.9 Use of Dutch medicines

Just over three-quarters of caregivers used or had given Dutch medicines to their child (v. Figure 5.3). TMP, PHC and public hospital attendees were very similar in terms of their usage (83%, 86% and 81% respectively), whilst the private clinic attendees had a lower proportion who had used / used Dutch medicines for their child under 6 (60%).

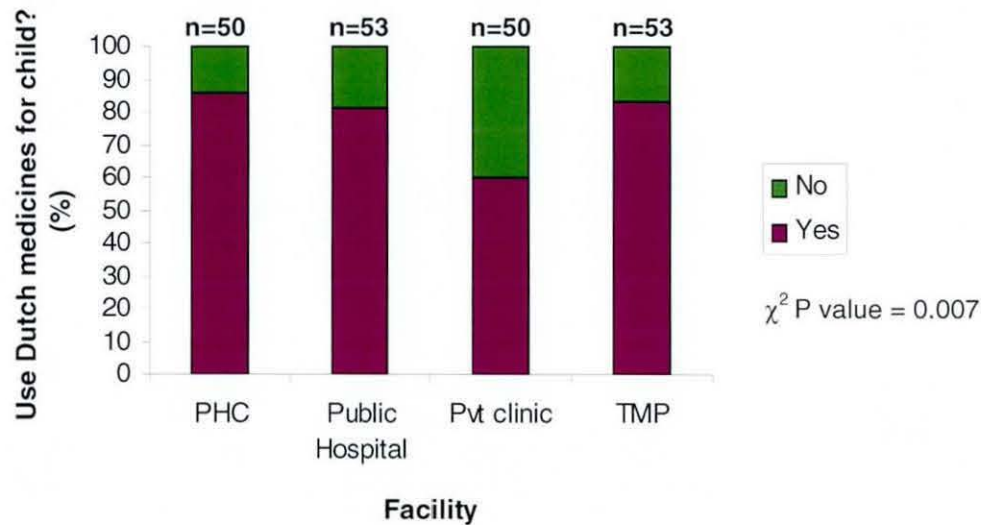


Figure 5.3: Use of Dutch medicines for child by facility on day of interview

As can be seen in Table 5.5, the most popular Dutch medicine overall in this sample was Haarlemensis (66%), followed by Stuijdruppels (39.3%), Essens Groen Amara (30.6%), Entressdruppels (29.6%) and Doepa (25.2%). In this survey, the TMP group used a much smaller selection of Dutch medicines than the other caregiver groups. The main ones that they reported using are Haarlemensis (64.2%), Stuijdruppels (35.8%), Doepa (34%), Entressdruppels (24.5%) and Groen Amara (18.9%). Slightly smaller proportions of public hospital caregivers use different Dutch medicines compared to the PHC caregivers (based in Soweto) and the private clinic caregivers. Certain Dutch medicines are used more by some groups than by others.

Behoedmiddel for example is used by a much higher proportion (30%) of private clinic caregivers than in other groups. The same is true of Jamaika Gemmer.

Table 5.5 Dutch medicines used by caregivers for their child under 6 by facility on day of interview

Dutch medicine	PHC (%) (n=50)	Pub hosp (%) (n=53)	Pvt clinic (%) (n=50)	TMP (%) (n=53)	Overall (%) (n=206)
Balsem Kopiva	10.0	5.7	8.0	1.9	6.3
Behoedmiddel	12.0	11.3	30.0	0.0	13.1
Borsdruppels	22.0	9.4	18.0	7.5	14.1
Duiwelsdrek	8.0	5.7	4.0	0.0	4.4
Duiwelsdrekdruuppels	6.0	1.9	8.0	0.0	3.9
Doepa	28.0	18.9	20.0	34.0	25.2
Entressdruppels	34.0	24.5	36.0	24.5	29.6
Essens Groen					
Amara	38.0	32.1	34.0	18.9	30.6
Haarlemensis	82.0	64.2	54.0	64.2	66.0
Jamaika Gemmer	2.0	3.8	12.0	1.9	4.9
Krampdruppels	4.0	5.7	16.0	1.9	6.8
Paragoriese	0.0	0.0	2.0	0.0	0.5
Rooilaventol	14.0	7.5	18.0	0.0	9.7
Staaldruuppels	6.0	1.9	4.0	0.0	2.9
Stuipdruppels	56.0	32.1	34.0	35.8	39.3
Turlington	4.0	0.0	2.0	0.0	1.5
Versterkdruuppels	2.0	1.9	2.0	0.0	1.5
Witdulsies	6.0	5.7	6.0	0.0	4.4
Wonderkroonessens	2.0	1.9	4.0	0.0	1.9

Of those who use more than one Dutch medicine for their child, just over half do mix Dutch medicines together – particularly caregivers at the PHC (v. Table 5.6). The TMP caregivers on the other hand had the highest proportion of caregivers who do not mix *Stuips*.

Table 5.6: Mixing *Stuips* by facility on day of interview

Does caregiver mix <i>Stuips</i> ?	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Yes	23 46%	14 26.4%	15 30%	14 26.4%	66 32%
No	12 24%	15 28.3%	12 24%	20 37.7%	59 28.6%
N/A only uses 1	14 28%	23 43.4%	23 46%	19 35.9%	79 38.4%
D/K	1 2%	1 1.89%	0 0%	0 0%	2 0.97%
Total	50 100%	53 100%	50 100%	53 100%	206 100%

Table 5.7 gives a summary of how Dutch medicines are used individually. *Stuipdruppels* for example are mostly used for protection and can be added to the child's bath, added to their milk or rubbed on their body, in particular their head or fontanelle. *Haarlemensis* has many different uses but the main one is for protection from bad spirits, other people using traditional medicine and when going out. Another important Dutch medicine for protection is *Entressdruppels*. *Groen Amara* is important for healing the child's umbilicus as well as other stomach problems. As well as drops being added to the bath and put in milk they are also rubbed on various parts of the child's body such as their fontanelle, nose, ears, armpits, hands, under their feet, on their chest and umbilicus: Forty-nine different mixing combinations were recorded in this study, of which *Stuipdruppels* and *Haarlemensis* were the most commonly mixed *Stuips*.

"I use Haarlemans to protect the child against evil spirits. If you are going to travel with the child for a long distance. You use a drop of it and a drop of Rooilaventol into the water, mix well and then you bath the child with that water. And then you also mix them, you apply it on the child so that even if you meet a person who uses muthi, the child is protected against those evil spirits." (CG5 – public hospital)

"Yes on top of the fontanelle and I put it here where there's holes... Yes where there's holes because it's still soft here everything can go there [bad spirits / strong medicine], and at the back, everywhere, anywhere inside the head I put it." (CG2 – public hospital)

"OK, Stuipdruppels is just for when, for protection. And Duiweldruppels and Entress I have just to use them for protection, when you put it in the water, not now, but when he was still young. Now I am not using any Stuips. Haarlamans I was using for... Ja, I'm rubbing it in the nose and ears..." (CG1 – public hospital)

Table 5.7: How Dutch medicines are used individually

Dutch medicines / Dutch medicines which are mixed	Reason for use of Dutch medicines	How Dutch medicines are administered
Stuipdruppels	Protection / bad spirits / frights 16; Stomach cramps / colic 4; Crying / restlessness / Help sleep 2; Stomach problems 1; Strengthen 1; According to leaflet 1; Can't remember 1; Not specified 4	Bath 7; Rub 5; Rub head / fontanelle 3; Bath / breast milk 1; Breast milk / formula milk / milk 7; Not specified 6; Water 1
Haarlemensis	Protection 68; Heal umbilicus / Clean system 6; Kidneys / Concentrated urine 4; Stomach cramps / colic 3; According to leaflet 2; Cough 2; Help child sleep 2; Appetite 1; Blocked nose 1; Fever / Restlessness 1; Fontanelle not to sink 1; If child doesn't feel well 1; <i>Inyoni</i> 1; For bath & rubbing 1; Prevent illnesses 1; Sores 1; Sores in throat 1; Stomach problems 1; Can't remember 2; Not specified 7	Rub chest / hands / under feet / head / fontanelle / armpits / umbilicus / neck / ears / nose / body 46; Mix with breast milk / formula milk / milk 16; Bath / Rub 7; Bath 6; Mix with Vaseline 3; Rub / drink 3; Bath / Drink 1; Bath / Rub on fontanelle 1; Bath / Rub umbilicus 1; Bath before going out 1; Give with teaspoon 1; Mix with sugar 1; Not specified 20
Behoedmiddel	Stomach cramps / colic 4; Diarrhoea 3; According to leaflet 1; After feeding child to help sleep 1;; Cough 1; Heal umbilicus 1; Not specified 1; Can't remember 2	Breast milk / milk 3; Water 1; Not specified 10
Krampdruppels	Stomach cramps / colic 4; Cleans stomach 1; Not specified 2	Breast milk 1; Water 1; Not specified 5
Borsdruppels	Cough 5; Chest problems 1; Cold / Flu 1; Constipation 1; Help child sleep 1; Stomach problems 1; Not known 2; Not specified 1	Breast milk / milk 5; Honey 2; Warm water 2; Mix with Muthi Wenyon 1; Not specified 3
Duiwelsdrek	Protection 2	Bath 1; Burn 1
Duiwelsdrekdruppels	Not specified 4; Protection 1	Bath 2; Bath / Rub 1; Not specified 2
Doepa	Protection - 30; Crying / restlessness 6; Help child sleep 4; Protection 3; Fever / Restlessness 1; If child doesn't feel well 1	Burn 40; Bath 1; Mix with imphepho 1; Not specified
Entressdruppels	Protection 19; Crying / restlessness 4; Stomach cramps / colic 4; According to leaflet 1; Cold / flu 1; Cough 1; Help child sleep 1; Not specified 5	Breast milk / formula milk / milk 7; Rub head / fontanelle / feet / ears / nose 7; Bath 4; Bath / rub head 2; Bath / Rub head / nose 2; Bath / Formula 1; Not specified 13;
Essens Groen Amara	Heal umbilicus 7; Appetite 3; Stomach cramps / colic 2; Stomach problems 2; Takes out green stools 2; Protection 2; Protection - bad spirits 1; Protection - others using traditional medicine 1; According to leaflet 1; Beating fontanelle 1; Cloudy weather - heal umbilicus 1; Cloudy weather - restlessness 1; Constipation 1; Not known 2; Not specified 3	Breast milk / formula milk 8; Bath 3; Rub head / fontanelle 2; Not specified 14; Water 1
Jamaika Gemmer	Cough 1; Flu 1; According to leaflet 1	Mix with breast milk 1; Not specified 2
Balsem Kopiva	Heal umbilicus 1; Blocked nose 1	Rub 1; Mix with breast milk 1
Rooilaventel	Clean tongue 1; Can't remember 1; Not specified 1	Not specified 1; Can't remember 1
Staaldruppels	Can't remember 1; Not specified 1; Protection 1	Bath 2; Can't remember 1
Turlington	Chest problems 1	Mix with formula milk 1
Witdulsies	According to leaflet 1; Chest problems 1; Hiccups 1	Mix with breast milk 1; Not specified 2

Given the malodorous and strong medicinal properties of the Dutch medicines – in particular *Haarlemensis*, not everyone uses *Stuips* for children. Caregivers are also warned against over-using them by nurses:

"We wouldn't come to an agreement [with the family], wanting the kids to do funny stuff like Haarlemensis and rubbing it on the child's nose. He ends up coughing, he has chest problems and other things, because that's dangerous for him. (CG3 – PHC)

"So they will come with the Stuips, smelling of those Stuips and then when you tell them, don't put these things on the child because they suppress the respiratory centre. That's why the child won't wake up... Ja, it suppresses the respiratory centre and the child goes like [makes wheezing sound]. And she comes here, she says the child isn't breathing well, then you say did you put Stuips on and she says yes. That's why."
(Nurse1 – public hospital)

"These small bottles? Ja they do [use them], a lot of them. And they believe a lot in them. And we always teach them, you must read the leaflets and see what are those treatments for, because some of them, most of them are treatments for adults, not for children." (Nurse2 – public hospital)

"The druppels are good for children, although the clinic doesn't want us to give them to children, but they are very good." (FG1)

5.1.2 Religion

The causation of illness and subsequent course of action a caregiver takes (traditional vs. allopathic) when their child is not well is very much governed by their own background and beliefs:

"If you believe this one can help your kids, it can help your kids." (FG4).

"But, you know everything that you believe that it will help you, it helps." (Nurse5 - PHC)

"It goes according to your beliefs or what can I say?" (Nurse4 – private clinic)

Strongly affecting a caregiver's personal beliefs is the religion she belongs to. If a mother had strong religious beliefs these soon became apparent when talking about her child's health:

"It takes your faith, and other bad influences can make you abandon your traditions. You just pray for a sick child." (FG2)

"You know mine I don't believe in all of this - for Muthi Wenyoni or whatever and a spuit. I pray, God here's your son, take that thing out of him and it will just go out like, you know, like stools out." (FG4)

"Faith healers, they pray and they use water as well. Sometimes you might find that somebody is sick, they will stay praying for her. The sick person must also have faith in those prayers, and from those prayers and water, that person will feel alive." (TMP1)

"I strongly believe in medicines from the clinic. I believe that the doctors help and the medicines... and so when they give you Panado they first prayed, asked God that these medicines can help. That is why I strongly believe in medicines from the clinic. That is why even when a child has a cough, I take that treatment that they gave me." (CG3 – PHC)

As can be seen in Figure 5.4, the PHC and public hospital caregivers were very similar in terms of their religious affiliation, with most either belonging to a Protestant or African Independent Church. The TMP caregivers had the highest proportion of Zion Christian Church (ZCC) members and a much lower proportion of Catholics and Protestants compared to the other facilities. The private clinic on the other hand had the highest proportion of Protestants and Catholics. Everyone at the private clinic ascribed themselves to a church whereas 11-15% of caregivers at the other facilities reported having no religion.

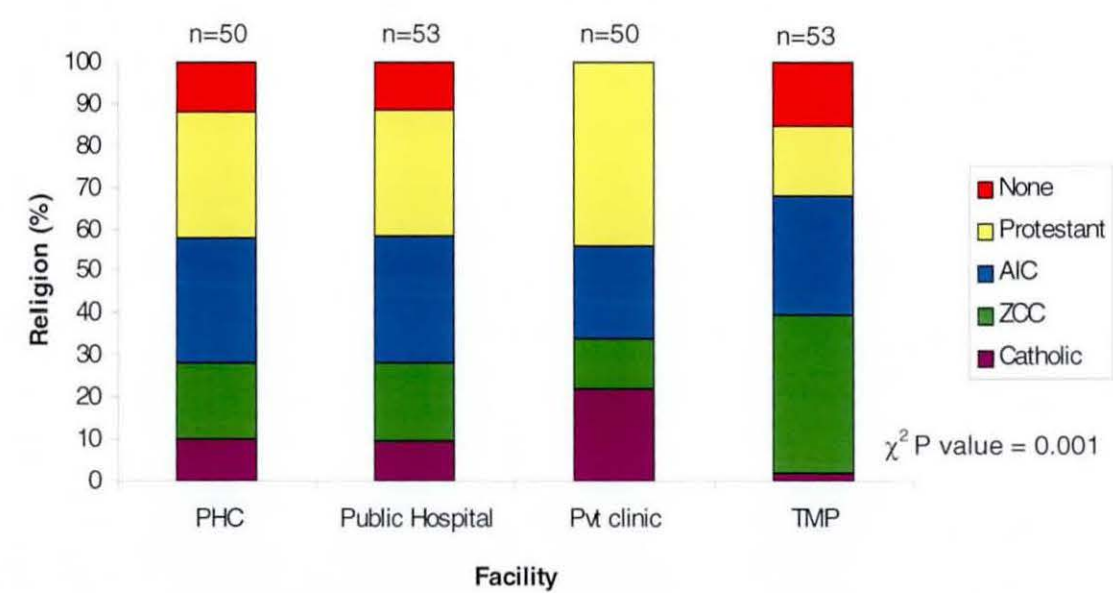


Figure 5.4: Religious affiliation by facility on day of interview

5.1.2.1 Religion, beliefs and the use of traditional medicine

One explanation for the non-use of traditional medicine is the influence of Christianity:

"You see today we have born again Christians who have disassociated themselves from their traditions and values and live in Western ways. They have abandoned their ways of doing things and today they live like Whites..." (FG2)

Although this does not always preclude the use of traditional medicine:

"... I don't have a problem with your belief - you pray to God and at the same time you go to the Gogo [TMP]." (FG4)

Whether a caregiver uses traditional medicine or not is therefore very much linked to their belief system:

"You know in our church we are just different. In church you will find some people wearing sangoma things. It is because we are different, we have different beliefs, but me, I believe in God and the clinic." (CG3 – PHC)

Nearly three quarters of caregivers had given or would give traditional medicine to their child if the need arose (χ^2 P value < 0.001) (v. Table 5.8). Excluding the TMP group this figure is 63.4%. Slightly fewer (58%) private clinic caregivers had or would give traditional medicine to their child.

Table 5.8: Use of traditional medicine for child under 6 by facility on day of interview

Use of traditional medicine	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Has given / would if need arose	34 (68%)	34 (64.2%)	29 (58%)	53 (100%)	150 (72.8%)
Has never / would never give	16 (32%)	19 (35.9%)	21 (42%)	0 (0%)	56 (27.2%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)

χ^2 P value < 0.001

Table 5.9 shows that the highest proportion of traditional medicine users compared to non-users were found in the ZCC group (88.9%; χ^2 P value = 0.009). This is closely followed by those that didn't ascribe themselves to any religion (80%) and the AIC group (75.4%). The highest proportion of non-users compared to users was the Protestant group (41.9%) and the Catholic group (31.8%).

Table 5.9: Use of traditional medicine for child under 6 by religion

Religion	Attitude towards use of traditional medicine		
	Has given / would give if need arose	Has never / would never give	Total
Catholic	15 68.2%	7 31.8%	22 100%
ZCC	40 88.9%	5 11.1%	45 100%
AIC	43 75.4%	14 24.6%	57 100%
Protestant	36 58.1%	26 41.9%	62 100%
None	16 80%	4 20%	20 100%
Total	150 72.8%	56 27.2%	206 100%

χ^2 P value = 0.009

Regardless of whether they had given their child traditional medicine or not (as this may come from any source), caregivers were asked the reasons for taking or not taking their child to a TMP. As can be seen in Table 5.10, the most common reason for taking a child to a TMP was for protection as well as 'African' illnesses or supernatural problems. The TMP caregivers stand out in their affirmation of the efficacy of traditional medicine and their belief in it (χ^2 P value < 0.001). A caregiver's background and family influence was more important for public hospital and TMP caregivers in this sample than for PHC and private clinic caregivers. This will be examined in further detail in the section on family influence on health-seeking.

Table 5.10: Reasons for using a traditional healer by facility on day of interview*

Reasons for using a traditional healer	Facility on day of interview					χ^2 P value
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)	
Supernatural problem / 'African' illness	21 (30.9%)	14 (20.6%)	17 (25%)	16 (23.5%)	68 (100%)	0.379
Inefficacy of Western medicine	3 (8.6%)	3 (8.6%)	0 (0%)	29 (82.9%)	35 (100%)	0.000
Background / Family influence	1 (4.3%)	9 (39.1%)	4 (17.4%)	9 (39.1%)	23 (100%)	0.039

*Respondent may give more than one response, therefore column % are not applicable

Excluding TMP caregivers for whom this question was not applicable, of those who did not take their child to a TMP, the main reasons were because they did not believe in it, closely followed by religious reasons such as being a Christian (v. Table 5.11). Families again exert a certain amount of influence over not going to a TMP. A large proportion of PHC caregivers who would not take their child to a traditional healer thought that traditional medicine was dangerous and Western medicine was better and this was the only statistically significant result (χ^2 P value=0.035).

Table 5.11: Reasons for not using a traditional healer by facility on day of interview*

Reasons for not using a traditional healer	Facility on day of interview				χ^2 P value
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	Total (n=153)	
Doesn't believe	7 (21.9%)	13 (40.6%)	12 (37.5%)	32 (100%)	0.341
Religion	4 (17.4%)	10 (43.5%)	9 (39.1%)	23 (100%)	0.236
Background / Family influence	4 (33.3%)	2 (16.7%)	6 (50%)	12 (100%)	0.286**
Western medicine better than traditional which is dangerous	9 (64.3%)	2 (14.3%)	3 (21.4%)	14 (100%)	0.035**

* Respondent may give more than one response, therefore column % are not applicable
 **Indicates that the Fishers exact test was used as the expected cell count was < 5

The caregivers were asked about their own consultations with TMPs and if this had changed in the past 10 years. Excluding those who reported never having consulted a TMP for themselves, the PHC, public hospital and private clinic attendees reported similar proportions in change (v. Table 5.12). Proportionately the TMP attendees had a lower proportion who no longer consulted a traditional healer (18.4%) compared to the PHC (44.4%), public hospital (40%) and private clinic (38.5%) attendees, however these numbers are small. In the same way, higher proportions of TMP attendees reported that they now went to a TMP more often (28.6%) compared to PHC clinic (5.6%), public hospital (13.3%) and private clinic (15.4%) attendees.

Table 5.12: Change in caregiver's consultations with a TMP by facility on day of interview

Change in caregiver's consultations with TMP in last 10 years	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Doesn't go anymore	8 (44.4%)	6 (40%)	5 (38.5%)	9 (18.4%)	28 (29.5%)
Goes less often	8 (44.4%)	6 (40%)	4 (30.8%)	12 (24.5%)	30 (31.6%)
Goes more often	1 (5.6%)	2 (13.1%)	2 (15.4%)	14 (28.6%)	19 (20%)
Same as before	1 (5.6%)	1 (6.7%)	2 (15.4%)	14 (28.6%)	18 (18.9%)
Total	18 (100%)	15 (100%)	13 (100%)	49(100%)	95 (100%)

χ^2 P value = 0.066 (Fisher's Exact Test)

The main reason for a change in the number of personal consultations with a TMP for caregivers interviewed at TMPs was because traditional medicine was not needed at present (v. Table 5.13). The main reason why caregivers interviewed at TMPs consulted TMPs themselves more often was because of their faith in the treatment and good outcome in the past. For attendees at the public hospital, the main reason for a change in their use of traditional healers was because of a bad outcome or the inability of traditional medicine to help them in the past.

Table 5.13: Reason for caregiver's change in use of traditional medicine by facility on day of interview

Reason for caregiver's change in use of traditional medicine	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Not needed at present	7 (14%)	3 (5.7%)	4 (8%)	20 (37.7%)	34 (16.5%)
Believes/Good outcome	1 (2%)	1 (1.9%)	2 (4%)	9 (17%)	13 (6.3%)
Bad outcome/Unhelpful	4 (8%)	7 (13.2%)	1 (2%)	1 (1.9%)	13 (6.3%)
Religious reasons	1 (2%)	2 (3.8%)	3 (6%)	3 (5.7%)	9 (4.4%)
Other	4 (8%)	2 (3.8%)	1 (2%)	2 (3.8%)	9 (4.4%)
N/A	33 (66%)	38 (71.7%)	39 (78%)	18 (34%)	128 (62.1%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)

χ^2 P value < 0.001

5.1.2.2 Attitude towards faith healing

Almost a third of caregivers thought that faith healing did work and just over 13% said that it would depend on the illness, belief or the healer (χ^2 P value = 0.009) (v. Figure 5.5) .

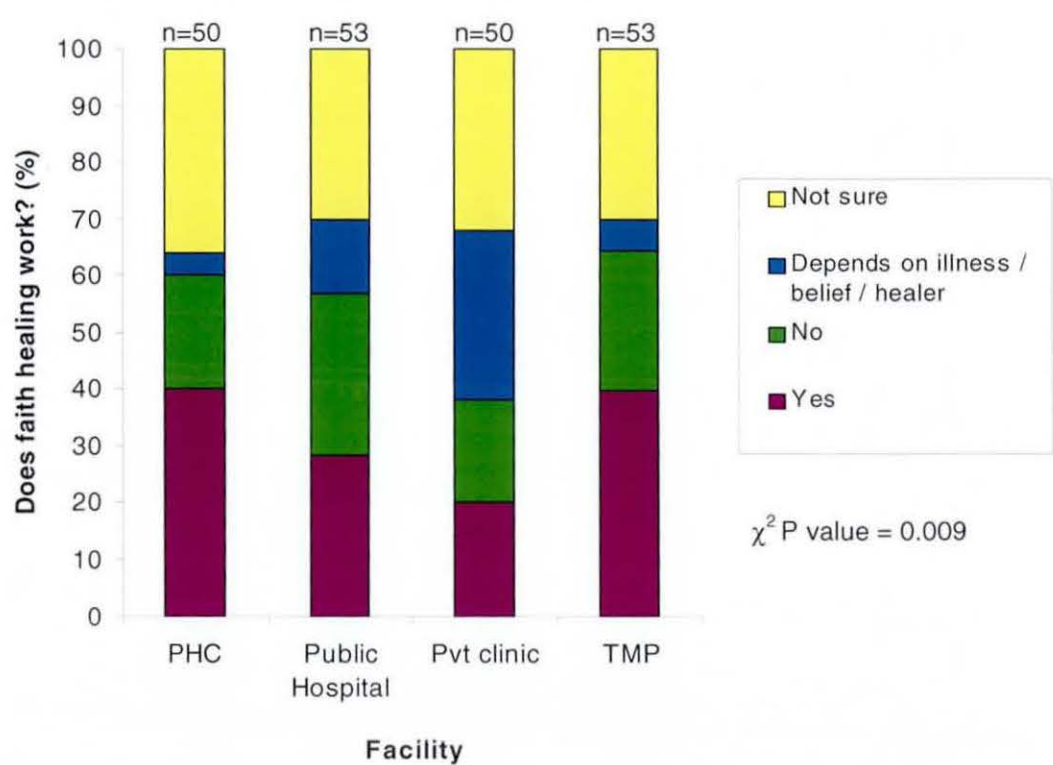


Figure 5.5: Attitude towards faith healing by facility on day of interview

This leaves 22.8% who did not think it worked and 32% who were not sure. When this is broken down by facility, PHC and TMP caregivers had the highest proportions who believed in faith healing (40% and 39.6% respectively). The private clinic caregivers were the most judicious, with 30% saying that it would depend on the illness, the belief or the healer (v. Figure 5.5).

As can be seen in Table 5.14, the AIC and the ZCC caregivers tended to have stronger beliefs in the power of faith healing (40.4% and 37.8% respectively), although they also had a sizeable proportion who were not sure (35.1% and 24.4%). Protestant caregivers tended to have the greatest number (30.7%) of non-believers in faith healing, as well as the largest number of undecided caregivers (33.9%).

Table 5.14: Attitude towards faith healing by religion

Religion	Does faith healing work?				Total
	Yes	No	Depends on illness / belief / healer	Not sure	
Catholic	6	4	6	6	22
	27.3%	18.2%	27.3%	27.3%	100%
ZCC	17	10	7	11	45
	37.8%	22.2%	15.6%	24.4%	100%
AIC	23	9	5	20	57
	40.4%	15.8%	8.8%	35.1%	100%
Protestant	13	19	9	21	62
	20.9%	30.7%	14.5%	33.9%	100%
None	7	5	0	8	20
	35%	25%	0%	40%	100%
Total	66	47	27	66	206
	32%	22.8%	13.1%	32%	100%
χ^2 P value = 0.185					

Figure 5.6 shows that nearly a third of caregivers had taken their child to a faith healer, as defined by the word '*abathandazeli*' (they are also referred to as prophets or *abaprofethi*). The main faith healer users were the TMP (35.8%) and public hospital (32%) caregivers. Use of faith healing was found to be less prevalent than the use of traditional medicine in this sample as shown in Figure 5.6.

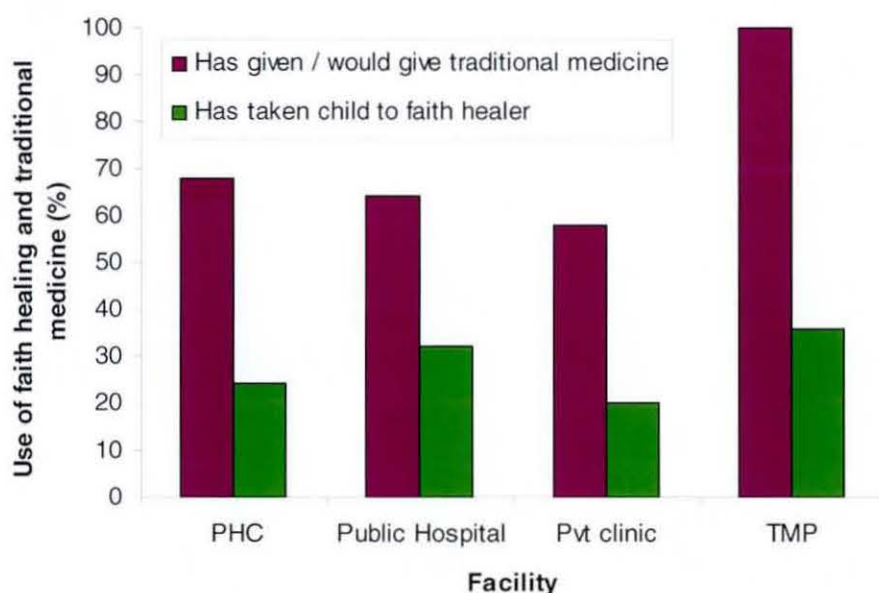


Figure 5.6: Use of faith healing and traditional medicine for child by facility on day of interview

Of those who had taken their child to a faith healer, 62.1% had had good results and believed that faith healing worked (χ^2 P value < 0.001) (v. Table 5.15). Only 17.2% had not felt that faith healing worked. This is contrasted with 78.7% of caregivers who did not think faith healing worked, although they had never been to a faith healer.

Table 5.15: Attitude towards faith healing by use of faith healing

Ever taken child to a faith healer?	Does faith healing work?				Total
	Yes	No	Depends on illness belief / healer	Not sure	
Yes	36 62.1%	10 17.2%	9 15.5%	3 5.2%	58 100%
No	30 20.3%	37 25%	18 12.2%	63 42.6%	148 100%
Total	66 32%	47 22.8%	27 13.1%	66 32%	206 100%

χ^2 P value < 0.001

As shown in Table 5.16, of those caregivers who had used traditional medicine for their child, only 33.3% had taken their child to a faith healer, although 86.2% of those who had gone to a faith healer with their child had / would also used traditional medicine (χ^2 P value = 0.007). Caregivers may therefore be split into those who use traditional medicine (100 caregivers); those who use traditional medicine *and* faith healing (50 caregivers); those who use neither (50 caregivers) and those who use faith healing but not traditional medicine (8 caregivers).

Table 5.16: Use of traditional medicine for child under 6 by use of faith healing

Use of traditional medicine for child < 6 years	Ever taken child to a faith healer?		
	Yes	No	Total
	50	100	150
Has given / would give if need arose	33.3%	66.7%	100%
	86.2%	67.6%	72.8%
	8	48	56
Has never given / would never give	14.3%	85.7%	100%
	13.8%	32.4%	27.2%
	58	148	206
Total	28.2	71.8	100%
	100%	100%	100%

χ^2 P value = 0.007

5.1.3 Family beliefs and decision-making

Directly influencing a caregiver's personal beliefs are the beliefs of her own family and the family she has married into. In certain cases relatives may actually be in charge of the decision-making process. After being told by the hospital that there was nothing wrong with her child, caregiver 2 asked her mother if they should take the child somewhere else:

"No, my mother said we must just wait and see what happens." (CG2 – public hospital)

"And then you ask her, why don't you breastfeed? They said, my mom said I shouldn't breastfeed because my breasts are still - my milk is filthy..." (Nurse1 – public hospital)

Table 5.17 shows that the mother of the child was the main decision-maker about health care for the PHC and public hospital children. For the private clinic children, decisions were mainly taken by both parents and for TMP children, grandmothers played a key role.

Table 5.17: Decision-maker when child is not well by facility on day of interview

Decision-maker	Facility on day of interview				Total (n=206)
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	
Mother of child	25 (50%)	27 (50.9%)	18 (36%)	17 (32.1%)	87 (42.2%)
Both parents	17 (34%)	15 (28.3%)	30 (60%)	10 (18.9%)	72 (34.9%)
Grandmother	4 (8%)	6 (11.3%)	1 (2%)	19 (35.9%)	30 (14.6%)
Other relative	4 (8%)	5 (9.4)	1 (2%)	7 (13.2%)	17 (8.3%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)

χ^2 P value < 0.001

In qualitative interviews, grandmothers were quick to be cited as key decision-makers due to their experience and knowledge:

"Grannies - they know everything." (FG3)

"It's my first child but I have a granny, she knows a lot of things." (FG4)

"I think it's their beliefs, because at home we have grandmothers. They will tell you that this is the good medicine and while the doctors can tell you that the Panado is." (FG5)

"Ja, just an older relative because we believe that they are more experienced than us. That's why we go to them." (FG3)

"I heard my granny said, with my granny's kids she used to give this and this and this, so I'm just following on my family's history..." (Nurse3 – private clinic)

"... just like in my grandson's case. I do tell his mother to take him to the Western doctor so that he can get healed and also give him from my traditional medicines." (TMP4)

Grandmothers exert a big influence over whether a child goes to a TMP or not, with 93.3% of children whose granny is the decision-maker having gone to a TMP (χ^2 P value = 0.016) (v. Table 5.18). The same is true for other relatives (82.4%). Caregiver 1 was asked how she would find a traditional healer to help treat her child's fits and the child's paternal grandmother was cited as the informant:

"Asking from friends or relatives. But the person I did ask it's the grandmother from the father's side. She told me we'll take him to someone else [TMP] to treat for the fits. So we are still going to go to that person tomorrow." (CG1 – public hospital)

Table 5.18: Decision-maker for child illnesses by attitude towards traditional medicine

Decision-maker	Use of traditional medicine for child		
	Has given / would give	Has never / would never	Total
Mother of child	56	31	87
	64.4%	35.6%	100%
Both parents	52	20	72
	72.2%	27.8	100%
Granny	28	2	30
	93.3%	6.7%	100%
Other relative	14	3	17
	82.4%	17.7%	100%
Total	150	56	206
	72.8%	27.2%	100%
χ^2 P value = 0.016			

In a patriarchal society, the father and his family have quite a strong say, particularly in relation to customs and traditional medicine. Problems may arise when families have different beliefs, with mothers being blamed for any ill that besets her child if she does not carry out rituals and customs, particularly with regards to the ancestors:

"They're [husband's family] blaming me! They're blaming me because of my beliefs. If you could have done those cows, slaughter all that and introduce him to the graves, to the father-in-laws, then he would know that there is a Daniel named after him." (FG4)

Similarly a mother may also be blamed for problems which may occur if she does use traditional medicines, although the strength of her beliefs means that she does not always follow her husband's wishes:

They don't believe in ancestors, my family believe in ancestors... He came and told me that his child doesn't use traditional medicines. I just told him why didn't he tell me sooner, because I could have known and stopped using them. I did this because I also grew up using them and that is part of my family norms, that each and every child must be treated with these traditional things." (FG4)

"I was explaining that at times I do believe in our African traditions. When I am sick and I want to visit a traditional healer he [husband] tries to stop me saying that I will bewitch him or us, or whatever it is but I do go at the end of the day." (FG2)

In Focus Group 4, one caregiver explained that as a Christian, she only believed in one God, and if the father of the child wanted to take the child to a traditional healer this would conflict with the teachings of her church:

"What if the father believes and I don't believe at all? ...Cause what if my God said you don't have to have any other God except me and then you gonna take my kids [to the traditional healer], God have to be hurt somehow, so it's a problem. I think we parents we should talk, I mean you believe in this, I believe in this... so let's talk about what's good for the baby." (FG4)

Beliefs about illness and healing may be difficult to change, as suggested by a public hospital nurse:

"It's people's attitude and people's mindset. I've grown up knowing you have to pray and if prayer doesn't help go seek help. Now it's either I take my child to a traditional healer or I come to a hospital or to a clinic. Now, if I have to change that, it's going to take a long time, because it's in me, it's embedded in me. I have strong beliefs about this, that I start with praying, then somebody else comes and says no you can pray whilst the child is getting treatment, you know. The 2 have got to balance. But no, I've got to balance it up here, it's the mindset. And it's not easy to change people's mindset." (Nurse1 – public hospital)

Occasionally however, beliefs can be changed, although it would have to be demonstrated that there is good reason to change them. In the example below a caregiver convinced her husband that they did not need to follow traditional customs for their child. Her success lay in the fact that her husband had not been able to secure work whilst seeking help from *sangomas*. Through prayer however he did secure a job:

"But lucky enough, along the way, I showed him, when you were young you applied this and this, but they didn't help to this far so if you gonna use that, and I am against that, then what will happen? I just feel I 'm gonna lose my baby. So at least we meet, we meet somewhere and we did go to church together and we started praying together, and he saw this other side. Then he told his mother, no, I cannot go back to those people [traditional healers]... I said they have taken you to all those sangomas telling you they'll help, you might work. You didn't work for all those years, and they slaughtered all the cows for you. What happened? Nothing. But we just pray God, we fasted for a month, then God gave you that full-time job. So you know it's all about beliefs. It's all about beliefs." (FG4)

Family influence can also reinforce the reliability of an habitual notion such as using a particular type of medicine:

"Our mother used it to us. I trust it." (CG2 – public hospital)

"I heard my granny said, with my granny's kids she used to give this and this and this, so I'm just following on my family's history..." (Nurse3 – private clinic)

"Well it's from way back. I grew up like that, my parents were using these druppels and what have you. So it's something that has been done for decades." (Nurse1 – public hospital)

"Yes. She [mother] was using them [Stuips] to us so she did tell me I must also use it." (CG1 – public hospital)

"Eh, I wouldn't say really taught. It's just one of those things that you learn by seeing that you experience because I grew up with my granny, you know living with it was my granny and my 2 aunts because my mother got married and she went to live with her husband in Thembisa and I was left with my granny and during that time my aunt had 2 kids and they went through that." (CG4 – private clinic)

"Those who grew up using traditional medicines, they prefer traditional medicine." (TMP1)

"I think it is the way we are socialised as we are growing up. We have this belief in our things and we don't want to break away from them." (Nurse1 – public hospital)

5.1.4 Social networks (the lay referral system)

The importance of the lay referral system, including advice from kin and other acquaintances in a caregiver's social network was an important concept mentioned by caregivers and by traditional healers in relation to referrals to them:

"So that's why I say at times, like as I was saying I was brought up in a Christian family - we didn't know those things and with my mom she was just worried that this thing is happening and she didn't know what to do until a neighbour came to interfere and say no this is what you supposed do. Because maybe if that person didn't come I would have lost my child." (FG1)

"For us to know that an inyanga is good we hear it from others, like for example if you come and say to me my child is sick what is wrong with your child? My child has epilepsy or my child has inyoni. And then I would say there is a good traditional healer who helped my child and cured him from inyoni and ibala." (CG5 – public hospital)

"The friends - like one will say, ay my friend is Doctor, like this one is Dr M, my friend is Dr M, he's very good, why don't you go to X Clinic, only to find you never wanted X Clinic. Just because this friend is telling you about this person, so you can go there. Or I don't like it, my friend says I don't like that place. She's not going to come also." (Nurse3 – private clinic)

However, advice from friends and neighbours is not always followed through:

"My neighbour believes in them [traditional healers]. And you find that my child gave me trouble the other night and I would go to her for help. So she would say in the morning go to so and so who is a TMP. Then I would just agree and not go there because she tells me of people I don't believe in." (CG3 – PHC clinic)

5.1.4.1 Social networks & support

Social networks provide more than information. They also provide child support in the form of money, sympathy and medicine which are invaluable in the health-seeking process and can sometimes influence whether certain treatment occurs or not:

"It won't be more than R100. But they [in-laws] will pay; I am not going to pay. They are going to pay because they are the ones who are taking him there [to TMP]." (CG1 – public hospital)

"...then round about [half] past two, things became complicated, [the child] turned blue, short breaths... I have to call my brother and I am not staying with him, to rush me to the hospital there." (FG4)

Significantly, those citing least support (financial / emotional / childcare / advice) were the caregivers from the TMPs (64.2%) followed by the PHC caregivers (58%) and the public hospital caregivers (54.7%), whilst those citing most support from friends or relatives were the private clinic caregivers (70%) (v. Figure 5.7)

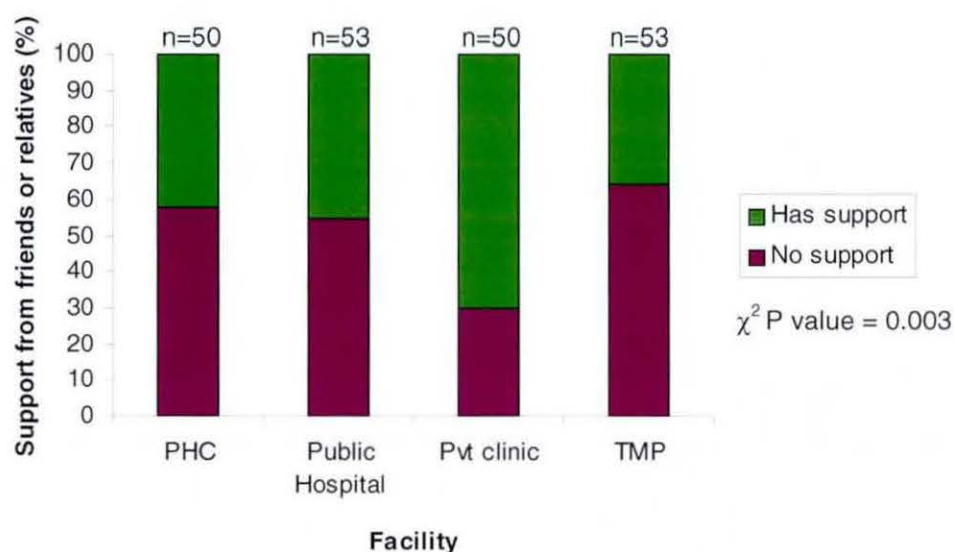


Figure 5.7: Support from friends or relatives by facility on day of interview

Smaller poor households may lack support from kinship networks (Sauerborn *et al.*, 1996). As can be seen in Table 5.19, a strong association is present between a caregiver's socio-economic group (very low; low; medium and high) and whether they receive any form of support (e.g. financial / emotional / child care / advice) from friends or relatives. In the lowest SES group, 70% report a lot less support from friends or relatives whereas 78.6% of those in the highest SES group have some kind of support from friends or relatives. No association was found between who made decisions about the child's health care and support from friends or relatives (χ^2 P value = 0.306).

Table 5.19: Support from friends & relatives by socio-economic status

SES group	Support from friends / relatives		
	No support	Has support	Total
Very low	33	14	47
	70.2%	29.8%	100%
Low	41	25	66
	62.1%	37.9%	100%
Medium	24	27	51
	47.1%	52.9%	100%
High	9	33	42
	21.4%	78.6%	100%
Total	107	99	206
	51.9%	48.1%	100%
χ^2 P value < 0.001			

Length of residency in an area may give an indication of the strength of support and social networks. Table 5.20 shows that the most stable groups (having resided longest in the general area), were those at the PHC, with 70% having lived all their lives in Johannesburg or Soweto. This was followed by 52% of the private clinic caregivers. The TMP and public hospital groups were the least stable, with just over a quarter of each having only lived for less than 5 years in the area. Only a third of TMP caregivers and 40% of public hospital caregivers had lived all their lives in Johannesburg / Soweto. No association was found between the length of residency in an area and the support a caregiver received from friends and relatives (χ^2 P value = 0.539).

Table 5.20: Length of residency by facility on day of interview

Length of residency in Johannesburg / Soweto	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
0 – 5 years	5 (10%)	15 (28.3%)	6 (12%)	14 (26.4%)	40 (19.4%)
5 – 10 years	3 (6%)	11 (20.8%)	11 (22%)	12 (22.6%)	37 (17.9%)
10+ years	7 (14%)	6 (11.3%)	7 (14%)	9 (16.9%)	29 (14.1%)
All my life	35 (70%)	21 (39.6%)	26 (52%)	18 (33.9%)	100 (48.5%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value = 0.012					

5.1.5 Summary

The previous sections have shown that caregiver beliefs are central to the health-seeking process because they distinguish between the type of health care paradigm which should be sought – traditional or Western. These beliefs are influenced by a caregiver's world-view, their religion, their upbringing and family beliefs as well as their social networks.

"It's because we don't have the same beliefs. So a newborn they say you have to take to whoever to do the cuts they do to make a child strong. But according to me I refuse to do that. It's those people who believe in such things and I don't believe in such things."
(CG3 – PHC clinic)

"If she believes that the traditional healer will help me, she'll go straight to the traditional healer. If she believes that the hospital will help her, she'll go straight to the hospital."
(Nurse1 – public hospital)

"Without the case of inyoni, the other diseases. It all goes with the beliefs of people. So I don't believe in traditional healers and faith healers. So I don't take anything from them."
(Nurse2- public hospital)

These beliefs in turn affect how characteristics of the child such as their age or general state of health may influence the decision-making process. This is examined in the following Section 5.2.

5.2 Characteristics of the child

5.2.1 Child's age

A child's age may influence where a caregiver takes her child because of the fragility of infants, particularly newborns and their perceived vulnerability both to natural and supernatural causes of illness, including the *Abantu* childhood illnesses. A paediatrician might therefore be preferred over a GP for example, GP might be preferred over a clinic or a TMP might be preferred over home treatment:

"You know like more especially if they are still young, I will never take a child to a GP. Say if the child is 0 to 6 months old, so whatever is wrong during that time I would take them to the specialist, not the GP..." (CG4 – private clinic)

When the child's age is taken into account, it follows from qualitative research that most 'African' childhood illnesses or problems will tend to occur within the first year of life (*inyoni*, *ibala*, ancestor-related problems, 'pollution') whilst the child is still weak and vulnerable and before rituals and ceremonies have been performed:

"Yes they come. From 10 days old. When they are 10 days, we do them ikhakhayi [fontanelle]. These are the very young children who suffer from ukhakhayi [inyoni]." (TMP3)

"Children has got sores in their stomach and on their chests, if this can get healed when the child is still young, this will go for ever, they will never come again, the child will grow until she becomes a grown girl without having this." (TMP6)

"If you treat the child while he's still small the child won't have any more problems." (TMP4)

[Do you use a sput?] *"On children especially immediately after birth, cleaning all dirty things in their stomach." (TMP3)*

"Normally when they are young they say you must take them to the clinic I used to take her to the clinic but it got worse - I had to take her to the doctor and it wouldn't help, even with those medicine. But after they took her to the auntie and she used this [sput]." (FG1)

"Inyoni... they tell you that they give the child, like when it's diarrhoea, within 10 months... it's inyoni." (Nurse3 – private clinic)

"... children of ages starting from 10 days to 5 months, when she is sick or when bewitched, most of the time they suffer from diseases such as hlogwana." (TMP6)

However *Abantu* illnesses are not limited to this age group as can be seen in the quotations below:

"Children from 6 years and upwards, it is easy to see what the child is suffering from. Sometimes you might find that the child has got 'hlogwana'. They don't sleep at night, they can't even tell what they suffering from." (TMP6)

"Doesn't matter the age it [ibala] just [appears] but my first one he didn't have that."
(CG2 – public hospital)

It was not possible to observe associations between providers, age groups and the reason for attending the provider (type of illness) because of insufficient sample size.

The type of medicine given to the child may also be influenced by their age. The Dutch medicines for example are mostly used when the child is still young and vulnerable:

"I was using the Stuips whilst the child was still young." (CG5 – public hospital)

"OK, Stuijdruppels is just for when, for protection. And Duiweldruppels and Entress I have just to use them for protection, when you put it in the water, not now, but when he was still young." (CG1 – public hospital)

"It's because I use them for a child. For a newborn. I mix the Stuips and apply them."
(FG1)

The age of the child will also affect the dosage of medicine given:

"Now, for your child, because your child is 6 months or 8 months old, you are going to give 5ml, a teaspoon, 3 times a day, as long as the child has a fever. If the child hasn't got fever you don't give it, do you understand? And she says yes. You ask her to tell you back what you've been saying and then she tells you, I must give this to the child when it's feeling hot, I must give it 3 times a day, I must give it a teaspoon. So we try instilling in them to give the proper amount of medicines so that they don't overdose, although accidents do happen, you know how people are." (Nurse 1 – public hospital)

"No, I like this for healing cough, especially for young children. You use only a teaspoon isn't it so? And then Panado for pain you give a teaspoon, even, panado syrup as well, you just give him or her only one teaspoon if the child is not feeling well and this will help." (FG1)

"...because 12 years old takes the whole pill, 6 years it's half... You use a little bit, like a quarter or a half when the child is constipated [Brooklax]." (FG5)

In the same way, certain treatments may not be suitable for certain age groups:

"No, no for asthma, normally when they're young we don't use those things [inhaler]." (FG1)

"But usually when the children are young, we do not sput them." (FG1)

"So you use it [sput] to lower the child's temperature. But at the hospitals they do discourage us that we must never. If you go to the hospital you mustn't tell them that you have ever done that to a child." (FG5)

"...but there is some differences between children and old people's imithi [medicine]. And you are not supposed to use old people's imithi on children or use children's imithi on old people." (TMP6)

"No, it's not for children under 6 years [Brooklax]." (FG5)

"This thing happened to me last year - I lost my baby after 3 months. So I took her to the clinic and the clinic just give me just cough mixture. After 2 days medicine she doesn't come well and I take her to Bara [hospital]. And the doctor said they were not supposed to give me this medicine - she's too young." (FG1)

"And it's also strong for older people too [traditional medicine], then what about a small child?" (CG3 – PHC clinic)

Overall, children under 6 months made up 26.7% of the sample, 7-12 month olds made up 17.4%, 13-23 month olds made up 23.3% and children 24 months or older made up 32.5% of the sample. As can be seen in Figure 5.8, public hospital attendees had the highest proportion of children under 6 months (45.2%) attending. The TMP and PHC caregivers had the highest proportions of children over 24 months (45.2% and 40% respectively).

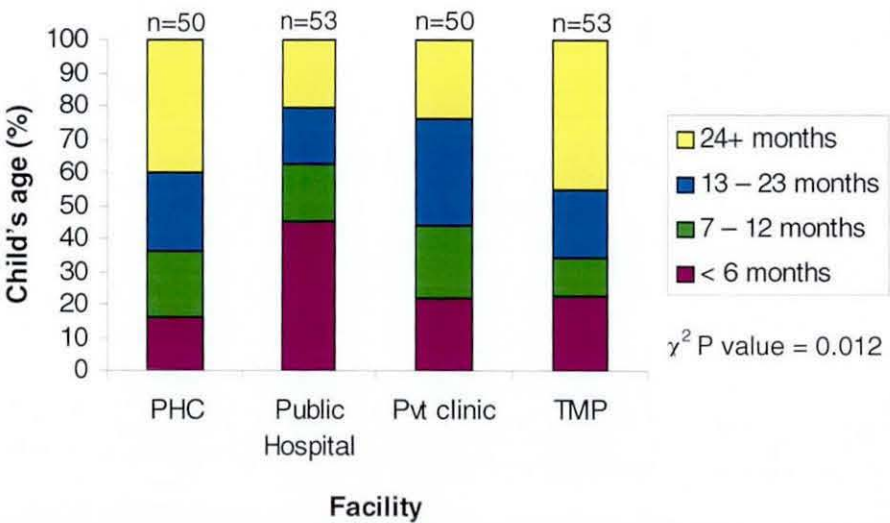


Figure 5.8: Child's age by facility on day of interview

5.2.2 Child’s health since birth, BMI & common illnesses

5.2.2.1 Child’s health since birth

As can be seen in Figure 5.9, previous illness experience with the particular child who is ill is also likely to affect treatment. Although no statistically significant difference was found (χ^2 p=0.320), overall 61.6% of caregivers reported that their child’s health since birth had been good, 20.3% reported average health and 17.9% reported poor health. In terms of the reported health status of the child since birth, no difference was found between SES groups (χ^2 P value = 0.333), between experiences of household hunger (χ^2 P value = 0.917), education levels of the caregiver (χ^2 P value = 0.658) or by how overcrowded the house was (χ^2 P value = 0.166).

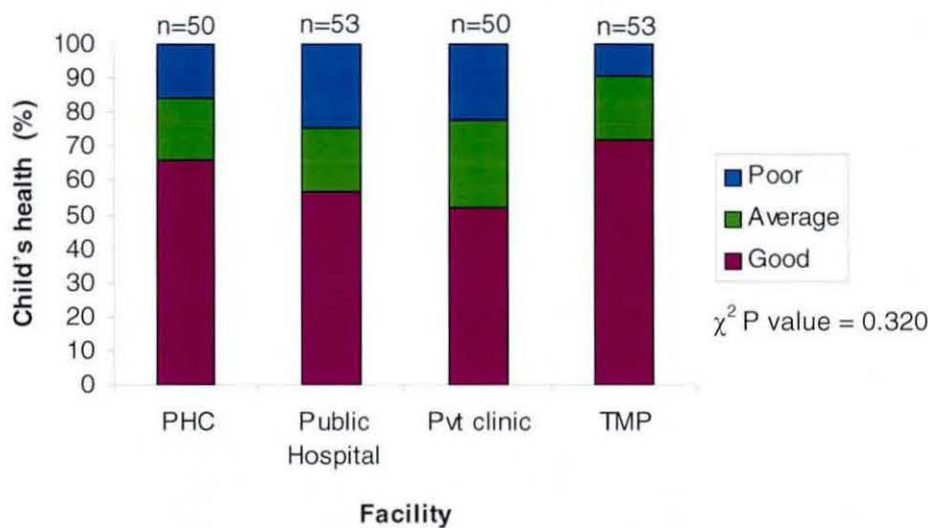


Figure 5.9: Maternal report of child’s health by facility on day of interview

5.2.2.2 Child’s birth weight and current BMI

Of those children whose birth weight was known (76.3%), no significant difference was found between facilities (v. Table 5.21). The private clinic had the highest proportion of 3.5kg – 4.5kg babies (37.5%), as well as the highest proportion of underweight babies. The PHC had the highest proportion of ‘don’t know’ answers (44.9%), whilst the private clinic only had 2 mothers who did not know the birth weight of their child.

Table 5.21: Child’s birth weight by facility on day of interview

Child’s birth weight	Facility on day of interview				Total (n=206)
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	
VLBW / LBW	4 (14.3%)	6 (14.6%)	8 (16.7%)	3 (7.5%)	21 (13.4%)
2.5 – 3.49 kg	18 (64.3%)	27 (65.9%)	22 (45.8%)	25 (62.5%)	92 (58.6%)
3.5 – 4.5 kg	6 (21.4%)	8 (19.5%)	18 (37.5%)	12 (30%)	44 (28%)
Total	28 (100%)	41 (100%)	48 (100%)	40 (100%)	157 (100%)

χ^2 P value = 0.366

Children's heights and weights were taken in an attempt to get an overall picture of the child's health. In the South African context, a 'plump' child is more likely to be perceived as healthy:

"...And they'll shout at you if the child starts to be thin. My child came here being fat, now the sisters are not feeding my child. No Mama, the child was sick, it was illness."
(Nurse3 – private clinic)

As can be seen in Table 5.22, overall, 25.2% of children were underweight and 44.4% of these were from the public hospital. Just over 67% of children in the sample had normal weight and 7.2% were overweight. Of the overweight children, 46% of these were again from the public hospital. The TMP caregivers had the highest proportion of normal weight children (86.7%), followed by the PHC (72%) and the private clinic (68%).

Table 5.22: Child's current BMI by facility on day of interview

Child's BMI	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Underweight	12 (24%)	23 (43.4%)	13 (26%)	4 (7.6%)	52 (25.2%)
Normal	36 (72%)	23 (43.4%)	34 (68%)	46 (86.8%)	139 (67.5%)
Overweight	2 (4%)	7 (13.2%)	3 (6%)	3 (5.7%)	15 (7.3%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value < 0.001					

No significant association was found between a child's BMI and their SES group (χ^2 P value = 0.117) or the support a caregiver felt she received from friends or family (χ^2 P value = 0.056). In terms of the severity of the illness on the day of interview (v. Table 5.23), most children with 'normal' weight had illnesses which were perceived as 'not serious' by their caregivers (58.3%), most 'overweight' children had illnesses which were seen as 'not serious' (60%). Amongst the underweight children, the largest proportion (44.2%) had illnesses which were seen as 'quite serious'.

Table 5.23: Child's current BMI by severity of illness on day of interview

Child's BMI	Severity of illness on day of interview			Total
	Not serious	Quite serious	Very serious	
Underweight	16 30.8%	23 44.2%	13 25%	52 100%
Normal	81 58.3%	33 23.7%	25 18%	139 100%
Overweight	9 60%	3 20%	3 20%	15 100%
Total	106 51.5%	59 28.6%	41 19.9%	206 100%
χ^2 P value = 0.013				

5.2.2.3 Common health problems since birth

As children may have had more than one common health problem since birth, Table 5.24 displays information on dichotomous health problem variables by the facility where the caregivers were interviewed. In terms of common health problems, TMP and private clinic children had experienced slightly more gastro-intestinal related problems since birth as a common problem. Chest-related problems, such as coughs and asthma were mostly reported by PHC and private caregivers, whilst the public hospital children had experienced the most varied health problems in the 'other' category. 'African' illnesses had been more commonly experienced by TMP and public hospital children.

Table 5.24: Common health problems since birth by facility on day of interview

Common health problems since birth	Facility on day of interview					χ^2 P value*
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)	
Gastro-intestinal	27 (23.2%)	22 (18.9%)	34 (29.3%)	33 (28.4%)	116 (100%)	0.039
URTI / ENT	25 (23.3%)	29 (27.1%)	24 (22.4%)	29 (27.1%)	107 (100%)	0.870
LRTI / Chest	34 (26.9%)	26 (20.6%)	37 (29.3%)	29 (23%)	126 (100%)	0.034
Fever	15 (25.4%)	15 (25.4%)	12 (20.3%)	17 (28.8%)	59 (100%)	0.830
Other	12 (21.8%)	22 (40%)	9 (16.3%)	12 (21.8%)	55 (100%)	0.037
African illnesses	1 (5.5%)	7 (38.8%)	1 (5.5%)	9 (50%)	18 (100%)	0.007*

* Fishers Exact Test if expected cell < 5

5.2.3 Summary

The previous sections have highlighted that caregivers may perceive younger children, particularly infants to be more vulnerable and therefore require more specialist care. Younger children are also more likely to require traditional treatments (including Dutch medicines) to protect them from *Abantu* illnesses such as *inyoni* and *ibala*, ancestor-related problems as well as 'pollution'. Depending on the age of the child, certain medicines may not be appropriate. However this will also depend on the caregiver's knowledge and beliefs about how medicines work. In this particular sample, children under 6 months were mostly found at the public hospital, whilst children over 24 months were mostly found at the PHC and the TMP facilities. No difference was found between groups in this sample in terms of the reported health of the child since birth. Overall, public hospital attendees had the largest proportion of children who were currently underweight (for height) as well as overweight, whilst TMP caregivers had the largest proportion of normal weight children. This was reflected in the maternal reporting of the severity of their child's illness on the day of interview. Characteristics of the child and their illness are therefore closely related, and characteristics of the illness and how this may affect decision-making are described in Section 5.3.

5.3 Characteristics of the illness

Mothers were asked about a child's illness on the day of the interview, symptoms and perceived severity.

5.3.1 Reason for bringing child to health care provider

Overall in the survey, the main reasons for attending the health care providers were for chest and lower respiratory (LRTI) complaints, ear / nose / throat (ENT) and upper respiratory (URTI) complaints and digestive system-related problems (v. Table 5.25). African illnesses / supernatural problems were only seen at the traditional healers. The main reason for admission for private clinic patients was digestive system-related, for PHC patients both URTI / ENT and LRTI / chest-related problems were the main reasons for attendance and for public hospital patients, LRTI / chest-related problems were the main reasons. The public hospital had a large amount of cases which had to be combined into an 'other' group. These included injuries, urology problems, heart problems, eye problems, swellings and HIV tests.

Table 5.25: Reason for attending health facility by facility on day of interview

Reason for attending facility	Facility on day of interview				Total (n=206)	χ^2 P value*
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)		
URTI / ENT-related	39 (45.8%)	22 (25.8%)	9 (10.5%)	15 (17.6%)	85 (100%)	0.000
LRTI / chest-related	39 (37.5%)	27 (25.9%)	25 (24%)	13 (12.5%)	104 (100%)	0.000
Digestive system	11 (14.2%)	19 (24.6%)	33 (42.8%)	14 (18.1%)	77 (100%)	0.000
Rash / skin-related	4 (21%)	10 (52.6%)	2 (10.5%)	3 (15.7%)	19 (100%)	0.056*
African illness / supernatural	0 (0%)	0 (0%)	0 (0%)	22 (100%)	22 (100%)	N/A
Other combined	7 (21.8%)	19 (59.3%)	4 (12.5%)	2 (6.2%)	32 (100%)	0.000

* Fishers Exact Test if expected cell < 5

5.3.2 Symptoms on day of interview

The private clinic and particularly the TMP caregivers reported significantly more symptoms related to weakness and dehydration on the day of interview than the other 2 facilities (v. Table 5.26). This includes the child being weak, sleeping a lot, having a sunken fontanelle, having sunken eyes, being dehydrated and having dry skin. The private clinic had the highest proportion of digestive / gastro-related symptoms including diarrhoea, vomiting, mouth rashes, loss of appetite, loss of weight and stomach aches. LRTI / chest-related symptoms such as coughing, wheezing, short breath and URTI / ENT-related symptoms such as sore throats, sneezing, swollen glands and tonsillitis, runny nose, blocked sinuses and ear infections were mostly found at the PHC. The TMP children had the largest proportion with skin-related symptoms such as rashes and red marks.

Table 5.26: Symptoms on day of interview by facility on day of interview

Symptoms on day of interview	Facility					χ^2 P value
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)	
LRTI / chest	43 (37.4%)	31 (26.9%)	26 (23.6%)	15 (13%)	115 (100%)	0.000
URTI / ENT	39 (39.8%)	24 (24.5%)	18 (18.4%)	17 (17.4%)	98 (100%)	0.000
Digestive / gastro	26 (21.3%)	27 (22.1%)	38 (31.2%)	31 (25.4%)	122 (100%)	0.038
Weak / dehydrated	3 (7.9%)	4 (10.5%)	13 (34.2%)	18 (47.4%)	38 (100%)	0.000
Rash/sore/red mark	5 (16.7%)	11 (36.7%)	2 (6.7%)	12 (40%)	30 (100%)	0.021
Not themselves / unhappy	16 (26.7%)	13 (21.7%)	17 (28.3%)	14 (23.3%)	60 (100%)	0.681
Other combined	9 (26.5%)	21 (61.8%)	4 (11.8%)	0 (0%)	34 (100%)	0.000

5.3.3 Perceived severity of illness

Symptoms will also affect the management of an illness if they are perceived to be severe:

"You know when you pick a small child up the head drops to the back, then that way you know that, that child is really sick." (CG4 - private clinic)

"Diarrhoea, fontanelle falls in and then the baby cannot lift the head up - it always goes like this and then there's diarrhoea with others and vomiting and runny eyes and - it depends on how serious it is. If it's not that serious the symptoms are less but then if it's very serious then it's more severe and fatal." (FG1)

"Then we go home, then round about past two [o' clock], things became complicated, [the child] turned blue, short breaths... you know it just changed everything, I couldn't do anything because I don't know what's the cause. I have to call my brother and I am not staying with him, to rush me to the hospital there." (FG4)

"I check the child's bottom and see that he has isilonda somoya and it also shows in the mouth when it's very serious." (TMP2)

Some traditional healers reported that they would first refer the patient on to the hospital if they deemed the illness to be serious and warranting treatment that they themselves could not provide, such as a drip:

"They will say the child has got AIDS. But when the child is not well, I will check them and tell them to take the child to the hospital. But when she is just coughing, I can still prepare her some cough mixtures. It depends what the person is sick from." (TMP3)

"Like children who are suffering from ikhakhayi. If I see that it is what I do I just send them to the hospital, especially when the child is worse, I send the child to the hospital to be put on drips for more water, since their body needs more water. From the hospital, when the child is better, then I can start giving him some medication for ikhakhayi. But if the child is worse, I just refer him to the hospital." (TMP3)

"I sometimes refer them [to the hospital], but sometimes I just take them there by myself... Like for if the child runs short of blood and water as well, you see." (TMP1)

"And the other thing, when you are very sick, like they like bringing people to me when the person is very ill, and when that, the person is just weak, no longer have a strength. I just tell them to start at the hospital to be given more water, before they can bring him to me." (TMP6)

If symptoms are perceived to be severe, in general mothers waste no time in seeking help either at a hospital or GP (if finances allow):

"For me, usually like if she is sick badly I don't go to the clinic, I just go to the doctor." (FG5)

"No, especially... babies are not the same. Your baby can treat her with this then it works, but what about her, maybe she use the same thing but it doesn't work the way, and maybe the baby becomes worse, you see. So it's better if you complicate then you go straight to the Doctor." (FG4)

"The one with the blood, you must take to the clinic and the clinic will transfer you to Bara [hospital]. because it's dangerous." (FG4)

"...I changed the child's nappy and decided I would take the child to the hospital on Monday, because I wanted to see whether this thing was become severe or not." (CG5 - public hospital)

For less serious problems a visit to the pharmacy or clinic suffices:

"Even if your child has diarrhoea and you are too lazy to take him to the hospital and it is not bad, you go to the chemist." (FG5)

"You get it with some kids where, like with my son, where it is not strong [inyoni]. You can just give them any old remedies like the Haarlemens bottle or whatever, and then the kids would be fine." (CG4 – private clinic)

For those who can afford private treatment, a distinction however is made between the GP and Paediatrician:

"Paediatrician is a child specialist so they are more prone to deal better with whatever would be wrong. If it's like a common cold then I would take them to the GP." (CG4 - private clinic)

For some less confident / less experienced mothers, some visits to the health care provider may not be warranted:

"... even if you just see a small thing, then you just rush to there. But I think its better to go to them than prescribing anything for your kid - what if it's not right for that thing? ... Because if you apply all that without knowing what if it's for the wrong thing and it makes the baby worse or you might even lose the baby." (FG4).

As can be seen in Figure 5.10, when asked how severe the caregiver thought the child's condition was on that day, over half did not think it was too serious. More serious cases were reported at the public hospital and in particular the PHC clinic. Much lower reporting of severity was found at the private clinic and the TMP.

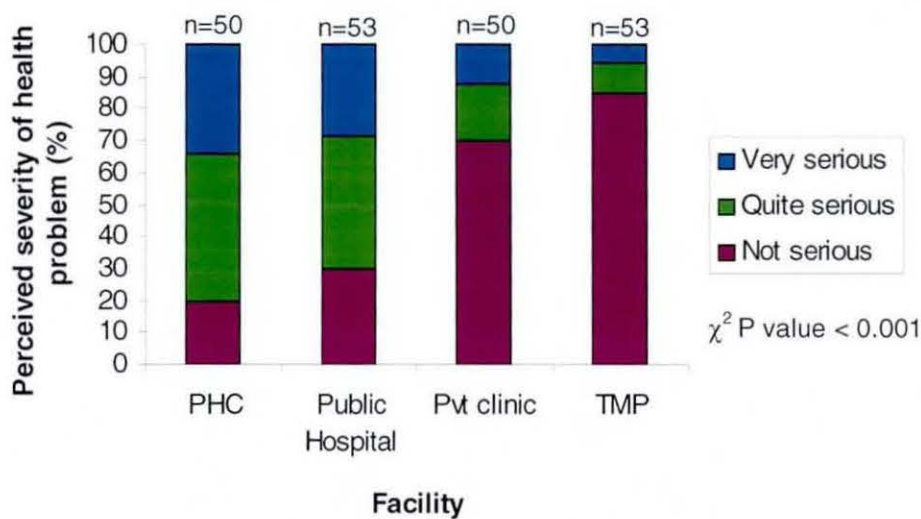


Figure 5.10: Perceived severity of health problem by facility on day of interview

Caregivers were asked what symptoms they considered to be serious for their child's health (v. Table 5.27). Dichotomous variables were created as caregivers were able to provide more than one answer. At the PHC clinic and TMP the main symptoms considered to be serious were the child not being themselves and the child not eating or losing weight. The main serious symptom at the public hospital was fever and the private clinic caregivers considered fever and the child not being themselves as the most serious symptoms.

Table 5.27: Symptoms considered to be serious for child's health by facility

Symptoms considered to be serious for child's health	Facility on day of interview					χ^2 P value*
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)	
Gastro-intestinal	8 (17%)	16 (34%)	13 (27.6%)	10 (21.2%)	47 (100%)	0.294
Fever	15 (21.7%)	20 (28.9%)	22 (31.8%)	12 (17.3%)	69 (100%)	0.112
Chest / coughing / breathing problems	1 (5.2%)	9 (47.3%)	8 (42.1%)	1 (5.2%)	19 (100%)	0.003*
Not themselves	28 (30.1%)	14 (15%)	20 (21.5%)	31 (33.3%)	93 (100%)	0.003
Not eating/losing weight	32 (35.9%)	14 (15.7%)	13 (14.6%)	30 (33.7%)	89 (100%)	0.000

* Fishers Exact Test if expected cell < 5

As well as asking the caregiver whether she thought her child's illness was serious or not, caregivers were also asked what symptoms in particular they considered to be serious for their child's health. These symptoms were then compared against the symptoms the child actually had on the day of interview to look at severity from a potentially more objective angle (although the caregiver may not have remembered all symptoms that they considered to be serious), however no significant difference was found between groups (χ^2 P value = 0.267). Figure 5.11 shows that private clinic children and TMP children had a smaller number of non-serious symptoms (46% and 64.1% respectively) than when the caregiver was asked directly about the severity of the illness (70% and 84.9% respectively). The PHC and public hospital children on the other hand had a greater number of symptoms which had not been stated to be serious by the caregiver (50% and 56.6% respectively). When asked directly about severity, the proportions of non-serious cases were 20% and 30.2% respectively.

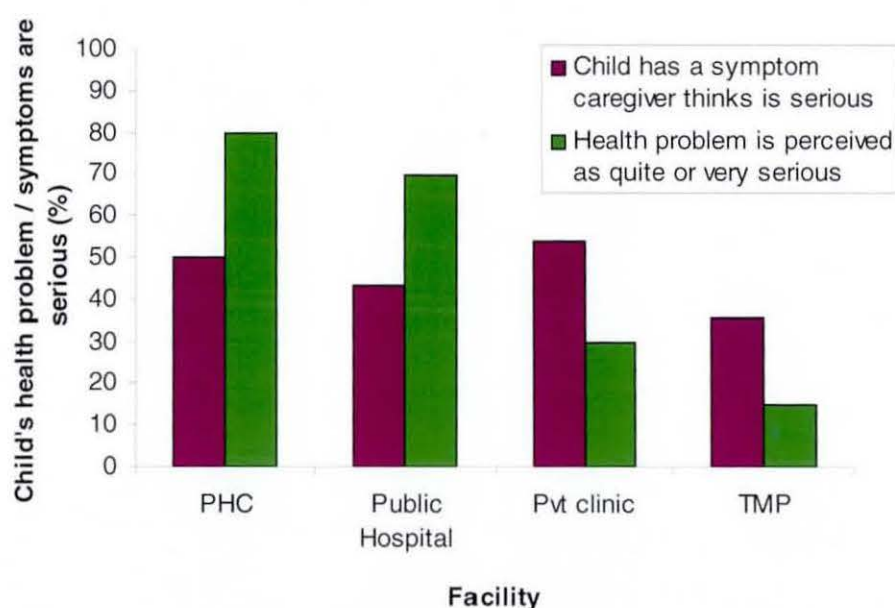


Figure 5.11: Two indicators of perceived severity by facility on day of interview

Table 5.28 shows that caregivers whose child either had diarrhoea or vomiting on the day of interview mostly cited the child not being themselves (including not playing and lassitude), not eating or losing weight, fever, as well as crying and restlessness to be the symptoms they considered to be most serious. For caregivers whose child had fever, the caregivers mostly cited the child not eating or losing weight, having fever and not being themselves to be the most serious symptoms. For children who were weak and not eating on the day of interview, their caregivers considered their child not being themselves to be the most serious symptom. For children who were not themselves on the day of interview, the caregivers mostly cited the child not eating or losing weight as well as not being themselves as the most serious symptoms.

Table 5.28: Main symptoms considered to be serious by symptoms on day of interview

Main symptoms considered to be serious*	Symptom on day of interview*				
	Vomiting (n=65)	Diarrhoea (n=70)	Fever (n=89)	Weak / not eating (n=38)	Unhappy / not playing (n=60)
Vomiting (n=20)	13	8	8	3	3
Diarrhoea (n=22)	7	10	8	3	1
Fever (n=69)	23	24	38	11	17
Not themselves (n=93)	24	30	37	24	35
Not eating / losing weight (n=89)	29	26	42	10	37
Crying / restless (n=55)	15	23	21	5	18

* Numbers in this table are actual figures and not %

It was difficult to discern any patterns between the perceived severity of the health problem and the caregiver's education level (χ^2 P value = 0.043) given that caregivers with higher education (69.1%), followed by caregivers with none / some or complete primary education (62.5%) had the highest proportion of 'not serious' responses. Those caregivers who had completed secondary education had the highest proportion reporting that the illness was 'very serious' (25.9%), followed by those with some secondary education (20.3%), those with primary or lower (18.8%) and finally those with higher (11.9%). No association was found in the level of support a caregiver had and the perceived severity of the health problem (χ^2 P value = 0.259). Nor was any significant difference found between caregiver age groups in terms of the perceived severity of the health problem (χ^2 P value = 0.993).

5.3.4 Duration of illness / health problem

Overall, 56.4% of illnesses seen had started 1 week prior to the interview, and 9.9% had started more than 2 weeks prior to the interview. If this is broken down by facility, more illnesses seen at the private clinic (67%) had started in the week prior to the interview than those seen at the PHC (61.2%), public hospital (50.5%) and TMP (46.4%). The fact that not many cases are presented

on the day the illness commences (only 4 from the TMP and 3 from the PHC) indicates that the mother delays before seeking help depending on the severity of the illness, so that she can see how the illness progresses. Because of the way the TMP mothers were sampled, 28.9% of caregivers reported an illness falling into the '> 2 weeks' band.

By grouping the duration of the illness (v. Figure 5.12), it becomes clearer that the private clinic children had the largest proportion of problems beginning 3 to 6 days before the interview (52%), the PHC clinic had the largest proportion (26%) which had begun in the 2 days prior to the interview, the public hospital children had the largest proportion (37.7%) occurring 7 to 14 days before the interview and compared with the other health facilities, the TMP children had the largest proportion of health problems commencing more than 2 weeks before the interview.

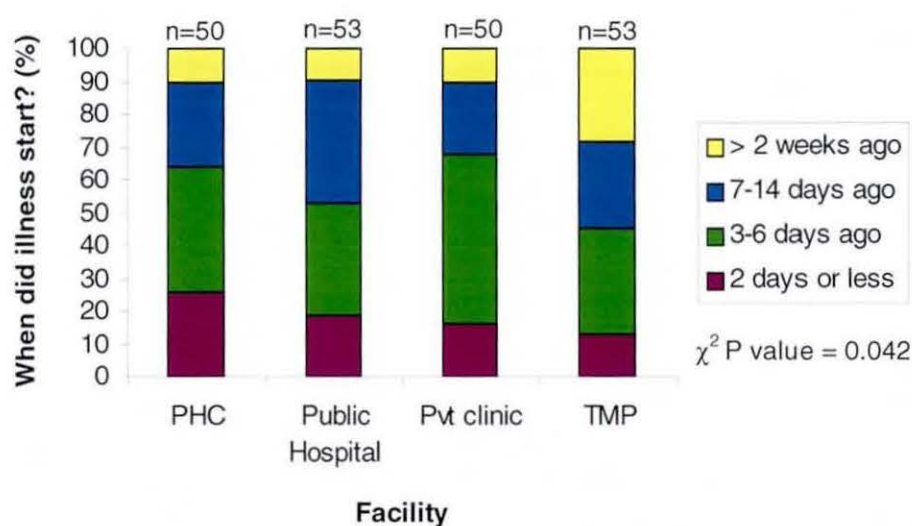


Figure 5.12: Duration of health problems seen at different providers

5.3.5 Summary

The previous sections have examined characteristics of the illness and how these may influence health-seeking behaviour. *Abantu* illnesses or supernatural problems for example were only seen at the traditional healers, whilst the public hospital had the largest variety of health problems reported, indicating the wider range of services available. As well as the type of health problem, the perceived severity of the illness may govern whether the child can be given treatment at home or whether they require more specialist treatment. As well as the beliefs of the caregiver, these decisions will be affected by characteristics of the caregiver or the household in which they live which is examined in the following Section 5.4.

5.4 Characteristics of the caregiver / household

5.4.1 Caregiver’s age

Overall, 33.9% of caregivers were in the under 25 age group, 43.2% were in the 25 to 34 age group and 22.8% were in the over 35 age group (v. Figure 5.13). The largest proportion of under 25s was found at the TMPs (45.3%), closely followed by the public hospital (39.6%). The private clinic had the largest proportion of 25 to 34 year olds (68%), and the over 35s were mostly found at the PHC (32%) and the TMP (24.5%) (χ^2 p = 0.001).

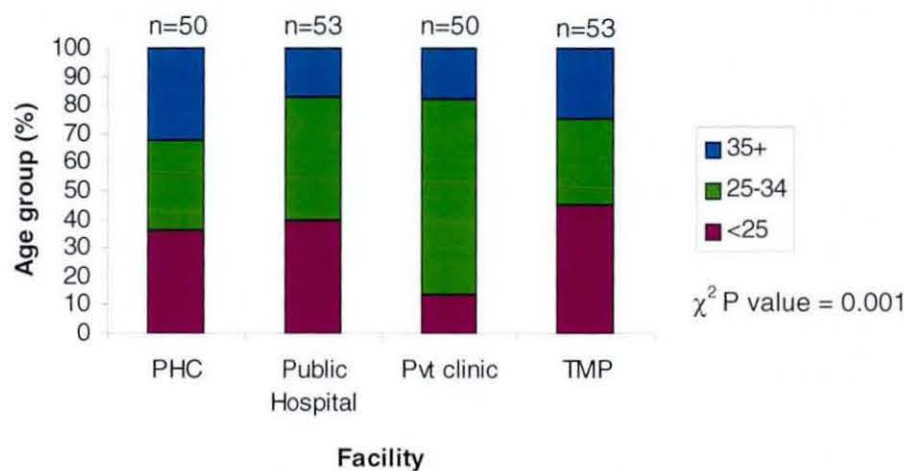


Figure 5.13: Caregiver’s age by facility on day of interview

Table 5.29 shows that for those caregivers whose grandmother or own mother (grandmother of the child) makes decisions when the child is not well, 60% were under 25 years. Similarly, for those whose other relatives make the decisions, 58.8% were in the under 25 age group.

Table 5.29: Caregiver’s age by decision-maker when child is not well

Age group	Decision-maker when child is not well				
	Mother of child	Both parents	Granny	Other relative	Total
<25	26	16	18	10	70
	37.1%	22.9%	25.7%	14.3%	100%
	29.9%	22.2%	60%	58.9%	34%
25-34	40	38	7	4	89
	44.9%	42.7%	7.9%	4.5%	100%
	46%	52.8%	23.3%	23.5%	43.2%
35+	21	18	5	3	47
	44.7%	38.3%	10.6%	6.8%	100%
	24.1%	25%	16.7%	17.7%	22.8%
Total	87	72	30	17	206
	42.2%	35%	14.6%	8.3%	100%
	100%	100%	100%	100%	100%

χ^2 P value = 0.004

5.4.2 Caregiver's education

Although education does not necessarily guarantee knowledge about what to do when a child is well, it may help the mother to make the most informed decision. The nurses interviewed spoke of the importance of health education for caregivers:

"Ja, most of them, they've got the problem with the breast milk. But I don't know. Most of them it's because they don't attend antenatal care so they don't have enough information and most of them they come to hospital on the day of delivery. Since they've been pregnant they don't book, they don't attend antenatal and they come on the day of delivery. They deliver, they don't have any information and postnatally they don't even go to the clinic. So they're having a problem with breastfeeding because they don't have any literature." (Nurse2 – public hospital)

"But now, the mothers also take chances. You know, let's say I say education goes a long way to the patients. Like, when you start doing that [reducing waiting times], then they're all coming. One mother will be bringing 3 to 4 let's say to the clinic. You don't stay long, bring your babies I'm going to the clinic, ne? Only to find that the others are not really - they can do without coming to the clinic. Now, that's why I say they need to be told, to be educated that how many, I mean how important is it to go to the clinic, ne? And at the right clinic, not jumping from one clinic to another. Why must you go to the clinic, not just because it is free and my child is having one pimple." (Nurse5 – PHC)

Although education and knowledge were identified as important factors, the nurses did not necessarily find the wealthier mothers, nor the ones they thought were well-informed to have the most accurate information:

"No, even the ones that you think they are well-informed - to them medicines should work now!" (Nurse1 – public hospital)

"They are wealthy most of them, because when you try to educate them, isn't it as a nurse you are supposed to educate them? Because your child has got diarrhoea, you are not supposed to give 1, 2, 3. 'I know, I have seen that in the internet I can give this and this and this'. OK Mama, I know you saw that in the internet don't you think the internet can also be wrong? 'No, it's accurate'. Then OK Mama, with my knowledge and my experience, I know you are not supposed to give this and this and this, and at times you know with the private clinics you end up by saying 'OK, you can give'. Then the diarrhoea continues and continues..." (Nurse3 – private clinic)

As can be seen in Table 5.30, the PHC and public hospital caregivers were quite similar in terms of their education. The TMP caregivers had a much lower level of education, with 33.9% having

primary level education or below and 0% with higher education. The private clinic caregivers had a much higher level of education than all groups, with 68% having post-secondary education.

Table 5.30: Caregiver's highest education level reached by facility on day of interview

Caregiver's highest education level reached	Facility on day of interview				Total (n=206)
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	
None / complete primary	5 (10%)	8 (15.1%)	1 (2%)	18 (33.9%)	32 (15.5%)
Some secondary	23 (46%)	23 (43.4%)	3 (6%)	25 (47.2%)	74 (35.9%)
Complete secondary	19 (38%)	17 (32.1%)	12 (24%)	10 (18.9%)	58 (28.2%)
Higher	3 (6%)	5 (9.4%)	34 (68%)	0 (0%)	42 (20.4%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value < 0.001					

In terms of a caregiver's age group, 46.9% of those with the least education were in the over 35 age group (v. Table 5.31). Similarly, nearly one third of those in the over 35 age group had either none or only primary education and only 17% had higher education. The under 25 age group only had 12.9% with higher education, but nearly a third had completed secondary school (the youngest mother was 17). A high proportion (42.9%) had not completed secondary school. The 25 to 34 age group had the highest proportion of caregivers with higher education (28.1%).

Table 5.31: Caregiver's highest education level reached by age group

Caregiver's highest education level	Caregiver age group			
	<25	25 - 34	35+	Total
None / complete primary	8	9	15	32
	25%	28.1%	46.9	100%
	11.4%	10.1%	31.9	15.5%
Some secondary	30	31	13	74
	40.5%	41.9%	17.6	100%
	42.9%	34.8%	27.7	35.9%
Complete secondary	23	24	11	58
	39.7%	41.4%	18.9	100%
	32.9%	26.9%	23.4	28.2%
Higher	9	25	8	42
	21.4%	59.5%	19.1%	100%
	12.9%	28.1%	17%	20.4%
Total	70	89	47	206
	33.9%	43.2%	22.8%	100%
	100%	100%	100%	100%
χ^2 P value = 0.006				

Education is a strong predictor of the use of traditional medicine (v. Table 5.32), with 93.8% of caregivers with primary school education or less having given, or would give their child traditional medicine. Only 57.1% of those with post-secondary education had given or would give traditional medicine to their child (χ^2 P value = 0.006).

Table 5.32: Caregiver's highest education level reached by use of traditional medicine for child

Caregiver's highest education level reached	Use of traditional medicine for child		
	Has given / would give if need arose	Has not given / would not give	Total (n=206)
None => complete primary	30 93.8%	2 6.3%	32 100%
Some secondary	54 72.9%	20 27%	74 100%
Complete secondary	42 72.4%	16 27.6%	58 100%
Higher	24 57.1%	18 42.9%	42 100%
Total	150 72.8%	56 27.2%	206 100%
χ^2 P value = 0.006			

Being highly educated does not always mean that an individual will completely abandon traditions and customs – as shown in Table 5.32 where over half of highly educated caregivers say they had or would give traditional medicine to their child if the need arose:

"You know I've got a friend, a Registered Nurse who's working in Paediatrics, Neonatal ICU... She took her son to a Gogo [TMP] in Zola! That's why I want to show you, that even people that know all the thing... She took the son to Gogo, he was razor, razor, razor here, muthi, muthi, muthi, muthi, muthi. After some time, where are you from? 'I'm from Gogo - it was at the back no, they said my child's ibala was very big. It was this one from here up to that one.' ... to show you that even learned and wealthy people do such things. She's from Natal originally." (Nurse3 – private clinic)

5.4.3 Caregiver’s marital status

Marital status may not affect care-seeking directly but it gives an indication of stability and support mechanisms within the home. Figure 5.14 shows that the PHC and public hospital caregivers had similar marital status patterns with 40% single, 20% ever-married and 40% living together. Just over half of the TMP caregivers were single whilst 64% of the private clinic caregivers were ever-married. Those co-habiting were mostly PHC and public hospital caregivers.

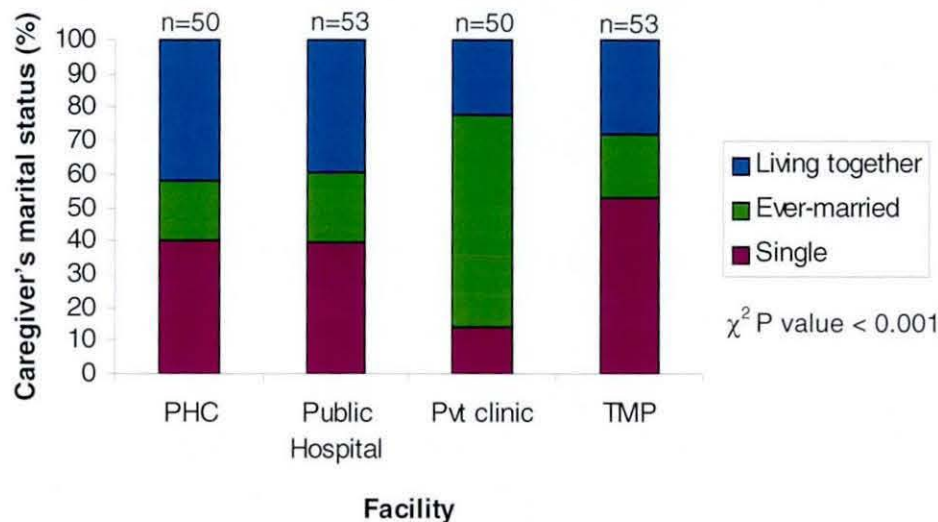


Figure 5.14: Caregiver’s marital status by facility on day of interview

The single group were mostly composed of caregivers under 25 (57.9%) (v. Table 5.33). Half of the ever-married group were aged 25 to 34 and 43.6% were over the age of 35. Although 32.4% of the cohabiting caregivers were under 25, over half were in the 25 to 34 age group. No significant difference was found between marital status groups in terms of the level of support they received for their child (financial / emotional / child care) from friends or relatives (χ^2 P value = 0.479).

Table 5.33: Caregiver’s marital status by age group

Caregiver’s marital status	Caregiver age group			Total
	<25	25 - 34	35+	
Single	44	22	10	76
	57.9%	28.9%	13.2%	100%
Ever-married	4	31	27	62
	6.5%	50%	43.6%	100%
Cohabiting	22	36	10	68
	32.4%	52.9%	14.7%	100%
Total	70	89	47	206
	33.9%	43.2%	22.8%	100%

χ^2 P value < 0.001

5.4.4 Caregiver’s birthplace & length of residency in Johannesburg / Soweto

Respondents identified culture as a potential explanatory factor in differences between the health-seeking behaviour of caregivers:

“It is caused by breasts. If a child stops breastfeeding, masebela should be taken out. With some children it is the culture, others it is not.” (TMP5)

“OK, traditionally sometimes you get, it depends on the culture of a child and how strong they have been towards a certain issue, because with a Zulu culture, more especially, if a child is born, you cannot cut a child’s hair before a certain ritual has been performed for that child.” (CG4)

“We as people, like myself, I’m from Natal - we use ushiboshi. Ushiboshi is Jeyes Fluid, isn’t it?” (FG3)

Culture may sometimes exert a stronger influence over health-seeking behaviour than education or socio-economic status:

“You know I’ve got a friend, a Registered Nurse... She took her son to a Gogo [TMP] in Zola! That’s why I want to show you, that even learned and wealthy people do such things, she’s from Natal originally.” (Nurse3 – Private clinic)

As can be seen in Figure 5.15, just over half of the caregivers interviewed were from the Gauteng Province in which Johannesburg and Soweto are situated. The next largest group were those from KwaZulu-Natal who made up a fifth of the sample and over half of these were found at the TMPs. Smaller numbers were grouped into the ‘other’ category consisting of the Limpopo Province, North West Province, Mpumalanga and the Free State.

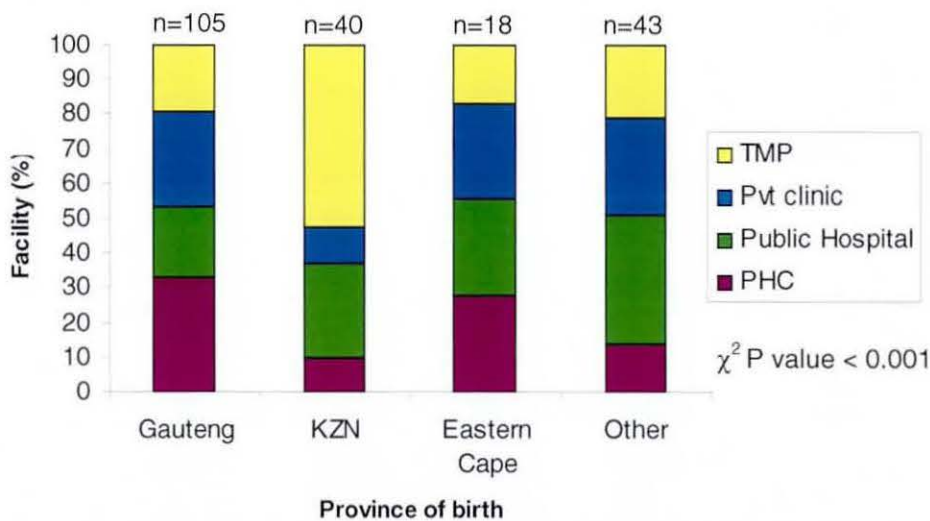


Figure 5.15: Province of birth by facility on day of interview

In this sample caregivers born in the Limpopo Province and KwaZulu-Natal had the highest proportion who had or would give their child traditional medicine (87.5% and 85% respectively). This was followed by Gauteng (73.3%) and the Eastern Cape (72.2%) (v. Table 5.34).

Table 5.34: Caregiver's province of birth & attitude towards traditional medicine

Place of birth	Attitude towards use of traditional medicine		
	Has given / Would give	Has never / would not	Total
Gauteng	77	28	105
	73.3%	26.7%	100%
Limpopo Province	7	1	8
	87.5%	12.5%	100%
North West	5	5	10
	50%	50%	100%
Mpumalanga	5	3	8
	62.5%	37.5%	100%
KwaZulu-Natal	34	6	40
	85%	15%	100%
Eastern Cape	13	5	18
	72.2%	27.8%	100%
Free State	6	2	8
	75%	66.7%	100%
Foreign*	3	6	9
	33.3%	66.7%	100%
Total	150	56	206
	72.8%	27.2%	100%

χ^2 P value = 0.05

*Angola, Mozambique, Swaziland and Zimbabwe

5.4.5 Head of household

Overall, for over half of the households the respondent's partner was the head of the household (v. Figure 5.16). For 33% this was a relative and for 16% the respondent was the head of the household. The PHC and public hospital caregivers reported similar head of household distributions with the respondent's partner the head of the household for 40% of PHC and 49.1% of public hospital caregivers; a relative in 36% (PHC) and 33.9% (public hospital) of cases and the respondent was the head of household for 24% of PHC caregivers and 16.9% of public hospital caregivers. For 76% of private clinic caregivers, their partner was the head of the household, whilst the TMP caregivers reported a high proportion (49.1%) of relatives who headed the household.

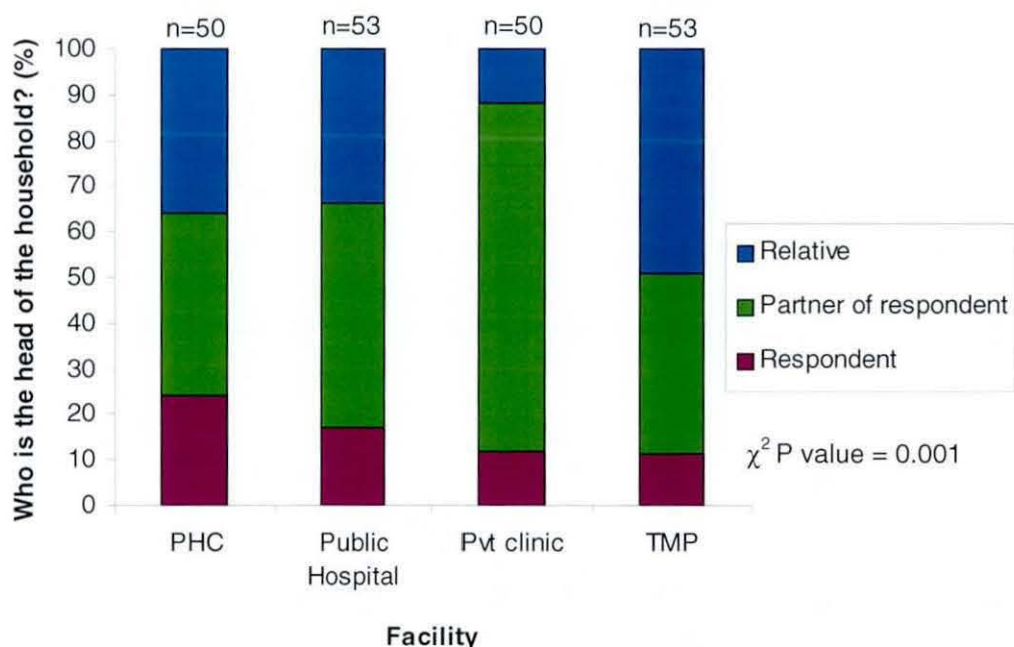


Figure 5.16: Head of household by facility on day of interview

For 69.7% of the single caregivers in this sample, a relative was the head of the household and the single caregivers also had the largest proportion (30.3%) who were the head of household themselves. For the ever-married and cohabiting groups, the majority of households were headed by the respondent's partner (82.3% and 79.4% respectively) (χ^2 P value < 0.001).

When considering who makes the decisions about health care for the child, Table 5.35 shows that this was mostly the mother if she was the head of the household (60.6%), both parents if the partner was the head of the household (54.3%) and the caregiver (38.3%) or grandmother (33.8%) if a relative was the head of the household (χ^2 P value < 0.001).

Table 5.35: Head of household by decision-maker for child health care

Head of the household	Decision-maker for child health care				Total
	Mother of child	Both parents	Granny	Other relative	
Respondent	20	6	5	2	33
	60.6%	18.2%	15.2%	6.1%	100%
Partner of respondent	41	57	2	5	105
	39.1%	54.3%	1.9%	4.8%	100%
Relative	26	9	23	10	68
	38.2%	13.2%	33.8%	14.7%	100%
Total	87	72	30	17	206
	42.2%	34.9%	14.6%	8.3%	100%

χ^2 P value < 0.001

5.4.6 Socio-economic status

5.4.6.1 Income

TMP caregivers had the lowest overall monthly household income, with 77.3% earning less than R1500 (US\$83) per month and no family bringing in over R6000 (US\$333) per month (v. Figure 5.17). The public hospital caregivers had a slightly higher proportion (64.1%) below R1500 than the PHC caregivers (52%). Overall the private clinic caregivers had the highest monthly household income, with 52% of families bringing in more than R6000 per month.

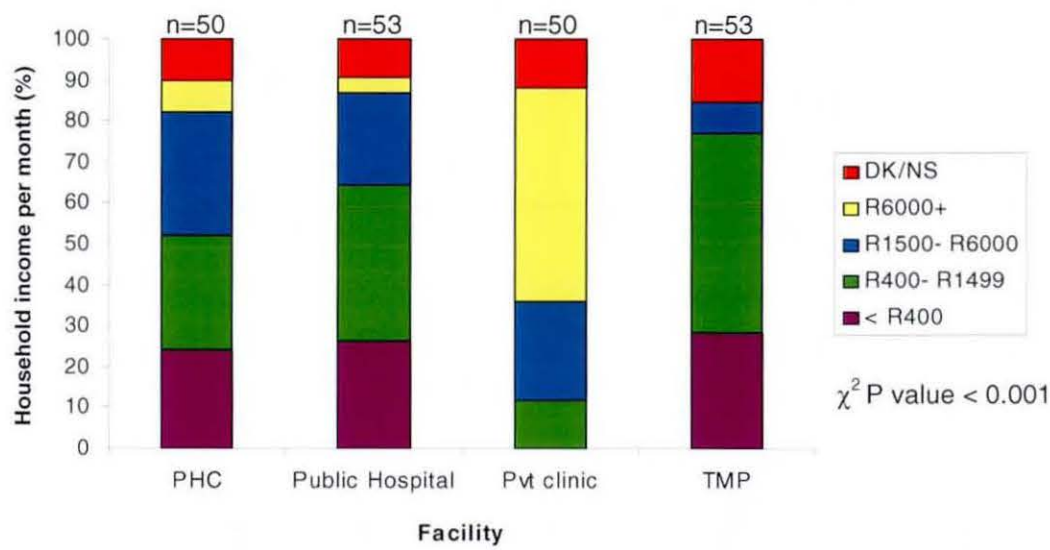


Figure 5.17: Household income per month by facility on day of interview

5.4.6.2 Household employment

Figure 5.18 shows that the greatest household employment was found amongst private clinic caregivers, with 62% of households with all adults employed. Around 26% of PHC and public hospital households had full unemployment (no distinction was made between those actively seeking work and those who decide not to work) and this figure was 32.1% for the TMP households. The PHC households had the highest full employment levels (28%) after the private clinic households. The TMP households had the lowest with only 13.2% in full employment.

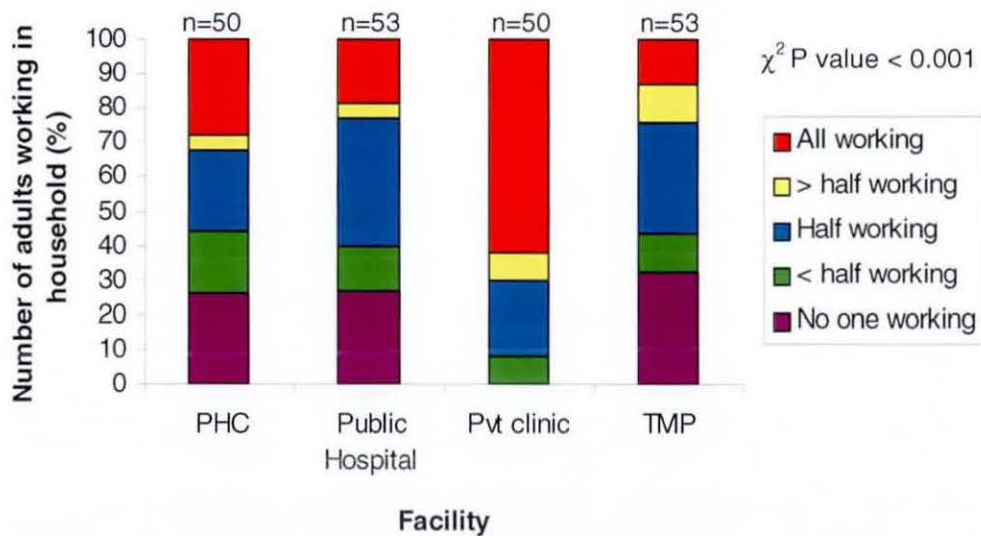


Figure 5.18: Household employment by facility on day of interview

5.4.6.3 Head of household employment

Head of household employment was similar at the PHC, public hospital and TMP providers with 56%, 64% and 62% employment respectively (v. Table 5.36). This figure was 94% at the private clinic.

Table 5.36: Head of household employment status by facility on day of interview

Head of household employment status	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Unemployed / Pensioner	22 (44%)	19 (35.9%)	3 (6%)	20 (37.7%)	64 (31.1%)
Employed	28 (56%)	34 (64.2%)	47 (94%)	33 (62.3%)	142 (68.9%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value < 0.001					

5.4.6.4 Caregiver employment

Highest caregiver unemployment (again no distinction is made between those actively seeking work and those who choose not to work) was found at the traditional healers, with 81.1% unemployed (v. Table 5.37). This was followed by 77.3% for public hospital and 66% for PHC caregivers. Highest caregiver employment levels (78%) were found at the private clinic.

Table 5.37: Caregiver employment status by facility on day of interview

Caregiver employment status	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Unemployed	33 (66%)	41 (77.4%)	11 (22%)	43 (81.1%)	128 (62.4%)
Employed	17 (34%)	12 (22.6%)	39 (78%)	10 (18.9%)	78 (37.9%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value < 0.001					

5.4.6.5 Frequency of household hunger

Greatest experience of household hunger was found amongst TMP caregivers, closely followed by similar levels at the PHC and public hospital. In contrast 94% of private clinic caregivers had never experienced household hunger (v. Table 5.38).

Table 5.38: Household hunger by facility on day of interview

Experience of household hunger	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Often	1 (2%)	1 (1.9%)	0 (0%)	3 (5.7%)	5 (2.4%)
Sometimes	14 (28%)	15 (28.3%)	1 (2%)	20 (37.7%)	50 (24.3%)
Seldom	8 (16%)	5 (9.4%)	2 (4%)	5 (9.4%)	20 (9.7%)
Never	27 (54%)	32 (60.4%)	47 (94%)	25 (47.2%)	131 (63.6%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value < 0.001					

5.4.6.6 Type of dwelling

Figure 5.19 shows that most PHC caregivers (46%) lived in a 4-room Bond house in Soweto. The majority (41.5%) of the public hospital caregivers lived in Johannesburg city centre where flats and shared accommodation are more common. Of the 43.4% of public hospital caregivers who lived in 1 room in shared accommodation, 65.2% of these resided in the inner city. The TMP caregivers were either from the informal settlement of Orange Farm (41.5%), where shacks abound (72.7%), or Johannesburg city centre (58.5%) where over 90% lived in 1 room. The private clinic caregivers were from a wider catchment area with diverse dwellings, ranging from big houses or townhouses in wealthier suburbs including Soweto, 4-room houses (66.7%) in Soweto and 10% lived in 1 room in shared accommodation.

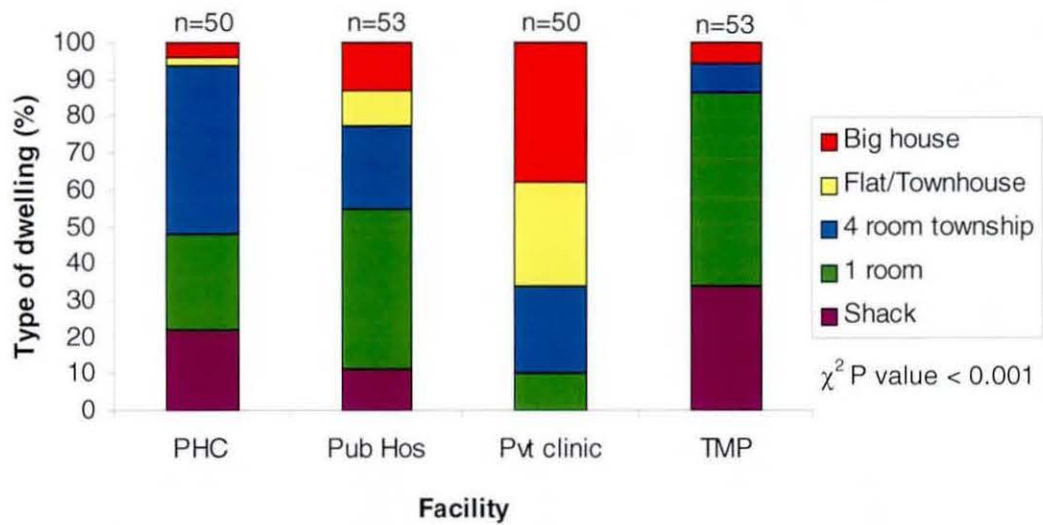


Figure 5.19: Type of dwelling by facility on day of interview

5.4.6.7 Number of rooms per person

The number of rooms or type of dwelling do not take into account the number of people living therein. Therefore a more useful indicator is the number of rooms available to each person. The first 2 categories in Table 5.39 indicate overcrowding, with less than one room per person. TMP caregivers' families lived in severely crowded conditions with 77.4% in dwellings with less than half a room per person. Seventy-six percent of private clinic families on the other hand have 1 room or more per person. The PHC and public hospital families tended to live in similar conditions of crowding despite the differences in dwelling-types. It should be noted however, that overcrowding did still occur amongst some of the private clinic families.

Table 5.39: Number of rooms per person in household by facility on day of interview

Number of rooms per person in household	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
< half a room	23 (46%)	26 (49.1%)	4 (8%)	41 (77.4%)	94 (45.6%)
> half but < 1 room	17 (34%)	15 (28.3%)	8 (16%)	9 (16.9%)	49 (23.8%)
1 room+	10 (20%)	12 (22.6%)	38 (76%)	3 (5.7%)	63 (30.6%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)

χ² P value < 0.001

5.4.6.8 Ownership of consumer durables

Table 5.40 shows that most people in this sample owned a TV, cell phone or radio. Indicators of more wealthy households (mostly found amongst private clinic families) were ownership of a car, microwave, fridge, CD player, computer or landline phone. The TMP caregivers owned fewer of these items than the other caregivers.

Table 5.40: Ownership of consumer durables by facility on day of interviewX

Ownership of consumer durable in working condition*	Facility on day of interview					χ^2 P value
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)	
Own car	3 (6.9%)	4 (9.3%)	34 (79.1%)	2 (4.7%)	43 (100%)	0.000
Own TV	36 (23.4%)	36 (23.4%)	48 (31.2%)	34 (22.1%)	154 (100%)	0.001
Own cell phone	29 (20%)	40 (27.6%)	48 (33.1%)	28 (19.3%)	145 (100%)	0.000
Own fridge	35 (26.1%)	27 (20.2%)	48 (35.8%)	24 (17.9%)	134 (100%)	0.000
Own stove	38 (21.9%)	48 (27.8%)	50 (28.9%)	37 (21.4%)	173 (100%)	0.000
Own microwave	10 (16.9%)	8 (13.6%)	36 (61%)	5 (8.5%)	59 (100%)	0.000
Own bicycle	11 (22.9%)	11 (22.9%)	17 (35.4%)	9 (18.8%)	48 (100%)	0.201
Own CD player	11 (16.9%)	11 (16.9%)	37 (56.9%)	6 (9.2%)	65 (100%)	0.000
Own computer	2 (9.1%)	3 (13.6%)	16 (72.7%)	1 (4.6%)	22 (100%)	0.000
Own radio	42 (25.9%)	41 (25.3%)	46 (28.4%)	33 (20.4%)	162 (100%)	0.002
Own landline phone	13 (23.2%)	9 (16.1%)	28 (50%)	6 (10.7%)	56 (100%)	0.000

* These are dichotomous variables and only those who own the items are in this table (therefore row %)

5.4.6.9 Socio-economic status (SES) score

By combining the household and asset SES-related variables (caregiver employment; income; number of rooms per household member; type of dwelling; experience of household hunger and ownership of assets) a SES score was derived which split caregivers into quartiles of very low, low, medium and high SES (v. Figure 5.20). Overall, the TMP group had the largest proportions of very low (40%) and low (49%) SES. This was followed by the public hospital caregivers (26.4% very low and 39.6% low) and the PHC group (24% very low and 32% low). No private clinic caregivers were in the very low group and only 3 fell into the low group. Only 6 TMP caregivers were in the medium category and none fell into the high category. For private clinic caregivers, 26% fell into the medium category and 68% into the high. The PHC caregivers were only slightly better off than the public hospital caregivers with 34% in the medium category (28.3% for public hospital) and 10% in the highest category (5.7% for public hospital).

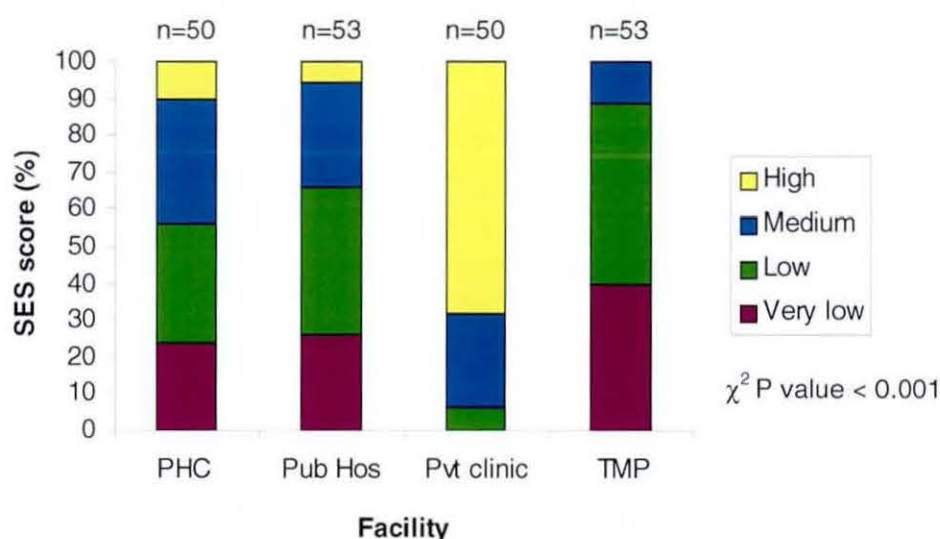


Figure 5.20: SES score by facility on day of interview

As can be seen in Table 5.41, those with lower household incomes (below R1500 (US\$83) per month) were more likely to use traditional medicine (80%) than those with higher household incomes (over R6000 (US\$333) per month) (50%).

Table 5.41: Household income per month by use of traditional medicine

Use of traditional medicine for child under 6	Household income per month				Total
	R400-1500	R1500-6000	R6000+	DK/NS	
Has given / would give	60	58	16	16	150
	80%	77.3%	50%	66.7%	72.8%
Hasn't given / wouldn't give	15	17	16	8	56
	20%	22.7%	50%	33.3%	27.2%
Total	75	75	32	24	206
	100%	100%	100%	100%	100%

χ^2 P value = 0.009

In terms of SES score, Table 5.42 shows that there is a correlation between the SES score of a caregiver and their use of traditional medicine, with 82.9% of those in the very lowest quartile having given or would give traditional medicine to their child compared with 50% in the highest quartile. Being wealthy does not preclude the use of traditional medicine however:

"You know at the inyangas, it is just mixed, it consist of people who are poor, who are rich. According to our ancestors, we are not supposed to discriminate or to choose who to treat and who not. People from different cultural background do come for consultation, both the rich and poor. They are all the same." (TMP6)

Table 5.42: SES score by use of traditional medicine for child under 6

Use of traditional medicine for child under 6	SES quartile				Total
	Very low	Low	Medium	High	
Has given / would give	39	50	40	21	150
	82.9%	75.7%	78.4%	50%	72.8%
Hasn't given / wouldn't give	8	16	11	21	56
	17%	24.2%	21.6%	50%	27.2%
Total	47	66	51	42	206
	100%	100%	100%	100%	100%

χ^2 P value = 0.002

5.4.7 Household size

In over 50% of households there were 2 adults. The most noticeable difference in Figure 5.21 is that private clinic households had a much lower proportion (12%) of 4 or more adults living in the house. The public hospital caregivers on the other hand had the largest proportion of 4+ adults (33.9%), followed by the PHC (28%). The public hospital households also had the largest proportion of single parents (15.1%). No association was found between the caregiver's area of residence and the household size (χ^2 P value = 0.468) or their SES group and the household size (χ^2 P value = 0.310).

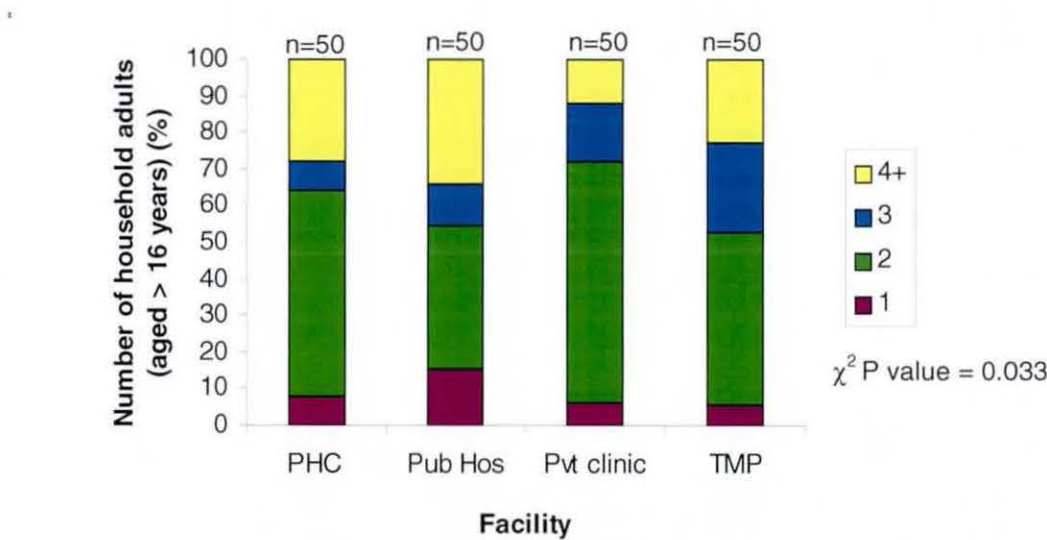


Figure 5.21: Number of household adults (> 16 years) by facility on day of interview

Table 5.43 shows that public hospital and TMP households had higher proportions of single-child families (49% and 43% respectively). PHC households had the highest proportion of 2 children (52%) and public hospital households had the lowest proportion of 3 or more children living in them. The private clinic households on the other hand had the largest proportion of 3 or more children.

Table 5.43: Number of household children (< 16 years) by facility on day of interview

Number of household children (< 16 years)	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
1	11 (22%)	26 (49%)	17 (34%)	23 (43%)	77 (37.3%)
2	26 (52%)	18 (33.9%)	17 (34%)	15 (28.3%)	76 (36.8%)
3+	13 (26%)	9 (16.9%)	16 (32%)	15 (28.3%)	53 (25.7%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)

χ^2 P value = 0.049

In terms of the caregiver's own child or children, less of a difference was found between groups (χ^2 P value = 0.123). The PHC households had the highest proportion of 2 children (56%) and the public hospital and TMP households had the highest proportions of single-child families (43.4% and 49% respectively). Although no significant difference was found between groups in terms of the number of caregiver's own children and borderline significance was found in terms of household children, this does not mean that parity is not important for care-seeking. As parity is associated with a caregiver's age (χ^2 P value < 0.001) less experienced parents may be less confident in their ability to treat a sick child with home remedies and may be more likely to take the child to a health care provider or to consult family members as illustrated in the quotation below.

"... you can ask them [grandmothers or mother], if you are staying... especially if you've got a first baby, you can ask. But if you've got second baby, third baby then at least you've got an idea." (FG4)

No association was found between parity and decision-making for child health care (χ^2 P value = 0.227). However, households where a grandmother or relative made decisions about the health care of the child did have higher proportions of 1-child families (56.7% and 52.9% respectively) than households where the mother or both parents made the decisions (35.5% and 34.7% respectively). Similarly, in terms of the child's current health problem 50.6% of caregivers with 1 child had first sought advice from a relative or friend, compared to 37.4% of caregivers with 2 children and 31% of caregivers with 3 or more children. No significant association was found however between these 2 variables (χ^2 P value using Fishers Exact Test = 0.161).

5.4.8 Psycho-social characteristics of the caregiver

Psycho-social characteristics of the caregiver such as fear, which were not measured directly in the survey but which were picked up during qualitative interviews, also affect health-seeking behaviour. Fear of losing the child for example is a strong cue to action:

"But what really prompts her to seek medical aid promptly is fear that my child is going to die. And if she believes that if I take my child to the hospital I will get help and my child will be helped, she'll come straight here." (Nurse1 – public hospital)

"But what will make her stand up quickly and go and get help from wherever is fear of losing the child." (Nurse1 – public hospital)

"So sometimes it helps to go straight to the clinic or to the hospital. Because if you apply all that without knowing, what if it's for the wrong thing and it makes the baby worse, or you might even lose the baby." (FG4)

In contrast, fear may also prevent or delay a caregiver from seeking further treatment. Similarly a lack of understanding may leave the caregiver frightened:

"So with the operation I am not quite happy. I am worried maybe they can operate then it come worse. So eh I'm afraid to take him now for operation because eh I'm afraid maybe he might be worse than now." (CG1 – public hospital)

"They said it's a broncho-pneumonia. So he was wearing a drip here on his arm. They took out the drip and put it in the head. When I arrived they said no, we are taking out the drip, they didn't explain why they are taking out the drip, they put it again back into the head. So I didn't know what's going to happen if they take out the drip, you put a drip and you take it out. So later on when I checked, maybe after a month, the eyes were no longer straight. I tried, I didn't understand why the eyes are no longer straight... that drip maybe did cause something... that's the main problem why the eyes did become no longer straight. They said the fits, it's only the temperature, I must keep the temperature not to become too hot... So I don't know what must I do now... [quite upset]... No, they said there's no tests they can do... I didn't say anything because it's a waste of time because if the person you are telling is busy telling you the same thing, I just kept quiet." (CG1 – public hospital)

Some caregivers are too scared or too proud to seek further information if they don't understand something. Therefore communication between caregiver and provider may sometimes be a barrier to effective health-seeking and may explain why caregivers do not always follow the provider's advice or instructions:

"I think they are scared. Some they don't want to say you know there are those people who are proud. They've got this pride, I'm not going to ask. They will end up asking in the street and get the wrong information. Because we've got health educators here, health promoters." (Nurse5 - PHC)

"... maybe the explanation from the nursing side from the doctor or whoever's dispensing, maybe the language, communication. You find that a patient will just stare at you as if she understands what you say, you show her, you show whatever and then you say OK sister you said you understand. Unless you make the patient repeat what you say. What I do when I give a treatment I tell the mother this is Panado, you give one teaspoon 3 times a day when it is necessary. What I mean, if your child is feeling hot, is restless, is crying, but it must not be more than 4 times a day... Then you say to the mother, repeat what I'm saying and nothing will come out of her mouth." (Nurse2 – public hospital)

"The others really I can't say, or it's due to negligence, or not understanding, because you know we educate people, we educate people and you ask questions, you ask them to ask questions. They say yes we understand. After a wink of an eye, you come back and ask you the same thing that you said to them, or does the same wrong thing that you said. I really... So they are negligent and I don't know - when they come to the clinic, even you, you sit down with them and make an open talk, you just talk, what is your problem guys? What do we do to a child who's having a temperature, a temperature, what do you do and all that. Before the end of the day or after 10 or 15 minutes you find a mother saying my baby's having a temperature but BIG blankets on top of the child and the jersey and all. And really I don't understand." (Nurse5 - PHC)

5.4.9 Summary

Section 4 has presented an array of caregiver and household characteristics which may influence health-seeking behaviour in this setting. The age of the caregiver for example, will determine her knowledge and gravida (experience) and whether the advice of older relatives may be sought or not. The majority of ever-married and cohabiting respondents reported having their partner participate in health care decisions whilst for single caregivers, themselves or a grandmother made these decisions. Psycho-social characteristics such as fear were also identified as determinants in the health-seeking process. Lower education levels were strongly linked to the use of traditional medicine, however this is also strongly linked to their SES. As the use of traditional medicine was not restricted to lower income groups, other factors such as culture or background may sometimes exert a stronger influence. Caregiver and household characteristics which may be important for the type of facility sought are socio-economic in nature, as these will differentiate whether the caregiver is able to afford fee-for-service health care or not. These variables are associated with the following Section 5.5 on enabling factors.

5.5 Enabling factors

Enabling factors are those which facilitate or inhibit the use of health services, such as costs, accessibility and distance.

5.5.1 Cost

5.5.1.1 Where caregiver normally gets over-the-counter (OTC) medicines from

Figure 5.22 shows that the providers of Western / OTC medicines were fairly evenly split between those that were free (public clinic or hospital – 51.5%) and those where medicine was purchased or obtained via medical aid (chemist or supermarket – 48.5%). The most noticeable differences are the private clinic attendees, 80% of whom buy their medicine (overall only private clinic caregivers (92%) are in medical aid schemes), and the TMP attendees, 81.1% of whom get their medicine for free. The PHC and public hospital were similar in terms of where they obtained their Western medicine – about 45% from a chemist / supermarket and 55% from a public clinic or hospital.

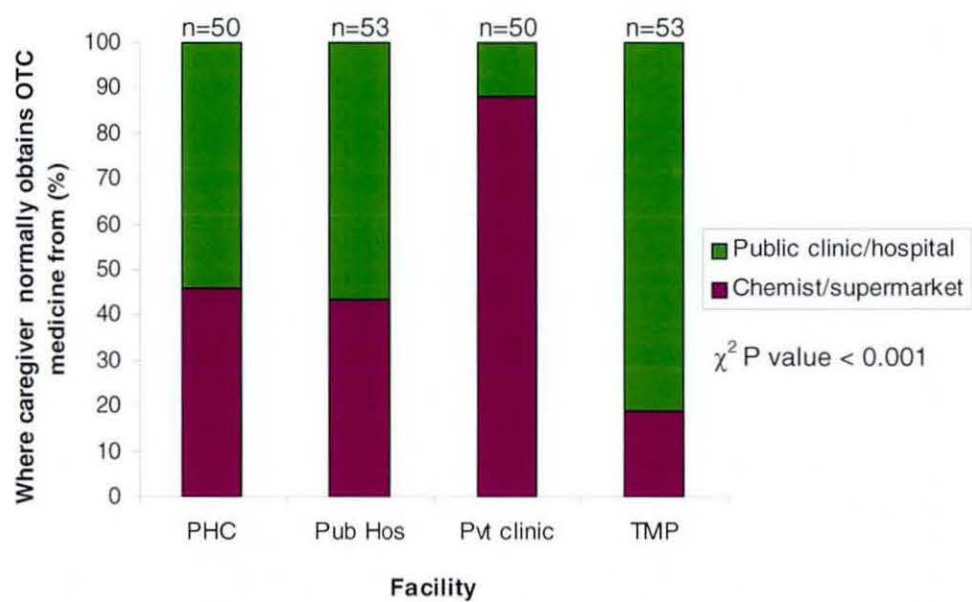


Figure 5.22: Where OTC medicine is usually obtained from by facility on day of interview

When this is looked at in terms of the caregiver's SES group, it is evident that the very low SES group mostly (89.4%) obtains their medicine from the clinic or hospital dispensary which is free (v. Table 5.44). This contrasts with 78.6% of the highest SES group who normally obtain their medicines from a chemist or supermarket. A sizeable proportion of the low SES group however (43.9%) also normally obtain their OTC medicines from a chemist or supermarket.

Table 5.44: Where caregiver usually obtains OTC medicine from by SES group

Where caregiver usually obtains OTC medicines from	SES group				
	Very low	Low	Medium	High	Total
Chemist / supermarket	5	29	33	33	100
	10.6%	43.9%	64.7%	78.6%	48.5%
Clinic / hospital dispensary	42	37	18	9	106
	89.4%	56.1%	35.3%	21.4%	51.5%
Total	47	66	51	42	206
	100.0%	100.0%	100.0%	100.0%	100.0%

χ^2 P value < 0.001

For some caregivers (not necessarily wealthy), by paying to go to the GP you get more medicines than if you just go to the clinic:

"No, you only pay maybe R100 [at the GP] and then you get the medicine....If you come back and your child has got something else, he can also give you another medicine. OK, when you come back for check up maybe you pay R20, he can give you another 2 medicines on top of that R20." (CG1 – public hospital)

When buying medicines, caregivers may also sometimes have a choice in prices, which may affect the medicine they choose to use:

"More especially these days there's um, supplements, like there's medicine substitutes, like with the value of the money, there's the expensive one... and you must choose from them, but you find that they work the same, they do the same thing." (FG1)

However, for less wealthy caregivers, pharmacies and GPs may be seen as expensive, particularly if the same medicine is available for free from the clinic:

"Pharmacies are expensive." (FG1)

"It's very rare that you hear them saying I've bought this from the pharmacy. It would be from the clinic." (Nurse2 – public hospital)

"Some people haven't got money to go the special doctor so they go to the clinic. And if they don't get helped so what must we do?" (FG1)

"Yes I pay [at the GP] and at the clinic it is free and there's a queue also at the GP like at the clinic. So it is better if I go to the clinic." (CG2 – public hospital)

5.5.1.2 Where caregiver normally obtains traditional medicine from

There are many sources from where a caregiver can get traditional medicine and caregivers were not limited to one response. In Table 5.45, overall, 67% of caregivers who use traditional medicine will get it from a traditional healer, particularly the TMP caregivers. Just over half will get it from a relative or their own garden or the bush, particularly the non-TMP caregivers.

Table 5.45: Where traditional medicine is normally obtained by facility on day of interview

Where caregiver normally obtains traditional medicine*	Facility on day of interview					χ^2 P value
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)	
TMP	18 (17.8%)	19 (18.8%)	13 (12.9%)	51 (50.5%)	101 (100%)	0.000
Church / Faith healer	4 (17.4%)	8 (34.8%)	7 (30.4%)	4 (17.4%)	23 (100%)	0.487
Muthi shop	3 (33.3%)	3 (33.3%)	3 (33.3%)	0 (0%)	9 (100%)	0.296**
Relative/Garden/Bush	22 (28.9%)	25 (32.9%)	26 (34.2%)	3 (3.9%)	76 (100%)	0.000

* This question was multifactorial and row results show dichotomous responses versus 'other'

** Fishers Exact Test if expected cell < 5

5.5.1.3 Is traditional medicine cheap, affordable or expensive?

Figure 5.23 shows that nearly a quarter of the total sample thought that traditional medicine was cheap, 21.4% thought it was affordable, 33% thought it was expensive and 20.9% didn't know. Of those who thought traditional medicine was cheap or affordable, the TMP caregivers were the largest proportion (34% & 40% respectively). This was followed by private clinic caregivers (32% and 24% respectively).

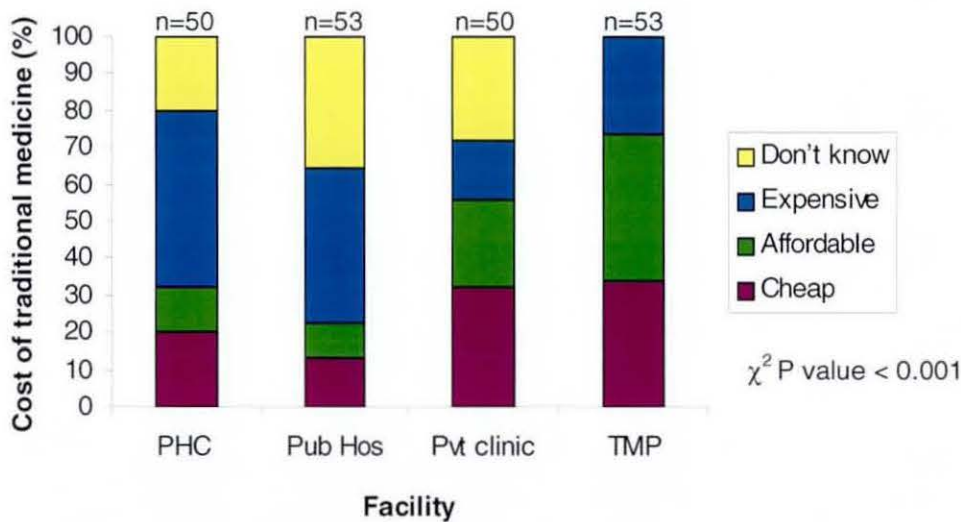


Figure 5.23: Perceived cost of traditional medicine by facility on day of interview

Although traditional healers do charge for their services, payment structures are fairly flexible, although this would depend on the healer:

"They go to doctors and the doctor would charge them but they don't get helped. But they pay that doctor. But here they get helped but they don't pay. But I sometimes feel sorry for those who don't have money and tell them to pay whenever they have the money." (TMP4)

"They accept my amount, but if they don't have that amount they will give what they have and bring the balance later." (TMP5)

"I help them, life come first and money later. We have to save people's life... Yes, there are those that I don't charge, especially those who are poor. I help them for free, they don't pay." (TMP1)

In some cases the cost of traditional treatment is beyond the means of some caregivers:

"They are also expensive when treating children. For example you pay R70 for treatment of inyani and ibala...No, I have not been to a healer, but I see from other people. If I had money I would go... Traditional medicine is expensive, because if you went to consult, let's say for epilepsy, the healer will say I can cure your illness, but I have discovered something else which is the cause of your illness, but you have to pay R1000 upfront... Sometimes a person does not have money just like myself, and knowing that the inyanga will ask for money, that is why it is better to go to the clinic." (CG5 – public hospital)

5.5.2 Distance

When caregivers were asked which of the providers (that they could afford to use) was furthest from them (v. Table 5.46), most PHC (52%) and public hospital (71.7%) caregivers stated that this was the public hospital. Fifty-one percent of TMP caregivers stated that for them the PHC was the furthest – particularly the TMP caregivers from Orange Farm who made up 67% of this proportion. Private clinic caregivers mostly cited private clinics as the furthest (74%), although this did not deter them from using this type of provider. The same can be said for public hospital attendees, 71.7% of whom cited the public hospital as the furthest affordable health care provider from where they lived.

Table 5.46: Furthest affordable health care provider by facility on day of interview

Furthest affordable health care provider	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
PHC	12 (24%)	2 (3.8%)	3 (6%)	27 (50.9%)	44 (21.4%)
Public hospital	26 (52%)	38 (71.7%)	4 (8%)	22 (41.5%)	90 (43.7%)
Private clinic / GP	4 (8%)	4 (7.6%)	37 (74%)	1 (1.9%)	46 (22.3%)
Pharmacy	8 (16%)	8 (15.1%)	5 (10%)	0 (0%)	21 (10.2%)
TMP	0 (0%)	1 (1.9%)	1 (2%)	3 (5.7%)	5 (2.4%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value < 0.001					

In terms of the proximity of providers that a caregiver could afford to use (v. Table 5.47), the PHC was the closest provider for 78% of PHC and 81.1% of public hospital caregivers. Nearly half of private clinic caregivers were generally nearer to a pharmacy and 66% and 36% were nearest to a private clinic or GP. TMP caregivers stated that the TMP was the closest provider for them (66%), followed by the PHC (32.1%).

Table 5.47: Closest affordable health care provider by facility on day of interview

Closest affordable health care provider	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
PHC	39 (78%)	43 (81.1%)	6 (12%)	17 (32.1%)	105 (51%)
Public hospital	1 (2%)	4 (7.6%)	1 (2%)	0 (0%)	6 (2.9%)
Private clinic / GP	5 (10%)	3 (5.7%)	18 (36%)	0 (0%)	26 (12.6%)
Pharmacy	2 (4%)	2 (3.8%)	24 (48%)	0 (0%)	28 (13.6%)
TMP	2 (4%)	0 (0%)	0 (0%)	35 (66%)	37 (17.9%)
Home/All	1 (2%)	1 (1.9%)	1 (2%)	1 (1.9%)	4 (1.9%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value < 0.001					

Both PHC (68%) and TMP (67.9%) caregivers were at a provider that was nearest to where they lived on the day of interview, as is shown in Figure 5.24. Just over three-quarters of private clinic and 90% public hospital caregivers on the other hand were not at their closest health care provider. It should be remembered however that the public hospital and private clinic were both higher level facilities, therefore a large proportion of caregivers would have been referred there.

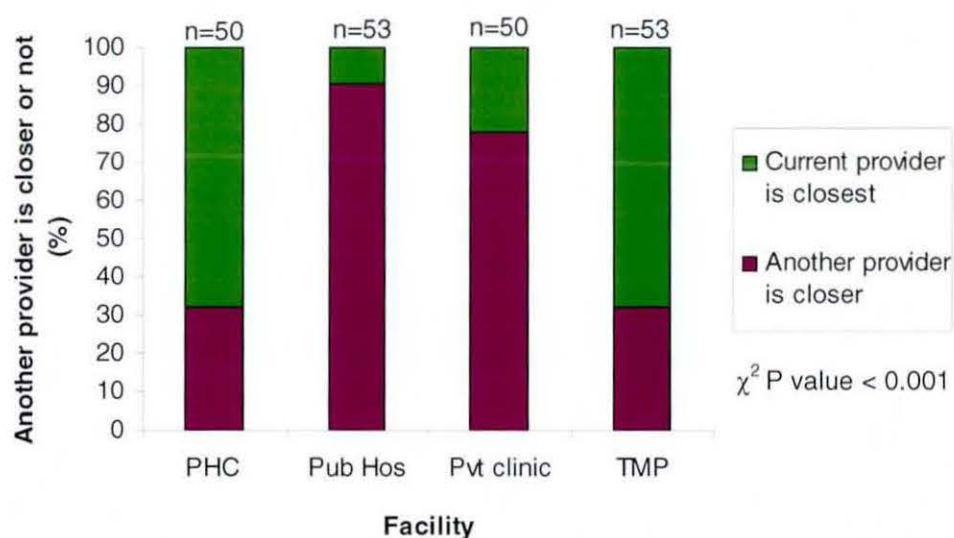


Figure 5.24: Another provider is closer or not by facility on day of interview

Despite better transport in urban areas, when considering how far away a provider is, transport issues were also identified as being important in this sample:

"...distance it's one of them. 'Cause as it is now, during the Easter holidays, the ward was empty. From my point of view, it was like others, it was far for them to move from Soweto to this and maybe from Alexander to this place, because maybe the husband is out on holiday, the car is not there, the transport is poor." (Nurse3 – private clinic)

Overall, 55.8% usually walk, 34.4% normally use public transport and 9.7% use a family car to travel to their health care provider (v. Table 5.48). Although most private clinic caregivers didn't live close to the private clinic, nearly 40% of them used a family car to travel there. For almost 90% of TMP caregivers, walking is the usual mode of transport to their provider and this figure was 56% for PHC and public hospital caregivers and 20% for private clinic caregivers. Just over 40% of PHC, public hospital and private clinic caregivers use public transport as the normal mode of transport to their provider. The very low SES group was more likely to walk to their usual provider (74.5%) than the low (69.7%), medium (43.1%) and high (28.6%) SES groups ($\chi^2 P$ value < 0.001). They were also less likely to use public transport (25.5%) than the low (28.8%), medium (52.9%) and high (30.9%) SES groups.

Table 5.48: Normal mode of travel to provider by facility on day of interview

Normal mode of travel to provider	Facility on day of interview				Total (n=206)
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	
Walk	28 (56%)	30 (56.6%)	10 (20%)	47 (88.7%)	115 (55.8%)
Family car	1 (2%)	0 (0%)	19 (38%)	0 (0%)	20 (9.7%)
Public transport	21 (42%)	23 (43.4%)	21 (42%)	6 (11.3%)	71 (34.5%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)

$\chi^2 P$ value < 0.001

Although limited by their disposable income or what they can borrow from friends or relatives, patients may forgo the extra costs of travelling if the service, including outcome, is of high quality:

"They don't even mind how far it is, what they want, is to be helped." (TMP6)

5.5.3 Waiting times and opening hours

A further enabling factor is the waiting time at a provider. Waiting times in the public sector, particularly the clinics, is sometimes a big enough incentive for a caregiver to pay for private treatment or go to a public hospital:

"You come [to clinic] with a seriously sick child... You come with a child at 6 or half past 6 [in the morning]. You will sit there until 9am without being attended. You need to shout that your child is sick and dying and that you are not going anywhere. You see?" (CG5 – public hospital)

"They [public clinic] will still make you wait in the queue. You sit in the queue for 3 hours with the sick child... The mothers get frustrated because first the child is sick and getting more frustrated because there is no attention, getting tired because then you get to wait more hours. (CG4 – private clinic)

"Because at the clinic you going to wait for a long time and my child has asthma so I know if I go to the doctor immediately she is going to be attended. So at the clinic you must go and queue. They don't come back and check who is sick badly or whatever so at the doctor you get attended. I think they are the same but if you want to be attended fast you must go to the doctor." (FG5)

"At the clinics I think that what she has just said it's true. They don't care how sick you are. You have to follow the queue. But here [public hospital], they come and check who is sick the most and then they attend to that person..." (FG5)

"Like the clinic, my baby... First time I came here [public hospital] she was so sick, very sick. They just attended her immediately. I didn't have to wait for a long time and their medicine is so good it helps children." (FG5)

"No, if they've been referred they get to be seen. But then some will tell you the clinics are too full, I can't wait in the queues there. Then they come here straight. Then they are sent back." (Nurse1 – public hospital)

"They rather go and pay the private doctor because they don't queue." (Nurse2 – public hospital)

"It's expensive [pvt] but you want to be attended immediately so you must pay." (FG5)

A further complaint was of public sector nurses, particularly in the clinics taking long tea breaks:

"The queues are much longer and they would complain of sisters going to tea, and there's no one and they will have to wait for sisters for 2-3 hours for teatime; they're coming back they say now we are closing you come tomorrow... So in the hospital the process is throughout. There's no one saying I'm going for tea. If others are going for tea, there are others who are looking after the sick ones. It is continuous, there's no time that you are closing, now go home come tomorrow." (Nurse2 – public hospital)

"By the time you get your card, your details and everything, they are gone on tea break, there is no doctor to see you, then you will have to wait because the doctors have gone on tea break. They come back off tea breaks; they are walking up and down with their white coats. By the time you get to the doctor's room and they have to see you, they have gone for lunch. They come back from lunch, they are changing shifts, you will have to wait for the next shift of doctors to come and see your child. So it is that type of thing, irrespective of that you have been there since 8 or 9 or whatever time that you have been there." (CG4 – private clinic)

The following passage illustrates the frustration that caregivers experience when their child is sick and they are made to wait for several hours before being seen:

"We were told to stand in the queue and then eventually all of that happened - the nurses changed shifts, the doctors changed shifts; tea and everything and eventually this nurse came up to me and said what is wrong with this child? Has been crying ever since I got here. And I said I was here for hours and hours and nobody has given us attention... So from 12 when I got to the clinic until 6 when the ambulance picked us up, the child basically didn't get any assistance... and I was getting frustrated and I started crying because I did not know what to do with this child. And I could see the child getting worse and worse in my arms and nobody was giving us any attention... Then when we arrived at the hospital you could see the urgency of the matter. Everybody was running around trying to help. And then they put the child in an incubator and a drip. They were also shocked by the size of the needle and they changed everything that was applied to the child at the clinic; changed the drip and put the child into an incubator and the child was starting to be revived." (CG4 – private clinic)

The opening hours of the provider also inhibit the numbers seen each day:

"Most of the local clinics are not functioning well so everybody comes here. Joburg Gen [public hospital] doesn't work after 4, I'm not sure of the time, so everybody comes here. Local clinics aren't working up until 7. Kos [PHC] used to close at 10, now it doesn't. They're having a go-slow, so I don't know what's going on there." (Nurse1 – pub hosp)

"In the early hours of the morning the clinics are still closed." (CG3 – PHC)

In contrast to public sector services, traditional healers are more likely to make themselves available:

"Sometimes you might find that they are sick and its night, and when they go to the clinic, they find it closed, and they decide to come to us, because we don't sleep."
(TMP1)

"I work everyday, Monday to Sunday." (TMP5)

"We don't close because sick people always come." (TMP2)

However one traditional healer reported that healers were not meant to work at night:

"You have to sleep so that you can communicate with your ancestors." (TMP6)

Caregivers identified the frustrations of queuing but also reported that patients may also cause problems through their impatience:

*"...Because even me I come with the baby because I want my baby to be attended. I forget that there are others who came in the morning. I came at 2 o'clock - I want to be attended [**Background: Immediately**] because my baby is sick. I don't think of the others."* (FG5)

"Yes, do you understand that when I'm at the clinic I'm in a hurry to go back home. I want to cut in the line, other times I want to push in the queue. To make things better I don't want to follow the rules because I came late. So because I came late, and I'm not doing what is right and follow the queue then I start shouting saying you are slow, whereas it's me who was slow from home. I should give other people a chance. When one goes in the other should wait and not push. But we always make corruption. We just get in and make corruption. That is why the nurses are impatient. We spoil things."
(CG3 – PHC)

5.5.4 Staff and drug shortages

5.5.4.1 Staff shortages

Another reason why waits are so lengthy is because of shortages of staff – both doctors and nurses in the public sector. A sense of helplessness was apparent in both caregiver and nurse comments. While caregivers asked 'what do we do?', nurses stated 'there is nothing you can do':

"Sometimes there's no doctors there. There's no doctors. They will just refer you to one doctor if there's emergency. But if there is no doctors, they just give you to the sisters, and they give you Panado, it doesn't work, then what do you do?" (FG4)

"What I can say is that they should employ more doctors. After employing more doctors, they must employ more nurses. At least that will be a change." (CG5 – public hospital)

"You can't improve it with the number of hands you have. You could improve it if you had a lot of people. You need doctors, you need nurses. Often we don't have, so for now there isn't much you can do about it. You have to make do with whatever you've got, otherwise you need people. To cope with the numbers you need people. So for now there's nothing you can do." (Nurse1 – public hospital)

"Ja, there is a shortage now [public sector] because most - 90% of nurses have left for overseas, otherwise the main things is the salaries, shortage of staff and equipment." (Nurse4 – private clinic)

In most cases the clinic and its staff were usually blamed, but in a few cases the government's responsibility for the health care system was highlighted:

"Another problem is with the Government as well. You know, at the clinics we are short of doctors. If there are any doctors!" (FG5)

"And another thing is, yes I do understand that we have a shortage of nurses and doctors in the country. But surely maybe they can try and look at a reward system for them so that they become motivated." (CG4 – private clinic)

5.5.4.2 Medicine shortages

Medicine shortages, particularly at clinics were a big concern for caregivers who were told to buy their own medicine from a chemist or use home treatments:

"Things like equipment used to check high blood, X-Rays, needles because sometimes they [PHC] will tell you, you cannot be injected because there are no needles, and the medicines for your illness are not available. We don't have pills to give you. We will write the prescription and you will have to go and buy them at the chemist." (CG5 – public hospital)

"When you arrive in the clinic, before explaining what's your child's problem – 'There is no more muthi [medicine] for cough, nothing, there is no cough mixture!' Then they will just recommend to use fish oil and vinegar for coughing. Sometimes they can give you Panado, sometimes they don't give you. OK, they'll just check, if you've got some tonsils they'll give you medicine, OK, that one they do give us, a big bottle. I think it's 100ml or 200 something. They do give you that one. But if you want a cough mixture, they say there's no cough mixture." (CG1 – public hospital)

As well as being inconvenient for the caregiver:

"Like today my medicine is not enough and I am from Tladi. I must travel to come here [public hospital]. I have to come back and she has some sores. She must have the treatment but there is no treatment. I must go home and come another day... I must come next month at the skin clinic. So if I want it I must come everyday to check if the medicine is there." (FG5)

This was especially a concern for those mothers who did not have money to go and buy medicine at the chemist or see a GP:

"Sometimes they tell you that they don't have medicine so what are you going to do? Take the child back home?" (FG1)

"Some people haven't got money to go the special doctor so they go to the clinic. And if they don't get helped so what must we do?" (FG1)

"Sometimes they write for you down, go to buy this. You buy yourself, because they don't have. OK, if you have the money you can go and buy, but what about those who don't have even that money? They can't buy. They'll just give their child vinegar and fish oil, because there is nothing they can use... so it's too bad, because you don't want to go to the clinic. Ay, they will just tell you there is no medicines hey! So we don't like to go to the clinics, we just go because we have to. But if we could have our money, we could go to the private clinics." (CG1 – public hospital)

It is also one of the reasons that mothers sometimes bypass primary health care clinics and go straight to the hospital:

"And there is no treatment in most cases, they just give Panado and that's it. So that's why they prefer coming to the hospital." (Nurse2 – public hospital)

It is also a reason why some caregivers prefer to go to a traditional healer:

"[If she runs out of a medicine]... I will just give her the other muthi [medicine] to replace umhlonyane. At least giving her something is better than nothing... At times, you will find that they go to the clinic and when they get there they are just told to go back home, because there are no medicines. And then because of those things, they will just come to me for help." (TMP1)

A caregiver interviewed at a private clinic no longer used public clinics because of an unpleasant experience at a PHC, where an adult needle was used on an infant because they had run out of small needles:

"She was bleeding and eventually that other nurse that took me from the seat came to these women and said 'What on earth are you doing?' And they said 'There is nothing we could do. We didn't find any small needles, we are out of stock, the public clinic is out of stock we don't have small needles. We are using adult needles on infants' and then she said – 'That is besides the fact. That child is small, you can see how tiny she is. She is pale so you can't even see her veins properly. In any case, an infant you don't administer it on the arm, you administer it on the head' and the other nurse was showing disgust..." (CG4 – private clinic)

When it comes to medication, caregivers like to have a range available to them as illustrated in the quotations below:

"And you can use it with water [ORS] but if it doesn't work, then what? At least they should give you another option if you go back to them [public clinic]." (FG4)

"Like if they prescribed medicine for her, so it wasn't there at the chemist. I went back to the doctor, asked him to prescribe something that was similar, a substitute." (FG5)

"So I tell the pharmacist what's wrong with the child and then sometimes they give you options on different medicines." (FG1)

In contrast with the options available from private providers and chemists, public clinics had a reputation for only giving Panado Syrup which was also obtainable from chemists:

"Medication is not offered. They only give us Panado. Let's say a child had diarrhoea and vomiting they will give you Panado." (CG5 – public hospital)

"And then you have Panado at home. You have Panado at home." (FG4)

"You know for the clinics, they just give us Panado when we're sick. Only Panado they know." (FG4)

"All they do is give you Panado [clinic]." (FG1)

One caregiver defended the clinics however, saying that some caregivers did not use medicines appropriately:

"And then the other thing is that other people when they are used to overdosing their children, once a nurse starts to give your child a Panado that is half [bottle] and just because you give your child an overdose, you want a full Panado. Then you start to say nurses think they are better, they think these Panados are theirs. And it's not the nurse's decision to give you Panado that is half; it's the doctor who said that. The doctor writes and he explains to you. The doctor writes what the child should get. If you see that he's not getting better, bring the child back. But we always want medicines that are more than what they give us. We are the ones causing funny reactions." (CG3 – PHC)

This view was supported by a PHC nurse who spoke of caregivers jumping from one clinic to another, collecting medicines along the way:

"Most of the time they have a problem with adults. With babies its rare because... In fact from the other clinics I think they're maybe having the problem, we've got a dispensary here, then they come and get their treatment. But they do come and say they're having a problem. Maybe there's no Penvicare, or so. And sometimes they'll lie because they say, they say they don't have treatment just because they wanted to try here so that they get treatment. They don't understand this thing of IMCI... If you don't give treatment, they think their child is not treated well. Only to find that the child doesn't need that antibiotic or that Panado." (Nurse5 – PHC)

"...they are really abusing it. As I say, you know they are like going to Checkers [supermarket], buying Panado, collecting Panado, because they jump from one queue to another, another." (Nurse5 – PHC)

The PHC nurse thought that many caregivers believed that their child should be given medicine when they were not well, which was not always necessary. A public hospital nurse highlighted that it was not always necessary to take a child to the clinic and in some cases Panado sufficed:

"You know, our mothers ne? With their babies, the way they don't understand that the antibiotics and all these treatments they are not right for their kids... It's a sister who's going to check your child and educate you that your child doesn't need to have antibiotics all the time. You need to just give the child Panado. Or even go without getting any treatment. After education you find out that baby doesn't need at all the treatment. So they believe that if the baby is sick you must give drugs..." (Nurse5 – PHC)

"Because at times they don't understand what Panado is used for. The child is coughing, you don't take him to the clinic, you just give Panado 3 times a day, it's like a medicine..." (Nurse2 – public hospital)

The same PHC nurse also acknowledged the shortages of supplies in the clinics:

"Sometimes we even run short of the papers that we put on top of the scales. You must change the paper every day, every child, every baby we put the paper and you must sit and you weigh the baby. We don't get them, and you end up using one for 50 babies."

(Nurse5 – PHC)

5.5.5 Summary

Section 5.5 has illustrated how caregivers' choices may be affected by the cost of the service and treatment, the availability of staff and medicines, as well as the accessibility or distance of the health care provider from where the caregiver lives. The cost of free public health care may be increased by medicine shortages, time spent going elsewhere for treatment and in some cases having to purchase it. Characteristics of the health care providers themselves therefore play a large role in health-seeking behaviour once caregivers have decided to seek treatment and these are examined in Section 5.6

5.6 Characteristics of the provider

Although limited by enabling factors, provider characteristics (perceived and normative) are an important factor in the health-seeking process. This study focused on general perceptions of health care providers and why caregivers might choose one over another. Before discussing these results, it is necessary to look at who else caregivers had spoken to since the onset of the child's illness.

5.6.1 Who had been consulted for child's current health problem

Table 5.49 shows who the caregivers interviewed at the different health care providers had spoken to since the start of their child's illness about the illness or health problem. Overall 75.2% of caregivers had consulted someone within the lay sector (family or friend). The majority (61.2%) had spoken to a family member, usually a grandmother (27.7%) or the father of the child (24.3%). Just over 42% of caregivers had consulted someone at a PHC facility, 34% had spoken to a private provider, 29% had been to a TMP and 28.6% had been to a public hospital. Only 8.7% said they had been to a pharmacy. A larger proportion of public hospital caregivers (28.3%) had also consulted a private provider for their child's current health problem compared to PHC (6%) and TMP (3.8%) caregivers. A much lower proportion (13.2%) of caregivers from the TMP had spoken to the father of the child compared to caregivers at other health care facilities, although they did have the highest proportion who had spoken to a friend or neighbour (26.4%). More caregivers from the PHC and the public hospital had spoken to a family member (72% and 64.2% respectively), whilst the lowest proportion of caregivers who reported speaking to a grandmother was found at the private clinic (22%).

Table 5.49: Who caregiver had spoken to / consulted about the illness since child became ill by facility on day of interview

Who caregiver had spoken to	Facility on day of interview				Total (n=206)
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	
Family or friend	39 (78%)	42 (79.3%)	34 (68%)	40 (75.5%)	155 (75.2%)
Family member	36 (72%)	34 (64.2%)	27 (54%)	29 (54.7%)	126 (61.2%)
Granny	17 (34%)	14 (26.4%)	11 (22%)	15 (28.3%)	57 (27.7%)
Father of child	17 (34%)	13 (24.5%)	13 (26%)	7 (13.2%)	50 (24.3%)
Other relative	5 (10%)	9 (16.9%)	4 (8%)	7 (13.2%)	25 (12.1%)
Friend / neighbour	4 (8%)	10 (18.9%)	8 (16%)	14 (26.4%)	36 (17.5%)
PHC	50 (100%)	30 (56.6%)	1 (2%)	6 (11.32%)	87 (42.2%)
Public hospital	3 (6%)	53 (100%)	1 (2%)	2 (3.8%)	59 (28.6%)
Private provider	3 (6%)	15 (28.3%)	50 (100%)	2 (3.8%)	70 (34%)
Pharmacy	7 (14%)	6 (11.3%)	3 (6%)	2 (3.8%)	18 (8.7%)
TMP	3 (6%)	2 (3.8%)	1 (2%)	53 (100%)	59 (28.6%)

5.6.1.1 Advisors for current or most recent illness by facility on day of interview

Five main options were recorded, and these are broken down by facility on the day of interview.

'Not applicable' includes caregivers who did not need to go on to see another provider. As can be seen in Figure 5.25, overall, treatment at home was the first main option reported by caregivers at all health care providers (PHC 46%; public hospital 32%; private clinic 40%; TMP 32%):

"Ja, if you've got some [medicine], before you take your child to the clinic, you use those you have. You use those you have before. Maybe only for a day, but the other day you take him to the clinic." (FG4)

For PHC caregivers the grandmother of the child or mother was consulted slightly more (18%) than the father of the child (12%) as a first resort. In the second, third, fourth and fifth piecharts, the main options reported by PHC caregivers were all the public clinic (34%; 42%; 24%; 14%).

For public hospital caregivers, similar proportions reported asking a grandmother (15%) and the father of the child (11%) to the PHC, however a higher proportion reported speaking to another relative (17% versus 6% of the PHC caregivers). Five caregivers interviewed at the public hospital had accessed the public hospital as their first provider. The public hospital caregivers had accessed some form of private treatment (usually a GP) a lot more as second (17%) or third providers (13%) than PHC caregivers (2% second provider and 4% third provider) or TMP caregivers (2% and 0%). From the third choice onwards, the main provider chosen was usually a public hospital (40%; 45%; 23%).

More private clinic caregivers reported accessing a private facility as their first provider (24%) than caregivers at other providers (PHC; TMP 2%; public hospital 0%). If going on to a second, third, fourth or fifth provider, the main option was always a private provider (46%; 60%; 24% and 18% respectively).

For the first advice sought, TMP attendees reported speaking to more friends and neighbours (13%) than the PHC (2%), public hospital (8%) and private caregiver (2%) groups. The main providers chosen for later choices were mostly the TMP (47%; 36%; 13%; 9%).

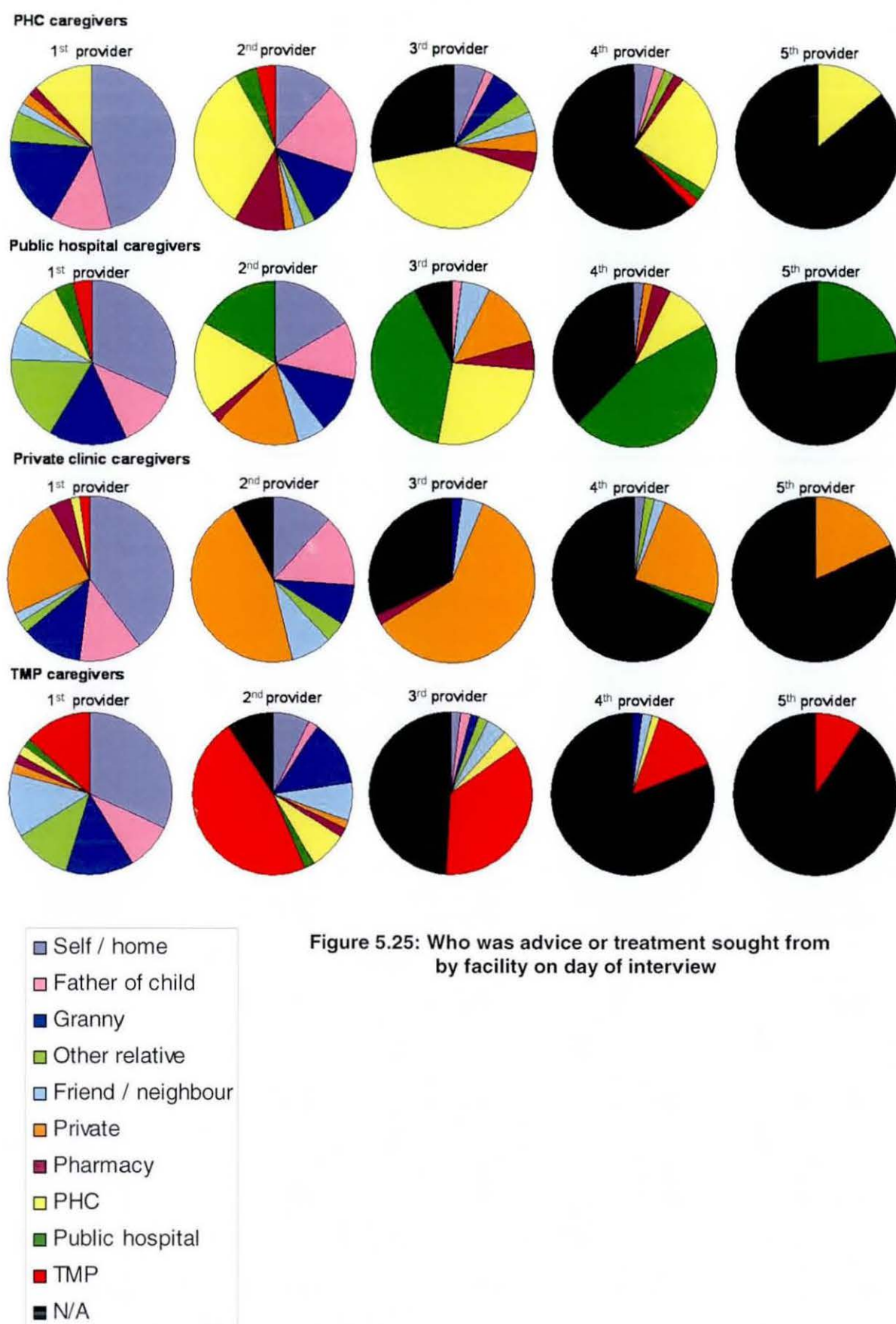


Figure 5.25: Who was advice or treatment sought from by facility on day of interview

5.6.1.2 Providers seen for current or most recent illness across SES groups

In Figure 5.26, the last 5 providers for the child's current or most recent illness is looked at in terms of SES group and it is clear to see that the highest SES group had used less home treatment as a first option (31%) than the very low (38.3%), the low (40.9%) and the medium (37.3%) SES groups.

Friends and neighbours had been consulted more as a first option by the very low SES group (12.8%), than the low (6.1%), medium (3.9%) and high (2.4%) SES groups. Grandmothers, relatives and the father of the child were consulted by all SES groups, particularly in the first and second provider options.

Very low (8.5%), low (6.1%) and medium (3.9%) SES groups had consulted a TMP as their first provider. For the second provider this proportion had increased to 25.5% in the very low SES group, 16.7% in the low SES group and 7.8% in the medium SES group. None of the high SES group reported consulting a traditional healer for their child's current illness.

The high and medium SES groups were the main users of private care in this sample. As a first option, 21.4% of the high SES group, 7.8% of the medium and 1.5% of the low SES groups had used a private provider. For the highest SES group this proportion increased to 38.1% for the second provider seen and 40.5% for the fourth provider seen. For the low SES group this proportion increased to 10.6% for the second provider seen and 7.6% for the third provider seen. Only 2 caregivers in the very low SES group reported using private care in the third option and only 1 reported this for the fourth provider seen.

Overall, the public clinics and hospitals were used less by the highest SES group compared to other groups. The public hospital became a more important option later on, particularly in the very low, low and medium SES groups.

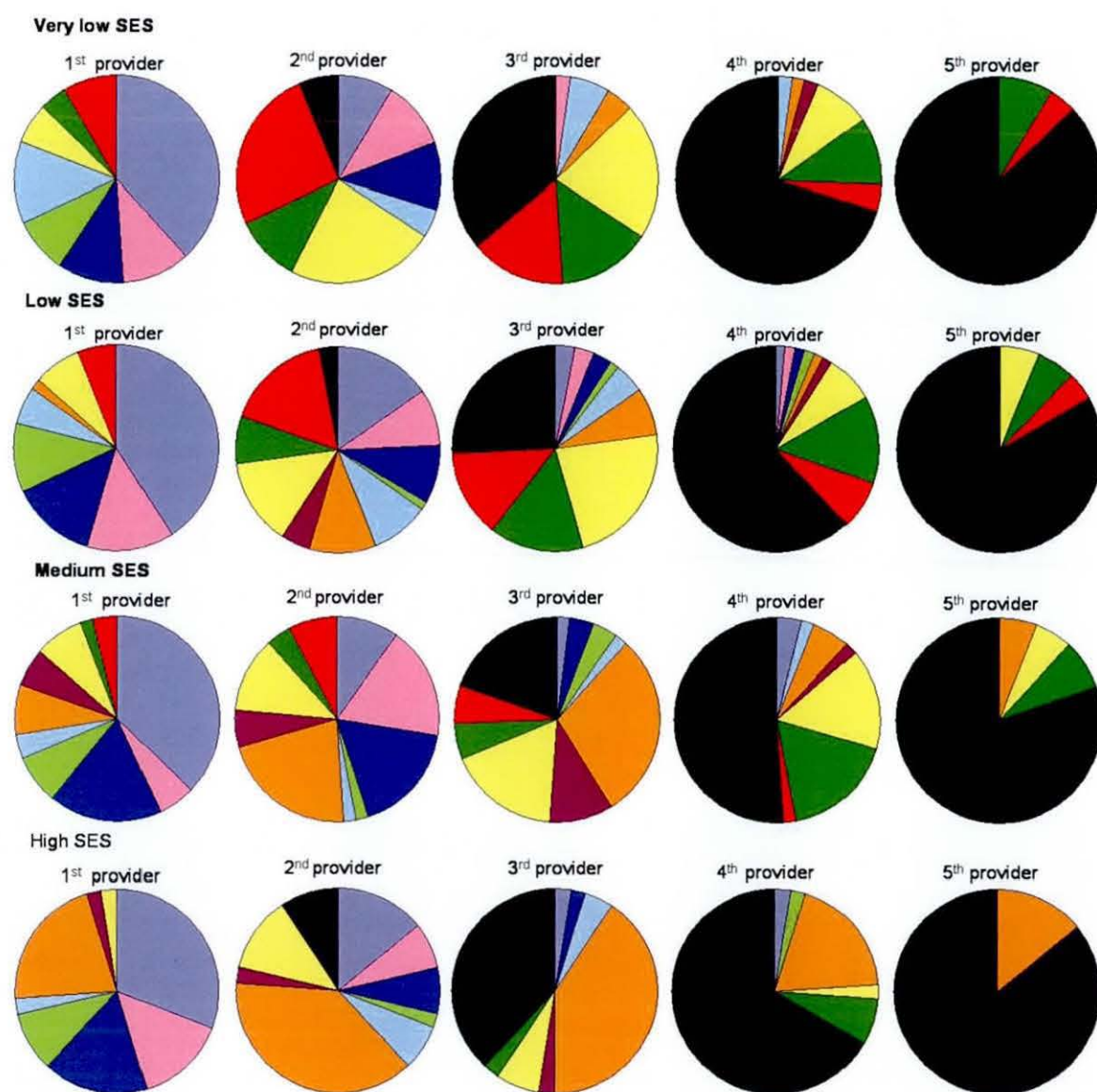


Figure 5.26: Who was advice or treatment sought from by SES group

5.6.2 Perceptions of providers

Respondents identified characteristics of private providers which meant they were perceived as better quality than the public sector: This included the service provided and the facilities available, which in the case of the private sector resembled an hotel, according to a nurse interviewed at a public hospital. Visits to these different facilities confirmed this viewpoint:

"Private sector it's more commercial. The nurse has got to be very sweet, very understanding. Whatever you say she's got to listen to you. If you say you want a glass of water she must go and get it for you. Whereas in the public sector you say 'Nurse I need a glass of water', I say 'There's the tap over there'. That's the difference. So the private they've got to be nice to you so that they get clients coming." (Nurse1 – public hospital)

"And the private is clean, extremely clean. It's beautiful, you are served with a tray and what have you, there's a TV for you and all sorts of things... They want all those nice things. Here, there's no time for nice, I tell you 'Go sit there and you wait the queue'." (Nurse1 – public hospital)

Similarly, negative points were raised about public sector facilities in relation to the private sector, including the treatment and services:

"The treatment and the services it's very good [Private]. Unlike here [Public]. If I can be hospitalized here, the very same day I'll be dead." (FG2)

Medicines in particular were thought to be of better quality at the private providers (including GPs and pharmacies) than the public sector facilities. It was mostly because they were more expensive that the following 2 caregivers thought the medicine at private facilities was of better quality. Caregiver 4 describes the Panado given at public clinics as looking diluted:

"...what I believe happens is because the public clinics they see a lot of people they are cheaper and some of them are free... So what happens is that that medication gets diluted, that does happen, it is not hearsay... The one from the clinic looks lighter, it looks diluted and the one from the pharmacy or the doctor or wherever it looks like the real Panado that we all know and trust." (CG4 – private clinic)

"Many people said they're good in treatment, but I've never been there. The people say the medicine that they give you is different from the clinic and is expensive and they make you better fast." (CG2 – public hospital)

Not all caregivers however thought that the private sector was better than the public sector:

"The GP is still the same as the clinic because what they told me I've heard it at the clinic. And I compare the medicine. It is still the same." (CG2 – public hospital)

"I think they are the same because they are made from one place. Even if it can change colour, the fact is it's Panado." (CG3 – PHC clinic)

Further problems with the public sector included shortages of medicines, or only Panado being given. Nurse 2 described how some caregivers would rather go to a private doctor where they knew they would be given more than Panado for their child:

"So they rather go to the private doctor... to avoid being given Panado for treatment only." (Nurse2 – public hospital)

"When you arrive in the clinic, before explaining what's your child's problem, there is no more muthi for cough, nothing, there is no cough mixture. Then they will just recommend to use fish oil and vinegar for coughing." (CG1 – public hospital)

"You know for the clinics, they just give us Panado when we're sick. Only Panado they know." (FG4)

"Medication is not offered. They only give us Panado. Let's say a child had diarrhoea and vomiting – they will give you Panado." (CG5 – public hospital)

Better examinations at private clinics, including the use of high-tech equipment and not just asking the mother what is wrong with the child or simply looking at the child, was another issue highlighted:

"At the private hospital they examine a child. If I say my child has chest coughs they will examine the child and even take the child for X-rays. So that you also get satisfied and that your child is going to be healed because they don't just listen to what I have to say about the child. They do their own examination." (CG5 – public hospital)

"That is why we are not satisfied with the treatment offered to our children [public sector]. It is not right, just because they are not checked - they will just give you a prescription of the medication." (CG5 – public hospital)

"....They said she was HIV+ without even testing the child, without even testing her! They said that it's obvious that it's HIV+. Today the child it's fine, today she's fine. She had a skin problem. And they just looked at her and they said oooh it's obvious what's the problem with this child..." (FG5)

Having only ever experienced public sector treatment, caregiver 2 describes the advanced equipment that she has heard about at private facilities:

"Yes and they've [private] got lots of machines, they can see anything. Like this child they said he got something in the stomach. So they can put him in the machine and the machine can tell what's wrong. But I've never been there. Those people went there they've got medical aid, they say it is better." (CG2 – public hospital)

Although private sector treatment is more expensive, it guarantees that you won't have to queue for long:

"It's expensive but you want to be attended immediately so you must pay." (FG5)

"You come here [public hospital] with a seriously sick child... You come with a child here at 6 or half past 6 in the morning. You will sit there until 9am without being attended. You need to shout that your child is sick and dying and that you are not going anywhere..." (CG5- public hospital)

"Because at the clinic you going to wait for a long time and my child has asthma so I know if I go to the doctor immediately she is going to be attended. So at the clinic you must go and queue. They don't come back and check who is sick badly or whatever so at the doctor you get attended. I think they are the same but if you want to be attended fast you must go to the doctor." (FG5)

Nurse 4 who had previously worked in the public sector, describes the differences in the time available to spend with patients at private and public facilities:

"Yes we spend a lot of time with the patient here [private]. You bath the patient, you give feeds, give treatment, you check the drip, you are always almost every time with the patient unlike in the provincial because you run from one patient to another." (Nurse4 – private clinic)

This may be one reason why staff attitudes in the public sector are thought to be less sympathetic:

"There is no proper care there [public clinic]. There is negligence and you get there they will just look at you, whether you child is screaming his lungs out or whatever." (CG4 – private clinic)

"We do come to the hospitals but there is no care." (CG5 – public hospital)

"...with the public we have a lot of patients and here [private] we don't have. If right now if the ward is full we will only have 10 and in the provincial if we are full we are having 50 to 60 patients and then there's a lot of shortage of nurses. So at times you find that quality of care suffers." (Nurse4 – private clinic)

Within the public sector however, PHC clinics did not always have a doctor / specialist and the sisters running the clinics were not trusted as much as doctors were:

"But if there is no doctors, they just give you to the sisters, and they give you Panado, it doesn't work, then what do you do?" (FG4)

"They [caregivers] don't like sisters examining their children – those PHC sisters. We have sisters who have done a course where they, it's between a doctor and a nurse and there's this nurse who will diagnose, treat and refer if she needs to. Now, they don't trust these sisters, they say they are not doctors." (Nurse1 – public hospital)

The PHC clinics also usually experience more shortages of medicines and equipment than the public hospitals:

"They did not have small needles for the drip. I am talking about a 2 week old child. So they pulled out the huge needle...eventually that other nurse that took me from the seat came to these women and said 'What on earth are you doing?' and they said 'We didn't find any small needles, we are out of stock, the public clinic is out of stock – we don't have small needles, we are using adult needles on infants'. Then when we arrived at the hospital you could see the urgency of the matter – everybody was running around trying to help and then they put the child in an incubator and a drip, they were also shocked by the size of the needle and they changed everything that was applied to the child at the clinic – changed the drip and put the child into an incubator and the child was starting to be revived." (CG4 – private clinic)

"When you ask them they'll always say there's no drip at the clinic,... So they want where they will get this drip immediately. So they know if you come to hospital... definitely you are going to get the drip. It's a sure thing." (Nurse2 – public hospital)

Similar to the perceived difference in private and public sector medicines, there is also thought to be a difference between medicines at the PHC clinic and the hospital:

"If I give a teaspoon of Panado, that fever must be gone within an hour. If it's not, no this Panado is not the same as Bara's [Public hospital] - let me take my child to Bara." (Nurse1 – public hospital)

Patients were also more likely to queue for longer at the clinic than the public hospital, regardless of the severity of the illness:

"At the clinics I think that what she has just said it's true. They don't care how sick you are. You have to follow the queue. But here like Ward X, they come and check who is sick the most and then they attend to that person..." (FG5)

In general, staff attitudes, particularly at the public clinics, were deemed to be offensive although the public hospital staff were also known to be rude:

"They [staff] are very rude, especially clinics." (FG2)

"Like when sometimes you go to the clinic, they say you just come here because you don't pay, you're coming for free." (FG4)

"But if you do talk with them they will backchat at you and they say bad things about you and they will even chase you away." (FG5)

"Their lives just carry on, and if you are lucky enough to actually see the doctor, the doctor is moaning and complaining that he / she is sick of this place. She has been on shift since last night and whoever else was supposed to come and didn't come and they are tired and they don't take this nonsense." (CG4 – private hospital)

"I don't really know but they always say the sisters have got a bad attitude at the clinic, they are shouting. They don't want to go to the clinic because they are not treated well, you know." (Nurse2 – public hospital)

"Even at the hospital they are very rude, they don't have patience anymore." (FG2)

Not all staff at public clinics were thought to be impolite however:

"But not all of them, not all of them [are rude at clinics]." (FG1)

"So sometimes they become impatient. If you go to the clinic the sisters are not the same, some are good and some are not." (FG4)

5.6.2.1 Ratings of doctors and nurses

Caregivers in the survey were asked questions about what the doctors and nurses were like at their usual provider (not specifically on day of interview) and these were grouped into positive and negative responses. As can be seen in Table 5.50, in general, all of the PHC caregivers, nearly all of the TMP caregivers (92.4%) and over half of the PHC caregivers (56.6%) would normally take their child to the clinic to see a doctor. Nearly all of the private clinic mothers (98%) would usually take their child to a private clinic to see a doctor. The public hospital caregivers also had a large proportion (39.6%) who would normally take their child to the public hospital to see a doctor.

Caregivers were also asked what the doctors were like at the usual provider (therefore not necessarily applicable to provider on day of interview). Overall, doctors achieved very positive results in terms of their politeness, manner and helpfulness, with over three quarters of responses being positive, 14% negative and 9.2% mixed ($\chi^2 p=0.002$).

Table 5.50: Where child normally sees a doctor by facility on day of interview

Where does child normally see a doctor?	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Public clinic (PHC)	50 (100%)	30 (56.6%)	0 (0%)	49 (92.4%)	129 (62.6%)
Public hospital	0 (0%)	21 (39.6%)	1 (2%)	4 (7.6%)	26 (12.6%)
Paediatrician / GP	0 (0%)	2 (3.8%)	49 (98%)	0 (0%)	51 (24.8%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)

χ^2 P value < 0.001

Figure 5.27 shows these ratings when broken down by where the usual doctor is seen and the facility on the day of interview. Most TMP caregivers normally take their child to see a doctor at the PHC and these doctors achieved the most negative ratings (28.5%). All 4 TMP caregivers who usually go to the public hospital to see a doctor however, rated these as positive. Private clinic caregivers, 98% of whom usually see a private doctor, rated 96% of them as positive. Public hospital caregivers who normally see a doctor at the PHC gave more negative ratings to their doctor (20%) than those public hospital caregivers who normally see a doctor at the hospital (0%). PHC caregivers, all of whom would take their child to the PHC to see a doctor, rated 76% of them as positive, 16% as negative and 8% as both positive and negative.

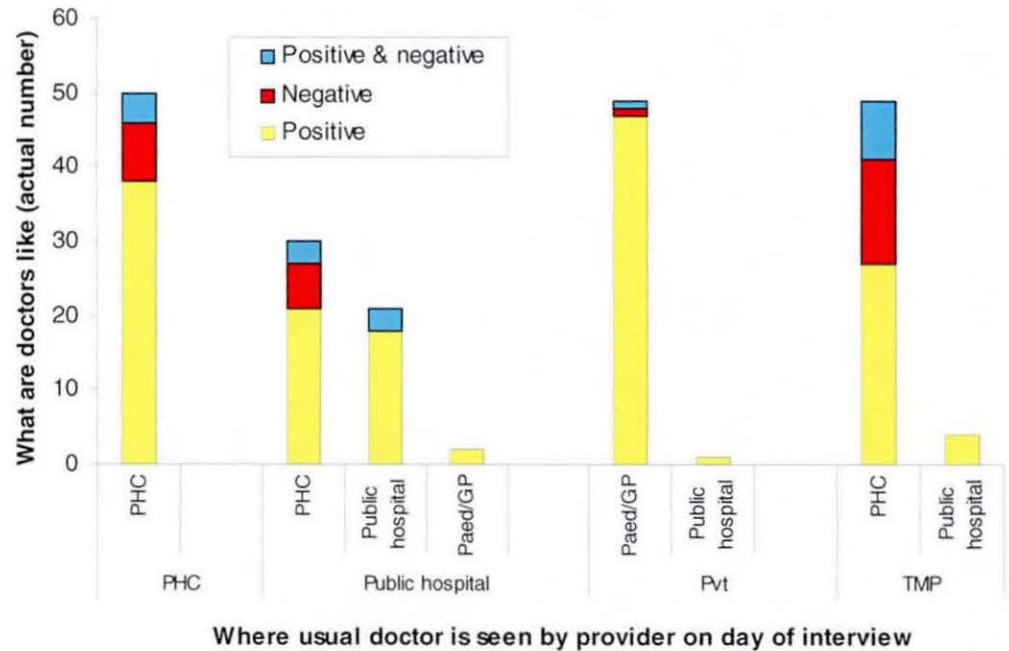


Figure 5.27: Caregiver ratings for usual doctor seen by facility on day of interview

Caregivers were asked where they usually saw a nurse for their child (v. Table 5.51). Responses were similar to those for doctors, with all PHC caregivers usually seeing a nurse at the PHC, all private caregivers usually seeing a nurse at a private clinic, 92.4% of TMP caregivers normally seeing a nurse at the PHC, 56.6% of public hospital caregivers normally seeing a nurse at the PHC and 39.6% usually seeing a nurse at the public hospital.

Table 5.51: Where child normally sees a nurse by facility on day of interview

Where does child normally see nurse?	Facility on day of interview				Total (n=206)
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	
Public clinic (PHC)	50 (100%)	30 (56.6%)	0 (0%)	49 (92.4%)	129 (62.6%)
Public hospital	0 (0%)	21 (39.6%)	0 (0%)	4 (7.6%)	25 (12.1%)
Paediatrician / GP	0 (0%)	2 (3.8%)	50 (100%)	0 (0%)	52 (25.2%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)

χ^2 P value < 0.001

Overall, nurses achieved lower ratings than doctors, with 58.7% of responses being positive, 22.8% being negative, and 18.4% mixed results.

Figure 5.28 shows these ratings when broken down by where the usual nurse is seen and the facility on the day of interview.

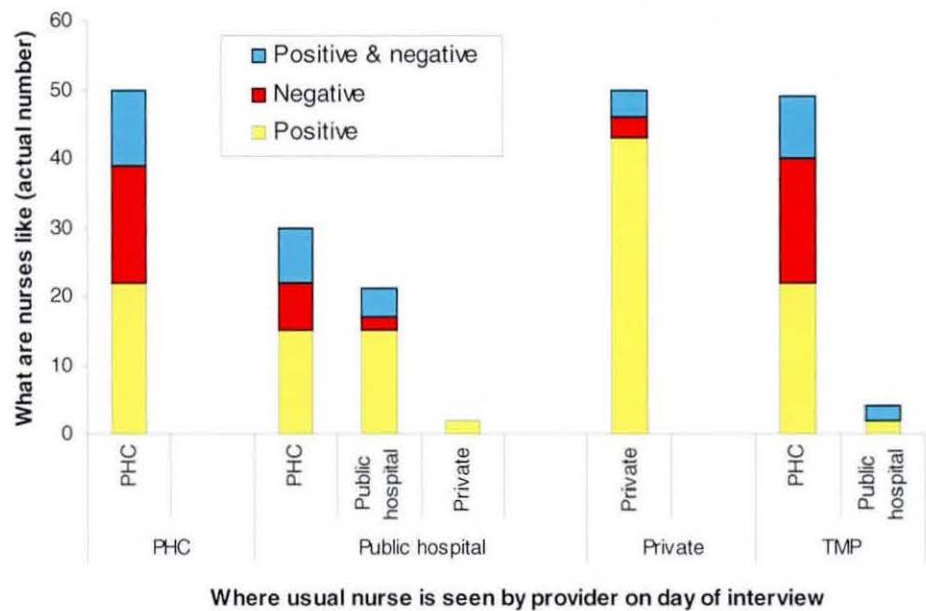


Figure 5.28: Caregiver ratings for usual nurse seen by facility on day of interview

Private clinic caregivers rated 86% of nurses at the private clinics as positive. The 2 public hospital caregivers who would normally take their child to see a nurse at a private clinic rated them as positive. Public hospital caregivers who would normally take their child to see a nurse at

a public clinic rated 71.4% as positive, 9.5% as negative and 19% as both positive and negative. For those who normally went to the PHC however, the positive ratings were slightly lower (50%), negative ratings were higher (23.3%) and mixed ratings were higher (26.6%). For PHC caregivers, all of whom would only take their child to see a nurse at the PHC clinic, 44% of these ratings were positive, 34% were negative and 22% were mixed. Overall, nurses working in the PHC clinic received slightly more negative ratings than public hospital nurses or nurses in the private sector. TMP and PHC caregivers gave PHC nurses similar low ratings (36.7% and 34% respectively). Similar to the doctor ratings, PHC nurses were rated most negatively by the TMP caregivers.

5.6.2.2 Best place to take sick child (that caregiver can afford)

Caregivers were asked where the best affordable place was to take their child when they are sick and results are shown in Table 5.52. Reasons for these choices are shown in Figure 5.29.

Table 5.52: Best (affordable) place to take sick child by facility on day of interview

Best place to take child in terms of affordability	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
PHC	37 (74%)	23 (43.4%)	2 (4%)	12 (22.6%)	74 (35.9%)
Public hospital	1 (2%)	23 (43.4%)	1 (2%)	5 (9.4%)	30 (14.5%)
Private clinic	1 (2%)	1 (1.8%)	41 (82%)	0 (0%)	43 (20.8%)
GP	7 (14%)	4 (7.5%)	5 (10%)	1 (1.8%)	17 (8.2%)
Pharmacy	3 (6%)	2 (3.7%)	1 (2%)	2 (3.7%)	8 (3.9%)
TMP	1 (2%)	0 (0%)	0 (0%)	33 (62.2%)	34 (16.5%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value < 0.001					

As caregivers were able to give more than one reason why they thought a provider was best, 'n' in Figure 5.29 relates to the number of responses and not the number of caregivers. Overall, those who chose the PHC as the best provider (that they could afford) did so mainly because of cost (53.3%). For those who chose the public hospital, the main reasons related to medicine (25.6%), the medical procedure (17.9%) and staff availability, including waiting times (17.9%). For those who chose the private clinic, the main reasons related to staff attitudes (33.8%) followed by medicine-related issues (16.2%). Those who chose the GP did so mostly because of staff availability and waiting times (28.6%), whilst those who chose the TMP mainly cited beliefs and habit (40.5%) and cost (23.8%). The main reasons for choosing the pharmacy included medicine-related issues (36.4%), cost (27.3%) and staff availability and waiting times (27.3%).

Cost issues therefore mainly related to the PHC; staff attitudes, seeing a specialist and facility-related issues (e.g. food, cleanliness, atmosphere, privacy) mainly related to the private clinic; the medical process (the way their child is examined / diagnosed and the explanation given) mainly

related to the GP and public hospital; whilst staff availability and waiting times mainly related to the GP and pharmacy. Knowing they will get help or having experienced a good outcome in the past mainly related to the TMP, as did beliefs and habit.

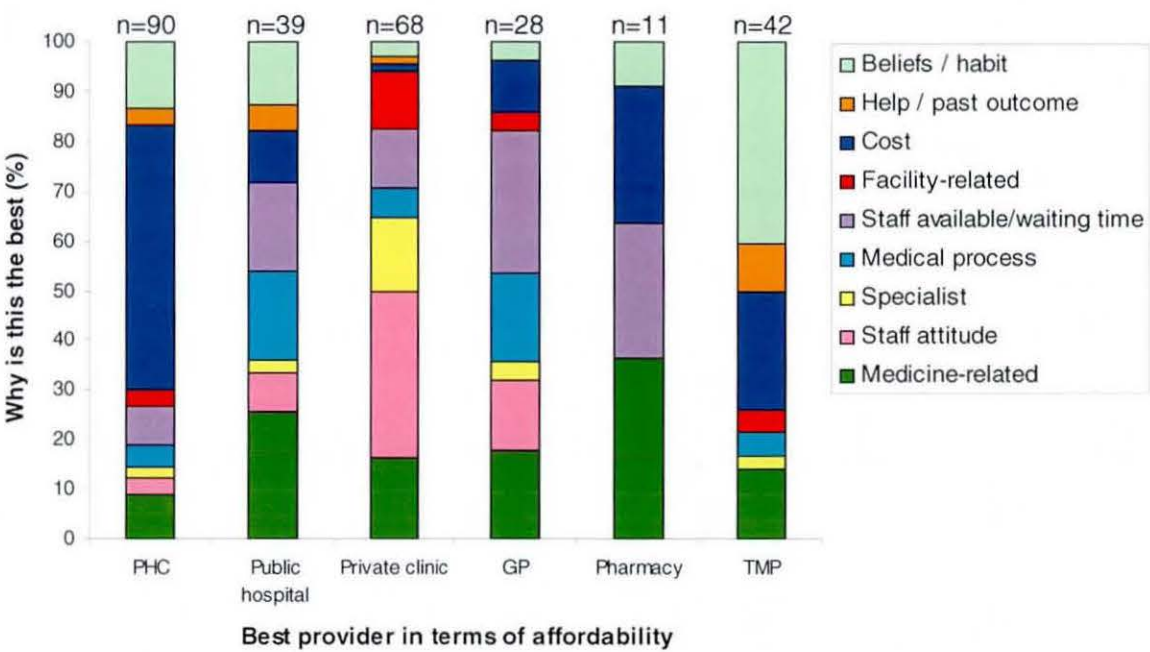


Figure 5.29: Best provider in terms of affordability and why this is best

5.6.2.3 Best place to take a sick child if caregiver won the lottery

If a caregiver won the lottery (i.e. money was not a problem), over three-quarters (77.6%) of all caregivers stated that they would take their child to a private provider. Over half of TMP providers however stated that the traditional healer was still the best place. As can be seen in Table 5.53, 96% of private clinic caregivers were at the facility they would choose if they won the lottery. Just over half of TMP caregivers were at the facility they would choose if they won the lottery, whilst this figure is only 8% for PHC and 7.5% for public hospital caregivers.

Table 5.53: Best place to take a sick child if caregiver won lottery by facility on day of interview

Best place to take child if caregiver won lottery	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
PHC	4 (8%)	1 (1.8%)	1 (2%)	1 (1.8%)	7 (3.4%)
Public hospital	3 (6%)	4 (7.5%)	1 (2%)	2 (3.7%)	10 (4.8%)
Private clinic	43 (86%)	47 (88.6%)	48 (96%)	22 (41.5%)	160 (77.6%)
TMP	0 (0%)	1 (1.8%)	0 (0%)	28 (52.8%)	29 (14%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)

χ^2 P value = 0.012

As caregivers were able to give more than one reason why they thought a provider was best, 'n' in Figure 5.30 relates to the number of responses and not the number of caregivers. Overall, for those who would use the PHC or the TMP if they won the lottery, the main reasons relate to familiarity with the provider and belief in the treatment (44.4% PHC; 58.5% TMP). Of those who would choose the TMP, 24.4% said that this would be because of help that they have received in the past. For those who would choose the public hospital if they won the lottery, 36.4% also said that this is because they had received help there in the past. The availability of staff and waiting times was cited by 27.3% of caregivers who would choose to use the public hospital. Reasons why caregivers would choose the private clinic mainly related to the availability of staff and waiting times (23.3%), medicine-related issues such as availability and their strength (21.6%) and staff attitudes (20.8%).

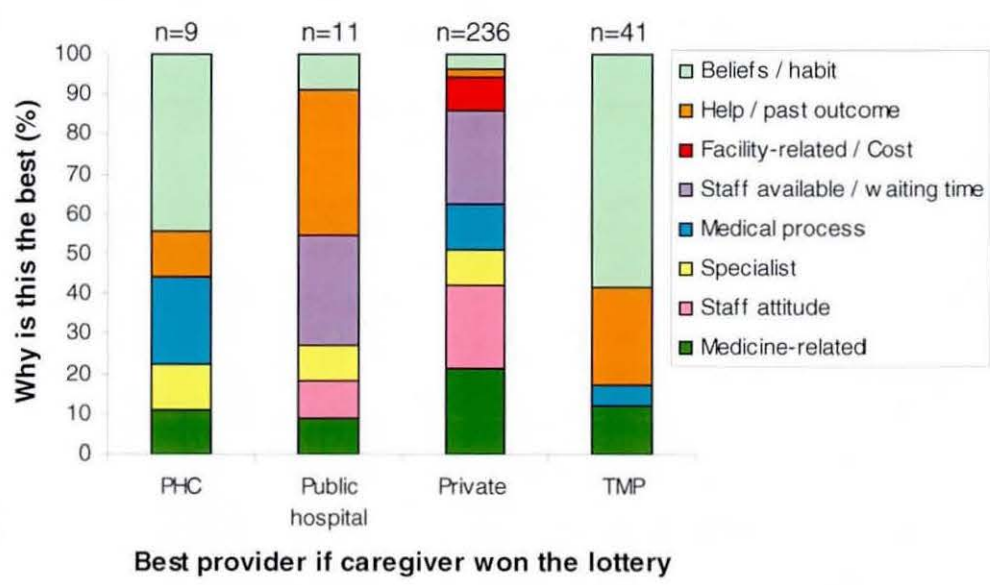


Figure 5.30: Best provider if caregiver won the lottery and why this is best

Figure 5.31 compares differences in caregivers interviewed at different facilities reasons for choosing the private clinic if they won the lottery. For caregivers interviewed at the PHC who would choose a private provider, reasons mainly relate to staff availability and waiting times (39%), the medical process (e.g. examination / diagnosis / aftercare / explanation) (23.7%) and medicine-related issues (18.6%). Staff availability and waiting times were also a main reason amongst caregivers interviewed at the public hospitals (28.6%) for choosing a private provider, as were medicine-related issues (30%). Staff attitudes were mainly cited by public hospital caregivers (21.4%) and caregivers already at a private provider (36.6%). Caregivers interviewed at the TMP who would choose a private provider would do so because of medicine-related issues (32%), the medical process (28%) as well as seeing a specialist (20%).

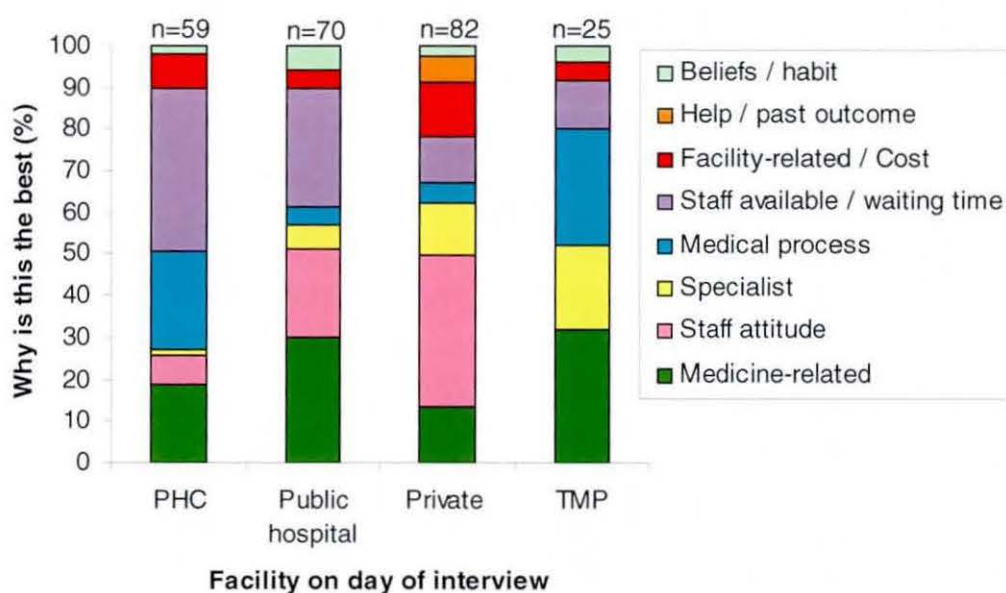


Figure 5.31: Caregivers who would choose a private clinic if they won the lottery by facility on day of interview and reasons why private would be best

5.6.2.4 Most important factors when deciding where to take a sick child

Caregivers were also asked about what first came to their minds when deciding where to take their sick child and this does not specifically relate to the provider they were at that day (v. Figure 5.32). Caregivers were able to give more than one answer, therefore the pie charts reflect the percentage of responses and not caregivers. For PHC caregivers, cost once again features as a major factor (26%), as do lengthy waiting times and severity of illness (20%). More PHC caregivers reported staff attitudes compared to when they were asked which provider was best in terms of affordability. For public hospital caregivers, the issue of cost was overtaken by staff attitudes (20%) and belief in the treatment (20%). Private caregivers again reported staff attitudes (31%), but also waiting time and severity (28%) (choosing between public clinic, GP and Paediatrician for example). Cost (23%), belief in the treatment (25%) and medicine-related issues (18%) were again at the forefront of the TMP caregivers' minds, but a larger proportion than the other caregivers mentioned distance (12%).

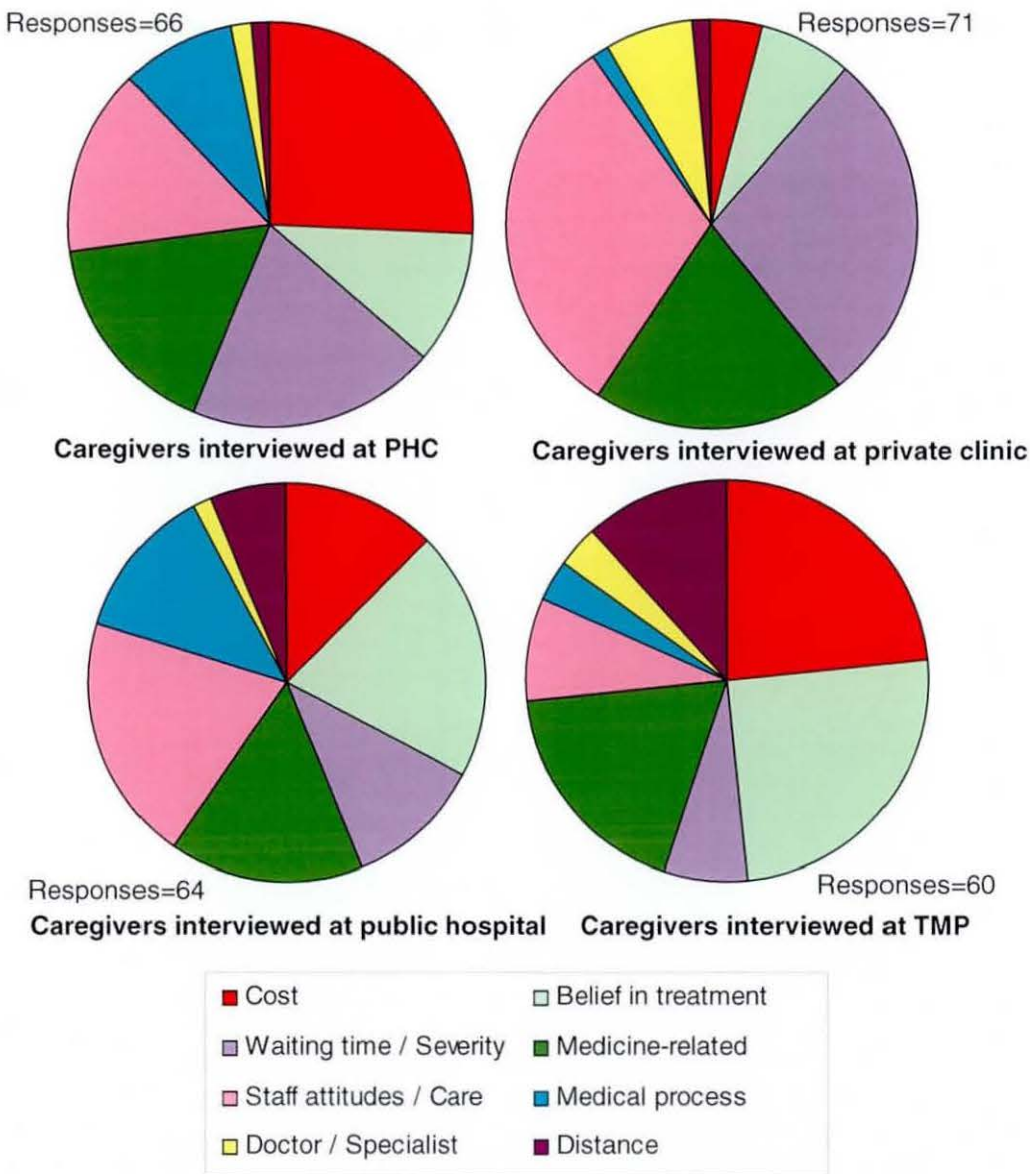


Figure 5.32: Most important factors when deciding where to take a sick child for attendees at different health care providers (do not specifically relate to clinic on day of interview)

5.6.2.5 Why do some caregivers bypass the local PHC in favour of the hospital?

Public hospital workers often claim that caregivers are abusing the system and bypassing the PHC to go straight to the hospital without a referral letter. Figure 5.33 shows why caregivers at the 4 different providers thought this might be. A large proportion of PHC caregivers stated that people would bypass the PHC clinic in an emergency (34%). Caregivers who were interviewed at the public hospital thought that caregivers might bypass the PHC clinic mainly because there is no doctor / specialist (22%), because of medicine-related issues (amount, availability, strength) (21%) and because of waiting times and opening hours at the PHC (15%). Private clinic attendees thought that caregivers might bypass the clinic mainly because of waiting times and opening hours at the PHC (24%), as well as knowing that there is definitely a doctor or specialist at the hospital (24%). Caregivers interviewed at the TMPs thought that caregivers might bypass the PHC clinic mainly because of medicine-related issues (21%), because they want to see a doctor or specialist (19%), because of lack of equipment at the PHC (18%) (e.g. no drip or no X-ray), and in an emergency (19%).

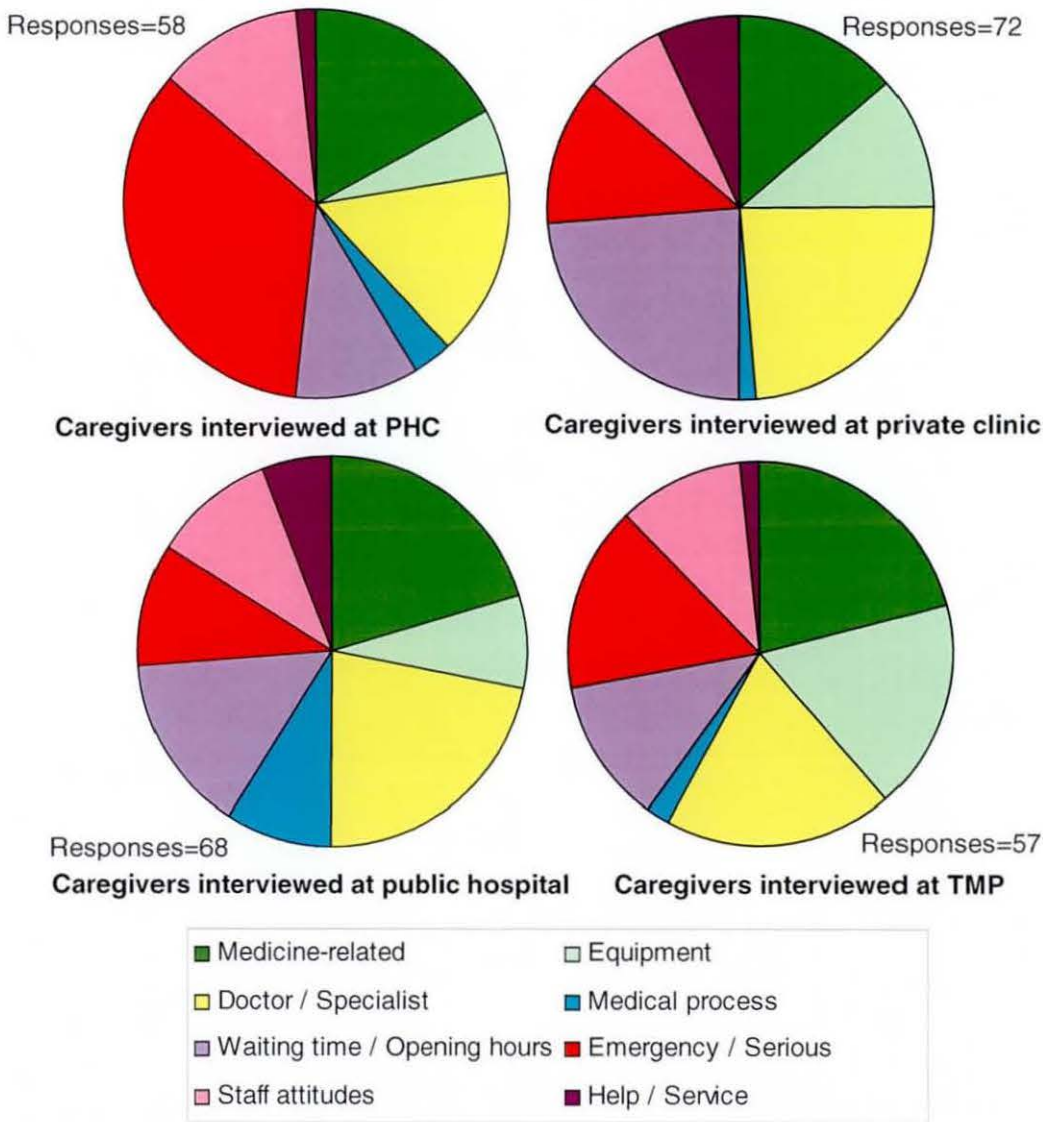


Figure 5.33: Why caregivers interviewed at different facilities think that people might bypass the PHC in favour of the public hospital

5.6.2.6 How child health services could be improved in Johannesburg and Soweto

Figure 5.34 shows that overall, caregivers wanted to see staff attitudes improved (PHC caregivers 40.3%, public hospital caregivers 25.8%; private clinic caregivers 27.4%; TMP caregivers 25%). For TMP caregivers a particularly salient issue was that of the integration of traditional and Western medicine, if not in the organisational sense, at least in terms of clinic and hospital staff showing more respect towards traditional medicine and cultural beliefs (38.3%). As well as staff attitudes, caregivers interviewed at the PHC wanted waiting times to be improved (27.4%). The largest proportion of caregivers who thought that patient attitudes should also change and that users should be charged a fee was found at the non-fee paying PHC clinic (8.1%). For public hospital attendees, improving staff numbers (27.3%) was one of the main concerns, followed by staff attitudes (25.8%). Besides staff attitudes, caregivers interviewed at the private clinic thought that the medical process and service-related issues (21.9%) could be improved in Johannesburg and Soweto. For example these include better management and supervision, better explanations and education for parents and having separate queues for children and adults at public facilities. Improving staff numbers at public facilities (20.5%) as well as the facility and its resources were other areas of child health services which were reported to need improvement.

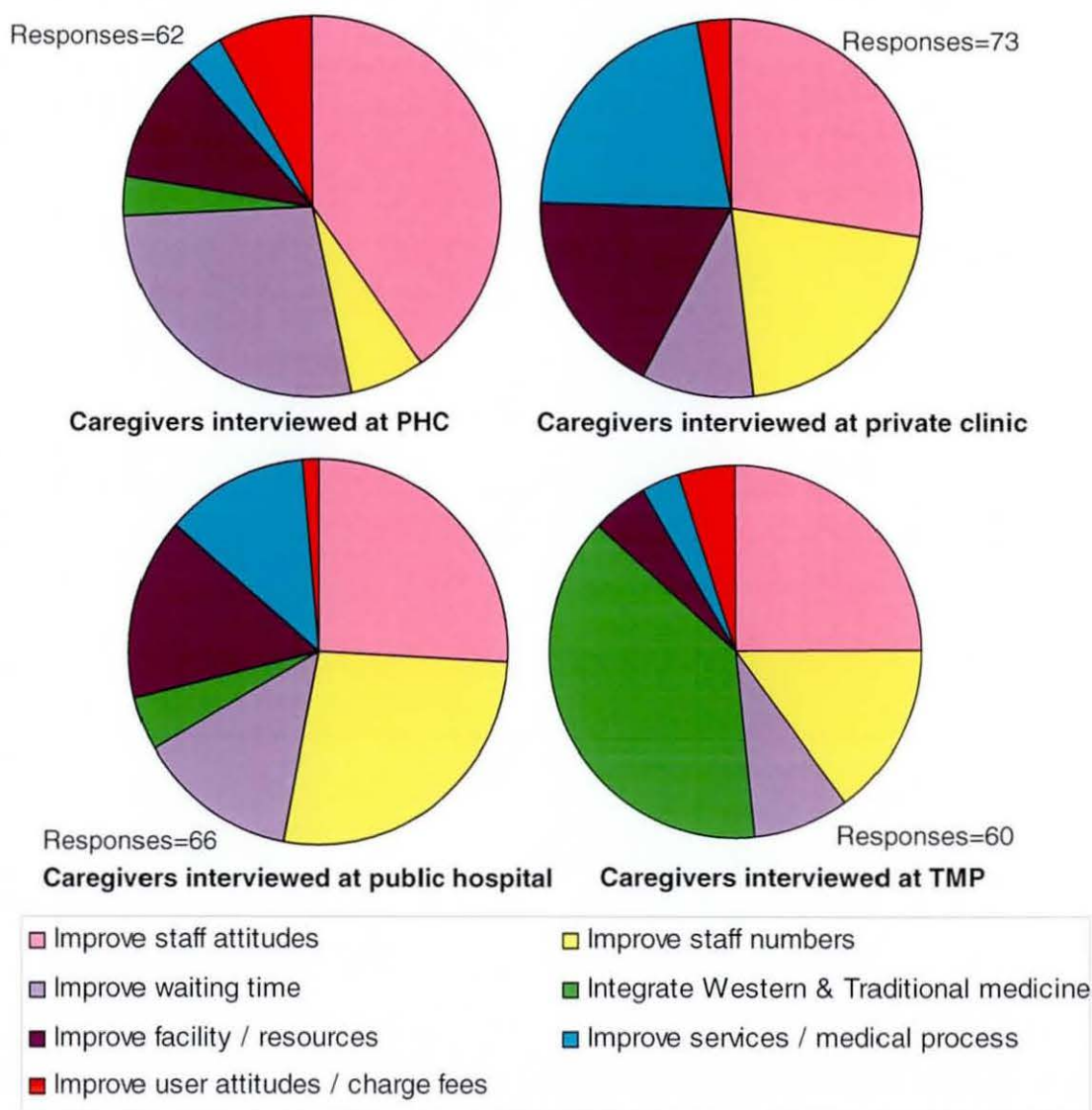


Figure 5.34: How child health services could be improved in Johannesburg and Soweto by facility on day of interview

5.6.2.7 Do you complain if queues are long or staff are rude?

As staff attitudes and queues were a major theme in the qualitative work, several questions addressed this issue in the survey, including whether caregivers complained. Table 5.54 shows that over 90% of private clinic caregivers would complain if staff were rude or queues were long. This is followed by just over 80% of TMP caregivers and 76% of PHC caregivers. The lowest proportion of caregivers who would complain was found the public hospital (60.3%).

Table 5.54: Complaining if queues are long or staff are rude by facility on day of interview

Does caregiver complain if queues are long or staff are rude?	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Yes	38 (76%)	32 (60.4%)	46 (92%)	43 (81.2%)	159 (77.2%)
No	12 (24%)	21 (39.6%)	4 (8%)	10 (18.8%)	47 (22.8%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value = 0.002					

5.6.2.7a Does complaining make a difference?

Table 5.55 shows that reasons for the highest proportions of complainants at the private clinic and TMP may be because they believe it will make a difference. Fewer respondents at the PHC and public hospital believed that complaining would make a difference, although these results are not statistically significant.

Table 5.55: Does complaining make a difference by facility on day of interview

Does complaining make a difference?	Facility on day of interview				
	PHC (n=50)	Pub hosp (n=53)	Pvt clinic (n=50)	TMP (n=53)	Total (n=206)
Yes	33 (66%)	33 (62.3%)	41 (82%)	41 (77.3%)	148 (71.8%)
No	11 (22%)	16 (30.2%)	6 (12%)	7 (13.2%)	40 (19.4%)
Maybe/Sometimes/DK	6 (12%)	4 (7.5%)	3 (6%)	5 (9.5%)	18 (8.8%)
Total	50 (100%)	53 (100%)	50 (100%)	53 (100%)	206 (100%)
χ^2 P value = 0.184					

Although one reason for not complaining as seen in Table 5.55 is that caregivers do not think it always pays to complain, another underlying reason as illustrated in the quotation below, is that caregivers are scared of the treatment (or lack of it) that their child might receive if they do complain.

"Because you can complain sometimes... Normally I don't complain, I just keep quiet. But I think if I can complain, they won't treat my child well, so I just keep quiet so that my child can be treated and we go home." (CG1 – public hospital)

"So sometimes if you talk for your kid it's not right. They talk to you, you know, too much, so since you know too much they'll be too finished. So they're becoming impatient, but in the hospital they do understand, you know." (FG4)

5.6.3 Summary

Section 5.6 has shown that although private providers are mostly used by the highest SES groups, lower SES groups do make use of fee-for-service providers. One reason for this may be because the private sector is generally perceived to be of better quality in terms of the number staff available, the presence of doctors, better quality medicines as well as better availability, better examinations with more high-tech equipment and shorter waiting times. Many of these were also identified as possible reasons why some caregivers might bypass their local PHC facility. A difference was also found in how public sector primary health care facilities were perceived in comparison to public sector hospitals. In general public sector hospitals were thought to offer speedier services for those whose illness was severe, stronger medicines than the PHC clinic and fewer shortages. Doctors received higher ratings than nurses in this sample and public sector staff received poorer ratings than private sector staff. The most negative ratings were given by TMP caregivers to their PHC clinic doctors and nurses. In terms of affordability, the PHC attendees mostly rated the PHC clinic as the best place to take a sick child, for public hospital attendees this was the PHC and the public hospital, for private clinic attendees private providers were mostly rated as the best and the TMP attendees mostly rated the TMP as the best provider they could afford. If the caregivers won the lottery, over half of TMP attendees would still think the TMP was the best provider to take their child, whilst most other caregivers at all the providers would choose to go to a private provider. Different factors were found to be most important for caregivers from different facilities when deciding where to take their sick child. For TMP caregivers for example, these were cost, belief in the treatment or medicine, medicine-related issues and distance. For private clinic caregivers these were staff attitudes and waiting times. Public hospital caregivers reported staff attitudes and belief in the treatment or medicine as their most important factors, whilst for PHC caregivers cost and waiting times were important factors when deciding where to go. The main improvement that caregivers wanted to see take place was that of staff attitudes in the public sector. This was closely followed by increasing staff numbers and reducing waiting times. TMP caregivers mostly wanted to see traditional and Western medicine integrated.

5.7 Effectiveness or outcome of treatment

The outcome is the final factor in governing whether the caregiver seeks further treatment or not and this is linked to the efficacy of a treatment. The effectiveness of certain treatments was acknowledged by respondents:

"The druppels are good for children, although the clinic doesn't want us to give them to children, but they are very good." (FG1)

[And did the treatment help them?] "Yes, yes it did because I remember with my aunt's youngest child, the girl... it was very bad. When they took her to the same Gogo [TMP] that treats the kids, she was like on the brink of death... and we didn't even know what to do. And my granny rushed her to that woman and when she came back the child was playing, she was crawling, she was fine." (CG4 – private clinic)

"You can take him to the abaprofeti [faith healers] and they can use the inyamazane zabantwana. Then he can be fine." (CG1 – public hospital)

"No, I like this [cough syrup] for healing cough, especially for young children. You use only a teaspoon isn't it? And then Panado for pain you give a teaspoon, you just give them only one teaspoon if the child is not feeling well and this will help." (FG1)

"...it is written iQuma, it is red in colour. It stays like this in the bottle. You will see that red colour being concentrated at the bottom end of the bottle. When the child is constipated and you give him this to drink, he is better within ten minutes." (FG4)

And it is this success with treatments or providers which may make caregivers more likely to use them again or recommend them to others:

"Iya, it helps. I took my child to the clinic I think 3 times with the same problem until I applied this thing and he was healed. Sunlight, pure Sunlight [soap] Ma, and Colgate. Pure Colgate. If ever my child has sores in his bottom I mix... I take a bit of the Colgate and then I put a bit of the Sunlight, and I just put it on a pen, then I round it over like this, then I put at the back [anus] and it helps." (FG5)

[So do the nurses say anything if they know the mothers are using the Stuips?] "No, we're not, because some of us they use it. And if someone uses something and it helps, you can't stop that person." (Nurse5 – PHC clinic)

"They [nurses] don't recommend us to go to the traditional healers, but we do get help from them, so they must understand the situation that can cause you to go there." (CG1 – public hospital)

If a caregiver knows of someone who has had success with a treatment, she is also more likely to use this:

"For us to know that an inyanga is good we hear it from others. Like for example if you come and say to me my child is sick, what is wrong with your child? My child has epilepsy or my child has inyoni. And then I would say there is a good traditional healer who helped my child and cured him from inyoni and ibala." (CG5 – public hospital)

"It's because after I help somebody, that person will go to somebody and tell them that they have been helped by me. Then they will refer that person to me for help." (TMP6)

One of the reasons why traditional healers are usually frequented is because of the inability of Western medicine to help with the problem:

"Any sickness or something that cannot be diagnosed. You know, you take the child to a doctor and a lot of them will be telling you about temperature. And the child gets worse and worse until eventually if nobody tells you did you properly name your child? Or did you follow the right procedures?" (CG4 – private clinic)

"Evil spirits... Some are brought for infection, others for inyoni, others for stomach constipation, others for diarrhoea. And you sometimes find that others have been to the doctors and the condition of the child does not improve. They will bring them to me." (TMP5)

"Normally you take the child to the clinic or the doctor first and if it doesn't work and then you go there." (FG1)

"Because it is not, eh, I don't believe that you can cure it [ibala] with Western medication. It has to be traditional..." (CG4 – private clinic)

"Yes because you would want to know which one works best isn't it? You have to use Western medicine first and check how it works on a child. And then if it doesn't work you have to switch to traditional medicine and give it to a child and see which one works best. There has to be a difference between medicines." (FG2)

"The doctor will give an injection to the child and Panado and it will depend on whether the child gets better whether you take him to a traditional healer." (TMP2)

"You know, but sometimes it's [Western medicine] not working. Like my son, I was using this but he got sick, even you see look here, behind. Yes, he was getting something here and when I take him to one doctor [traditional], the doctor said you must get something like, you know imbiza, like and then I take him to one woman and she gave him the medicine and put the spuit, and he's OK now." (FG4)

"She used to have a problem with that - every now and then, maybe twice in a month. Then she'll have diarrhoea and I go to the doctor, clinic and whatever. Normally when they are young they say you must take them to the clinic. I used to take her to the clinic but it got worse. I had to take her to the doctor and it wouldn't help, even with those medicine. But after they took her to the auntie and she used this; you know it's like she said there was like, I don't know - you know older people, they know those things – ja there's dirt or whatever inside. It has to be taken out. So they used that thing [spuit] and everything went out and like the greenish things came out and after that she was fine."
(FG1)

Similarly, negative outcomes can lead to a caregiver never using a service again. A private caregiver for example, had lost her first child after public clinic treatment and would no longer use their services as a result:

"No, because she was my first child. I think that is where I got the inclination of going for the best for my kids. It is from that experience that I had with the clinic." (CG4 – private clinic)

Another caregiver had witnessed her sister's use of traditional medicine, which in the end did not prevent her death as a result of HIV/AIDS:

"That's why I told my sister that these [traditional] things are not OK... They must stop looking at traditional things because they say when you have HIV, they say the soldiers in your body are not strong. So when you take the muthi from the bush, the more you boil and drink, the more you kill the soldiers of your body. She [sister] was using traditional medicines, that is why I say they kill, she was killing the soldiers of her body. They should drink the medicines from the clinics so that they can live longer... To me it's an example, I can also be able in future to show these children that, that is wrong and what is right." (CG3 – PHC clinic)

Caregiver 1 blamed the removal of a drip from her child's head on his subsequent fits. The inability of the hospital to help with this problem made the caregiver contemplate using traditional medicine:

"... they didn't explain why they are taking out the drip, they put it again back into the head. So I didn't know what's going to happen if they take out the drip, you put a drip and you take it out. So later on when I checked, maybe after a month, the eyes were no longer straight. I didn't understand why the eyes are no longer straight... so I don't know what must I do now? Cause he [doctor] said there is no cure for this. They can't treat fits, because each and every child when he has got fever he can fit. So I don't know what must I do? Must I just leave him like that or what?... Yes. I do [consider going to a TMP]. Because I think they can help me, because the hospital they're just saying temperature, I'm even thinking of going to the traditional healer." (CG1 – public hospital)

In the same way, when traditional medicine fails to help, caregivers may switch back to allopathic medicine:

"With the traditional things they still do go to the traditional healers, but at the same time they will still come to us when they see there is no change in the child." (Nurse1 – public hospital)

The speed a medicine works is also important in the therapeutic process as it affects caregiver actions. If a caregiver believes that the medicine has had no effect they may go to another provider or return to the same provider without having given the medicine a chance to work:

"No, even the ones that you think they are well-informed, to them medicines should work now! If I give a teaspoon of Panado, that fever must be gone within an hour. If it's not, no this Panado is not the same as Bara's [hospital] let me take my child to Bara." (Nurse1 – public hospital)

"... midday she's at Lillian Ngoyi [clinic]. At 6 she's here with all those medicines that she got from Chiawelo, Lillian Ngoyi, coming here and telling that the child isn't getting better. You ask her how many times have you given the medicine? 'I haven't started - the child vomited.' So why are you here? 'The child isn't getting better.' And then you ask - if you say you never gave the medicines, you've been to Chiawelo, you've got medicines, you never gave the medicines. You went to Kos [Lillian Ngoyi clinic] they gave you medicines? 'The child vomited the medicines.' How do you expect the child to get better? 'I don't know...' " (Nurse1 – public hospital)

The speed a medicine works is usually synonymous with its strength. The perceived weakness of the Panado syrup given at the clinics means that some caregivers will have formed a judgement about the outcome before the medicine has even been given to the child. If a medicine is not perceived to be strong enough, stronger treatments may be given as Nurse 1 from a public hospital explains below:

"So I mean if a child is sick and is given a diluted medication it is not actually working to its fate because it's diluted. And I think that is what lead to that problem of having to have medication diluted is that they receive little stock and they have high volumes... And they see it as a means to an end, but at the end of the day it's defeating the whole system because they are not doing what they were meant to do, what they were set out to do." (CG4 – private clinic)

"Ah, they say the Sunlight [soap in sputum] isn't working, it's not strong enough. So they give Surf, they give Jeyes Fluid, they give all sorts of things." (Nurse1 – public hospital)

In some cases the child may therefore not receive the full course of treatment because of the caregiver's expectations about the medicine:

"It's... I don't know. They have this belief in them that you give medicine now it must work now, if it doesn't work now you must go to this doctor. If it does not work you go to this doctor. They are abusing them [clinics] terribly. Some we have to turn away - 'You say go and give the medicine that was given at Lillian Ngoyi [PHC]. You go and give it. If the child isn't better in the 7 days that it's supposed to be better, you go back to Ngoyi and tell them, this isn't working, they will refer you here.'" (Nurse1 – public hospital)

"And then those that will say I've been to Kos [clinic] this morning and the child isn't getting any better so I've got to come here. Then you say 'Go back to Kos and give the medicines that you were going to. When your child isn't getting any better go back to them and tell them, I've given for 7 days, it's not working, and then see what happens after that. Some tell you straight I don't want to go to the clinics, I want to be seen at [public hospital]!" (Nurse1 – public hospital)

"So at times they don't believe in these medicines, because you find that she was given like for instance amoxicillin ne? There are different types, kinds of colours, bottles, different manufacturers. So you find that on that month we were giving the purple one. And the child he was having cough and he was treated with amoxicillin and it went smooth and everything was OK. And maybe after 4 months the child starts coughing again, she comes to hospital she gets amoxicillin but in a pink form. She doesn't believe in this pink one. It's the same, she won't take 'Uh uh, I want the purple one.' And what they do, they go home and maybe there was a child who was sick previously, didn't finish off the medication and someone starts coughing. They continue on that medicine. That's what they do." (Nurse2 – public hospital)

"They don't finish the course, that is why our children doesn't get better, their babies doesn't get better. They don't finish that course. If they say take this for 12 days or 5 days, 3 times a day, if the child is better she leaves the treatment." (Nurse5 – public clinic)

Treatment might also be abandoned if a caregiver seeks help elsewhere. TMP3 for example would normally instruct her patients to stop using Western medicines whilst using her treatment. She does not tell patients to throw them away however, but to keep them for use at another time:

"They will come and tell me that they started at the doctor, saying that they have about 2 weeks seeing the Western doctor. Then I will stop them from using the medicines they have, and start using mine. And if it happens that mine help them, they will have to continue with it. But it doesn't mean that they have to throw away the medicines they have from the doctor. For example if they have the medicines for flu, they must just keep it safe for next time." (TMP3)

"Because the patient will be seen at Zola [PHC clinic] ne? Then the mother feels ay, my child is not better, I'm going to Lillian Ngoyi [PHC clinic], takes this [registration] card and chucks it away. Come and get another card. The child will now be seen for the second time with the same treatment. Then she feels my child is not becoming better, she takes this card and puts it away and goes to a different clinic. Same thing to different clinic...it means you are going to get one and the same treatment, one and the same treatment. They'll tell you, what did they give to your child? 'Oh sister the baby doesn't become better.' Why? 'I took her to the clinic.' What did they give her at the clinic, because you don't have a card, where's the card? 'It's at home.' What did they give? 'Something yellowish.' How many yellow syrups do we have? How many green syrups? How many pink syrups? As long as you don't bring the name or the card, then we don't know. They give you again, then what happens to your child?" (Nurse5 – PHC clinic)

5.7.1 Type of visit

As can be seen in Figure 5.35, when looking at the main reasons why caregivers were at a specific health care provider (not in illness terms) it is clear to see that outcome and efficacy-related issues played a key role along with enabling factors. If a patient is referred on to a higher level of care, this is because the provider is unable to treat them. If they are recommended by a friend or relative, this is because of previous successful outcomes experienced by a third party. In the case of the PHC, the main reasons for attendance were because of cost (52%) and because the child was not better (22%). For the public hospital attendees, the main reasons were for a check-up or to collect results (43.3%) and also because they had been referred (35.8%). The private clinic attendees had mainly been referred (38%), but they also mentioned staff-related issues as a reason for being at a private provider (having a doctor / specialist / polite staff) (26.4%). The TMP caregivers mainly cited the efficacy / ability to help as their main reason for choosing the TMP (39.6%). This is concordant with beliefs that Western medicine cannot help with traditional problems. Others had been recommended the TMP (22.6%) and it was also more accessible (opening hours / distance / availability of medicines) (22.6%).

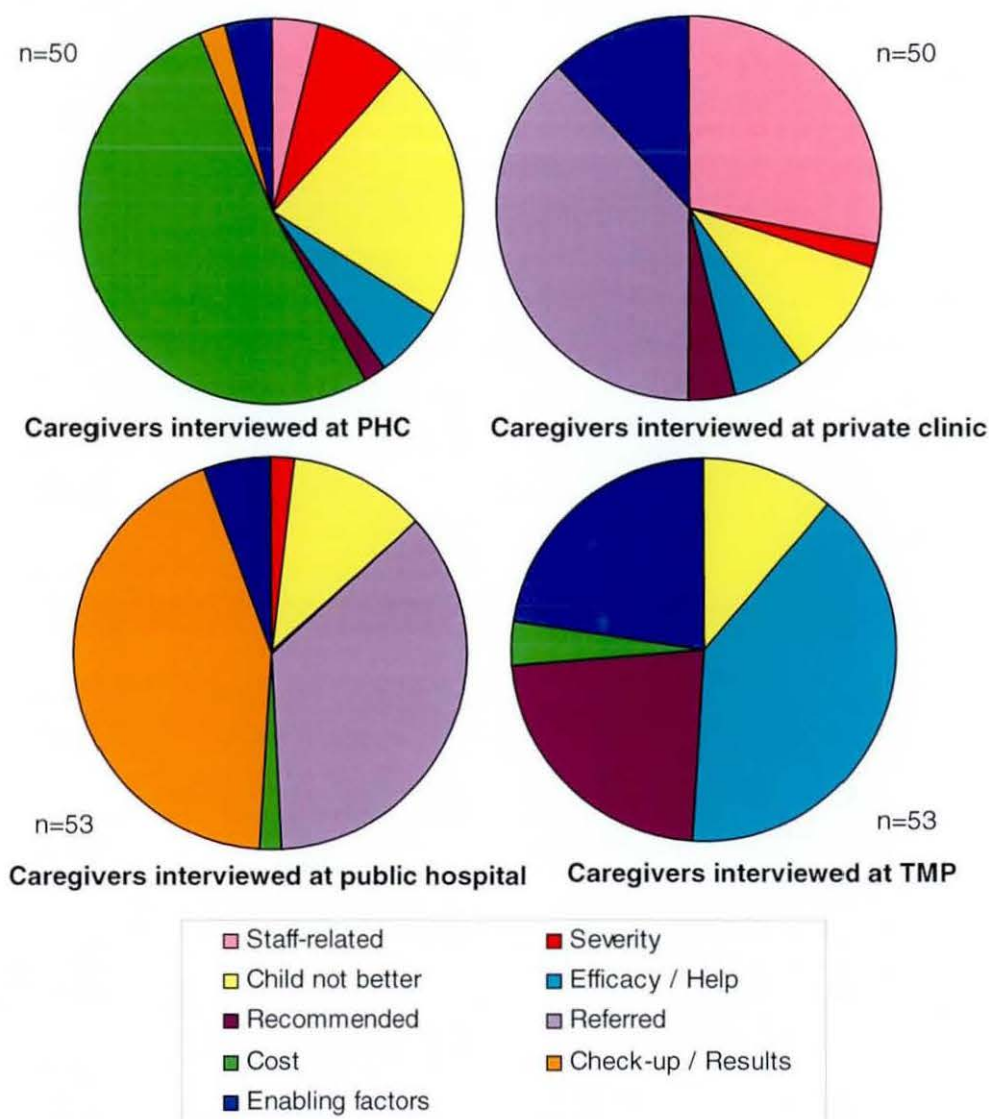


Figure 5.35: Reason for choice of provider / type of visit by facility on day of interview

5.7.2 Summary

Section 5.7 has shown that a strong motivation for using a provider or a treatment is their efficacy. This may be as a result of success in the past or through recommendations from a friend or relative. One indicator of the strength of a medicine is the speed with which a person recovers. Because medicines at the PHC were sometimes thought to be diluted and weaker, they were thought to be less efficacious than medicines from the pharmacy or a private provider. This may lead some caregivers to abandon treatments before the full course has been administered. Even though caregivers were discouraged from using Dutch medicines and traditional medicines by nurses, this was difficult to enforce if caregivers were finding success in using these types of treatments. Negative outcomes with certain types of services as well as treatments will discourage a caregiver from using that facility or treatment in the future. The outcome and efficacy of the treatment are the main reasons why a caregiver will decide to see another provider or use another treatment.

This brings the spheres of influence back to the inner circle of beliefs as health-seeking behaviour is heavily influenced by the belief that a provider will be able to help with the problem and therefore lead to a positive outcome:

"And if she believes that if I take my child to the hospital I will get help and my child will be helped, she'll come straight here. If she believes that the traditional healer will help me, she'll go straight to the traditional healer. If she believes that the hospital will help her, she'll go straight to the hospital." (Nurse1 – public hospital)

Believing strongly in a treatment may also help it to work:

"If you believe this one can help your kids, it can help your kids. If this izinyo [horse's tooth] can help your kids, it can help your kids. The thing that you believe in." (FG4)

"But, you know everything that you believe that it will help you, it helps." (Nurse5 – PHC clinic)

These results will next be discussed in terms of the existing literature (Chapter 6) as well as the study's limitations, methodological issues and what implications they might have for health policy and planning in South Africa (Chapter 7).

6. Discussion

This chapter begins with a discussion of the principle findings on health-seeking behaviour for childhood illnesses in Johannesburg and Soweto (6.1) followed by a discussion of patterns of health-seeking behaviour found in this study (6.2) and management of 10 common illnesses (6.3)

6.1 Spheres of influence

It is clear from previous research on health-seeking, that many factors influence the choices that caregivers make on behalf of their sick child. In an urban environment the decision to use a particular health service should not be due to the lack of another facility. In the context of this pluralistic environment, across multiple illnesses and caregivers sampled, the complexity of these choices is underlined. The discussion is outlined according to the hypothesised 'spheres of influence' which were developed from findings from both the literature on health-seeking behaviour as well as the results (v. Figure 6.1). Caregiver beliefs which are influenced by religion, family beliefs, world-view and social networks affect how characteristics of the child and illness are interpreted and subsequently affect health-seeking behaviour. These beliefs may however be constrained by characteristics of the caregiver and household, enabling factors and provider characteristics. Outcome and past experience will also affect how beliefs are reshaped.

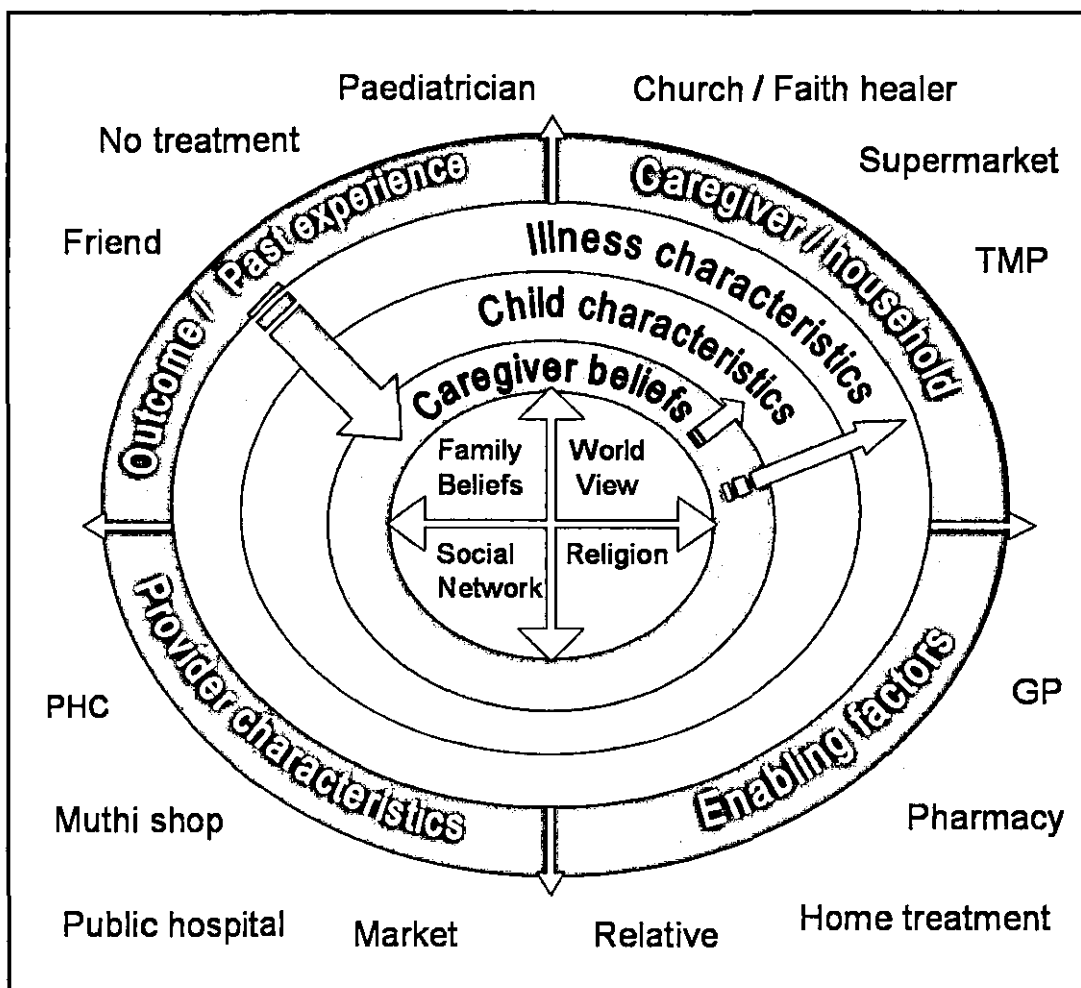


Figure 6.1: Motivational schemas / spheres of influence (Adapted from Andersen's Behavioural model & the Health Belief Model)

6.1.1 Caregiver beliefs

6.1.1.1 World-view and health beliefs

Results from this utilisation-based survey support Green's (1999) idea that although economic and environmental factors are important when looking at treatment choices in the South African setting, causation beliefs may play an even greater role in predicting treatment choice even in urban areas. Once beliefs are understood, the logic of choosing particular treatments may be appreciated (Kleinman, 1980).

As Janz & Becker (1984) suggest in the Health Belief Model, health beliefs may be more important at the beginning of the health-seeking process, with other variables gaining importance further along the way. Suchman (1965a, 1966) also found that at the stage where symptoms are experienced, health orientation which reflects specific beliefs (ranging from popular to scientific), was most important for explaining different responses to illness.

Although not at the forefront of all caregivers' minds in the quantitative survey, from the qualitative research outlined in this paper, beliefs are central to the care-seeking process in several ways. According to Andersen (1995), the most immediate cause of health services utilisation is 'perceived need' as determined by the individual or family members in relation to the type, number, or severity of symptoms experienced during a period of time. In the Health Belief Model, 2 of the 'core beliefs' include perceived susceptibility and severity (sometimes grouped as perceived threat). In Janz and Becker's (1984) evaluation of 46 studies using the Health Belief Model however, overall, 'perceived severity' was the weakest predictor although it was more important for sick-role rather than preventative behaviours. Although 'perceived need' is an important variable in the health-seeking process, in this particular South African context it is hypothesised that other factors precede as well as determine 'perceived need'. The first of these is beliefs about causation. The perceived cause of an illness has been found to be one of the main determinants in deciding between traditional and allopathic treatment (Chavunduka, 1978; Stock, 1987; Colson, 1971; Goldman & Heuveline, 2000). Although LeBeau (1998:p.3) suggests that until treatment begins, "disorders are of indeterminate aetiology" (1998:p.3), this study proposes that the first decision the caregiver might make (sometimes unconsciously) will be which health care paradigm is needed.

Illness beliefs as influenced by a caregiver's cultural background, education and family and partner's influence will therefore determine whether the problem requires traditional or Western treatment. This will depend on whether the symptoms are perceived as having a natural, supernatural or 'non-Western' cause or whether they are labelled as "*Abantu* illnesses". "Notions of causality are crucial, however, in the choice of therapy, for they establish limits within which the appropriate therapy is chosen" (Yoder, 1981:p.241). In the South African world-view 'pollution', strong medicines, evil spirits, witchcraft and the ancestors are all non-Western causes of illness. The most commonly known *Abantu* childhood illnesses in this sample were *inyoni* and

ibala. Although these folk-related illnesses were not known to be caused by anything in particular they were described as only affecting African infants and requiring traditional medicine. Treatments for these illnesses were similar to those found in a rural study in KwaZulu-Natal (Kauchali *et al.*, 2004) which had explored the aetiology of these childhood illnesses in more detail. Other African childhood illnesses identified in the present study which were also identified in the KwaZulu study are *amankabeni* (also referred to as *inkaba* in the present study) and treated in the same way (scarification, herbs, ritual healing) and *isilonda / isithakathi* for which Colgate toothpaste was also smeared around the rectum and enemas were given.

An *Abantu* illness does not always necessitate a visit to a traditional healer however and older relatives may be called upon for their advice, traditional chemists or *muthi* shops may be visited, OTC medicines may be used or plants may be collected from the garden. Similar to previous study findings in the same area (de Wet, 1998a; 1998b), in some cases Western medicines such as Muthi Wenyoni or the Dutch medicines have been indigenised and are widely used home treatments for African childhood health problems.

In many cases the aetiologic cause may change once a particular type of treatment fails to work. If a naturalistic agent is expected to be the cause and the patient does not respond to the treatments given, then a personalistic cause may be suspected (Green, 1999). In terms of taking their own child to a traditional healer, the majority of TMP attendees in this survey cited the inability of Western medicine to help with the child's condition as well as the illness being an 'African' or supernatural one and therefore requiring traditional medicine. The main reason for caregivers at Western health care providers in this study taking their child to a TMP was because of 'African' or supernatural illnesses.

Traditional healers interviewed in this study and the traditional medicine used by caregivers for their children were not solely used to treat either "*Abantu*" or supernatural illnesses. In contrast, Western health care providers were not able to diagnose an *Abantu* or supernatural cause of illness. According to Goldman *et al.* (2002), biomedical and non-biomedical beliefs are not always mutually exclusive however. In the present study this was evidenced in the qualitative interviews which revealed that in some cases Western providers are able to treat the symptoms of an *Abantu* illness but a traditional healer or faith healer would be required to treat the cause of the problem. In other societies of the world Western medicine may also be used to cure the somatic symptoms of the 'disease', whilst traditional or folk treatment is needed to cure the cause of the 'illness' (Kleinman, 1980, Adair & Deuschle, 1970)

6.1.1.2 Religion

Also affecting the caregiver's beliefs is their religion and this was one of the 'belief variables' which could be measured quantitatively in this survey. In terms of traditional medicine, religion was the second main reason after 'non-belief' for not taking a child to a traditional healer. These findings are similar to an earlier South African study (Segar, 1997) which found that 2 of the main

reasons for not going to a traditional healer included non-belief and only believing in the power of prayer.

In this study, only 15% of the TMP caregivers reported having no religious affiliation, and the majority (37.7%) belonged to the Zion Christian Church. Only 2% described themselves as Catholic, 16.9% belonged to a Protestant Church and 28.3% to an African Independent Church. Similarly, in an urban study in Durban (Mander, 1998), South Africa, only 3.3% of traditional healers' patients interviewed did not belong to any religion whilst the rest were Christian, the largest proportions belonging to the Zion Church (26.7%), the Roman Catholic Church (16.7%), the Methodist Church (14.4%), and the Nazareth Church (10%). In contrast, a study in the Eastern Cape Province of South Africa (Cocks & Dold, 2000) found that the majority of customers using *muthi* shops mostly belonged to a mainstream church (47%) whilst 25% belonged to an African Independent Christian Church. Although the respondents in the Eastern Cape did not feel that the use of traditional medicines was in conflict with their religious beliefs, buying traditional medicine from a *muthi* shop may be seen as less conflicting than actually consulting a traditional healer. This may explain the higher proportion of mainstream church members found in this survey compared with the Mander (1998) survey and the present survey.

ZCC members were the most likely to use 'traditional medicine' in this sample, whilst the Catholics and Protestants were the least likely. Although traditionally faith healers (and therefore members of their church) do not use plant-based medicines, there are instances (including this study) where Zionist faith healers as well as patients make use of herbal remedies (Cocks & Dold, 2000; du Toit, 1980). Concepts of pollution, purity and the ancestors have also been incorporated into the beliefs and practices of the Zionist Churches (Green, 1999), and it is therefore not surprising to find overlap between the two. The *sangoma* from Orange Farm for example was also a faith healer and member of the Zion Christian Church. TMP2 belonged to the Shembe Church (AIC), TMP5 was Anglican, TMP3 belonged to the African Methodist Episcopal Church, whilst TMP4 and TMP6 only worshipped their ancestors which is traditionally the norm for TMPs.

Regardless of their use of traditional medicine, child health and its links with the parents' religious beliefs were usually evident during interviews. Faith-based healing through prayer or simple faith in a provider, treatment, God or ancestors were revealed by caregivers in this sample. When asked about faith healing itself however, only a third of caregivers overall believed that it worked and 13% said it would depend on the illness, the belief or the healer. This left 22.8% thinking it did not work and 32% undecided. Those with strongest beliefs in faith-healing belonged to the AIC and the ZCC Churches, whilst the largest proportion of non-believers belonged to the Protestant Church. The majority of caregivers who did not think faith healing worked had also never been to a faith healer, whilst 62% of caregivers who had been to a faith healer believed that it had worked. Although the word '*abathandazeli*' was used to refer to a faith healer (as opposed to a *sangoma* or *inyanga*) it is not clear whether some caregivers associated faith healing with

traditional healing, given the interchangeable roles that some *sangomas* and faith healers have developed. This was also apparent when caregivers were asked about 'traditional medicines' that their child had been given. As found in other studies, most of the *material medica* used in 'church medicine' was inorganic and inexpensive (Hammond-Tooke, 1989; Dube, 1989) although labelled by caregivers as 'traditional medicine'.

6.1.1.3 Family influence and social networks

A caregiver's background will have been strongly shaped by the beliefs of her own family and what she has experienced whilst growing up and is key to understanding the therapeutic choices that patients make across all forms of health care. As described by Kleinman (1980), within the Explanatory Models are 'semantic sickness networks' composed of the patient and their family whose experiences and beliefs about symptoms and causality, along with any social problems form a basis for decision-making. These semantic sickness networks have also been labelled 'Therapy Managing Groups' (Janzen, 1978) or 'action sets' (Mayer, 1966).

With the exception of the TMP attendees who mostly obtained their traditional medicine from a traditional healer, the PHC clinic, public hospital and private clinic attendees mostly obtained their traditional medicine from a friend or relative. Background or family influence was the third main reason for taking a child to a traditional healer and grandmothers in particular were found to exert a strong influence over the use of traditional medicine. Studies elsewhere have found that most urban patients are usually referred to a TMP by a relative, friend or acquaintance who has experience of the TMPs work or knowledge of their reputation (Good, 1987a) and that a caregiver's proximity to parents and in-laws increases the probability that a child is taken to a curer (Goldman *et al.*, 2002). In the same way that families have influence over using traditional medicine, they also have influence over its non-use, with 12 caregivers in the sample not using traditional medicine because of how they were brought up. Both qualitative interviews and informal discussions with the caregivers during the survey revealed that fathers also had a strong say over the use of traditional medicine (either for or against its use) with difficulties arising if the parents had conflicting views. Kleinman (1980: p.111) describes this conflict between Explanatory Models of patients (or in this case caregivers) and their family as forming a "dyadic relationship". A few caregivers indicated that they had taken their child to a traditional healer without their husband or partner's knowledge and others described the blame which may be apportioned if traditional rituals are upheld or not. In Kenya, Molyneux and colleagues (2002) also found that carrying out treatment-seeking disapproved of by their husband could have serious consequences.

The normative beliefs (or what others think about the behaviour) which the Social Cognition models (TRA, TPB and HAPA), do attempt to include were not able to be included in the survey. Similar to the normative beliefs found in the Social Cognition models, Green (1975) drew on the Diffusion of Innovations theory and emphasised a person's interaction with individuals in their own socioeconomic group as well as other social groups and characteristics of the 'innovation'

such as benefits or how culturally acceptable it is. It is acknowledged that it would be useful to try and measure beliefs and evaluations about the individual's social world which shape their attitudes and exert pressure on an individual to perform or abandon a behaviour. However this was beyond the scope of the current research.

Similar to results from a Guatemalan study (Carter, 2004), three-quarters of the caregivers in this South African study had consulted someone in the lay sector (family, friend or neighbour). In some cases a relative may actually be in charge of the decision-making process. This was more so the case for the younger caregivers interviewed at the TMP, although grandmothers were reported to be in charge of the decision-making process for children at other health care facilities, as well as in qualitative interviews. If grandmothers are thought to be knowledgeable about child health their advice is likely to be sought and followed by caregivers. Overall in this sample, grandmothers were the most common source of advice (27.7%), followed closely by the father of the child (24.3%). In communities or social groups with person-oriented world-views and more close-knit social networks, there are likely to be more knowledgeable people such as grandmothers who can be consulted about treatment (Chrisman & Kleinman, 1983). Although mothers are usually the main decision-makers when it comes to child care, husbands or partners also play an important role, particularly in patrilineal societies or if they are expected to pay for the treatment or medical care (Adetunji, 1991). During the survey, some of the caregivers at the private clinic for example indicated that they were there because the child's father had medical aid. In Kenya, the extent to which males were involved in the decision-making process for child fevers and convulsions depended on the symptoms, cost, their place of residence, the structure of the household and their relationship with the mother of the child (Molyneux *et al.*, 2002). In this South African study, over a third of the mothers described themselves as single which would affect the amount of support and advice they received from the father of the child.

As well as close family members, individuals in a caregiver's social network may also exert a strong influence over their health-seeking behaviour through emotional (e.g. care, empathy, love or trust), instrumental (e.g. service or direct assistance), informational (e.g. advice, suggestions, information) appraisal (e.g. constructive feedback, affirmation) or financial support. This may work in both directions as qualitative data showed that some caregivers completely disagreed with the advice of friends and neighbours. 'Word of mouth' on the other hand can be powerful enough to influence a decision. This 'lay referral system' applies both to traditional and Western medicine. When caregivers were asked about the support (financial / emotional / childcare / advice) they received from friends or relatives, the TMP attendees cited the least support whilst the private clinic attendees cited the most support. Of the 19 TMP attendees whose mother / grandmother made decisions when their child was not well 12 caregivers indicated that they received no support. Despite the definition of 'support' being kept very general, 'support' was probably interpreted more as financial support by the lower-income caregivers, including those caregivers at the TMP. Whilst 78.6% of caregivers in the high SES group said that they had support, 70.2% of the very low SES group said they had no support. Although support is always intended to be a

positive interaction (Heaney & Israel, 1997), sometimes the wrong advice is given. (Adams *et al.*, 2002). In this study, social networks were mostly spoken about in a positive manner in terms of advice for their sick child. Only one qualitative interviewee (Caregiver 3) mentioned that she did not follow the advice of her neighbour as it usually involved traditional medicine which she did not believe in herself. It is logical to assume that cases where medicine is used incorrectly (such as the Dutch medicines, Brooklax, enemas with Sunlight soap or Surf) may be recommended to other caregivers if no negative outcome was experienced.

Another indicator of social support and possible integration in social networks in this sample was the caregiver's length of residency in the area. It is hypothesised that in general the least stable groups (those having resided for a shorter period of time in the area) would have the smallest social networks, the least support and in some cases the least knowledge about health care facilities available. In this sample, although no significant difference was found in terms of support and the length of residency in the area, a slightly higher proportion of caregivers who had lived 0 to 5 years (60%) and those who had lived 5-10 years (56.8%) reported receiving no support compared with those who had lived for 10 years or more and all their life in the area (about 48%). A clearer definition of integration and support would be needed to verify this however. In an urban study of health-seeking behaviour in Senegal for example, the participation of a mother in urban networks (use of the local language, being a member of local associations and knowledge of the political leader in the area) was associated with utilisation, whilst time spent living in the area on its own was not (Fassin *et al.*, 1988). Finding out more about the structure (loose-knit or close-knit; noninsular cosmopolitans or parochials) of the caregiver's social network would therefore be more intuitive for finding out the degree to which the action set will be involved in the patient's illness and how likely a caregiver is to trust providers outside their network. Urbanisation is likely to reduce the effect of kin on health-seeking behaviour as the extended family become more dispersed (Feierman, 1979) and work commitments reduce the time available to uphold customs and rituals (Hirschowitz, 1995a). For instance in this study, qualitative interviews revealed that the length of time a newborn is kept indoors is very much governed by the caregiver's work arrangements.

Indicators of social structure were partially available through what is known from the literature on the caregiver's area of residence, their SES group, as well as the size of their household. A strong sense of community with strong social networks is more likely to be found in Soweto than in Johannesburg itself (Gilbert & Soskolne, 2003) and smaller poor households may lack support from kinship networks (Sauerborn *et al.*, 1996). No significant difference was found in household size (adults) between caregivers living in inner city Johannesburg and Soweto, however differences in the composition of these households (i.e. just family or shared with others) was not known. Neither was any significant difference found between household size (adults) and their SES group. According to Barnes (1954, as cited in Heaney & Israel, 1997) social networks which are more close-knit, homogenous and live closer to each other provide each other with better affective and instrumental support. Caregivers living in Soweto cited slightly more support (44%)

than caregivers who lived in inner city Johannesburg (39%), however no significant difference was found. It would seem, in this sample support and SES group had the strongest links regardless of the area of residence.

6.1.2 Child characteristics

Characteristics of the child may be a difficult determinant of health-seeking to predict as these will depend on the caregiver's perceptions of the child and the way they respond to treatment.

6.1.2.1 Child's age

A child's age may affect the decision process, regardless of the illness. For very young children for example, mothers may be less willing to risk making decisions about medication (Maiman, Becker & Katlic, 1986). In the South African world-view, infants are particularly susceptible to *imikhondo* and *imimoya* in the environment because they have weak joints, in particular the fontanelle (*ukhakhayi*). Because young babies are perceived to be more vulnerable to both Western and supernatural causes of illness, study findings reveal that specialist treatment may be preferred above general (Paediatrician over a GP or a GP above the PHC) and in the same way that a baby is immunised, preventative traditional treatment may be sought soon after birth, if not before. When comparing facilities, the public hospitals had the highest proportion of children under 6 months of age attending, whilst the PHC had the lowest.

Qualitative results revealed that certain medicines are not appropriate for certain age groups and that the amount of medicine given will also be affected by the child's age. However this depended on the mother's knowledge of how medicines should be used (a caregiver characteristic). In the South African context, Ngubane (1977) and Gumede (1990) similarly found that emetics are believed to be too strong for very young children and they are therefore usually given an enema instead. A study in the Eastern Cape Province of South Africa (Cocks & Dold, 2000) found that the main treatments for children in *muthi* shops tended to be OTC remedies such as the Dutch Medicines, as herbal remedies were thought to be too strong for infants. Some caregivers in the present survey also believed that traditional medicines were too strong for young children, as were some Dutch medicines. This was why infants especially needed to be strengthened and protected in case they came into contact with someone who used 'strong' medicines which could affect the child.

6.1.2.2 Health status of the child

The literature revealed that the perceptions about a child's health status will be affected by socio-economic status and education (Segel & Hirschowitz, 1995; Gesler & Gage, 1987). Higher SES mothers for example have been found to report more (Gesler & Gage, 1987) and longer (Gesler, 1979a) periods of illness, whilst more educated mothers have been found to seek more care for their child (Fosu, 1994; Schellenberg, *et al.*, 2003; Neumark, Palti, Donchin, & Elleneweig, 1992; Kutty, 1989). In cases where higher SES caregivers reportedly seek less care for their

child, this has been attributed to their ability to seek care later on in the illness as a result of greater resources at their disposal (Pillai *et al.*, 2003).

In a household survey in 1995 (Segel & Hirschowitz, 1995), respondents were asked about their child's health and those who reported that they did not have sufficient money to feed the child adequately, those living in overcrowded households and those with lower levels of education (characteristics of the caregiver) were more likely to rate their child's health as fair or poor. In this survey, no association was found between ratings of child health and SES groups (χ^2 P value = 0.333), experiences of household hunger (χ^2 P value = 0.917), education levels of the caregiver (χ^2 P value = 0.658) or how overcrowded the house was (χ^2 P value = 0.166). However, this may in part be an artefact of the survey design in which children of the respondents interviewed at the traditional healers, despite their lower SES, were overall healthier at the time of interview than children at the other health care providers.

Overall in this sample, 61.6% of caregivers reported that their child's health since birth had been good, 20.3% reported average health and 17.9% reported poor health, with no significant difference found between any of the groups. These are similar to the results found in the Second Kaiser Family Foundation Survey of Health Care in South Africa (Smith *et al.*, 1999) in which 78% of urban Africans reported that the health status of their child under 16 was good or excellent and 22% reported that it was poor or fair. A slightly larger proportion of Africans in rural areas (83%) actually reported that their child was in good or excellent health compared the Africans surveyed in urban areas (Smith *et al.*, 1999).

6.1.3 Illness characteristics

Symptoms may affect where a child is taken if these are perceived to be markers of the severity of the illness or markers of a traditional illness, such as the red mark on the back of the neck associated with *ibala*, green stools or a sunken fontanelle associated with *inyoni* and night frights associated with bad spirits for example. These beliefs about symptoms might differ considerably to that of a health professional (Chrisman & Kleinman, 1983) which was illustrated in the nurse and caregiver interviews from this study.

Whilst most illnesses are usually of short duration and are quickly cured, as an illness progresses, various treatments are evaluated and the illness may be redefined in terms of aetiological cause or severity (Good, 1987a). This was also found in the present study, particularly in the qualitative results.

6.1.3.1 Severity of the illness

Perceptions about the severity of the illness, as determined by experience and knowledge of childhood illnesses as well as the child's general health (a child who is often sick may require

even greater care) will determine the subsequent course of action: no treatment, home treatment or help from a provider (Csete, 1993; Bhardwaj & Paul, 1986; Gesler & Gage; 1987).

More serious cases were reported at the public hospital and in particular the PHC clinic in this sample. Because the children's illnesses were at different stages, they were also therefore at different perceived stages of severity. Asking about which symptoms the caregiver considered to be serious for her child's health therefore made it easier to compare across facilities and severity could also be looked at from a potentially more objective angle (although the caregiver may not have remembered all symptoms that they considered to be serious). The PHC and TMP attendees gave similar responses, with the main 2 being the child not eating or losing weight and the child not being themselves. The private clinic and public hospital attendees both considered fever to be the most serious symptom. Overall, the child not eating or losing weight and the child not being themselves were considered the most serious symptoms. In the case of diarrhoea, Yoder and Hornik (1996) identified fever, lassitude and vomiting as the symptoms most frequently cited as serious in a six site study in Asia and Africa. Similar to Yoder and Hornik's results, the present study found that caregivers of children who had either diarrhoea or vomiting on the day of interview mostly cited the child not being themselves (including not playing and lassitude), not eating or losing weight, fever as well as crying and restlessness to be the symptoms they considered to be most serious. Vomiting was not found to be one of the main serious symptoms and in the Yoder and Hornik (1996) study this was also found to be less important for judging severity than not playing and fever.

Table 6.1 presents a matrix for the 2 variables measuring 'severity' in this study. SEVERITY1 was constructed directly by asking the caregiver whether or not she thought the child's condition was serious on the day of interview. SEVERITY2 was constructed indirectly by asking the caregiver what symptoms she thought were serious and then finding out whether or not the child had any of these symptoms. If these 2 variables were measuring the same construct, we would expect to see few if any cases in the shaded cells, which is not the case. This is probably because SEVERITY2 has been constructed from a list of reported symptoms which may be incomplete. Another reason may be that caregivers may be over or under-reporting how serious they think the child's illness is in SEVERITY1.

Table 6.1: Matrix of 2 variables measuring severity

		Does child have symptom caregiver considers to be serious? (SEVERITY 2)	
		Doesn't have serious symptom	Has serious symptom
How serious is the child's illness today? (SEVERITY 1)	Not serious	55	51
	Quite / Very serious	57	43

According to Chrisman and Kleinman (1983), unremarkable symptoms may be interpreted as more severe particularly amongst individuals who are under a lot of stress or who lack social

support. No significant association was found in the level of support a caregiver received and the perceived severity of the health problem (χ^2 P value = 0.259). However, the group reporting the child's health problem to be very serious on the day of interview had a higher proportion reporting no support (63.4%) versus support (36.6%) than caregivers reporting the child's health to be quite serious or not serious (49.1% no support versus 50.9% support).

Although maternal reports of childhood morbidity measured against biochemical markers of health status in rural Bangladesh were found to be very reliable (Rousham *et al.*, 1998), in this sample the only variable available to obtain a crude measurement of reliability of maternal reporting was BMI. An association was found between a child's BMI and maternal reports of illness severity, with most 'normal' and 'overweight' children having a non-serious illness (58.3% and 60% respectively) and a large proportion (69.2%) of underweight children having an illness which was quite or very serious.

6.1.4 Caregiver and household characteristics

6.1.4.1 Age and parity

Studies have found that primiparous or younger mothers may be less confident in their ability to treat a sick child at home and may be more likely to consult family members or go to a health care provider (Goldman *et al.* 2002; Adetunji, 1991). In this study, for those caregivers whose grandmothers / mother make decisions when the child is not well, 60% were under 25 years of age. Similarly, for those whose other relatives make the decisions, 58.8% were in the under 25 age group. This suggests that younger caregivers may be more likely to seek advice from older relatives regarding the health care of their children. Although overall no significant difference was found between groups (χ^2 P value = 0.161), a larger proportion of caregivers with 1 child (50.6%) had first sought advice from a relative or friend, compared to 37.4% of caregivers with 2 children and 31% of caregivers with 3 or more children. Caregivers with 1 child were also less likely to treat the child at home themselves compared to caregivers with 2 or more children. Studies elsewhere have similarly found that children of lower parity (2) were more likely to be taken to a health care provider during illness episodes than higher parity children (6) (Goldman & Heuveline, 2000) and that younger women were more likely to consult a physician than use home remedies (Logan, 1988). According to Csete (1993) the degree to which age and parity influence health care choices will be determined by beliefs as well as socio-economic barriers to health care. Although a caregiver with 1 child might be less likely to treat the child at home for example, she may be limited in her choice of provider by her socio-economic status. Similarly, depending on a caregiver's or her family's health beliefs for example, regardless of her age or number of children she may choose to use or not use traditional medicine. Although younger caregivers in this sample were more likely to have ever given traditional medicine to their child, they were also more likely to let an older relative make decisions about health care for the child and may therefore be influenced by their beliefs.

6.1.4.2 Culture and ethnicity

Concepts of health, illness and healing or *heal memes* (Fabrega, 1997) cannot be divorced from the particular world-view of the person being healed and their cultural group (LeBeau, 1998). Qualitative interviews from this study revealed that culture (also linked to family beliefs) can sometimes exert a stronger influence over health-seeking than education or socio-economic status. The fact that higher education and high SES did not preclude the use of traditional medicine in this sample means that other factors are influencing its use and one of these may be culture. In this study, the caregivers interviewed at the TMPs had a higher proportion of Zulu caregivers (39.6%) followed by the public hospital (20.8%). Although this may also be a reflection of the geographical make-up of the areas where the interviews took place, certain ethnic groups have been found to exhibit stronger links with traditional medicine than others, e.g. the Zulu-speakers in South Africa (Mander, 1998) and the Kamba in Kenya (Good, 1987a).

6.1.4.3 Education

Formal education has also been found to reduce both utilisation of traditional healers' services (Kleinman, 1980; Rhi, 1973; Mohseni, 1979), as well as traditional health care advice from mothers-in-law (Adetunji, 1991). Education was a strong predictor in this sample of the use of traditional medicine, with a higher proportion of less educated caregivers more likely to have given or to give their child traditional medicine. Being highly educated does not preclude the use of traditional medicine however. In Durban, Manders (1998) found that 60% of consumers of traditional medicine had at least some form of secondary education. Similarly in this study, over half the caregivers with post-secondary education would or had given their child traditional medicine. For those who had completed secondary education this figure was 72.4%.

Studies suggest that more educated mothers tend to downplay the severity of an illness (Gesler & Gage, 1987). A household survey in South Africa in 1995 found that mothers with higher levels of education were more likely to rate their child's health status as very good or excellent (Segel & Hirschowitz, 1995). Findings are less clear cut in this study given that many types and stages of health problems were included. Caregivers with higher education (mostly private clinic) did have a much higher proportion of 'not serious' versus 'quite serious' or 'very serious' responses compared with caregivers with some secondary or complete secondary education. However, those with none / some or complete primary also had a high proportion of 'not serious' versus 'quite serious' or 'very serious' responses. It should be remembered that this group was largely composed of TMP caregivers seeking preventative help or whose child did not have illness symptoms on the day of interview.

A study of self-medication in Addis Ababa found that higher use of OTCs for illnesses traditionally treated with home remedies was found in groups with higher education (Kloos, Getahun, Teferi, Gebre Tsadik & Belay, 1988). According to Bland *et al.* (2004), more educated women are more likely to administer oral medications because they may be influenced more by marketing strategies of manufacturers and by their peer group. However, in the case of the caregivers from

the private clinic in this study (the most educated group) who did use more OTC medicines than any of the other caregivers, this may also be because they can afford to do so.

6.1.4.4 SES

The overall Black unemployment rate in South Africa was 31.6% in March 2004 (Statistics South Africa, 2005b) and for females this rate was approximately 37.6%. The total head of household unemployment in this sample was 31.1% between March and June 2004. Caregiver unemployment was 62.4%, however these caregivers were not asked if they or the heads of household were actively seeking work or not and these figures may therefore be inflated.

Previous research describes how lower SES groups are more likely to have a more person-oriented world-view and are therefore amenable to beliefs in individuals who possess spiritual or occult powers (Gaines, 1979, as cited in Chrisman & Kleinman, 1983). Those in higher SES groups on the other hand are more likely to have an institution-oriented world-view which is less likely to implicate personal powers in an individual's illness, the interaction-style with the health care provider is likely to be more formal and alternative treatments (e.g. yoga) involve outsiders rather than relatives, friends and neighbours. In the October Household Survey (1995), in urban areas, of those seeking care, the use of private providers was mostly found in the high income groups (55.4% for the highest income quintile and versus 24.8% for the lowest income quintile), whilst the use of a traditional healer was more common amongst those living in an informal settlement (Wadee *et al.*, 2003; McIntyre *et al.*, 1998). Similar results were found in the present study in terms of household income, however much higher proportions reported using traditional medicine than those in the October Household Survey (50% for the highest income category and 80% for the lowest). The higher proportions found in the present study may be partially explained by the survey type (facility versus population-based survey). As the OHS authors suggest, the use of traditional health care (particularly in the case of adults) is probably only considered once the illness occurs. The present study also focused on children under 6 who are more likely to require some form of traditional treatment for protection or for treating an African childhood illness than adults.

According to Lindbladh and Lyttkens (2002) lower social classes or groups are less likely to change their habits and therefore more likely to maintain habitual behaviours. When asked which provider the caregiver might choose if they won the lottery, reasons for choosing a traditional healer, despite having newfound wealth mostly related to familiarity with the provider and belief in their treatment. In this study beliefs are very much linked to habitual behaviour as illustrated in the following quotations:

"Those who grew up using traditional medicines, they prefer traditional medicine."
(TMP1)

"I think it is the way we are socialised as we are growing up. We have this belief in our things and we don't want to break away from them." (Nurse1 – public hospital)

Whereas the concept of habit was associated with lower social positions in research by Lindbladh & Lyttkens (2002), for individuals in higher social positions this manifests itself as choice. The following 2 quotations illustrate this association. Whilst the participant in Focus Group 1 speaks of no choice other than the clinic, Caregiver 4 from the private clinic speaks of doing what she believes to be best for her children:

"Some people haven't got money to go the special doctor so they go to the clinic and if they don't get helped so what must we do?" (FG1)

[Had you been to any Paediatrician before that or GP?] "No, because she was my first child. I think that is where I got the inclination of going for the best for my kids. It is from that experience that I had with the clinic..." (CG4 – private clinic)

For those not restricted by economic barriers a greater choice of health care providers is available and they are less likely to rely on habit. This choice may also give patients a greater sense of control and satisfaction with their treatment. According to the NHS (UK), research has shown that patients want to be more involved in making decisions and choosing their healthcare and that most of the patients who are offered a choice of hospital view the experience as positive and valuable. (National Health Service UK, 2005; UK Department of Health, 2005). How choice might affect patients in the South African context is illustrated in the following example. In this utilisation-based survey, caregivers interviewed at the private clinic were more likely to complain if staff were rude or queues were long than those at public facilities. Although such problems may be less likely to occur in the private sector, problems do arise and the majority of these caregivers felt that complaining would make a difference. Although the Health Systems Trust (2004) found that the Patients' Rights Charter was on display in 95% of facilities in Gauteng and 87% had procedures in place to handle patient complaints, caregivers interviewed at public facilities mostly felt that complaining did not make a difference and in some cases this may be borne out of fear that their child would not receive proper treatment. Research assistants in a hospital survey in KwaZulu-Natal (Salmon, Heavens, Lombard, & Tavrow, 2003) also reported that patients were not always honest, most likely because they thought answering negatively would affect the care they received. A wider choice of providers would give patients more confidence and would allow them to take their child to another provider if necessary. In some cases a service which was paid for was perceived to be better quality and would give patients the right to demand better treatment. This may explain why caregivers interviewed at the TMPs, despite their lower SES had the second largest proportion who thought that complaining made a difference. As with private clinics, TMPs have a reputation to uphold and as one nurse explained: *"they've got to be nice to you so that they get clients coming"* (Nurse1 – public hospital).

The TMP group in this sample had the lowest SES overall compared to other caregiver groups. Whilst 53% of the TMP caregivers interviewed in the centre of Johannesburg would choose a private provider if they won the lottery only 23% of the caregivers from Orange Farm on the

outskirts of Johannesburg would choose such a provider. Perhaps those caregivers living in the city centre would have heard more about private providers than those living in an informal settlement.

Whilst this study has identified a difference in health-seeking behaviour for children under 6 in this setting, SES is by no means a completely defining factor in the health-seeking process given that a small proportion of the low and very low SES groups reported having used a private provider for their child's current or most recent illness. Similarly, a large proportion of those in the highest SES groups had given or would give traditional medicine to their child if the need arose.

6.1.4.5 Fear

The importance of fear as a cue to action has been highlighted in the Health Belief model (Strecher & Rosenstock, 1997; Becker *et al.*, 1977b), is one of the components of *threat appraisal* in Protection Motivation Theory (Rogers, 1975; 1983; 1985) and falls into the Theory of Planned Behaviour as a belief about the outcome of an illness (Ajzen & Madden, 1986; Ajzen, 1991; Ajzen & Driver, 1991). From the qualitative interviews in the present study, it was evident that the health-seeking actions of many mothers were borne out of fear of losing their child (e.g. doing what's best for the child, paying for private treatment or taking the child to a health care provider instead of using home treatment).

Furthermore, qualitative results also revealed that fear may also prevent or delay a caregiver from seeking further treatment, with some caregivers either too scared (or too proud) to seek further information if they don't understand something. Communication between caregiver and provider (which is discussed later on) may sometimes be a barrier to effective health-seeking and may explain why caregivers do not always follow the providers advice or instructions.

6.1.5 Enabling factors

Although this study supports Janz & Becker's (1984) argument for the importance of health beliefs in the initial stages of health-seeking, Good (1987a) suggests that at the beginning of an illness the choice of therapy is usually determined more by the accessibility and previous experience with a clinic or TMP than by the actual type of illness. Although caregivers' health beliefs are internalised and shaped by socialization and experiences throughout the lifecourse (Hammond-Tooke, 1989), they are also bound by socio-economic and 'enabling factors' perceived as barriers or benefits. These include the accessibility, availability and cost of treatment and providers.

6.1.5.1 Cost

Although some studies report user fees to be one of the biggest barriers in health care utilisation (Yoder, 1989; de Bethune *et al.*, 1989; Kanji, 1989, Haddad & Fournier, 1995), others, including this survey report that even poor people are willing to pay and even travel further for better quality

services (Mariko, 2003; Stock, 1983; Litvack & Bodart, 1993; McIntyre *et al.*, 1998; Statistics South Africa, 2002; Joosub, 2004). Similar to results found in other studies (Palmer, 1999; Segar, 1997; Nyamongo, 2002; Couper *et al.*, 2004), qualitative and quantitative data in the present study describe how paying for a service ensures quality and more choice through either better medicines (strength and quantity), a more thorough examination, shorter waiting times or better respect for the patient. Although previous studies have shown that the demand for health care is price-elastic (i.e. responsive to a price change) amongst low-income groups (Gertler *et al.*, 1987; Gertler & van der Gaag, 1990; Wang'ombe, 1984), studies which have taken into account both the introduction of fees and quality have found that reduced utilisation occurred if there were few improvements in quality (de Bethune *et al.*, 1989; Yoder, 1989; Waddington & Enyimayew, 1989, 1990) or that utilisation actually increased when fees were accompanied by improvements in the quality of care (Knippenberg *et al.*, 1990). Although the poor are sensitive to price changes, health care costs also include out-of-pocket expenses for treatment or drugs, transport and non-pecuniary cost in terms of the time spent travelling to the facility or queuing which may 'cost' more than paying for a better quality service. In a cross-sectional study it is usually difficult to establish whether respondents prefer not to pay or cannot afford to pay for a service.

In terms of traditional medicine which is purchased, the TMP attendees had the largest proportion of caregivers who thought it was cheap or affordable, followed by the private clinic. Whereas the private clinic attendees would be evaluating the actual cost of traditional medicine compared with what they themselves spend on private health care, the TMP attendees must evaluate the cost of traditional medicine in terms of its value for money, given that they have the lowest overall SES in the sample. Similarly in an urban study in Durban, South Africa, although the cost of visiting a clinic was cheaper than a traditional healer, this did not deter people from using this source of health care (Mander, 1998). In fact consumers stated that they would still use traditional medicine if its price increased.

Traditional healers and vendors indicated that only 25% of customers might bargain for a lower price in the Durban study and the present study found that over 90% of caregivers interviewed at the TMP would not shop around for cheaper prices of traditional medicine. Mander (1998) speculated that this fact may mean that the prices are affordable which was confirmed by TMP attendees in the present survey. It may also indicate however that their preferred TMP or supplier of traditional medicine is trusted enough to warrant the cost:

"I go to one person that I know and trust... Iya, some could be quite expensive you know when you - I think it's more of, how can I put it? The person you go to it's better if it is a person that you know and trust, not a person that is after money. Because when you take a child to that woman, money is not an issue, the issue is the life of a child."
(CG4 – private clinic)

In the present study, TMPs also reported that they were fairly flexible in their payment options, which has been reported elsewhere (Leonard, 2003). Not everyone considered traditional medicine to be affordable however, including 26% of TMP attendees. The highest proportion of caregivers who thought traditional medicine was expensive was found at the PHC clinic and the public hospitals.

With the removal of financial cost barriers to child health care at public primary health care facilities, according to Andersen (1968, 1995) one would expect to find greater equity in terms of health service use. This is because where medical care is equitably distributed (quantity and quality), Andersen (1968) argues that one would expect to find demographic (e.g. age and sex) and 'need' (e.g. symptoms) variables accounting for most of the variation in the amount of health service utilisation. In Andersen's study on family use of different health services in the U.S.A., the size, the age and sex structure of the family and number of illnesses experienced would therefore account for the majority of health service use in an equitable distribution of health services. In contrast, health beliefs (e.g. the value placed on health insurance, doctors, health services, good health as well as the knowledge of disease and attitudes towards types of health services or providers), social structure (e.g. ethnicity, education, social class and occupation) and enabling resources (e.g. income or health insurance) would be expected to have less of an impact. The effect of health beliefs for example would be reduced as the effect of differences between families, of which health beliefs are a part (i.e. lack of a regular source of care, no medical insurance and low income) would be minimised. Social structure usually influences health care use through enabling factors which would be reduced in an equitable distribution of health services, thereby minimising the influence of social structure. Without a population-based survey however, this is difficult to measure quantitatively. Based on qualitative and descriptive statistics from this study as well as literature on the health care system in South Africa it is known that although horizontal equity (those whose needs are the same) has increased since 1994, it is more difficult to achieve vertical equity (those whose needs are different) (EQUINET Steering Committee, 2000). Loewenson (1999a) summarises developments which have increased health systems inequity in the Southern African region as including poor quality primary health care (Bijlmakers & Chihanga, 1996), inadequate resources, staff and working conditions (Loewenson, 1999b), ineffective cost-recovery systems (McCoy & Gilson, 1998), loss of skilled personnel to the private sector, poorly functioning referral systems and excessive commuting between health care providers (Loewenson, Sanders & Davies, 1991). These developments were also highlighted in the present study by caregivers and health care providers alike.

6.1.5.2 Distance and Transport

In urban areas, distance may not be one of the main barriers that patients face (Mariko, 2003) however this will depend on their socio-economic status and type of transport and whether they have been referred on to another facility or have decided to bypass their nearest one. A large proportion of PHC (68%) and TMP attendees (67.9%) were at a provider they considered to be close to where they lived. Just over three-quarters of private clinic and 90% of public hospital

caregivers on the other hand were not at the closest provider to where they lived. Overall 55.8% of caregivers usually walked to their normal health care provider, 34.4% used public transport and 9.7% used a family car. In 1998 a survey (Smith *et al.*, 1999) found that 48% of Africans (rural and urban) usually walked, 40% used public transport and 10% used private transport. The results from the 1994 survey were 37%, 51% and 7% respectively (Smith *et al.*, 1999). The higher proportion of respondents walking to their usual health care provider in 1998 and the present 2004 survey may indicate that building more clinics has made health care more accessible. Since the lowest SES group was more likely to walk and least likely to use public transport or have a private car in the current study however it may also be a reflection of socio-economic status. Traditional healers were also included as a usual source of health care in the present study and many of these lived close-by to respondents.

Being an urban environment with good transport networks, prior to the survey distance was not prioritised as an issue for discussion during the focus groups and in-depth interviews. Post-survey results reveal however that distance was clearly an issue for TMP caregivers, particularly those living in Orange Farm. Eighty-six percent of the Orange Farm caregivers cited the primary health care clinic as their furthest provider. Although a TMP is likely to live in the vicinity, informal discussions with these caregivers during the survey revealed that their primary health care clinic was a mobile one which was not there every day. A few caregivers from Soweto also revealed that their area was served by a mobile clinic which did not come every day.

Although primary health care is supposed to be the most equitable level of care, many health districts are under-served and great variation is seen in per capita spending (Ntuli & Day, 2004). Access to primary health care may therefore not always be uniform and is more likely to affect the most disadvantaged in society. For this reason, even in urban areas distance and transport should therefore be considered when looking at factors affecting health-seeking behaviour.

6.1.5.3 Waiting times and opening hours

Urban African respondents (20%) in 1998 were more likely to report that their access had worsened than rural African respondents (14%) mostly because of increased waiting times (Smith *et al.*, 1999). This issue was further highlighted in the present 2004 sample of urban African respondents in Johannesburg and Soweto. Waiting times at public facilities was the main grievance for many caregivers in this sample. Matters were made worse if the caregiver was worried about the child, if they thought someone had jumped the queue or if caregivers felt that nurses were taking long tea breaks or standing around chatting to one another. Some caregivers did indicate that they were aware that clinics were short-staffed and that patients should have more patience. A similar awareness was found in a case-study at 2 PHC clinics (one Government and one NGO) in the North West Province, although dissatisfaction was also reported in the Government clinic in relation to staff tea breaks affecting waiting times (Couper *et al.*, 2004). Long waiting times had led some caregivers in the present study to use private care if they could afford it.

Another reason given for bypassing the local PHC clinic in this sample was because of its opening hours. According to the National Primary Health Care Facilities Survey (Health Systems Trust, 2004: p.15), "PHC facilities should be open for 5 or more days per week and, ideally, should be open for extended hours (10 to 15 hours)." Although 86% of facilities were open for 5 or more days per week for a median of 8 hours, this was below the national figure of 96% for a median of 9 hours. Furthermore, only 5% offered 24 hour emergency services, another reason cited in the present survey for not attending the PHC. In South Africa, Palmer (1999) found that patients had in some cases turned to the private sector because of the opening hours of public sector facilities at night and at the weekend. The Second Kaiser Family Survey of Health Care in South Africa (Smith *et al.*, 1999) also found that hospitals and private primary care facilities were reported to be the most accessible in terms of opening hours whilst public primary care facilities, used by the majority of the population were not. The unavailability or inaccessibility of services was the second reason cited (23%) after cost for reasons for not having sought care when needed (Smith *et al.*, 1999). The same survey also found that although 91% of urban Africans were aware of the free health policy for children under 6, only 46% were aware that a referral was needed for a government hospital. Although not asked about in this survey, this factor may still influence inappropriate health-seeking behaviour.

The TMPs interviewed in this study were open usually 6 days a week during the day, however some availed themselves 7 days a week at any time of day because "sick people always come" (TMP2). Most of the TMPs (9 out of 10) interviewed in a study in Nairobi worked for 7 days a week, with two-thirds willing to see a patient any time of day or night (Good, 1987a).

The accessibility of a provider through their waiting times and opening hours is therefore likely to play an important role in the choice of a health care provider, particularly as even the poorest caregivers will have other options available if they are turned away because of queues (e.g. home treatment, different PHC, public hospital, TMP).

6.1.5.4 Shortages

As well as staff shortages, drug shortages may also be a barrier to health care particularly as it is more likely to affect those on the lowest incomes for whom purchasing medicines from a pharmacy or private provider is not always possible. This study found that a shortage of medicines and the inconvenience of return visits may deter some caregivers from using a particular clinic. They may prefer to travel further to a different clinic, pay to see a private provider or even a traditional healer if they are assured of sufficient and good quality medicines. In the words of one PHC clinic nurse "If you don't give treatment, they think their child is not treated well". It has been found that people want medicines more than the advice from doctors and nurses (Alland, 1970), and in some cases medical prescriptions may be a substitute for effective communication with a patient (Wartman *et al.* 1981). Previous studies from around the world have also found that people will avoid a facility if they know it is short of medicines (Atkinson *et al.* 1999; Alubo, 1990; Wolffers, 1988; Akin *et al.*, 1985; Mamdani & Walker, 1985; van der Geest &

Reynolds Whyte, 1989; van der Geest, 1982; Ugalde, 1984). Haddad and Fournier (1995) found that patients from neighbouring areas were attracted by the study area's availability of drugs. A similar scenario emerged at the PHC clinic in Soweto where the present survey took place. Compared to other local primary care clinics in the vicinity it was known to be better stocked with medicines and had therefore seen visitors from other clinics. Respondents in the present study described how due to the lack of medicines at some PHC clinics, Panado was usually the only medicine given to their child and this has been described in another qualitative study in South Africa (Gilson *et al.*, 2005). In a case-study of a Government and a NGO PHC clinic in the North West Province, Couper and colleagues (2004) found the medicine supply to be worse at the Government clinic and this was also reported by respondents. Around a third of the 30 respondents interviewed at each clinic reported using other clinics. Some nurses in the present study referred to this as abusing the health system by 'doctor-shopping', citing lack of medicines in the previous clinic as the main reason for doing so. In the Couper study only a few patients mentioned this as their reason for visiting other clinics.

6.1.6 Outcome of consultation and treatment and perceptions of providers

Because of the way data were collected, outcome of the consultation and treatment as well as characteristics of the providers (as perceived by respondents) will be discussed together.

The reason why satisfaction is so important in the health-seeking process is that a satisfied patient will be more likely to comply (DiMatteo, 1994; DiMatteo, 1997; Speedling & Rose, 1985); perceive their problem as being solved and curtail any unnecessary doctor-shopping (Ben-Sira, 1988). They are also more likely to use the services of that health care provider in the future should they require them (Ross & Duff, 1982); and more likely to give a complete history of the illness, symptoms and the treatments taken (Waitzkin & Stoeckle, 1972; Hackett *et al.*, 1973). One way of measuring outcome of the consultation is through patient satisfaction with the quality of a health care provider. Trying to improve health-seeking behaviour may be fruitless if the quality of health care is low (WHO, 1999). Some of the aspects important for quality of care in the South African context will be discussed in the following sections.

6.1.6.1 Perceptions of providers

Figure 6.2 is a schematic diagram and summary of how different health care providers are generally perceived by caregivers, based on in-depth interviews with caregivers and focus groups with caregivers as well as the survey results. In this study it should be noted however, that these perceptions are general and the reputations of providers varied. Even within the private sector, comparisons and choices are made based on staff attitudes, whether their medical insurance is accepted or whether the provider will take cash in instalments, specialist care (Paediatrician) versus general care (GP or pharmacy), as well as the service provided (meals, etc). Perceived quality has been found to vary according to the respondent's age, sex, ability to access health services and socio-economic group (Haddad *et al.*, 1998). Furthermore, the composition of good

health care is culturally-defined and what is appropriate in one setting may not always be appropriate in another (Scarpaci & Kearns, 1997; Scarpaci, 1988). Patients and health care providers may not necessarily have congruent ideas of what denotes quality in health care (Haddad & Fournier, 1995), therefore finding out about caregivers' views may help to explain their behaviour. Although quality of care (particularly primary health care) is receiving increasing attention in developing country settings, there remains a paucity of comparison studies available which identify the criteria that patients use when judging different health care providers (Haddad *et al.*, 1998; Newman, Gloyd, Nyangezi, Machobo & Muiser, 1998).

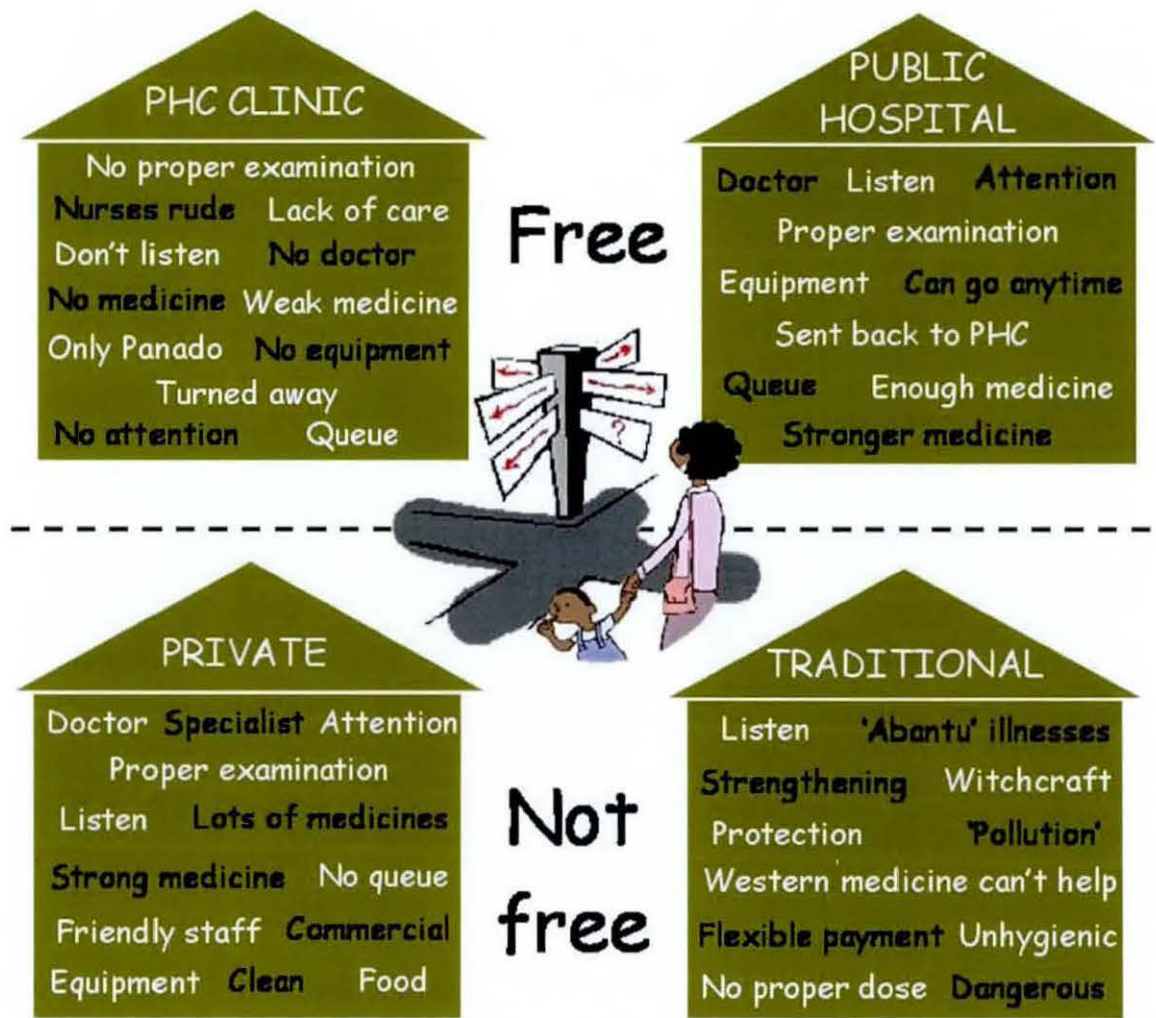


Figure 6.2: Motivational schemas of health care providers

The general consensus amongst caregivers, TMPs and nurses in this survey was that primary health care in the public sector suffered from shortages of staff (particularly doctors) and medicines as well as long queues. That patients are concerned about waiting times (Palmer, 1999; Smith *et al.*, 1999; Westaway, Rheeder, Van Zyl, Seager, 2003; Modiba *et al.*, 2001; Gilson *et al.*, 2005), being turned away (Mills, Palmer, Gilson, McIntyre, Schneider, Sinanovic & Wadee, 2004; Gilson *et al.*, 2005) a shortage of medicines (Smith *et al.*, 1999; Mashego & Peltzer, 2005; McCray, 2004; Modiba *et al.*, 2001; Gilson *et al.*, 2005) and weak medicines (Palmer, 1999;

Schneider & Palmer, 2002; Modiba *et al.*, 2001; Smith *et al.*, 1999; Couper *et al.*, 2004; Gilson *et al.*, 2005) has been previously highlighted in South Africa. More specifically, in 2004 only 4% of facilities in Gauteng had the full complement of the 25 most important and commonly used drugs from the Essential Drugs List, although it is acknowledged that not all drugs may be needed at all facilities (The Health Systems Trust, 2004). According to Ntuli and Day (2004), the ratio of health personnel to the population has not improved in South Africa, with 31.9% of health professional posts vacant in Gauteng alone. Despite an increase in the number of nurses registering with the South African Nursing Council, the number of nurses working in the public sector has shrunk as a result of shifts to the private sector or abroad (Ntuli & Day, 2004). In the present survey, caregivers especially, felt that their child was not given a proper examination by the nurse, that nurses were usually rude and did not listen. The perceived lack of interpersonal skills amongst public sector health workers, poor examinations and lack of explanations is not a new phenomenon (Palmer, 1999; Schneider & Palmer, 2002; Jewkes *et al.*, 1998; Abrahams *et al.*, 2001; Mashego & Peltzer, 2005; Westaway, Viljoen & Chabalala, 1998; Westaway *et al.*, 2003, Mills *et al.*, 2004; Fonn & Xaba, 2001; Modiba *et al.*, 2001; Couper *et al.*, 2004; Gilson *et al.*, 2005).

Although the public hospitals suffer from similar problems to those found at PHC clinics (e.g. queues and negative staff attitudes) (Modiba *et al.*, 2001; Smith *et al.*, 1999) and less patient satisfaction has been found in bigger hospitals (Salmon *et al.*, 2003) compared with the primary health care facilities, in the present study they were generally thought to be better-stocked with medicines and more accessible in terms of opening hours. If the caregiver had no referral letter however they were sometimes sent back to their PHC facility. Better examinations, probably as a result of more doctors and more high-tech equipment were expected and staff were believed to be more attentive than their PHC counterparts. Although it is well known that public hospital care is generally perceived as better than primary care (Palmer, 2006; Gilson, 2006; Schneider, 2006), few detailed studies comparing primary and higher levels of care within the public sector care were found, with most tending to compare public and private sector care. In the Second Kaiser Family Foundation Survey (Smith *et al.*, 1999), queues were actually found to be worse at public hospitals than PHC facilities although most hospitals were open every day whereas the clinics were not. More people were treated by doctors at public hospitals than at PHC clinics in the same survey. Outside of South Africa, a Tanzanian study found that the local government health centre was often bypassed for the hospital because there was a shortage of medicines and due to the perceived lack of care (Walraven, 1996). Similarly in Zambia, Atkinson *et al.* (1999) found that patients believed the hospitals to be better stocked with medicines than the public clinics. A study in rural Kenya found that patients tended to choose the public hospital for long-term illnesses, particularly if they could not afford to continue with private treatment (Nyamongo, 2002). In a study comparing patients' willingness to pay for hospital and traditional health care in Tanzania, Hausmann-Muela *et al.* (2000) found that caregivers had more faith in the high-tech examination tools at the hospital, whereas traditional healers could not always be trusted. Such perceptions are not confined to developing country settings (Walsh, 1995).

In general, private sector care (primary and higher) was perceived to be better than public sector care. The level or ranking of a provider has previously been found to indicate the quality of care (Wong, *et al.*, 1987; Heller, 1982; Sauerborn *et al.*, 1989). The Second Kaiser Family Foundation Survey (Smith *et al.*, 1999) also found that private facilities were rated a lot higher than public ones. In South Africa, private doctors are usually rated higher than public facility doctors because of their polite manner, the time they spend talking to patients and giving them a thorough examination (Palmer, 1998; Gilson *et al.*, 2005). This may be due as Ben-Sira (1998) explains in the case of Israel, to the private providers' need to attract customers to their service and the primary care providers' need to demonstrate their authority given their perceived lower status by the professional community and patients. In the Second Kaiser Family Survey, 64% percent of patients treated at a primary health care facility were treated by a nurse whereas 92% of patients who visited a private facility and 72% of patients at a public hospital were treated by a doctor (Smith *et al.*, 1999). In the present survey, wanting to see a doctor or specialist was one of the reasons why even low-income caregivers will pay to go to a private provider or why patients might bypass the PHC clinic in favour of the public hospital. Private facility doctors received more positive ratings in the present study and overall doctors received more positive ratings than nurses in terms of their manner and how helpful they were. As well as the reasons found by Palmer (1999) and Gilson and colleagues (2005) for the higher rating of private facilities, in the present study respondents also mentioned thorough examinations, enough medicines and generous prescriptions, no queues, friendly staff who listened and were attentive, high-tech equipment, cleanliness and the food provided. The commercial aspect of private care was also highlighted by nurses in this study. Studies in South Africa and elsewhere have also found that private clinics were believed to have a faster service (Smith *et al.*, 1999; Nyamongo, 2002; Segar, 1997; Mills *et al.*, 2004; Amarasiri de Silva *et al.*, 2001), a more certain supply of medicines and stronger drugs (Nyamongo, 2002), a greater variety of medicines as well as more medicines given to the patient (Segar, 1997), the ability to change a medicine at no extra cost if it didn't work (Nyamongo, 2002), give more thorough examinations (Palmer, 1999; Schneider & Palmer, 2002; Bhatia & Cleland, 2004; Gilson *et al.*, 2005), have longer consultations (Smith *et al.*, 1999), more well-trained staff (Nyamongo, 2002), and have more respect for patients (Palmer, 1999; Segar, 1997; Mills *et al.*, 2004; Amarasiri de Silva *et al.*, 2001; Gilson *et al.*, 2005). Interviews with GPs in South Africa suggested that in order to attract more patients the quantity of drugs, the length of the consultation and waiting times were important incentives (Mills *et al.*, 2004). Although private care facilities were mostly spoken of in a positive manner (the few negative comments included 'chewing' patients money and comparisons of the food and attitudes of staff with another private clinic), studies in South Africa have previously highlighted weaknesses in the quality of services provided by some types of private providers. Chabikuli, Schneider, Blaauw, Zwi and Brugha (2002) for example found that overall GPs interviewed in the Gauteng Province had poor knowledge of STI syndromic management and uninsured patients were offered cheaper and less convenient drugs compared to insured patients whose doses were also usually higher than required. Treatment in the private sector therefore varies according to what the patient can afford to pay, as well as the strong influence of drug companies and suppliers who are not always

interested in promoting the most cost-effective medicine (Schneider, Blaauw, Magongo & Khumalo, 1999). Unnecessary investigations as well as over-prescribing have become characteristics of the fee-for-service system (Schneider *et al.*, 1999). Focus group participants in another South African study (Gilson *et al.*, 2005) also highlighted their concern over the fact that some GPs who charge for each service might sometimes be tempted not to refer the patient on if they needed care elsewhere.

Positive aspects of traditional health care included flexible payment options, the ability to help with health problems that Western medicine could not. These included strengthening and protection from witchcraft, evil spirits and 'pollution'. Healers were also attentive and listened to the patient. Negative aspects of traditional healing included unhygienic working conditions, inaccurate dosages, harmful medicines and its association with witchcraft. Studies in South Africa and elsewhere have found similar results regarding the benefits of traditional healers' payment options (Good, 1987a; Hausmann-Mueula *et al.*, 2000; Leonard, 2003), the inability of Western medicines to help (Hammond-Tooke, 1989; Green, 1999; Ngubane, 1977; Hausmann-Mueula *et al.*, 2000), a holistic approach to health care (Sodi, 1996) and understanding of beliefs (Gumede, 1990) thereby ensuring greater empathy in the patient-provider relationship (Hausmann-Mueula *et al.*, 2000); a desire for more hygienically-packed medicines (Mander, 1998), a need for hygiene-related training (Good, 1987b) problems surrounding dosages (Popat *et al.*, 2001; Yoder, 1982), the toxicity of herbal remedies (Venter & Joubert, 1988; Hutchings & Terblanche, 1989; Joubert, 1990; Wood *et al.*, 1990; Bye & Dutton, 1991; Steenkamp *et al.*, 2002) and its negative association with witchcraft (Department of Health, 2003a; Good, 1987b).

A previous hospital-based study in South Africa found that the socio-economic status of the patient was likely to confound one aspect of the perceived quality of care measured by hospital sanitation (Salmon *et al.*, 2003). Bias may be introduced into the study if respondents do not have toilets or bathrooms in their own homes. Lower SES respondents may therefore be less likely to indicate that sanitation is poor. Of the 10 caregivers in the current study who mentioned that cleanliness could be improved in health facilities for children, 4 were from the very low SES group, 2 were from the low SES group, 2 were medium SES and only 1 was high. Cleanliness was not directly asked about during the survey however and other issues were more important to caregivers such as waiting times, staff attitudes and availability of medicines.

Table 6.2 provides a summary of the top 3 responses given for 4 different 'choice-related' variables. Care should be taken when interpreting these results however as hypothetical questions may not always reflect actual behaviour (Abel-Smith & Rawal, 1992). Similarly, those with lower education levels and less experience with private health care may find hypothetical questions more difficult to deal with (Yassin, 2002). Without wishing to discredit the strength of their beliefs in traditional treatment, this may explain why over half of the traditional healers' group would not switch to a private health care provider if they won the lottery.

Table 6.2: Comparing top 3 responses for 4 choice-related questions at different facilities

Facility on day of interview		Rank of why best affordable ¹	Rank of why best if win lottery ²	Rank of what is most important ³	Rank of ideas for improving health services ⁴
PHC clinic	1	Cost	Staff available / waiting time	Cost	Staff attitudes
	2	Staff available / Waiting time	Medical process	Waiting time / severity	Waiting times
	3	Medicine-related	Medicine-related	Medicine-related	Facility / resources
Public hospital	1	Cost	Medicine-related	Belief in treatment	Staff numbers
	2	Staff available / Waiting time	Staff available / waiting time	Staff attitudes	Staff attitudes
	3	Belief in treatment	Staff attitudes	Medicine-related	Facility / resources
Private clinic	1	Staff attitudes	Staff attitudes	Staff attitudes	Staff attitudes
	2	Medicine-related	Medicine-related	Waiting time / severity	Service / medical process
	3	Staff available / Waiting time Specialist	Facility-related	Medicine-related	Staff numbers
TMP	1	Belief in treatment	Belief in treatment	Belief in treatment	Integrate Western & traditional
	2	Cost	Medicine-related	Cost	Staff attitudes
	3	Medicine-related	Help / past outcome	Medicine-related	Staff numbers

*Multifactorial responses not necessarily applicable to provider on day of interview

¹ Why is [provider X] the best place to take a sick child in terms of affordability?

² Why is [provider X] the best place to take a sick child if you won the lottery?

³ What are the most important factors when deciding where to take a sick child?

⁴ How could health services for children under 6 be improved in Johannesburg and Soweto?

Staff attitudes were in the top 3 responses for how public health services for children under 6 could be improved for caregivers interviewed at all facilities. They were also mentioned by public hospital and private clinic attendees in the other responses. As previously illustrated, staff attitudes in public health facilities in South Africa are common complaints of patients (Palmer, 1999; Schneider & Palmer, 2002; Jewkes *et al.*, 1998; Abrahams *et al.*, 2001; Mashego & Peltzer, 2005; Westaway *et al.*, 1998; Westaway *et al.*, 2003; Mills *et al.*, 2004; Fonn & Xaba, 2001; Modiba *et al.*, 2001), although in some cases it may only relate to a few members of staff who give the facility a bad reputation (Couper *et al.*, 2004). Interpersonal dimensions of care (support, consideration, friendliness and encouragement) were found to account for 45.8% of the variance (the largest share) in a patient satisfaction scale for diabetic patients in South Africa. In the North West Province, Couper and colleagues (2004) found that patients did not mind having to wait as they were assured a caring a friendly consultation. Nurses themselves in the present study admitted that low staff morale and the abusive attitude of some patients put constraints on the

quality of care. These issues have been highlighted in other studies in South Africa (Fonn & Xaba, 2001; Ijumba, 2002).

Although there may be subtle differences in how these questions are interpreted, it is clear that staff attitudes, which is more related to choice than to enabling factors was the most important factor for caregivers at private clinics. For caregivers from the other 3 providers however, enabling factors such as waiting times, cost, distance and medicine-related issues were more salient than the staff attitudes. Overall, availability and quality of medicines was a common theme at all four health care providers. There was no point queuing for hours at the clinic only to be told you had to go and buy your own medicine or improvise. The importance of medicines in the health-seeking process and concern over shortages has been highlighted previously in South Africa (Mashego & Peltzer, 2005; McCray, 2004; Modiba *et al.*, 2001; Smith *et al.*, 1999).

It was interesting to note that cost, although an important issue for caregivers at the PHC, public hospital and TMP facilities, was not foremost in the thoughts of public hospital attendees on the day of interview, whereas staff attitudes, 'belief' in the treatment and medicine-related issues were. It is very difficult to separate caregivers' general thoughts from their thoughts on the day of interview which were subject to recent experiences. The variables most likely to reflect immediate concerns are the reason why a chosen provider is the best in terms of affordability (not necessarily the provider on the day of interview) and the most important factor in deciding where to take a sick child. These variables should produce similar results which they did in the case of PHC and TMP caregivers. In a study comparing patient views on health care providers obtained through different methods, Schneider and Palmer (2002) found that responses using exit interviews were context specific, thus reflecting immediate concerns of service users. Focus groups on the other hand captured the views of those who chose not to use a service and who were not as preoccupied with illness concerns. In the present study, the results from these hypothetical questions were however validated in the focus group discussions and in-depth interviews (e.g. concern of staff attitudes, medicine-related issues and waiting times), therefore rather than simply reflecting a recent event they are also likely to represent accumulative experiences. Although there appeared to be agreement in findings between the methods used (focus groups, in-depth interviews and utilisation-based survey) in terms of caregivers' health-seeking behaviour and their views on providers, repeated assessments over time would help to establish a more comprehensive description of caregiver's behaviour and views (Schneider & Palmer, 2002).

Although not in the same order, the caregivers interviewed at public facilities gave the same responses for what needed to be improved in child health services in Johannesburg and Soweto. Table 6.3 compares the views on health service priorities of respondents in this utilisation-based survey conducted in 2004 and a household survey conducted in 1998 (Smith *et al.*, 1999). Both accepted multiple responses.

Table 6.3: Comparison of respondents' views on health service priorities from this survey (2004) and the Second Kaiser Family Foundation Survey of Health Care in South Africa (1998)

How could health care be improved for children under 6 in Johannesburg and Soweto? ¹	%*	What if anything would you like to see change in the Government Health Service? ²	%*
Improve staff attitudes	37	Better service	37
Improve staff numbers	22	Get the staff to treat us better	26
Improve waiting time	18	Increased availability of drugs / medicines	24
Integrate Western & Traditional medicine	16	Improve staff skills	13
Improve facility / resources	14	Nothing	11
Improve services / medical process	14	Make it affordable	10
Improve user attitudes / charge fees	5	More convenient opening hours	9
		Don't know	9
		Wider range of services	8
		Make it easier to get to	6
		Other	13

¹ This survey (2004)

² Second Kaiser Family Foundation Survey of Health Care in South Africa (Smith, Solanki & Kimmie, 1999)

* Responses were multifactorial and therefore % do not add up to 100

Although not directly comparable, it is evident that quality of care as well as waiting times (including number of staff) remain top priorities for improvement for respondents in both surveys. Similar issues arose in the current study. It is very difficult to provide a health service which satisfies everyone but there was a consensus amongst caregivers at all health facilities that staff attitudes could be improved as well as more nurses and doctors in the public sector which would in turn reduce waiting times. A qualitative study in 2005 found that the 3 main priorities for improving quality of primary health care were improving the drug availability, the interpersonal skills of staff and technical care (examination, explanation of treatment and treatment outcomes) (Mashego & Peltzer, 2005). When asked how public clinic services could be improved, focus group participants in a study in the Eastern and Western Cape mainly wanted the attitudes of staff to improve and for everyone to be treated equally (Palmer, 1999).

Although it is acknowledged that staff are also on the receiving end of abuse from patients and have tremendous workloads, it is easier to target the 19 Medical Practitioners and 106 Professional nurses than the 100,000 population that they provide for (Day & Gray, 2002) for example. Good management and teamwork are 2 of the key factors in achieving this (Couper & Hugo, 2002) and in terms of the Andersen Behavioural Model, staff attitudes can therefore be seen as highly mutable. Although staff attitudes, particularly in the public sector were reported to be lacking by respondents in this study, other studies have also found that good nurse

interpersonal skills may sometimes compensate for other shortfalls in quality (Haddad and Fournier, 1995; Palmer, 1999). Furthermore, positive experiences with primary care, particularly initial experiences, have been associated with staff having caring attitudes, being willing to listen and being competent (Modiba *et al.*, 2001; Couper *et al.*, 2004), being part of the community and therefore understanding patients' problems (Mills *et al.*, 2004). In a study exploring interpersonal relations between health workers and clients in South Africa (Fonn & Xaba, 2001), nurses reported that not having a positive role model to guide them contributed to the uncaring attitudes displayed towards their job and patients. In the North West Province, nurses at an NGO PHC clinic indicated that the attitude and leadership style of their Matron helped them to empathise more with patients (Couper *et al.*, 2004). A survey of fixed primary health care facilities in the Gauteng Province (Health Systems Trust, 2004) found that only 36% of clinics received written feedback from supervisory visits, although higher than 29% nationally.

Improvements in the quality of care between 1999 and 2004 include the launch of the Patients' Rights Charter in 1999, the introduction of a National Complaints' Centre, the implementation of internal and external quality care assessments including regular patient satisfaction surveys at hospitals, a national PHC supervision system including a supervisor's manual and training as well as awards programmes for health workers (Department of Health, 2004a; 2004b; Andrews & Pillay, 2005).

For TMP caregivers, a particularly salient issue is that of the integration of traditional and Western medicine, if not in the organisational sense, at least in terms of clinic and hospital staff showing more respect towards traditional medicine and cultural beliefs. Health systems are culturally sensitive and traditional beliefs and practices are usually dismissed as ignorance instead of being incorporated into health education, since not all traditional treatments are harmful. Furthermore, traditional healers must be valued by patients for reasons other than cost, given the free basic biomedical services provided by the Government. In an urban study in Durban (Mander, 1998) the main reasons given for using traditional medicines were because of a strong belief in the use of traditional medicine and the fact that Western health care providers could not cure certain illnesses (Mander, 1998). The same reasons were found in this utilisation-based survey in Johannesburg and Soweto although accessibility was another strong reason cited for having taken a child to a traditional healer rather than a government facility, mainly by caregivers who lived on the outskirts of Johannesburg.

Although not explored in detail in the current study, an area which warrants further research is that of the communication between the health care provider and the patient (part of the medical process). This is a particularly salient issue because it is the institutional factor most likely to impact on health behaviour (Gochman, 1997b). In terms of medication instructions, encouragingly, all caregivers in the study reported that the doctor or chemist explained how to use the medicines clearly. Similar results were found when examining patient medicine education in KwaZulu-Natal, where 91% of public hospital patients reported that the pharmacist made sure

they knew how to take the medication (Salmon *et al.*, 2003). Patients were less happy with doctors' (57% satisfied) and nurses' (39% satisfied) explanations of medications (Salmon *et al.*, 2003). When the medicine was taken away for a moment Salmon and colleagues (2003) found that the patient could not answer what it was for or how often it should be taken. Therefore patients may not always be totally honest when answering this question. In some cases communication between a doctor and a patient may be hampered by linguistic differences (Ngubane, 1977). However given the multilingual setting, one PHC nurse did not feel this was a major problem, explaining that "You make them understand - you speak in Zulu, Xhosa, Sotho. If they are Coloureds you speak in English." (Nurse5 – PHC clinic). A common language and culture however does not necessarily result in understanding (DiMatteo, 1997). Ellis' (2004) book on how to communicate with the African patient in South Africa is an excellent reference for all health care professionals wishing to develop these skills.

Similar to findings in previous research (Hall *et al.*, 1988; Roter & Hall, 1992; Ley, 1989), caregivers in this study indicated that they wanted their child to be examined thoroughly and to be given an explanation of what is wrong. According to Nurse 5 however and similar to findings in other research (DiMatteo, 1997; Roter & Hall, 1992; Barnlund, 1976), typically caregivers do not ask many questions or seek clarification when they do not understand. Although more work would have to be done in this area in the South African context, other studies have found that this discrepancy may be due to the subjectivity of the illness experience (Kleinman, 1988), the patient's potential anxiety as well as the medical jargon used, consultation time limits and differences in physician-patient knowledge and power (DiMatteo, 1997). Patients may also lack skills in articulation or not want to take up too much of the doctor's valuable time. When Nurse5 was asked why she thought some patients did not follow instructions she put it down to negligence, fear, pride and lack of concentration as a result of stress. Patients have been found to recall instructions much better however if the doctor is friendlier and when they are involved more in the consultation, (Heszen-Klemens & Lapinska, 1984) although this was beyond the scope of the current study.

6.1.6.2 Outcome of treatment

The final 'branch' of the decision tree is the outcome of the treatment – whether the child gets better or not. Because many illnesses are self-limiting and would disappear regardless of treatment, 'outcome' can be difficult to measure (Haug, 1997). In addition, discrepancies between a Western practitioner's definition of therapeutic efficacy and that of a patient's may lead to patient dissatisfaction and subsequent non-compliance, withholding information, misuse of health services or the use of harmful or ineffective alternative treatments (Kleinman, 1980).

Outcome may be measured through the efficacy of the treatment and subsequent speed of recovery (Haddad *et al.*, 1998). According to Good (1987a), choice of a treatment or provider, although restricted by accessibility or cost, is primarily determined by its perceived value or expected benefits which may also be labelled 'outcome variables'. The HBM including the Social

Cognitive models, emphasise *value expectancies*, in which a subjective value and probability of occurrence is assigned to an outcome (Strecher & Rosenstock, 1997). In the case of medicines, qualitative interviews in the present survey found that stronger medicines (usually a reflection of cost) were assigned a higher 'efficacy' rating. Free Panado from the public clinics which in some cases was believed to be lighter in appearance and therefore diluted was perceived to be weaker than the Panado you could buy over-the-counter or that given by the hospitals. Focus group results from the Second Kaiser Family Foundation Survey also described how medicines were believed to be watered down to make them go further (Smith *et al.*, 1999). Similar results were found in a case-study in the Northern (Limpopo) Province where an NGO clinic bought ready-mixed medicines whilst the Government PHC clinic mixed theirs themselves (Couper *et al.*, 2004). This contributed to the perception that medicines were diluted in the Government clinic. Elsewhere it has also been found that foreign medicines or medicines that are well-packed are usually perceived to be more expensive and thus more effective than the generic or local versions usually found in primary health care facilities (Nyamongo, 2002; van der Geest & Reynolds White, 1988; Sussman, 1988; Ugalde, 1988).

Some medicines such as the Dutch medicines or traditional medicines were believed to be very strong and if not used appropriately, or if children were not strengthened accordingly, these medicines could be harmful, even if others were using them and came into contact with the child. In other settings such as Mauritius (Sussman, 1988) for example, herbal remedies are not perceived to be as strong and therefore as harsh on the body as pharmaceuticals for long-term treatment. The positive results for many using traditional medicine is witnessed though the continued use of traditional medicine in highly urbanised societies offering free primary health care (Swantz, 1990; Bibeau *et al.*, 1980; Fassin *et al.*, 1988; Edwards, 1986; Longmore, 1959; Press, 1978; Janzen, 1978; Warren, 1978), including Johannesburg and Soweto.

'Belief' variables in the South African context relate much to the medicine being used and its ability to harm, prevent or heal (the outcome of treatment). "Beliefs about illness, the central cognitive structure of every health care system, are closely tied to beliefs about treatment." (Kleinman, 1980:p.90). In some cases, where there is no logical reason (from a Western perspective) why a treatment might help, for example where grey beads, *izinyo lehashe* (horse's tooth), black velvet or copper wire necklaces are worn by the child to help teething, but it is 'belief' or faith in the treatment which is said to influence the outcome. "The motivation to obtain medicines is not simply that they are powerful, but that people believe them to be so." (van der Geest & Whyte, 1989:p.348). This is also true of Western medicines and health care providers. According to de Wet (1998a) the key ingredient in Dutch medicines is faith that they will work.

6.2 Hypothesised synchronic¹ and diachronic² representation of health-seeking for children under 6 in Johannesburg and Soweto

The following diagrams provide a summary of all the hypothesised pathways of influence in this South African context based on 2-way relationships between variables as well as qualitative data. A summary of these pathways is necessary in order to understand what motivates caregivers to make certain health care decisions, given their own background characteristics, characteristics of the child, the illness and the health care provider. Of the providers selected, it should be noted that caregivers may choose to access 2 providers concurrently (e.g. home treatment and OTC medicine; Church and the local PHC; TMP and public hospital). From the results in this study however, caregivers indicated that they generally preferred to use providers and treatment sequentially.

In Figure 6.3, a caregiver will first decide whether the health problem requires allopathic medicine 'A' or traditional medicine 'B'. This decision is influenced by her beliefs as well as the beliefs of a partner or relative if they are strongly involved with the care of the child. These beliefs are influenced by education and experience which also depend on the age of the caregiver and the how many children she has had. Beliefs are also influenced by a caregiver's upbringing and their family's beliefs and culture. A caregiver's education and experience as a caregiver as well as the child's general state of health will determine if the illness is perceived to be severe or not.

Figure 6.4 follows the decisions of a caregiver if the illness is believed to require allopathic medicine and is perceived to be severe (labelled C in Figure 6.3). A caregiver's socio-economic status (SES) will affect whether money is available or not. If money is available and a local provider or treatment is accessible (indirectly influenced by knowledge and education), experience with a provider in the past or characteristics of the provider will influence the provider chosen. If money is available but a local provider or treatment is not accessible then a caregiver may travel further to a different PHC, a public hospital or a private provider. If money is not available, the same pathways apply, although private providers will not be an option. A child's age may affect the afore-mentioned options e.g. a Paediatrician may be preferred over a GP or a GP may be preferred over the PHC clinic for younger children. Caregiver beliefs will once again determine expectations, how fast the medicine should work for example, or success from previous treatments. This will in turn affect compliance and the health outcome. A positive or negative health outcome after treatment will determine whether the child exits the decision tree or whether they re-enter at the beginning. Because symptoms, perceived severity and personal circumstances may have changed, new advice given, and the caregiver will have formed a judgement about the quality of the previous provider, they may not necessarily follow the same pathway (Nyamongo, 2002). In some cases a cost-benefit analysis may be undertaken, for example, a caregiver might forego transport and distance costs in order to obtain better treatment

¹ Synchronic studies look at the use or non use of a particular treatment or provider.

² Diachronic studies look at the order in which treatments or providers are used.

– whether this be more medication, better medication, a thorough examination, more helpful staff or to see a doctor instead of a nurse. This rational deliberation of costs and benefits (subjective expected utility theory (Edwards, 1954)) forms much of the basis for the Social Cognition models. On one hand it is argued that not all benefits and barriers are processed consciously (Ogden, 2004) and on the other hand it is argued that care-seekers are rational decision-makers whose choices are affected by the knowledge and resources at their disposal (Ryan & Martinez, 1996).

Figure 6.5 follows the decisions of a caregiver if the illness is believed to require allopathic medicine and is not perceived to be severe (labelled D in Figure 6.3). A caregiver's social networks, education and experience of different illnesses will affect her knowledge of home treatments. If she does know about home treatments and these are available, she will try this option which will either lead to a positive outcome (exit health-seeking process) or negative outcome (return to point A or try alternative B). If no home treatments are available or if the caregiver does not know about home treatments she may consult a health care provider. This will depend on the money and support available to her, as well as whether treatment is available and accessible locally. If no money is available this reduces the options available.

Figure 6.6 follows the decisions of a caregiver if the illness is believed to require traditional medicine and is not perceived to be severe (labelled E in Figure 6.3). The pathways are similar to those of non-severe illnesses requiring allopathic medicine but differ in their treatment options. For those caregivers who have money available, extra options are available including the *muthi* shop and the chemist. As some TMPs provide free treatment to the very poor, they are included as an option for those who have no money. Western health care providers have also been included given that in some cases they may be used to cure the symptoms of the illness, with the TMP then being visited to cure the cause.

Figure 6.7 follows the decisions of a caregiver if the illness is believed to require traditional medicine and is perceived to be severe (labelled F in Figure 6.3). In this context, a provider would rely less on home treatment and more on advice from an expert, whether this be a traditional healer, a herbalist in a *muthi* shop or a faith healer at church. For caregivers with no money available options are again reduced. Depending on the outcome of the treatment, a caregiver will exit the health-seeking process (positive outcome), return to point B or try alternative A (Western treatment or provider) to heal the symptoms in the case of a negative outcome.

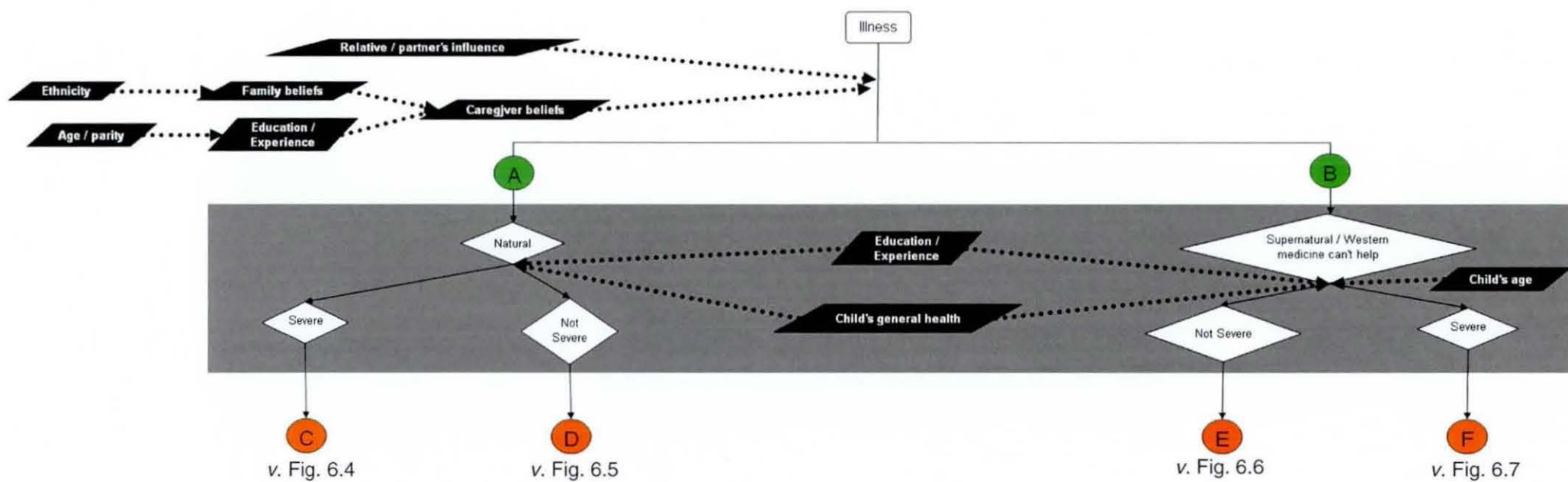


Figure 6.3: Choosing between health care paradigms

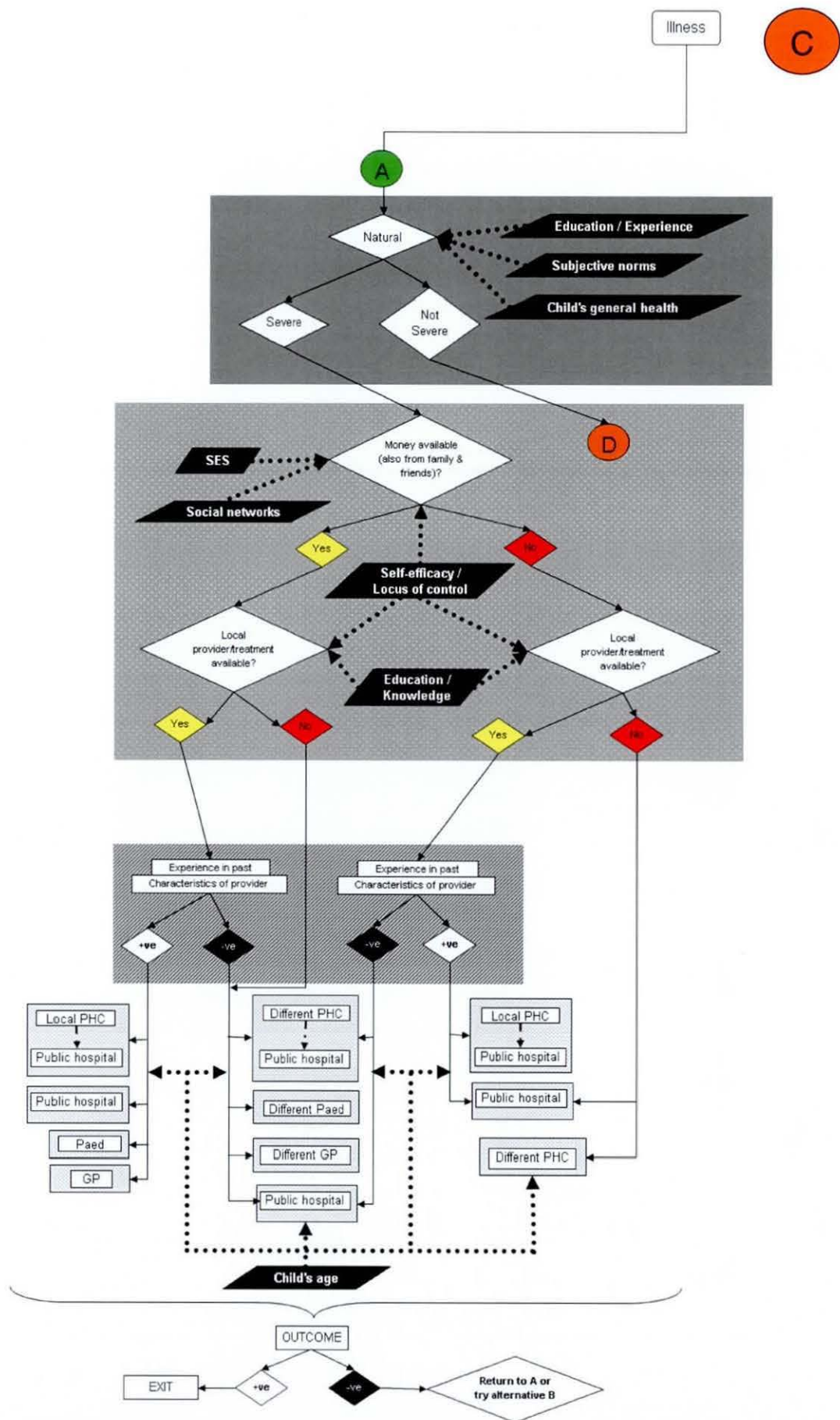


Figure 6.4: Option C: Health-seeking behaviour for natural illnesses perceived to be severe



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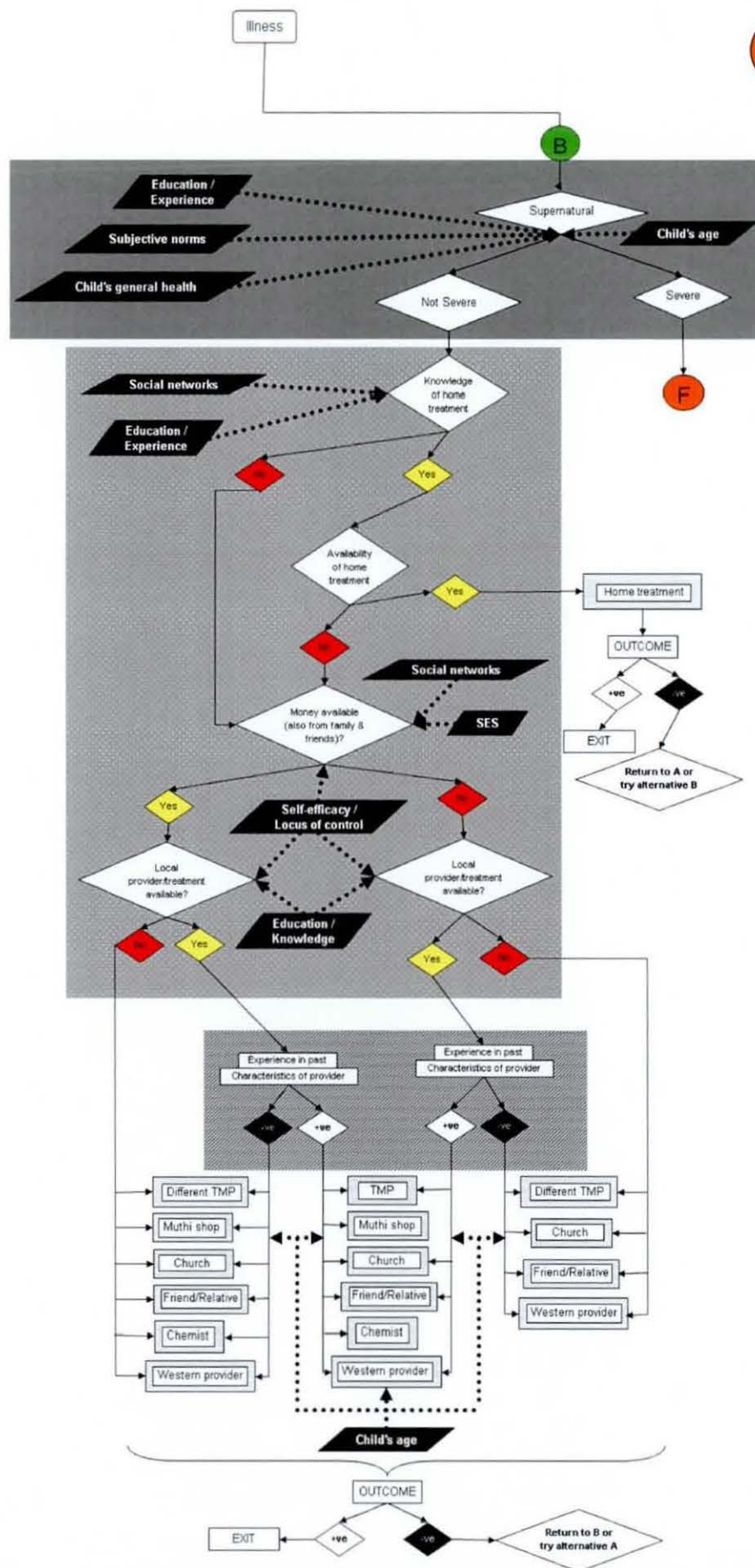


Figure 6.6: Option E: Health-seeking behaviour for supernatural illnesses / those which Western medicine cannot help and which are not perceived to be severe

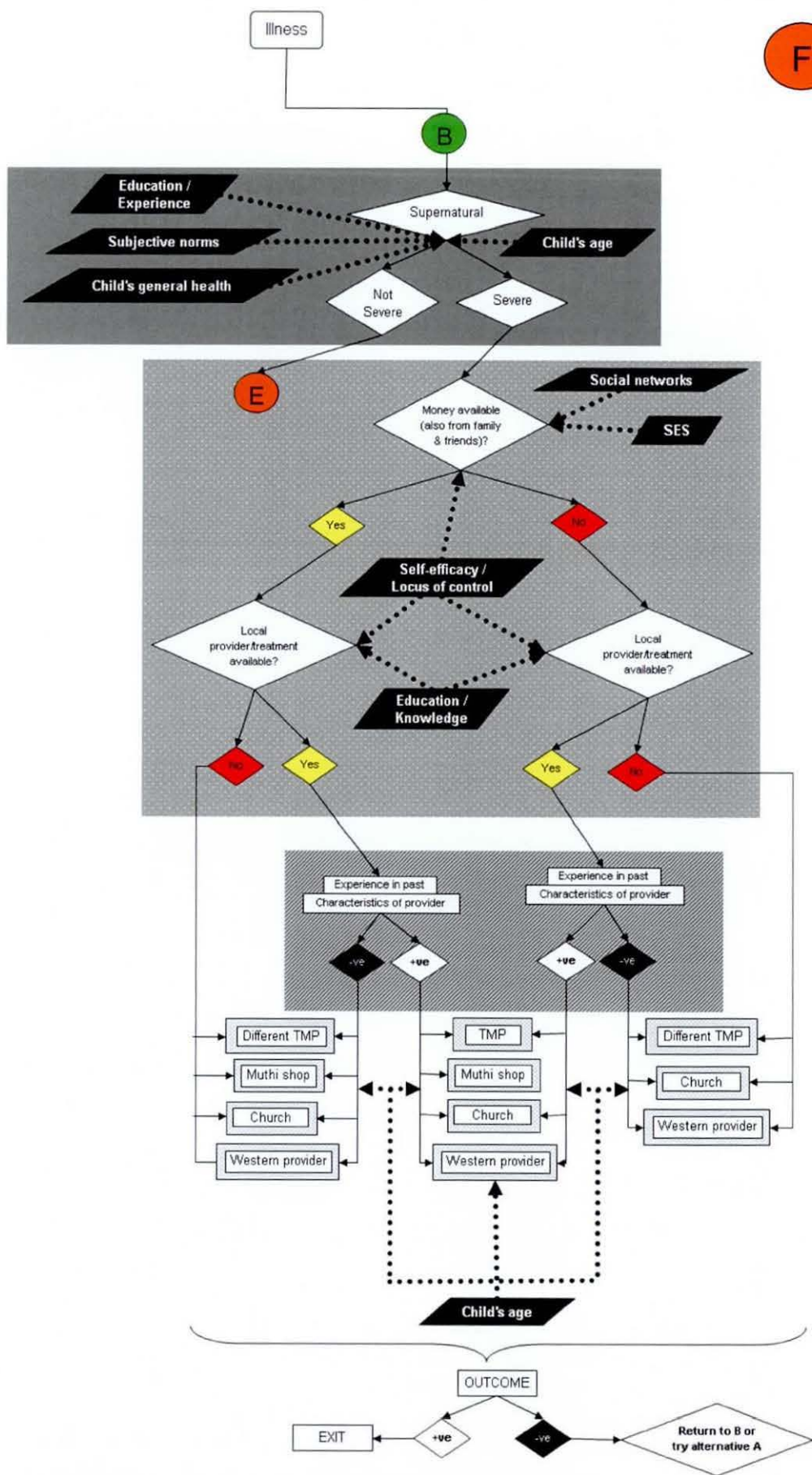


Figure 6.7: Option F: Health-seeking behaviour for supernatural illnesses / those which Western medicine cannot help perceived to be severe

6.3 Treatment for 10 childhood illnesses

Caregivers in the quantitative survey were asked hypothetically how they would respond to 10 common child health problems: diarrhoea, coughs, fever, vomiting, constipation, colds / flu, *inyoni*, *ibala*, crying and teething. *Inyoni* and *ibala* were included in this survey as locally defined illnesses. Because children were presenting at the health care providers with a wide range of health problems, the hypothetical method was used in order to obtain a larger set of responses for each illness. Caregivers interviewed at each of the 4 different health care providers were therefore asked what they would do or where they would go first for each illness, and then if the child did not get better what they would do.

In patterns or hierarchies of resort, the trend in health-seeking behaviour in many parts of the world is to begin with home remedies or the lowest cost treatment and proceed to more expensive treatment options if the illness persists or worsens (Cosminsky & Scrimshaw, 1980; Green, 1999; Sussman, 1988; Nyamongo, 2002; Ryan, 1995, 1998; Kroeger, 1983; Weller *et al.*, 1997; Hammond-Tooke, 1989; Sussman, 1988; van der Geest, 1988). Results from this study (v. Table 6.4) indicate that caregivers will usually start with home treatments particularly for diarrhoea, vomiting, fever, constipation and crying.

Table 6.4: Top 2 choices for first provider sought and second provider sought for 10 common childhood illnesses

Health problem	Provider 1		Provider 2	
Diarrhoea	Home	83%	PHC	54.9%
			Paediatrician	14.6%
Cough	OTC	35.4%	PHC	48.5%
	PHC	25.2%	Paediatrician	15.5%
Fever	OTC	38.3%	PHC	43.2%
	Home	30.6%	Home	20.4%
Vomiting	Home	40.8%	PHC	42.2%
	Public provider	26.7%	Paediatrician	17.5%
Constipation	Home	55.8%	PHC	46.1%
	OTC	25.2%	Home	12.1%
Colds / Flu	Public provider	35.4%	PHC	45.6%
	OTC	28.6%	Paediatrician	15.5%
Inyoni	TMP	36.9%	TMP	44.2%
	OTC	27.7%	PHC	19.9%
Ibala	TMP	52.9%	TMP	47.6%
	Relative	17.9%	Public provider	23.3%
Crying	Home	49%	PHC	38.8%
	OTC	17.9%	TMP	21.8%
Teething	OTC	72.8%	OTC	48.5%
	TMP	11.7%	Public provider / TMP	16%

Over-the-counter medicines were commonly used in the case of coughs, fever and teething. For vomiting, colds and flu a high proportion of caregivers would also consult a public provider as their first choice and in the case of *inyoni* and *ibala* the expertise of a TMP was primarily sought. If the health problem did not get better or got worse the main second-choice providers were the PHC, paediatricians and TMPs.

Because home treatment remains an important source of health care, it is therefore important for the patient and the health care provider to be able to openly discuss home treatment or self-initiated medication (Maiman *et al.*, 1986) without fear of reprisal on the part of the patient. In this study, qualitative interviews revealed that caregivers preferred not to tell a nurse she was giving her child Dutch medicines or traditional medicines for fear of retribution. Interviews with nurses confirmed these views.

As more and more people gain access to the internet and other sources of information, self-diagnosis and treatment may even increase as a first line of treatment (Haug, 1997). An interview with a nurse at a private hospital revealed how caregivers often cite what they have seen on the internet and other qualitative interviews revealed how caregivers learn about home remedies from friends and work colleagues. If a caregiver decides to treat the child at home, they are however bound by knowledge and experience as well as the availability of kin and friends for advice or the availability of the treatment itself.

Studies have found that the use of OTCs was higher in smaller families, amongst mothers of a high socio-economic status, older mothers, mothers with older children, mothers who perceived their child to be more vulnerable to ill-health, mothers who believed in the efficacy of OTCs (Maiman *et al.*, 1986; Jefferys *et al.*, 1960; Maiman *et al.*, 1982) and mothers with higher levels of education (Kloos *et al.*, 1988; Bland *et al.*, 2004). In Kenya, Molyneux and colleagues (2002) found that 46% of urban mothers had shopped for OTC medicines whilst only 13% reported taking action within the household.

Although the use of OTC medicines in this study varied by the illness being treated, overall the higher SES respondents were more likely to use OTC medicines and less likely than other groups to use home treatments. According to Bland and colleagues (2004), more educated women are more likely to administer oral medications because they may be influenced more by marketing strategies of manufacturers and by their peer group. However, in the case of the caregivers from the private clinic, this may also be because they can afford to do so. In the case of coughs, colds and flu for example, although a large proportion of high and medium SES caregivers will administer OTC medicines to their child, the first main choice of provider for the lowest SES group is a public facility where medicines are free. Overall the TMP group who had the lowest SES overall also used the least OTC medicines. OTC medicines were however used by at least 20% of the lower income groups for constipation, coughs, fever, colds / flu, *inyoni* and teething.

In line with the WHO's Integrated Management of Childhood Illnesses (IMCI) and the importance of 'self-care' in primary health care, it was encouraging that the majority of caregivers interviewed, regardless of their socio-demographic profile used some form of home treatment first for diarrhoea, most often an oral rehydration solution in line with the WHO recommendations (WHO/CAH, 1997). In an earlier household survey in South Africa (Hirschowitz, 1995b), although awareness of ORS was observed to be relatively widespread, lower SES individuals (as measured by income, education, dwelling type and household overcrowding) were less aware. In contrast, this study found a higher proportion of low SES caregivers than high SES caregivers who would administer some form of ORS in the event of diarrhoea.

Although ORS can be made at home, 13 caregivers reported using the packets of ORS (7 from the private clinic). Only in a small minority of cases where children are severely dehydrated is the exact balance of electrolytes needed and the packets of ORS are expensive substitutes for home solutions (MacCormack & Draper, 1988). In contrast the incorrect dosage of salt and sugar in the home-made solutions may be dangerous or ineffective (Lukmanji, 1988; Ekanem, Akitoye, Adedeji & Salako, 1993; Sena, Maranhao Hde, Moraes, 2001; Matsitukwa & Pisacane, 1988; Nyatoti, Nyati & Mtero, 1993). In a study in Jamaica it was found that less than a third of caregivers understood the role of oral rehydration salts. Some misinterpreted oral rehydration salts to be laxative salts to purge the system. A similar question was asked in relation to the intravenous drip in this study in South Africa and overall 16 caregivers thought that the drip would stop vomiting or diarrhoea (4 caregivers from the public hospital, 4 from the PHC clinic, 1 from the private clinic and 7 from the TMPs) whilst 2 caregivers thought that it cleaned the system. In Jamaica, laxatives are sometimes used when the child has diarrhoea to cleanse the body (MacCormack & Draper, 1988). A few of the traditional remedies mentioned in this study were emetics or purgatives, serving the same purpose of cleansing the child's system and may leave the child even more dehydrated.

Vomiting was perceived as being more serious than diarrhoea amongst all respondents given that a large proportion, particularly those at private clinics would first go to a health care provider rather than trying home treatment. In Jamaica, MacCormack and Draper (1988) reported chicken gizzards to be used as a means of stopping a child from vomiting using the concept of a transfer of qualities from a strong gizzard to a weak or queasy stomach. In South Africa this study identified a similar practice to stop a child vomiting.

Although caregivers using private primary health care (e.g. GP) were not able to be interviewed in this study, results from this study show that some low SES caregivers will also use private primary health care for certain illnesses or if the condition does not improve. A small proportion of caregivers interviewed at non-private providers for example, reported that they would seek help from a private provider particularly if their child is vomiting, has fever or cold / flu and the condition does not improve. Previous studies in South Africa have also found private sector use amongst

low-income groups, including those without medical aid (South Africa Labour Development Research Unit, 1994; Wade *et al.*, 2003; Statistics South Africa, 2002).

In terms of public hospital use, overall compared to other caregivers, higher proportions of respondents at the public hospitals reported that they would use a public hospital if the child's illness did not improve. This was particularly the case for coughs and vomiting. Having recently experienced the benefits of public hospital treatment compared to public primary care may have influenced these results. A very large proportion of public hospital caregivers compared to other caregivers had reported that they thought the public hospital was the best provider in terms of affordability. Another factor may be the child's age as studies elsewhere have found that the younger the child, the more vulnerable they are likely to be perceived and therefore given formal medical care (Goldman & Heuveline, 2000; Kleinman, 1980; Chrisman & Kleinman, 1983; Gesler, 1979a). Forty-five of the respondents interviewed at the public hospitals were attending with a child under 6 months of age. Eight of the 13 (in the case of coughs) and 7 of the 13 (in the case of vomiting) had a child under the age of 6 months. These were mostly young mothers in the under 25 and 25 to 34 age groups.

As with the Logan (1988) and Bland *et al.* (2004) studies, respondents were usually quite specific about which brand of OTC that they used. Panado for example, an analgesic syrup, was widely used by respondents in the survey, not solely for fever. It was also used for vomiting, for coughs and 49 caregivers reported using it if their child was crying. As it was reportedly the most common paediatric medicine given by public clinics, some caregivers may use it as a 'fix-all' remedy, particularly if they have no other medicine available. Other OTC medicines used for crying include various Dutch medicines. As with other study findings (de Wet, 1998a; Bland *et al.*, 2004; Richter, 1994) the benefits of these medicines may be partially caused by sleep-inducing properties of the alcohol in the medicine. Although the administration of these non-prescribed medications in small doses may not be life-threatening, according to Bland *et al.* (2004) they may prevent appropriate health-seeking behaviour by masking symptoms. Although exclusive breast feeding rates are low in South Africa (Department of Health *et al.*, 1998), Bland and colleagues (2004) warn that giving non-prescribed medications whilst exclusively breastfeeding also contravenes the WHO (1991) definition of exclusive breastfeeding.

Traditional treatments used for crying mostly involved burning some form of incense. This form of treatment signifies that crying may be interpreted as a sign that evil spirits are affecting the child. Caregivers revealed that a child crying may also mean that the child does not belong to the caregiver's husband or partner although this was not found in the literature. Even if untrue, very superstitious caregivers may therefore try to prevent their child crying a lot for fear of accusations of infidelity. For those caregivers living in over-crowded conditions, caregivers of crying children may be berated.

Focus group results and the hypothetical questions revealed that medicines are not always used as intended and some products such as household detergents have become medicinal. Side-effects such as pain or the efficacy of a medicine such as strength are culturally constructed and the way medicines are used may therefore vary (Melrose, 1982; Etkin, 1988, 1992; van der Geest & Whyte, 1989). Examples from this study include the use of Baby's Own, an antacid and mild laxative. This was spoken about by several mothers as an excellent treatment for teething if the tablets were crushed and rubbed on the baby's gums. Given that teething is associated with diarrhoea the use of a mild laxative may aggravate the diarrhoea. The same is true of the antacid Muthi Wenyoni which 63 caregivers reported they would use if their child had *inyoni*. Muthi Wenyoni had been used by half of the caregivers in de Wet's (1998b) study to get rid of the green stools, or dirt in the child's stomach associated with *inyoni*. Although the active ingredients in the antacid are only harmful if consumed in large doses, using an antacid for diarrhoea or to clean the child's system may leave the child dehydrated. In the de Wet study these mothers were young, unmarried, had secondary education and were not particularly religious. In the present study, 57% of caregivers who would use Muthi Wenyoni to treat *inyoni* had completed secondary education or had higher education, 46% had medium or higher SES and over half belonged to an African Independent Church (including ZCC), suggesting that this practice is not confined to lower SES individuals.

Brooklax, a chocolate-flavoured laxative not recommended for children under 6 years was reportedly used by some caregivers for their children under 6, albeit in smaller doses than an adult would receive. If children's medicines were not readily available (e.g. Panado syrup), in some cases caregivers would also adjust the dosage of medicine intended for adults or older children (e.g. Panado tablets). The use of these products did not appear to be wide-spread in the study but it is clear that medicines are not always used appropriately.

Enemas were widely used in this sample, mostly for constipation but in some cases they were reportedly used for diarrhoea or to clean the child's system out. An enema commonly mentioned was that of Sunlight soap (the original one) in water which may cause irritation to the child. This type of paediatric enemata was also found to be used by caregivers in KwaZulu-Natal (Bland *et al.*, 2004). In terms of what a caregiver would do if her child had constipation, of the 57 caregivers who would use a '*sputi*', 22.8% of their children were under 6 months and in total 60% were under 24 months. If enemas are to be given at home, they are generally not used in children under 2 years of age and advice should first be sought from a health care provider (Schmitt, 1991). The only enemas that are completely safe in children are mineral oil and normal saline enemas. Normal saline enemas must be made at home (2 level teaspoons of table salt to a quart of lukewarm distilled water) and the amount administered should be adjusted according to the age or weight of the child. Soapsuds, hydrogen peroxide, or plain water as an enema should not be used as these can be dangerous. Herbal enemas have also been reported to have negative health effects (Moore & Moore, 1998; Wittenberg & Bonnici, 1998; Kibukamusoke & Coovadia, 1984 as cited in Bland *et al.*, 2004). Although the ingredients may not always be toxic, an incorrect dosage may make them so (Popat *et al.*, 2001). Through informal interviews with TMPs

and caregivers, the author found that in Johannesburg and Soweto one method of measuring traditional medicine was referred to as *ilungu* or *ilunga*, meaning the distance between 2 finger joints or the tip of a finger, regardless of the size of the container. Continuous use of enemas irritates the anus and can also cause the child to hold back bowel movements, therefore this common practice identified in the study is potentially harmful, especially in a child that is already sick.

More widely used were the Dutch medicines and it was very clear from this study and previous studies conducted by de Wet (1998a) in Soweto that caregivers have more uses for these medicines than those printed on the accompanying instructions. Although not all Dutch medicines were administered orally, some Dutch medicines used by caregivers are not intended for use in young children. In many instances they may be used as recommended by friends and relatives, particularly if no instructions are found on the box.

Table 6.5 provides a comparison of caregivers' use of Dutch medicines in this sample, with de Wet's (1998a) Soweto survey of Dutch medicines used by caregivers for their child under 6. The most popular *Stuips* in de Wet's study were Haarlemensis (92.3%), Stuijdruppels (69.2%), Groen Amara (47.9%) and Entressdruppels (46.7%). In the current study the same ordering of popularity was found, although these 4 were reported to be used less used than by de Wet's study participants – Haarlemensis (66%), Stuijdruppels (39.3%), Groen Amara (30.6%) and Entressdruppels (29.6%). In both surveys Haarlemensis was the most popular Dutch medicine reported to be used. Although the de Wet survey found much higher proportions of Sowetan caregivers using Dutch medicines, this was especially true for Duiwelsdrekdruipels, Rooilaventel and Wonderkroonessens. One reason for the difference in levels of use between the 2 surveys is that whilst de Wet's study was a population-based survey in a fairly homogenous setting, the present study was a utilisation-based study which included potential low-users of the Dutch medicines (e.g. at the private clinic and the TMP). The PHC caregivers interviewed at a clinic in Soweto did report the highest use of Dutch medicines in the sample and were therefore more similar to de Wet's sample.

In 1998 over 80% of mothers combined 2 or more Dutch medicines together, most often Haarlemensis, Stuijdruppels and Groen Amara or Entressdruppels. In the present study, of those who used more than one Dutch medicine for their child, just over half mixed Dutch medicines together, particularly caregivers at the PHC. The TMP caregivers had the highest proportion of caregivers who did not mix *Stuips*. The most commonly mixed Dutch medicines were Stuijdruppels and Haarlemensis. These were mostly used for protection.

The main reasons for giving children under 6 Dutch Medicines in both surveys was to protect and strengthen the child from inhaling bad spirits, being frightened by evil spirits, childhood illnesses such as *inyoni* and so that they would not be affected by other people using strong medicines (de Wet, 1998a). Similar to de Wet's respondents, caregivers in the present study also mostly rubbed

Haarlemensis and Stuijdruppels onto the child or used them in the bath. Some children were also given drops in their milk.

Table 6.5: Comparison with de Wet's 1998 Soweto survey of Dutch medicines used by caregivers for their child under 6

Dutch medicine	de Wet 1998 (%) (n=211)	Overall (%) (n=206)	PHC (%) (n=50)	Pub hosp (%) (n=53)	Pvt clinic (%) (n=50)	TMP (%) (n=53)
Balsem Kopiva	2.4	6.3	10.0	5.7	8.0	1.9
Behoedmiddel	18.9	13.1	12.0	11.3	30.0	0.0
Borsdruppels	18.3	14.1	22.0	9.4	18.0	7.5
Duiwelsdrek	0.6	4.4	8.0	5.7	4.0	0.0
Duiwelsdrekdruk	26.0	3.9	6.0	1.9	8.0	0.0
Doepa	30.8	25.2	28.0	18.9	20.0	34.0
Entressdruppels	46.7	29.6	34.0	24.5	36.0	24.5
Essens Groen						
Amara	47.9	30.6	38.0	32.1	34.0	18.9
Haarlemensis	92.3	66.0	82.0	64.2	54.0	64.2
Jamaika Gemmer	1.8	4.9	2.0	3.8	12.0	1.9
Krampdruppels	16.6	6.8	4.0	5.7	16.0	1.9
Paragorise	1.8	0.5	0.0	0.0	2.0	0.0
Rooilavent	24.9	9.7	14.0	7.5	18.0	0.0
Staaldruppels	1.2	2.9	6.0	1.9	4.0	0.0
Stuijdruppels	69.2	39.3	56.0	32.1	34.0	35.8
Turlington	0.6	1.5	4.0	0.0	2.0	0.0
Versterkdruppels	4.1	1.5	2.0	1.9	2.0	0.0
Witdulsies	1.8	4.4	6.0	5.7	6.0	0.0
Wonderkroonessens	21.9	1.9	2.0	1.9	4.0	0.0

6.4 Summary

It is clear from the discussion in sections 6.1, 6.2 and 6.3 that despite its limitations, a utilisation-based survey strengthened by qualitative methods does indeed capture a wide range of health-seeking behaviours. It was hypothesised that at the heart of the decision-making lies beliefs, as defined by the caregiver's world-view, their religion, family influence and beliefs and their social networks. These beliefs were seen to affect how characteristics of the child may make them more vulnerable to certain illnesses and as well as how illness characteristics may be perceived and what treatment should follow. Barriers to how these beliefs controlled illness behaviour were indeed found in the form of socio-demographic characteristics of the caregiver and the household, enabling factors and characteristics of the provider. Furthermore, qualitative results in particular

revealed how previous experiences and the ensuing outcome of treatment may reformulate caregiver beliefs.

Important differences were found in the caregivers' health-seeking behaviour at the 4 different providers. These included how medicines were used, beliefs in faith healing and traditional healing, levels and types of home treatment for different illnesses, as well as provider preferences when an illness first starts and if the child's condition does not improve.

Important similarities were also found between groups however in terms of the importance of beliefs in their choices, the influence of grandmothers in children's health care, the widespread belief in the *Abantu* illnesses *inyoni* and *ibala*, the prevalent use of Dutch medicines, Panado Syrup, Muthi Wenyoni and enemas for children under 6 and high levels of primary schedules of immunisation. In addition, common perceptions of different levels of public sector care, as well as differences in public and private sector care were also found.

When interpreting these results however, it is necessary to take into account the limitations and methodological issues encountered during the study and consider how future studies may be improved, as well as what these results might mean for policy-making. These issues are reviewed in the following Chapter 7.

7. Study limitations, future research, policy recommendations & conclusions

This chapter begins with an overview of the limitations and methodological issues experienced during data collection and analysis (7.1), followed by recommendations for future research (7.2), policy recommendations (7.3) and the conclusion (7.4).

7.1 Limitations and methodological issues

Limitations and methodological issues will be discussed in terms of the qualitative (7.1.1) and the quantitative (7.1.2) approaches used in this study. Such issues are important when considering the validity of results which are easily affected by biases and errors in the study design, sampling, and interview process.

7.1.1 Qualitative limitations and methodological issues

The main qualitative limitations and methodological issues which will be discussed in this section include obtaining permission from and establishing contact with health care providers (7.1.1.1), time constraints (7.1.1.2), linguistic constraints (7.1.1.3) and exaggeration bias (7.1.1.4).

7.1.1.1 Obtaining permission and establishing contact

The first challenge encountered was obtaining permission from the relevant health care facilities. This was logistically challenging, in particular identifying the correct protocols and channels for seeking permission in such a short timescale, and from very busy people. Establishing contact and gaining the trust of traditional healers was also a challenge, particularly as the same amount of time was not available to develop credibility with traditional healers as had other studies. The development of trust between researchers and healers took 8 months of regular meetings for example in the Demand for Medicinal Plants survey in Kwa-Zulu Natal (Mander, 1998), whereas in this survey this had to be achieved within a few weeks because of financial and temporal constraints.

7.1.1.2 Time constraints

Focus groups were held before commencement of the survey, however because of delays in the recruitment of a fieldworker as well as financial limitations, qualitative and quantitative work ran simultaneously which was not ideal. There was no way to resolve this issue due to financial limitations but it is acknowledged that the survey instrument and design could have been improved further had the qualitative work been carried out a few months prior to the start of the survey. Having more time to go through the in-depth interview and focus group transcriptions before conducting the survey would have allowed further development of the questionnaire and

enabled certain themes to be explored further. It would also have been beneficial to conduct more post-survey qualitative interviews or focus groups to address any remaining questions arising from the qualitative results, however the timescale available did not permit theoretical saturation. Due to temporal and financial limitations only 5 focus groups were therefore held. Questionnaires were redesigned based on what was communicated to the researcher by the fieldworker during the FGDs and IDIs rather than using the full transcriptions which were not yet available.

7.1.1.3 Linguistic constraints

Where possible the in-depth interviews were in English, but TMP, some caregiver interviews and the focus groups were in Zulu, Sotho or Xhosa. The researcher therefore had to rely on the fieldworker for quick summaries / translations as the interview / focus group progressed, which sometimes disrupted the flow of the interview. This was necessary however to aid the probing of answers which would potentially be useful in answering the study's research questions and designing the quantitative questionnaire. Within the given timescale, there was no easy way to resolve this issue as the fieldworker was not as familiar with the research questions as the researcher, and even with training, the fieldworker required input from the researcher. The researcher and fieldworker learnt to work together to minimise disruption. As the researcher became more familiar with Zulu, Sotho and Xhosa terms, it was easier to follow the interviews and know when it was appropriate to probe for further information.

Because new questions arose as the in-depth interviews and focus groups progressed, this did not allow translation / back-translation of questions for the interview guide for the qualitative fieldwork. The fieldworker was good at ad-hoc interpreting however and soon became familiar with the contents of the interview guide. The researcher also tried to check that the question had been interpreted correctly through the summarised translation of the answer.

The translation of the use of local terms (taxonomies of disease and cultural interpretations of translations) was also a potential problem, particularly as many concepts arose from the South African world-view. The use of a local fieldworker helped to minimise this problem and one of the aims of qualitative work was to explore this issue and discuss different meanings where time permitted, with both the interviewer and the respondent.

7.1.1.4 Exaggeration bias

One methodological issue which was not surmountable was the problem of focus groups (and in-depth interviews) eliciting "dramatic accounts of what may be a banal everyday reality" (Schneider & Palmer, 2002:p.39). This was borne in mind however when interpreting the results. Clinic and hospital staff for example were judged quite harshly, in particular neglecting patients. One caregiver also described how medicines were watered down in the clinics, although clinic staff denied that this happened. The same perceptions, particularly with staff and medicines, were found in the survey results however and this supports findings from the focus group discussions.

7.1.2 Quantitative methodological issues and limitations

The main quantitative limitations and methodological issues which will be discussed in this section include sampling (7.1.2.1), safety (7.1.2.2), recruiting participants (7.1.2.3) and questionnaire issues (7.1.2.4 and 7.1.2.5).

7.1.2.1 Sampling

Although utilisation surveys reduce recall bias, thereby giving greater validity to the study results, the convenience sampling procedure and utilisation-based survey design prevent the generalisability of results to the population whence the sample came (external validity) and also increase the risk of type II (beta) error occurring because there were only 206 caregivers in the sample and not a wide enough range of providers to capture the variation in quality. Furthermore, not everyone who has an illness or medical condition consults a doctor. Neither was it possible to interview caregivers at other types of health facilities such as pharmacies, *muthi* shops or general practitioners given the faster turnover of patients / customers at these providers and because of the timescale needed to acquire a large enough sample. It would have been valuable to conduct interviews at GP surgeries, since a mixed clientele of insured and uninsured patients are usually seen and even mothers of low socio-economic status use these if they have money to spare. This was looked into but as with the pharmacies, there was no guarantee that there would be at least 6 caregivers per day to interview. In fact time was further reduced because most of the GP surgeries only opened at 10 or 11am and were closed by 4pm. Locating busier surgeries was not possible within the timescale available.

7.1.2.2 Safety

Safety limited travel to certain areas, therefore areas where 'busier' traditional healers might be found were not accessed. To overcome some of the safety limitations, the traditional healer from Orange Farm brought her caregivers and their children to the Birth to Twenty offices at Baragwanath Hospital in Soweto and they were given extra money for transport, as well as provided with some lunch. This meant that it was not easy to interview another caregiver if a child was found to be too old or if they had not recently given traditional medicine. There was also the possibility that caregivers might talk to each other about what answers they had given which might have affected other interviewees' responses.

7.1.2.3 Recruiting participants

The traditional healer from the market in Johannesburg explained that they did not have 'queues' of mothers coming to see them. Visits were sporadic and unpredictable. The only way to overcome this was to have the traditional healer arrange for the caregivers with children under 6 that she had previously treated (recently) to come to us, given that at least 6 mothers per day had to be interviewed in the time available and there was not sufficient time to search for and gain the trust of a 'busier' healer (by no means common). This introduced selection bias into the sample as both the traditional healers recruited the respondents themselves. These respondents most

likely lived in the same area, knew each other and some were possibly even related. Such sampling may have produced similar caregiver characteristics, therefore traditional healers were used from 2 very different areas in an attempt to minimise this. As the study progressed, it became clear that there was the potential to get traditional healers' friends or relatives posing as caregivers when interviewing at the traditional healers, if the traditional healer did not have enough 'recent' clients for us to interview. Mothers were therefore asked to bring their child's Road to Health Chart. In this way, it could at least be ascertained whether the mother and child were related. Getting children older than 6 years of age was also a potential problem: one child in the survey was over 6 years and their interview was not used. The age of the child could usually be checked on their clinic card, Road to Health Chart or by looking at their weight and height.

As with many facility-based surveys, operational conditions make it difficult to control the sampling procedure (Good, 1977; 1987a; Grady & Strudler Wallston, 1988). When working as a researcher in a clinic or hospital, care should be taken not to disturb tasks or timetables and flexibility is therefore needed. Furthermore, dealing with respondents with sick children requires sensitivity and patience.

The turnover of patients at the private clinics was not particularly high during our survey and sometimes it was therefore only possible to do interviews there once or twice a week. It was also difficult finding mothers at one of the public hospitals as the queues were a bit shorter than those at the other public hospital and the PHC clinic. The mothers were also a bit more suspicious and didn't want to lose their place in the queue. Fortunately, some of the nurses and doctors helped in the recruitment of participants and ensured that they did not lose their place in the queue. The way that respondents were recruited at public hospitals (those already screened and waiting to see a doctor) meant that those bypassing their local clinic would not have been interviewed. It would have been useful to have been able to interview such caregivers to find out their reasons for bypassing rather than asking others why they thought this might happen.

The last 2 mothers recruited at a public hospital were only at the hospital to pick up formula milk for their child as they were HIV-positive. These caregivers were asked about the last time that their child was ill. Three more mothers were therefore interviewed in case these interviews were not appropriate to use. These interviews were actually included in the survey because mothers use health care providers for many reasons and we wanted to reflect this in the survey.

7.1.2.4 Design, translation, piloting and administering the questionnaire

Because of delays in the recruitment of a fieldworker, this reduced the time available to pilot, change and translate the final versions of the lengthy questionnaires into Zulu, Xhosa and Sotho and they were therefore left in English (v. Appendix C and D). There were obvious problems that the fieldworker might have asked leading questions or phrased the question in such a way that would lead to biased respondents' replies. However the fieldworker recruited was multilingual and comfortable undertaking simultaneous translation. She requested that the questionnaire remained

in English because of the range of African languages used in this setting which resulted in her often having to interview in more than one language, which could include English. She was most comfortable translating from English to other languages.

Mothers from the focus groups were invited to pilot the questionnaire, further modification was needed and the questionnaire was tested again. In addition, the researcher (Natalie Spark-du Preez) has a degree in translating and interpreting, was present during all of the fieldwork and was able to guide the fieldworker, and pay close attention to the fieldworker's questions and the respondent's answers. With only one fieldworker this was achievable, although the ideal would have been to translate the interview guide into multiple languages. In the beginning when the fieldworker was still familiarising herself with the questionnaire, the researcher corrected her if she had not interpreted the question correctly and she would rephrase it. The researcher also followed the respondent's answer to see if it required further probing.

When conducting a survey with different ethnic groups, difficulties may arise if there are different names for the same illness (e.g. *hlôgwana* and *inyoni*) or different names for the same treatment (e.g. *inDawulothi* / *Kalmoes* / *iKalamuzi*; *Isiphepheto* / *Serokolo*) or different treatments with the same name (e.g. Qhuma (OTC) and *iQuma*). What was sold as '*iQuma*' for teething at a *muthi* shop was in fact '*intuma*' a species of the *Solanum* plant family. This demonstrates how easy it is to make mistakes with terminology. These were minimised by consulting several experts at the start of the fieldwork, but it is also likely that some multiple meanings were not resolved.

7.1.2.5 Questionnaire evaluation

The following issues arose whilst piloting the questionnaire and during the actual survey itself and identifying these problems is important for the design of future surveys.

7.1.2.5a Questions to be left open-ended due to the large number of potential responses

The questionnaire had to take no longer than 30 minutes to administer so that mothers with a sick child would not lose their place in the queue. The original questionnaire was pre-coded for this reason, however this approach assumes that human behaviour can be measured quantitatively (Bowling, 1997). Listing items in measurement scales may be unsatisfactory as not all answers may be pertinent to each individual and patients are more likely to report being satisfied in response to a pre-coded question (Cohen, Forbes & Garraway, 1996; Cartwright and Anderson, 1981). It soon became apparent after holding a few focus groups and piloting the questionnaire that it was not possible to capture all of the relevant answers if all of the questionnaire was pre-coded, particularly with the timescale available for piloting. Therefore certain questions were left open-ended or partially close-ended, such as symptoms, illnesses and treatments, religion, area of residence and jobs. For questions which had been pre-tested in the qualitative research, the most common responses were coded with enough space left for other answers (e.g. reason for bringing child to the health facility). Because the researcher was present during all of the interviews and carried out all the coding, this minimised loss of meaning. Future surveys in this

setting however would now be able to have lists of precoded questions based on those identified in this study and adapt these as appropriate (v. Appendix F).

7.1.2.5b Questions which needed rephrasing:

The following questions were identified as being difficult for respondents to interpret. Question B8 was identified as problematic and changed prior to the survey, E1 was reworded during the survey and questions B9, C2, C3, D5 and D6 sometimes needed clarification.

B8. How soon after birth was this child given a bottle?

This question was originally worded as 'Was the child breastfed exclusively? (Breast milk only – no other liquids or solids) If yes, for how long?' However after focus groups and discussions with key informants it was discovered that most Black South African mothers give their child water or other liquids almost immediately after birth. This question was therefore broadened to encompass all liquids, not just water by asking about when the child was first given a bottle. In future surveys, more testing would need to be done however to ensure the validity of the breastfeeding questions.

B9. Was child fully breastfed? If yes, for how long?

'Fully breastfed' in this sense was not interpreted by caregivers as breast milk and plain water but breast milk and any liquids. As seen in question B8, most South African mothers give the child water or other liquids almost immediately after birth; therefore the aim of this question was changed to find out about how long it was before solids were introduced. Sometimes the caregiver needed clarification and a further question was asked i.e. 'When did you start to feed the child porridge?' as this is what most children would be weaned onto.

C2. What are the 3 most common kinds of child health problems your child under 6 has experienced?

Although the caregiver was asked to name the 3 most common kinds of health problems her child had experienced, it was not always possible for the mother to name 3. There was therefore potential recall bias if the child was quite healthy and was not usually ill. Furthermore it became apparent that the term 'common' was difficult for some caregivers to interpret and clarification was usually necessary.

C3. What symptoms would you consider to be serious for your child's health?

Some caregivers had to be prompted (with examples given e.g. fever) about what symptoms they considered to be serious for their child's health. This should be taken into account if this question is used again in future surveys. Because of recall bias, a list of symptoms with yes / no responses to whether they are considered serious or not may also be valuable.

D5. Can you give Western and African medicines at the same time?

Informal interviews with key informants suggested that some caregivers might mix Western and African medicines, however the answer to this question by caregivers during the survey was usually 'no'. Qualitative interviews reinforced the idea that caregivers preferred to keep the treatments separate. The question format could be improved however given that 'at the same time' could either mean 'simultaneously' or on the same day. A more specific phrasing of the question would improve the accuracy of interpreting these responses (e.g. 'Is it possible to mix traditional and Western medicines together?' or 'If a child is ill can Western and traditional treatments be given on the same day?').

D6. If you give a child African medicine, how soon can you give a child Western medicine?

The way mothers interpreted this question was not very clear, as some would say that a couple of days or weeks was necessary for the traditional medicine to leave the child's system. It was not clear whether this meant that the child was not given any medicine at all for a few days or weeks. As most caregivers preferred not to mix traditional and Western medicines, this question may have limited value. It does however leave questions which may be better answered with the help of qualitative methods i.e. what situation are mothers thinking of when they interpret this question (e.g. non-severe traditional illness).

E1. If money was not a problem, where would be the best place to go to make sure that your child makes a good recovery? Why would this be the best?

As the survey progressed, this was rephrased by the fieldworker herself to 'If you won the lottery...' since many mothers in the private clinics did not have financial problems and some caregivers did not understand the hypothetical concept of money not being a problem. For this question caregivers were shown the picture card of different health care providers. 'Best place' was difficult to interpret because it would depend on the illness and its severity. A future survey would need to investigate how caregivers interpret this question and think about asking it for specific conditions as answers were found to be dependant on the symptoms being treated.

7.1.2.5c Questions which did not contribute as much as expected:

Certain questions did not contribute much to the study findings and in some cases this was due to the phrasing of the question, such as C4, or the question being too broad, such as D4.

C4. When do you think a child under 6 would need a drip? Why do you / do you not think it is important?

In-depth interviews with nurses revealed the importance of the 'drip' in caregivers' minds; and that they preferred to go 'where there was a drip'. This open-ended question was therefore included. Although this question revealed that some caregivers thought that the drip could stop vomiting and diarrhoea and that it cleaned the child's system, contrary to expectations however, it did not contribute as much as expected as most caregivers were aware that the drip was used if a child was dehydrated. A more informative question would investigate which equipment was viewed as most important in a clinic or hospital.

D4. Do you normally give traditional medicine first or Western medicine first?

It is possible that this question did not contribute much as a result of the wording. Whether traditional medicine or Western medicine is given first mostly depends on the type of illness which is not taken into account in this question. More useful information was obtained from question C9 on the management of specific childhood illnesses; therefore this question would not be used again.

7.1.2.5d Questions with potential recall bias

Many questions on health-seeking behaviour, particularly open-ended ones, involve the respondent remembering what they have done in the past and are therefore prone to recall bias (Long, 1984). The following questions were therefore identified as being susceptible to recall bias, particularly if the event was not recent for the caregiver or if symptoms and treatments were not considered important.

B1. For what reason are you bringing your child here today?

A few questions on morbidity data had to be reformulated to fit in with the new sampling strategy at the traditional healers. Question B1 had to be adapted for the mothers from the traditional healers as they were not actually attending on that day. Instead they were asked 'When was the last time you took your child to a traditional healer, and what was the reason for this?' This meant there was a higher chance of recall bias amongst caregivers recruited through traditional healers.

D3. Which are the main traditional medicines you have used for your child under 6 and for what reason?

For caregivers who did not know much about the names given to traditional medicines or their ingredients and who had not given their child traditional medicine for quite a long time, the chances of recall bias were increased. General terms such as '*imbiza*' (mixture), '*sput*' (enema) or '*muthi*' (medicine) were therefore used quite often by caregivers when answering this question. For future surveys the definition of 'traditional medicines' should be given however (i.e. including home remedies, church medicines as well as the medicines obtained from a TMP or *muthi* shop) as some caregivers tended to label these all as '*imithi wesintu*'¹. Church medicines for example do not generally contain herbs and a caregiver might prefer to use home remedies with plants from the garden rather than consult a TMP. Finding out where the medicine is obtained is useful for interpreting health-seeking behaviour.

C9. Now I would like you tell me what you would NORMALLY do if your child UNDER 6 had this symptom?

There was potential recall bias in this question if the child had not experienced the health problem for a while or reporting bias in terms of actual and reported behaviour. Although difficult for the caregivers to remember, it would have been valuable to have collected additional information on

¹ African medicines.

how long it had been since the child experienced the relevant symptom to be able to identify the likelihood of recall bias.

C10. 1-week morbidity data

More reliable information is usually obtained if behaviour within an exact time period is asked about rather than 'usual behaviour' as with the previous question. This was the purpose of section C10. Originally adapted from the calendar design implemented in the 1995 Guatemala Survey of Family Health (Heuveline & Goldman, 2000) this was the most difficult and longest section of the questionnaire as mothers had to remember the chronological order of events in the previous week (and sometimes further back than this). Originally there was a structured format as used in the Guatemala survey but it was too cumbersome for a 30 minute facility-based interview and also would have taken a while for the fieldworker to familiarise herself with. The easiest way was to leave the questions semi-structured and fit all of the questions on the same page so that the fieldworker was not flicking through pages when the mothers remembered something else or changed their minds. A great deal of probing was necessary when it came to this section, particularly about medication and who caregivers had spoken to. For some mothers, little had happened in the previous week and for others, sometimes the problem may have started over a year ago and a more flexible approach was needed to be able to capture this information.

This question had to be adapted for the traditional healers' patients. As they were not at a traditional healer's with a sick child. They were therefore asked about the last time that they had gone to the traditional healer for their child under 6. If the child was still a baby or a toddler this was not as problematic, but for the 4 / 5 year olds a few said that they had not been for a year. If the caregiver was probed further however, it was discovered that they had usually taken their child to a traditional healer more recently but that they did not think it was worth mentioning (e.g. for a cough). Unless a future survey is able to identify caregivers who have taken their child to a TMP on the day of interview (and therefore less prone to recall bias), that caregivers might need additional probing for trivial illnesses is worth bearing in mind.

7.1.2.5e. Questions with social desirability / response bias

Social desirability bias (Sitzia & Wood, 1997) may be more common in surveys at health care providers with respondents wanting to be seen to be good patients (Grady *et al.*, 1988). It was however made clear to respondents that we were not medical staff but researchers from the university and whatever was said in the interview was confidential. Interviewer awareness and interest in traditional therapies was also demonstrated through probes on therapeutic actions and specific treatments. Although most respondents did not appear to be reticent on this subject, some may have been hesitant about revealing their true thoughts, particularly on health care providers and others may have wanted to give socially desirable responses to sensitive questions. In terms of finding out about caregivers' use of traditional medicine it was expected that respondents would be reticent, however this proved not to be the case even in private health

care facilities where 58% of caregivers reported that they had used or would give traditional medicine to their child if the need arose.

A7. What is your marital status?

Unexpectedly, marital status was difficult to ascertain, particularly of those in long-term or ephemeral consensual unions, without invading the respondent's privacy. The fieldworker admitted that she felt a little uncomfortable asking this question. This has been noted elsewhere (Good, 1987a). The fieldworker tried to be as polite and sensitive as possible when asking this question however it is difficult to ascertain if the 'single' caregivers were indeed single, or if they were just not cohabiting. The aim of this question was to find out about any support the caregiver may receive from either the biological father of the child or another man. Therefore to improve the quality of this type of information in future surveys, preliminary qualitative work should seek to establish how caregivers might interpret the concept of 'single'. Additional data on whether the biological father or a surrogate father provides financial, emotional or any other form of support for the child would be more useful.

D1. Have you ever given your child under 6 traditional/herbal medicine (doesn't have to be from a traditional healer)

Giving socially desirable answers was a particular concern in the case of a caregiver's use of traditional medicine, however a large proportion of caregivers admitted having used traditional medicine for their child under 6. To try and overcome any social response bias, FGDs using semi-homogenous groups and IDIs with traditional healers were used to elicit more information on this type of treatment modality. A non-medical fieldworker was also selected to reduce respondent bias. When the interviewing began it became apparent that most mothers did not mind talking about their use of traditional medicine, particularly with regards to the 'African' illnesses. This may be because it is believed that 'African' illnesses cannot be cured with Western medicines, therefore there is no other option. Caregivers were asked matter-of-factly what they did for the 2 most common 'African' illnesses, along with other common childhood illnesses. The questions were therefore framed to make it clear that such behaviour was acceptable. The section on use of traditional medicine was the second-last section which allowed time to set the mother at ease and gain her trust.

C9. Now I would like you tell me what you would NORMALLY do if your child UNDER 6 had this symptom?

Giving socially preferred responses to hypothetical questions on health-seeking behaviour was a possible problem (Csete, 1993). Question C9 was potentially one of the most useful questions in terms of comparing health-seeking for different people but took a long time to get through (usually 10 to 15 minutes depending on the respondent). The number of illnesses was limited to ensure that this question did not become longer. By asking about the 'Bantu' or African illnesses - *inyoni* and *ibala*, respondents were indirectly asked about their use of traditional medicine as these were the 2 most common reasons why someone might take their child to a traditional healer, or use

traditional medicine. Most mothers, including those in the private clinic did not mind talking about taking their child to a traditional healer or using traditional medicine for *inyoni* or *ibala* as they were accepted as 'common' illnesses.

C10. 1-week morbidity data

Because illness behaviour is difficult to observe, researchers have to rely on self-reported behaviour. For this reason, socially desirable responses were also a potential problem when asking about health-seeking behaviour for the child's current health problem. By the time this question was asked however, respondents had already been asked about their use of traditional medicine and health-seeking behaviour for 10 common childhood illnesses. With no chastisement from the researchers it was hoped that a sufficient degree of trust had been established. Building an open rapport with the caregiver within the first 10 minutes of the interview is therefore imperative. As well as reassuring the respondents about confidentiality, caregivers in this survey were offered a drink and a sandwich or biscuits which immediately set them at ease. Most discussions were open and the main problem for this question was getting the respondent to recall trivial events and behaviour as seen in Section 7.1.2.5d.

7.1.2.5f Questions with misclassification bias / bias from self-reporting

As well as recall bias, one problem which health surveys may suffer from is that of misclassification bias or bias from self-reporting. This is particularly the case if respondents are asked to identify illnesses or if the researcher wishes to obtain an indirect assessment of health status through self-reporting.

B1. For what reason are you bringing your child here today?

Discrepancies between medical examinations and health surveys may occur because the former identify many chronic symptoms which are not commonly self-reported because they are not thought to be serious (e.g. malnutrition; anaemia; parasitic infection) (Kroeger, 1983). Conversely, individuals who perceive themselves or their children to be ill may not display the set of symptoms required for a clinical diagnosis of infection (Rousham *et al.*, 1998). In future surveys, reading a list of symptoms from a precoded list after the caregiver has reported the symptoms may help her to remember more 'trivial' symptoms.

There is usually considerable overlap in syndromes and trying to identify the disease or illness category would produce considerable bias through disease misclassification, particularly as the child may not experience all the symptoms or the child may have concurrent illnesses (comorbidity). Since this was not a morbidity survey, disease misclassification was not a major issue. Nevertheless, caregivers were asked both why they were at the health care provider as well as what symptoms the child had. This was because some caregivers knew what was wrong with their child or they had already been diagnosed e.g. cold / flu, broncho-pneumonia, measles, whilst others did not know what was wrong with the child but knew what symptoms they had. Other confounding factors in morbidity surveys lie in cultural differences in the definitions and

interpretations of illness and the responses of mothers according to the professional status of the interviewer (Ross & Vaughan, 1986), however this did not appear to be a problem in the current survey given that caregivers openly discussed *Abantu* illnesses as well as supernatural causes of illness.

C10: D. How serious do you think the problem is today?

Health outcome was only measured from the caregiver's perspective (whether child's condition improved or not), therefore it is not known whether maternal reports of illness correspond with a clinically defined illness. Although the aim of the survey was to find out about caregiver perceptions of severity rather than trying to correctly identify the level of severity it was still interesting to try and compare the two. Maternal reporting bias (perception versus observation), is of interest to the study since the perceived severity of the illness may influence care-seeking. Mothers were asked how serious they thought the illness was that day. They were also asked what day they were most worried and what symptoms they considered serious for their child's health. These were asked at different points in the interview.

Although it would have been of interest to compare maternal reports of severity with clinical reports, this was not possible. Neither were biochemical indicators of child health available to assess the validity of maternal reporting (Rousham *et al.*, 1998). Although of limited value, it was possible to use anthropometric measurements of child health as a possible objective measure. In terms of mortality, Mosley & Chen (1984, p.29) note that "... a child's death is the ultimate consequence of a cumulative series of biological insults rather than the outcome of a single biological event." They argue that both child mortality and child growth are affected by the same set of underlying nutritional and infectious conditions, such that weight-for-age can be regarded as a measure of health status rather than solely of nutritional status (Hill, 2003). BMI was therefore used in the current survey to assess the overall health of the child.

The duration of a child's illness during the survey period, may also be used as a measure of illness severity, although in a study in Nigeria, children with more educated mothers, better water sources and toilet facilities, experienced relatively longer periods of illness (Gesler, 1979a). This may be because high socio-economic status leads to a relatively greater perception of the seriousness of the health problems (Mechanic, 1975). Although duration of the illness was captured in the present survey, the large number of different illnesses meant that comparisons could not be made in a sample size of 206.

7.1.2.5g Bias in patients satisfaction questions

When evaluating health services, if certain attitudes (e.g. being critical of health services) are expected to be under-reported, leading questions can be used (e.g. 'What would you like to see improved in the health service?') (Bowling, 1997). Patient satisfaction surveys are well-known for generating high levels of satisfaction despite differences in the target populations and health facilities being surveyed (Schneider & Palmer, 2002). Given the context-specific nature of

utilisation-based surveys (Scheider & Palmer, 2002), general questions may sometimes lead respondents to voice their most immediate worries (Segar, 1997). Without wishing to downplay the importance of these concerns which are important findings in themselves, dimensions of time and place may affect a respondent's views and should be taken into account when interpreting results.

E9. Which is the most important when deciding where to take your sick child?

- ☐ 0. Waiting time
- ☐ 1. Cost of treatment or medicine
- ☐ 2. Distance to travel
- ☐ 3. Staff attitudes
- ☐ 4. Belief in treatment / medicine
- ☐ 5. Do not know
- ☐ 6. Other (specify)_____

Due to the broad nature of this question, it was a difficult question to get caregivers to understand, and resulted in the respondents needing to be prompted. Depending on previous answers, sometimes probing was necessary if the response did not correspond with previous information. If a caregiver said 'belief in the treatment / medicine' when she usually went to the PHC clinic she was also asked if she thought the medicine was better at the clinic than elsewhere. A potential problem with E9 was that it may be affected by the respondent's recent health care experience and is also dependent on the nature of the child's illness. One mother may be thinking of measles for example and they might go to the hospital, whilst another mother might be thinking of cough. They would therefore have something different in mind when answering this question. This could potentially be captured however through their other responses e.g. severity of illness. For a future survey this question may be too broad and may need to be broken down into a few more specific questions. For example a scale response could be used to find out how important each item is when deciding where to take a very sick child and a child who is not so sick.

E21. In your opinion, how could child health care be improved in Soweto/Johannesburg?

- ☐ 0. Reduce waiting times
- ☐ 1. More doctors
- ☐ 2. Stop free health care – make people pay
- ☐ 3. Improve staff attitudes at clinics / hospitals
- ☐ 4. Integration of traditional and Western medicine
- ☐ 5. Registration of traditional healers
- ☐ 6. Don't know
- ☐ 7. Other (specify)_____

For question E21, respondents were prompted with the list of precoded answers and were able to give more than answer. They were also encouraged to give their own recommendations to help generate more items for precoded lists in future surveys (v. Appendix F). As pointed out with question E9, in future surveys a scale response could be used to find out which items need most improvement. In this way, a caregiver is reminded about other aspects of health care services which might also need improvement, but which may not have affected her health care visit on the day of interview. Allowing respondents to voice other concerns not on the precoded list and therefore be more critical (Bowling, 1997) is also of importance.

E15. What are the doctors like at the clinic when you take your child for treatment? i.e. do they treat you well / spend enough time with you? (can tick more than 1) PHC CLINIC / PUBLIC HOSPITAL / PRIVATE HOSPITAL

- ☐ 0. N/A
- ☐ 1. There are a lack of doctors
- ☐ 2. Caring/friendly
- ☐ 3. Helpful - spend enough time
- ☐ 4. Polite
- ☐ 5. Impolite (verbal abuse)
- ☐ 6. Impolite (physical abuse)
- ☐ 7. Unfriendly
- ☐ 8. Unhelpful – don't spend enough time
- ☐ 9. Other (specify)_____

Accurate measurement of patient satisfaction with their health care provider can be influenced by the wording and format of questions. With a pre-coded Likert scale response for example, patients are more likely to report that they are satisfied, compared to an open-ended question (Calnan, 1988b; Cartwright & Anderson, 1981). Cartwright and Anderson (1981) also found that patients usually make judgements based on human factors (attitudes, manner, provision of information and service factors) rather than evaluations based on competence of medical care. The question above was also asked for nurses and antenatal nurses. The answer format of these questions did not work that well as the standard response was 'OK' or 'Ah, alright', so the fieldworker would have to read the answers. If the reply was negative the mother was usually quite clear about the type of response. For data analysis these responses were entered as positive or negative. A more informative but longer way of structuring this question would have been to construct dichotomous or scale responses for each characteristic of the provider, including medical competence and not just their affective behaviour (e.g. 'Were you happy with the child's examination?'; 'Did the nurse / doctor spend long enough examining your child?'; 'Did the nurse / doctor listen to you enough?'; 'Did the nurse / doctor explain what was wrong with the child?'; 'Did you understand what was wrong with the child?'; 'Did you want more explanation given?'; 'Did the nurse / doctor give you any other advice that you think is useful?'; 'Did the nurse / doctor speak politely to you?')

7.1.2.5h. Questions which would require expansion

A6. What religion (denomination) do you belong to?

In retrospect, measuring religious activity / attendance and not just affiliation may have been a good indicator of the strength of beliefs as well as social networks and how this varies denominationally (Schiller & Levin, 1988). Frequency of attendance has also been positively associated with better health outcomes (Levin, 1994; Horwitz, Morgenstern & Berkman, 1985; Schiller & Levin, 1988). Although the potential role of religion in health-seeking behaviour had been acknowledged, the strength of its influence had not been anticipated prior to the survey and has also been sidelined in most health studies (Levin, 1994).

A16. Do you get any support from friends / relatives with child care? (money / health care / child minding / transport)

- ☐ 0. No support
- ☐ 1. Support from friends
- ☐ 2. Support from relatives
- ☐ 3. Support from friends and relatives

Future surveys should include better measures of social networks and social integration (i.e. where do most of the respondent's family live – do parents or in-laws live in the same household or nearby, the caregiver's community involvement, who is the close social network comprised of and is there a TMP in the family) as these were identified as important factors in health-seeking behaviour in this setting. Question A16 was too broad to be able to capture more precise information on numbers of friends and relatives, frequency of contacts, geographic proximity as well as the closeness and duration of such relationships (Geertsens, 1997). Material and emotional perceptions of support would also need to be separated as caregivers of different SES groups may have interpreted this question differently. From discussions with caregivers, additional measures of household cohesion such as support from the father of the child and household conflict may also have contributed useful information. Measures of the degree of social integration and household structure (e.g. close-knit) could not be ascertained with the variables available, so would need to be improved upon for future surveys using adaptations of existing scales.

C1. Who makes decisions about what to do if your child is not well?

It would also have been good to have developed an index of household decision-making (Goldman *et al.*, 2002) about who makes decisions about buying food and medicine and who controls money for household expenses. It is suggested that the control a mother has over the household income may actually be more important than the overall level of household income (Csete, 1993) and that control over family resources may affect a caregiver's use of treatment and services when their child is sick (Caldwell, 1986; Cleland and van Ginnekin, 1988; Lindenbaum, 1990, DasGupta, 1990; Fosu, 1994; Pebley *et al.*, 1996; Streatfield *et al.*, 1990),

however this could not be explored in the current survey with the data available. With so many caregivers unemployed in this sample, they would be dependent on money from the child's father, a relative or in receipt of a child support grant and decisions over how this money is used would shed additional light on barriers to decision-making within the household. Some caregivers for example were only able to take their child to the private clinic because their husband had medical insurance.

C5. Which Stuips do you use for your child under 6? / C7. Where do you get most of your Western medicines from?

Although caregivers were asked what treatment they gave to their child for 10 common childhood illnesses, questions C5 and C7 were the only questions which specifically addressed the caregiver's use of OTC medicines. Including a question on what medicines the caregiver kept at home for her child for example would have been useful as de Wet (1998b) points out that shortages of health care professionals and drugs encourages people to self-medicate. Given that treatment at home was the main first option for the 10 common childhood illnesses, asking caregivers about the medication they currently had at home for their child and where they had obtained them from would have given greater insight into self-medication practices. Differences in the types of medications kept at home between high and low SES groups would be interesting to look at, given the higher use of OTCs amongst high SES groups. Similarly, having a list of medicines and asking the caregiver if she had ever used the medicine for her child would also have been a useful way of obtaining such information.

C8. Does the doctor or chemist explain the medicine instructions clearly to you?

In-depth interviews with nurses revealed that some mothers did not understand the instructions that themselves or the dispensary gave, therefore it was expected that some mothers would answer negatively for question C8. Nearly 100% answered that the instructions were explained clearly. This also coincided with nurses comments that caregivers will say they understand but don't necessarily follow instructions. A better way of teasing this out would be to ask separate questions relating to instructions from doctors, nurses and pharmacists since such questions have yielded different results previously in South Africa (Salmon *et al.*, 2003).

Section E: Measuring patient satisfaction

In the same way that illness was only measured from the caregiver's perspective, no attempt was made to get a normative assessment of the health care provider. This study did not measure quality of care *per se*, but aspects of it through in-depth interviews with health care providers and it is acknowledged that objective data on the health care facilities themselves would have helped to explain caregivers' health-seeking behaviour. A future study would also incorporate more on the user's subjective assessment of the structure, process and outcome elements which were not able to be explored in enough detail in this utilisation-based survey. Looking at willingness to pay (contingent valuation) for improvements in quality has been used successfully in other studies (Abel-Smith & Rawal, 1992; Weaver *et al.*, 1996) and may help to explain why some low-income

caregivers will pay to see a private provider whilst others will not. An example of a contingent valuation question from Weaver and colleagues (1996) is shown below:

Given that your health facility is not well-maintained, without beds, mattresses, a delivery table, doors, etc. would you agree to pay 1000F CFA per episode of illness for maintenance of the health facility nearest you? Which of the following responses best represents your opinion?

1. I would not hesitate
2. I would go into debt to pay
3. I would pay if I had enough money
4. I would not pay

Sentinel indicators of access and barriers to health care would also require development since most of these questions were open-ended in this survey. Issues which arose in the present study included caregivers being turned away from PHC clinics if the queues were too long. Future studies might therefore include a question asking whether the caregiver had experienced such an event in the past year and what she did instead. Caregivers were asked about whether the current provider was near or far from where they lived, however it would also be valuable to obtain information on how long the journey took to facilitate comparisons between caregivers. Although waiting times are known to be a problem, caregivers were not asked about how long they had waited on the day of interview (or the last time they had visited a health care provider). Although primary health care is free in South Africa, financial barriers may also affect access if the caregiver cannot afford transport or medicines if the clinic is experiencing shortages and these issues were not explored in the survey. A caregiver might be asked for example, whether there was ever a time in the previous 6 months that she delayed taking her child for treatment because she could not afford to go.

7.1.3 Diaries

To overcome issues of recall bias and to test the diary as a data-collection method in this setting where literacy levels are 82.4% (UNDP, 2005), 1-week diaries were given to caregivers to obtain prospective data on patterns of resort for treatment. Diarists were asked to record any health problems that their child had had and any action they had taken. As well as care from health professionals, diarists were also encouraged to comment on any informal care, self care and alternative therapies they had used. One problem with using diaries as a method of data collection, particularly in developing countries is how to deal with illiterate respondents. Diaries were therefore kept as simple as possible and respondents were asked if there was someone who could help them fill the diary in at home.

A longer post-diary interview would have been more useful (Wiseman *et al.*, 2005) to ask diarists about their experience of maintaining such a diary, but as diary returns coincided with interviews with other caregivers this was not possible.

Despite great efforts in explaining to caregivers how to fill the diary in, some diaries were returned blank. For this reason, it would be interesting to look into caregivers' understandings of 'instructions' as nurses experienced similar problems with certain caregivers despite their acknowledged understanding of health care advice and how to use medicines. If diaries were partially completed we asked the mother to try and remember the missing information, but this was time-consuming and difficult given the parallel interviews.

Because many of the TMP diaries were not filled in very well they were not given out in the last few weeks of the survey as these diaries were the most poorly filled in, given the lower levels of literacy in this group. It had not been anticipated that respondents would ask the one literate traditional healer for help.

Co-ordinating the return of the diary was also logistically challenging. Because the research team were not always in the same room at the primary health care clinic a sign had to be up on the door so respondents could locate them. If caregivers had a phone an attempt was made to call them to remind them where the research team would be. When caregivers returned the diary it was also possible to obtain any questionnaire missing information. The last 2 weeks of the survey no diaries could be given out because the caregiver would not have been able to return them.

As can be seen in Table 7.1, the diarists from the TMP at the market in Johannesburg had the highest proportion of diaries returned (77.8%) followed by the public hospital in Soweto (66.7%) and the PHC clinic in Soweto (48%). Caregivers from these clinics lived more locally than the caregivers interviewed at other facilities therefore it was easier for them to return the diaries. Proportionally most comments in the diaries were obtained from caregivers from the public hospital (45.8%) and the PHC clinic (34%). Although 55.6% of the TMP caregivers' diaries had been filled in sufficiently, the TMP had helped all but one caregiver to fill the diary in. Caregivers from the TMP at the market in Johannesburg had the highest proportion of blank diaries returned (11.1%). The caregivers interviewed at the PHC clinic had the highest proportion of diarists who had filled in their diaries very well (20%).

Table 7.1: Summary of diaries returned

Facility where caregiver was interviewed	Number given	Total returned	Contained comments	Blank	Partially complete	Mostly complete	Filled in well
Private clinic	32	43.8%	31.3%	3.1%	3.1%	25%	12.5%
TMP (Orange Farm)	7	14.3%	0%	0%	0%	14.3%	0%
TMP (Joburg market)	18	77.8%	27.8%	11.1%	11.1%	55.6%	0%
Public hospital (Johannesburg)	18	38.9%	22.2%	0%	11.1%	11.1%	16.7%
Public hospital (Soweto)	24	66.7%	45.8%	4.2%	20.8%	29.2%	12.5%
PHC clinic (Soweto)	50	48%	34%	0%	8%	20%	20%

Some caregivers reported that they thoroughly enjoyed filling in the diaries as they felt it made sure they monitored their child's health. Some kind of basic diary with pictures or instructions could therefore be beneficial for new young mothers in helping them to manage childhood illnesses as well as developmental phases. Some mothers said they would make their own diary and continue monitoring their child. Using diaries as a method of data collection is possible in the South African context, however it is only feasible if regular contact can be made with the respondent. Similar recommendations have been made in Tanzania and The Gambia (Wiseman *et al.*, 2005).

7.1.4 Data analysis restrictions

Financial and temporal restrictions meant that a larger population-based survey could not be conducted and using a small facility-based sample introduces some statistical complications for analysis (Akin *et al.*, 1995). For instance, it was not possible to use multinomial logit or probit regression to look at differences in caregiver characteristics at the different providers. Because the caregivers were purposively chosen at health care providers rather than randomly chosen in a household survey, and because outcome was the 'facility on day of interview' (private, public clinic, public hospital, traditional healer) this makes the data clustered and non-random, thereby violating regression assumptions e.g. independence of the outcome variable. Furthermore, in trying to explain differences between groups, important variables with structural zeroes, particularly relating to the use of traditional medicine and traditional beliefs, i.e. 'African illness' being the reason for attending provider (only applicable to traditional healer's patients) meant that even bivariate analysis was affected. Questions which had an open-ended format (e.g. provider-related variables) also made comparison difficult because respondents were not asked their views on each item. For example, it could therefore not be said with certainty that *only* 23% of TMP caregivers thought that cost was the main factor they took into account when deciding where to take a sick child because other caregivers may have had more pressing issues on their mind and had simply forgotten to mention it.

As respondents were at different stages in the health-seeking process this made it more difficult to compare across groups in a sample size of 206. Furthermore, different variables will be important depending on the type of visit (illness vs. preventive vs. check-up; patient-initiated vs. physician-initiated (Hershey, Luft & Gianaris, 1975, as cited in Maiman & Becker, 1983). In the 1-week morbidity calendar, some illnesses were not yet complete, therefore it was not possible to capture the full care-seeking process for each child's illness.

7.1.5 Summary

In order to try and overcome some of the afore-mentioned limitations, combined methods were used in order to better illuminate the complexity of health service utilisation, particularly at a micro level. It should be remembered that it is difficult to identify differences in health-seeking behaviour

at an aggregate level, particularly in a pluralistic health-setting such as South Africa for what is arguably an area of research focusing on individuals in a dynamic environment (Phillips, 1990). As Mechanic (1979) and Nyamongo (2002) have identified, people with similar complaints may behave differently depending on their personal circumstances; neither do the same people behave consistently at different points in their life with the same symptoms. Similarly, Good (1987a, p.291) reminds us that “efforts to construct a theory of therapeutic choice and to find consistent evidence of a hierarchy of resort beyond specific cases continues to be frustrated by the diversity and complexity of individual behaviour”. One debate has been why qualitative studies find some variables important whilst large-scale multivariate studies do not (Mechanic, 1979:p.387), therefore using combined methods is essential to help explain this complex behaviour. In this way, constructs that are difficult to measure quantitatively such as beliefs, can be examined in more detail with the help of qualitative findings.

The current study design was suitable for a preliminary investigation of health-seeking behaviour for childhood illnesses in urban South Africa and provides a snapshot of what many mothers may be doing in this area when treating childhood illnesses. In addition, despite the limitations, the qualitative data provide unique in-depth data which aid the understanding of health care-seeking practices for children under 6 in South Africa. Furthermore, the facility-based approach allowed insight into the differences in characteristics, beliefs, knowledge and actions of caregivers attending different health care providers to be examined (particularly traditional healers' patients) which population-based surveys are not able to provide. The following section discusses how this study could be built upon to further aid our understanding of these processes in the South African context.

7.2 Recommendations for future research

7.2.1 Study design

Ideally, to be able to extrapolate the results to the study population, an utilisation-survey used in conjunction with a population-based survey would be ideal. In Nigeria, Akin and colleagues (1995) were able to use a facility-based sample and went on to interview neighbours of the respondents so as to obtain a sample who were not pre-selected due to their attendance at a health care provider. A larger-scale utilisation-based study which asks respondents about the facility they are attending would also need to take into account the general reputation of different clinics, hospitals and healers in the sampling design. The present study found that these will vary and by only sampling very good private clinics or very poor PHC clinics, results may be biased.

7.2.2 Variables

Table 7.2 provides a summary of the key variables which should be researched and developed further for future health-seeking behaviour studies in South Africa. The development and use of

some or all of these variables will depend however on the length of the questionnaire and the skill of the interviewer. Although many of the variables were looked at in this study, some of the questions were left open-ended in the quantitative survey as there was not enough time prior to the survey to establish codes or scales or because no information was available from previous surveys on which to base such questions. Although this provided information about what issues may be important for health-seeking behaviour in the South African context, the structure of certain variables limited their use in data analysis.

Table 7.2: Suggested variables to be included in future health-seeking behaviour studies in urban South Africa

Variable	Possible indicators
Belief variables	
Aetiology	Cause of illness; Type of medicine given
Perceived control / Locus of control	Beliefs in control by chance, powerful others, or the self
Religion	Denomination; Frequency of attendance
Cultural group	Place of birth; Languages spoken
Degree of cultural adaptation	Languages spoken; Membership of local association
General beliefs	Beliefs in traditional healing, faith healing, power of prayer
Health orientation	Scientific -> popular; Knowledge of health policies
Illness characteristics	
Symptoms of current disorder	Pre-coded list
Severity	Perceived and normative
Duration	When symptoms first began
Symptoms perceived to be severe	Pre-coded list with Likert scale
Characteristics of the child	
Susceptibility	Health since birth; Common health problems since birth; General health status
Age	
BMI	
Vaccinations	
Characteristics of the caregiver (predisposing factors)	
Demographic	Age; Sex; marital status; Formal education; SES
Status in household	Control over family resources; Decision-making variables
Cues to action	Fear; Parity; Previous experience
Internal control factors	Skills; Ability; Information; Knowledge; Self-efficacy
Habit	Why caregiver has certain behaviours e.g. upbringing
Family & social networks	
Family influence	Proximity to parents and in-laws
Social structure	Parochial versus cosmopolitan; Interaction with family / community; Household size; Membership of local association
Social support	Childcare
Financial support	Source of financial support; Regularity of financial support
Important others attitude to behaviour	Does family agree with use / non-use of traditional medicine?
Motivation to comply with others	Does caregiver mind if others know she uses traditional medicine?
Characteristics of the health service	
Cues to action	Source of information; Past experience
Enabling factors	Cost; Accessibility; Opening hours; Distance; Communication; Waiting times
Quality of care / patient satisfaction	Structure (characteristics of the setting such as environment, material and human resources); The medical process itself (e.g. staff attitudes, the physical examination, diagnostic tests, and continuity of care)
Outcome	
Patient satisfaction	Satisfaction with quality of service; Efficacy of treatment; Speed of recovery; Absence of disease / symptoms

7.2.2.1 Belief variables

Although most of the questions in the survey were taken from well-known surveys where questions have been tested for reliability and validity, the survey would have benefited from better indicators of health belief (i.e. belief data was mostly captured through qualitative methods) as shown in Table 7.2. Peltzer (2003) used the Paranormal Belief Scale (adapted from Tobacyk & Milford, 1983) and the Magical Ideation Scale (adapted from Eckblad & Chapman, 1983) to look at beliefs amongst secondary and university students in South Africa. Adapting these scales to look at health-seeking behaviour for children under 6 would prove very useful. The Divine Influence scale of the Child Improvement Locus of Control (CILC) Scales used by DeVellis and colleagues (1988) amongst parents of children in the U.S.A would provide an indication of the strength of beliefs in divine intervention. Measuring beliefs should also involve looking at the perceived cause of an illness as well as the type of medicine given. Although not known about at the time of the survey, an individual may regard events as controllable by themselves (internal locus of control) or uncontrollable (external locus of control in the hands of fate or others) (e.g. Wallston & Wallston, 1982, as cited in Ogden, 2004). The Social Cognition Theories also include 'self-efficacy expectancies' (i.e. confidence in the ability to carry out a behaviour) and the HBM also includes the concept of 'self-efficacy' or belief in one's ability to carry out a behaviour. Although mostly used to investigate health-related behaviours rather than sick-role behaviours, the locus of control theory in particular may be associated with beliefs about illness causation as well as the belief in the treatment or provider's power to heal. These beliefs may therefore lead caregivers to trust in one provider or treatment over another. Part of the aetiology of the disorder therefore involves beliefs about control which may be measured with an adaptation of the Multidimensional Health Locus of Control (MHLC) Scale, first developed by Wallston, Wallston and DeVellis (1978).

As already discussed in section 7.1.2.5h, measuring frequency of religious attendance as well as the denomination would be of benefit to establish degrees of religiosity. Place of birth and mother tongue was captured in the present survey but the respondent was not asked all of the languages they could read and write which may (along with other social integration indicators identified in 7.1.2.5h) give an indication of the degree of cultural adaptation in an area. This may be important for how easy it is for a caregiver to integrate into a community, find out new information and adopt new health care practices. This is particularly true for caregivers from outside South Africa. Such variables may also help to explain 'health orientation'. Based on an adaptation of Suchman's (1965a) index of health orientation, a caregiver may be defined as having a popular or a scientific health orientation. Suchman (1965a) included an individual's cognitive (knowledge about disease), affective (their scepticism of medical care) and behavioural (dependency in illness) characteristics, however these may be adapted to include characteristics specific to the South African context, such as belief in traditional and faith healing as well as characteristics of the caregiver and their family. Geertsens (1997) for example emphasised the social and cultural beliefs and values relevant to health as these may lead an individual to use or not use certain types of health care.

7.2.2.2 Characteristics of the disorder and their perception

Although data were collected on the symptoms, perceived severity and duration of the current illness as well as which symptoms the caregiver generally considered to be serious (v. Table 7.2), there was potential for recall bias. A more reliable way of collecting this data would involve a precoded list of symptoms which the caregiver could be prompted with after she has listed the symptoms herself. In terms of symptoms which are perceived to be severe, a Likert scale may be used to indicate how serious the caregiver believes a pre-defined list of symptoms to be. An adaptation of the Seriousness of Illness Survey (Wyler, Masuda & Holmes, 1968) which created a score based on degree of discomfort, disability, life threat, duration and prognosis could be used depending on the length restrictions of the questionnaire.

7.2.2.3 Characteristics of the child

No major problems were reported with child-related variables found in Table 7.2, although a precoded list with prompts could be used when asking the caregiver about illnesses the child is prone to getting (e.g. coughs, colds, fever). Some variables may be better at predicting intention to engage in a behaviour (e.g. perceived susceptibility) versus actual engagement in a behaviour (Strecher & Rosenstock, 1997), therefore more work would be required to understand how the child's health status is perceived in the South African context. Age, BMI and vaccination history should all be included as the age of the child was found to influence health-seeking behaviour, BMI gives an indication of the child's overall health status and vaccination history (from the Road to Health Chart) is important for preventative health behaviour

7.2.2.4 Characteristics of the caregiver

As well as the demographic variables collected in this survey, variables which were not measured but which may prove useful for future surveys include the status of the caregiver in the household, internal control factors, habit and fear as a cue to action (v. Table 7.2). Fear for example may be included in a list of potential influences on why the caregiver chooses a particular health care provider and the caregiver may respond as to whether it influenced her decision or not. Gesler & Gage (1987) suggest that more educated mothers may be more knowledgeable about illnesses as well as about facilities which are further away and have the means to use those facilities. Although education, parity (as an indicator of experience) and management of 10 childhood illnesses were looked at in the present study, knowledge (including information, skills and ability) of illnesses and treatments were not scored. With the help of medical staff and traditional healers, knowledge scores could be developed based on what mothers do for certain childhood illnesses (Olango & Aboud, 1996). In a previous study in South Africa (Smith *et al.*, 1999), 91% of urban Africans were aware of the free health policy for children under 6, however only 46% were aware that a referral was needed for a government hospital. Although not asked about in this survey, this factor may still influence inappropriate health-seeking behaviour given the high levels of bypassing reported by nurses in the present survey. If people are aware of the policy then other factors such as characteristic of the health care provider may be influencing these health choices.

Studies have also found that more educated parents, particularly mothers, have more self-confidence and more control over family resources and are therefore able to use these resources more effectively in finding effective treatment and better health services when their child is sick (Caldwell, 1986; Cleland and van Ginnekin, 1988; Lindenbaum, 1990, DasGupta, 1990; Fosu, 1994; Pebley *et al.*, 1996; Streatfield *et al.*, 1990; Csete, 1993). Although the caregiver was asked who made decisions about the child's health care, 'control over family resources' (for food as well as medicines) was not measured in the present study and would complement the decision-maker variable already collected. 'Habit' (e.g. the caregiver was used to attending that facility or was used to giving a particular medicine as that was what she had always done and so had her mother when she was growing up) arose as a theme during qualitative interviews and should therefore be explored further in future surveys. How it could be measured quantitatively in the context of the present study would require further qualitative work.

7.2.2.5 Family and social networks

The influence of older relatives, particularly grandmothers was found in the present study, however this was not the case for all caregivers. Future research should incorporate questions on the geographical as well as emotional proximity to parents, older relatives and in-laws and whether their advice is ever sought. In the same way, it is also acknowledged that it would be useful to try and measure beliefs and evaluations about the individual's social world which shape their attitudes and exert pressure on an individual to perform or abandon a behaviour ('important others' attitude to behaviour and the caregiver's motivation to comply with others) (v. Table 7.2). Questions may include whether relatives or friends know about a caregiver's use of traditional medicine or Dutch medicines for example and whether they approve of its use. As well as ascertaining to what extent mothers are instructed by others on what to do it is also important to explore how often these instructions conflict with what mothers believe to be 'appropriate' and what enables mothers to circumvent inappropriate decisions (Molyneux *et al.*, 2002). The presence of husbands or partners in the household, whether they manage the household money and what decision-making authority they have (Carter, 2004) are also important determinant aspects of health-seeking behaviour which were not able to be examined in sufficient detail in the present study.

Suchman (1965a) also developed indices of social structure which were related to health behaviour. These included the level of social cohesion of the community ('ethnic exclusivity'), friends ('friendship solidarity') and the family ('orientation to family tradition and authority') (Becker & Maiman, 1983:p.541). These 3 dimensions were then combined into an index of cosmopolitan-parochial social structure in which high levels of ethnic exclusivity, friendship solidarity and orientation to family tradition and authority defined a parochial structure whilst low levels defined a cosmopolitan structure. A similar index would be useful in the South African context to evaluate whether a caregiver with a parochial social group affiliation combined with a popular health orientation would be less likely to recognise symptoms and more likely to underestimate the severity of symptoms and therefore delay in seeking treatment (Suchman, 1965a, 1966) and

whether they would also be more likely to discuss symptoms with family and friends and seek confirmation, self-medicate and use a physician who their significant others approved of. According to Suchman (1965a, 1966), they may be more sceptical of the diagnosis, seek care elsewhere and fail to adhere to the treatment prescribed. Finding out more about the structure (loose-knit or close-knit; noninsular cosmopolitans or parochials) of the caregiver's social network would therefore be more intuitive for finding out the degree to which the action set will be involved in the patient's illness and how likely a caregiver is to trust providers outside their network.

A clearer definition of integration and support would also be needed than the one used in the present study. In an urban study of health-seeking behaviour in Senegal for example, the participation of a mother in urban networks (use of the local language, being a member of local associations and knowledge of the political leader in the area) was associated with utilisation, whilst time spent living in the area on its own was not (Fassin *et al.*, 1988). Support in this study combined several concepts which would need to be separated out into social and financial support and whether this came from friends or relatives. This would also contribute to our understanding of how the caregiver's social network may influence their health-seeking behaviour.

7.2.2.6 Characteristics of the health service

Measuring characteristics of the health service is the element which would require most future work in order to be able to incorporate this data into a multivariate analysis (v. Table 7.2). Westaway and colleagues (2003) developed a 25-item patient satisfaction scale in South Africa which looked at provider and service characteristics. A similar patient satisfaction scale could be used in future surveys based on findings about what caregivers want from their health service from the present study. Using such a scale would allow the most important dimensions of patient satisfaction (e.g. interpersonal or organisational) to be identified through principal components analysis for example (Westaway *et al.*, 2003). Exit interviews would have to be conducted in order to measure all these aspects however, which may not always be possible in an utilisation-based study where caregivers are interviewed whilst they are waiting to see the health care provider. It would then not be possible to measure aspects of the medical process. As well as patient satisfaction with the current health care provider and their intention to return, patient perceptions about aspects of other types of health care should also be measured in order to allow comparisons between providers. As well as gathering patient information, it would be necessary to conduct interviews with several members of staff of different ranks at the facility as they may have different experiences and viewpoints. Finding out about any shortages of staff or medicines, aspects of care and whether any measures have been put in place to tackle shortfalls in the quality of care and service provided would also be useful to validate patients' comments about the health care provider.

7.2.2.7 Outcome

Outcome is difficult to measure in an utilisation-based survey unless a follow-up interview with the respondent is possible. This was the motivation for testing diaries in the present study but it would not be feasible for all study participants to use these based on what has been learned from using these in this study. Therefore as part of measuring patient satisfaction, future research should also explore what caregivers perceive to be the most important construct / constructs for both the outcome of the medical encounter (i.e. number of medicines prescribed, affective behaviour of the provider) and the outcome of the treatment (i.e. speed of recovery, absence of symptoms) (v. Table 7.2). In this way, the researcher will know what the caregiver's definition of outcome is and know which aspects are likely to affect health-seeking behaviour the most.

7.2.2.8 Additional research questions

During the fieldwork additional questions arose which were not able to be explored or could not be looked at in great detail due to the limited time available. The following recommendations are therefore also highlighted for inclusion in future studies.

Although not explored in detail in the current study, an area which warrants further research is that of the communication between the health care provider and the patient (part of the medical process). According to nurses in this study, typically caregivers do not ask many questions or seek clarification when they do not understand. Although more work would have to be done in this area in the South African context, other studies have found that this discrepancy may be due to the subjectivity of the illness experience (Kleinman, 1988), the patient's potential anxiety as well as the medical jargon used, consultation time limits and differences in physician-patient knowledge and power (DiMatteo, 1997). Patients have been found to recall instructions much better however if the doctor is friendlier and when they are involved more in the consultation, (Heszen-Klemens & Lapinska, 1984). Patient's understanding and recall of instructions are extremely important aspects of health-seeking behaviour which require further investigation in the South African context.

The present study found that the higher SES groups tended to use more OTC medicines than the lower SES groups. From the type of data gathered in this study however, it is difficult to ascertain whether the higher SES groups *over-used* OTC medicines and *under-used* home treatment or whether the lower SES groups *under-used* OTC medicines. Future research could therefore involve a comprehensive survey of caregiver's 'medicine cabinets' (or what medicine they usually keep at home for their child) and dosages given to young children. This is particularly important for examining the use of leftover prescription medicines as well as non-prescribed medications which this study has identified as not always being used appropriately by caregivers. Non-adherence in this sample appeared to be a problem if medicines did not work fast. Research into what medicines caregivers keep at home and use for their child, as well as their beliefs about these medicines compared to others would provide insightful information about the use of OTC medicines for young children in South Africa.

Although commonly reported by nurses, it is not known how widespread the phenomenon of 'doctor-shopping' or bypassing certain health facilities is. Whether this be bypassing a primary health care facility for a higher level facility or bypassing a primary health care facility for another one that is perceived to be better would require further exploration as it has important implications for the effective functioning of the health care system. Accessing higher level facilities when not appropriate for example is a waste of time and resources for both the caregiver and the higher-level provider if a local PHC facility *should* be providing the care. It also delays treatment for those who need it more urgently. One method could include outpatient surveys during screening at hospital facilities. Patient's knowledge about the reputation of health facilities in the local area as well as further afield and whether respondents have bypassed facilities themselves could form part of this research. Case studies of contrasting but geographically proximate health care services are also of value (Couper *et al.*, 2004).

Studies focusing on specific illnesses are able to collect more in-depth information than the present study was able to collect. Local beliefs about diarrhoea have been looked at in rural KwaZulu-Natal, South Africa with 11 local types of diarrhoea identified (Kauchali *et al.*, 2004) and it would be of value to conduct similar studies in urban areas. This is particularly relevant as diarrhoea with a supernatural cause was not found as needing ORT in KwaZulu-Natal and similar types of diarrhoea and traditional treatments were identified in the present study in Johannesburg and Soweto. Furthermore, in the present study different types of diarrhoea were mentioned (e.g. green and yellow) and some of these were in relation to *inyoni* which requires treatment that is inappropriate for diarrhoeal illnesses. Although a high proportion of caregivers reported using ORS in this study for diarrhoea and vomiting, their knowledge of how to make such solutions was not tested, therefore it is not known whether they were giving socially desired responses. Nor were they asked about their opinions on such treatment (e.g. whether they prefer to buy packet solutions because they are flavoured or how they think it helps the child). As well as diarrhoea, other health problems such as constipation also require further exploration. Bland and colleagues' (2004) study suggest that many caregivers are probably not aware of the normal pattern of stooling, particularly amongst children who are still breastfed. They indicate that this may vary from once a week to after every feed. Therefore enemas may sometimes be given erroneously. It was not possible to look at this in the present study but given the widespread use of enemas it is probably a subject worth investigating. Caregivers in the present study also revealed that a child crying may also mean that the child does not belong to the caregiver's husband or partner although this has not previously been documented in the literature. Even if untrue, very superstitious caregivers may therefore try to prevent their child crying a lot for fear of accusations of infidelity. For those caregivers living in over-crowded conditions, caregivers of crying children may be berated. This topic would need to be explored further however, particularly with regard to what happens to the child if it is believed that he / she does not belong to the father's clan.

Although HIV-positive mothers are advised not to breastfeed to prevent mother-to-child-transmission, low rates of exclusive breastfeeding are also found in the rest of the population.

Nurses in this study indicated that in some cases the breast milk was considered dirty and many other mothers had problems expressing the milk. Much of this was due to late or sometimes lack of attendance at antenatal classes. Although antenatal care did not form part of this research, some of the issues raised relating to breastfeeding highlight the need for further understanding of the use of such services during pregnancy.

Traditional medicine and church medicine were not always differentiated by caregivers in the present survey and one *sangoma* who used traditional medicines also considered herself to be a faith healer. The changing role of traditional and faith healers in South Africa should be investigated using ethnographic methods as this will increase our understanding of how these services are used, as how these providers and their treatments are defined can become blurred. Either some faith healers have needed to incorporate aspects of traditional healing into their work because of the demand for such services. Alternatively, some traditional healers might prefer to call themselves faith healers to disassociate themselves from its links with witchcraft. With the high degree of religiosity in South Africa, the concept of a faith healer offering treatments for *inyoni*, *ibala* or protection from bad spirits might be more acceptable to some caregivers, although this is pure conjecture and would need to be investigated.

7.3 Policy recommendations

Results from this study raise important policy implications for health-seeking behaviour for childhood illnesses in urban South Africa.

The third component of the WHO and UNICEF IMCI strategy (household and community IMCI) is important for empowering communities to explore and address issues which facilitate or impede key family practices for effective child health care (Winch *et al.*, 2002), yet this component has remained underdeveloped in South Africa (Andrews & Pillay, 2005). A need for community and household IMCI has been highlighted in the present study. Because home treatment (including the use of OTC medicines) is common for most childhood illnesses, ensuring appropriate behaviour is a key objective (Hill, Kirkwood & Edmond, 2004). Health education campaigns should pay attention to the symptoms that mothers themselves recognise as significant (Yoder & Hornik, 1996) and incorporate these into cues for how best to treat the illness (home treatment versus a provider). This includes treatment for traditional or *Abantu* illnesses. The recognition of grandmothers as important decision-makers in the health care of the child means that they, as well as mothers should be targeted by child health campaigns. Increasing social support for grandmothers (or even siblings as found in this survey) who have taken on the role of primary caregivers is also recommended. Furthermore, strategies to ensure that the correct information is being passed on to caregivers as well as understood (i.e. instruction leaflets, advice from a pharmacist, nurse or doctor) is important and interventions elsewhere have successfully improved instruction-giving (Mwenesi, 1993, as cited by Hill *et al.*, 2004). Nurses in the present study highlighted that understanding between the patient and the provider was sometimes a problem.

Since traditional healers continue to remain important providers of health care in urban South Africa, training *all* traditional healers to recognise important signs and symptoms of childhood illnesses which require referral to a clinic or hospital should be a priority. The traditional healers interviewed in this study were honest about their ability to treat certain illnesses and indicated that they referred the patient to a clinic or hospital, sometimes accompanying them if they themselves could not help. Workshops, which need not be resource (time and money) intensive, as well as nurses or health workers who go out into the community would be welcomed by many TMPs who are considered by themselves and their patients to be important sources of traditional as well as primary health care. Liaising with traditional healers as part of community-based services is already on the agenda for STDs (Department of Health, 2001b) and should be expanded to include traditional healers as information, education and communication (IEC) agents in the community component of IMCI.

Whether Western health care providers or traditional healers support co-operation between the 2 systems or not, it is within their patients' interests to know and understand about alternative sources of health care. As well as training traditional healers, Western medical staff should be given training on why caregivers take their children to traditional healers or give them traditional medicine. Although some nurses in this study knew of *inyoni* and one or 2 other *Abantu* illnesses, little respect was shown for such beliefs. In contrast it was also reported that a nurse at a private facility also used traditional medicine for her child. It is acknowledged that female nurses are more likely to know about such health-seeking behaviour however such knowledge amongst doctors may be more limited. By showing knowledge of traditional illnesses, health care providers may be perceived as more approachable and it may also help them in understanding their patients' health-seeking behaviour in the context of the local belief system (v. Ellis, 2004).

'Batho Pele' or 'People First' is the slogan of the national norms and standards for Primary Health Care in South Africa (Department of Health, 2001b:p.1) which states that "access to decent public services is the rightful expectation of all citizens" and that "communities are encouraged to participate in planning services to improve and optimize service delivery for the benefit of the people who come first." This is not always easy to follow through in health care planning however (Hardon *et al.*, 1994), and even nurses have felt excluded from policy decisions (Walker & Gilson, 2004). This study reinforces what other studies have found in South Africa (Palmer, 1999; Modiba *et al.* 2001; Jewkes *et al.* 1998) as well as neighbouring countries (Atkinson *et al.*, 1999; LeBeau, 1998) in terms of the common problems identified with services (i.e. staff attitudes, waiting times, examinations, shortages of medicines and staff, medicines which are perceived to be 'weak' and being turned away). Although "patients are not well placed to judge the quality of services which they receive in the private sector, often appearing to make superficial judgements based on issues such as the likelihood of receiving an injection" (Palmer, 1999:p.6), patients' views on how public sector services which the majority of people use, could be improved, should be taken into account. This is more so the case if patients are mainly using private providers to be treated with

more respect, something which Palmer (1999:p.6) points out the public sector should be capable of. A simple action such as examining the child signals to the caregiver that the physician is concerned about them, thus creating a greater sense of trust. This type of doctor-patient interaction allows medical knowledge to be shared which is important for health education (Chrisman & Kleinman, 1983).

Until such time as a more equitable society exists giving people a greater choice of health care options, managers should reinforce the basic standards of 'People First' - that "Citizens should be treated with courtesy and consideration" and "if the promised standard is not delivered they should be offered an apology, an explanation and an effective remedy, when complaints are made, citizens should receive a sympathetic positive response" (Department of Health, 2001b:p.1). It is known that frustration and fear borne out of weaknesses in the biomedical system can lead to a "peripatetic, costly quest for a 'cure'" (Good, 1987a:p.243). Many caregivers in this sample were scared to complain directly to staff and also felt that there was no point complaining. Facility users need to know that their complaints are taken into account, regardless of whether they can be dealt with or not. Targeting facilities which caregivers, and indeed health facility staff identify as not functioning well is a good starting point to address many of the known complaints. Ways to spot a good health district include effectiveness (good services which work well), efficiency (fast and streamlined services), accessibility and friendly and courteous staff (Harrison, 1997). Since the afore-mentioned issues have been raised in previous studies in South Africa (Smith *et al.*, 1999; Palmer, 1999; Schneider & Palmer, 2002; Jewkes *et al.*, 1998; Abrahams *et al.*, 2001; Mashego & Peltzer, 2005; Westaway *et al.*, 1998; Westaway *et al.*, 2003, Mills *et al.*, 2004; Fonn & Xaba, 2001; Modiba *et al.*, 2001; Gilson *et al.*, 2005), and the focus of the Department of Health's 1999-2004 Strategic Framework for Health was to improve the quality of health service delivery (Buch, 2000), this study can only serve to highlight the issue further and press for even greater efforts to achieve this. Not all public sector staff were thought to be rude or uncaring and it is unfair to them that some providers give them all a poor reputation. The fact that not all staff are rude and uncaring indicates that staff attitudes may be improved despite poor working conditions, however as well as tackling the issue of negative staff attitudes in some public facilities it is necessary to conjointly address the issues which may lead to low morale such as staff shortages and poor pay. Support from management including performance evaluations, training opportunities, feedback and rewards where possible may help staff to feel valued as opposed to overworked and underpaid. Efforts have already been made to implement such policies in South Africa (Department of Health, 2004a), however challenges to successfully bridge the policy-implementation gap remain to be addressed in the 2004-2009 strategic framework (Andrews & Pillay, 2005).

The success of medicines has contributed to the 'antibiotic mentality' in which there is said to be a 'pill for all ills', even for self-limiting diseases such as colds and diarrhoea (Yudkin, 1982; Nichter & Vuckovic, 1994; de Wet, 1998a). Although home treatments were a popular first treatment in this sample for most illnesses, it was felt that the only impediment to the more

widespread use of OTC medicines was their cost and availability. Caregivers in this survey considered the quality as well as the quantity of medicines that they were prescribed to signify efficacy. Differences in public and private sector prescribing and their associations with quality of care provided may have contributed to this mentality. Furthermore, the speed a medicine works was also found to indicate efficacy which may lead some caregivers to abandon treatments and search for another provider. The strength of these convictions has even led some low SES caregivers to pay for private sector care. In the South African Health Review (1999), Palmer pointed out that there was a need to educate patients about the quality of the drugs available in public PHC clinics. In a survey 5 years later this point is being raised again.

A final policy recommendation is to ensure that caregivers are made aware of the dangers of using enemas, particularly those containing detergents such as Sunlight soap which were found to be popular in the present study. As well as targeting manufacturers and retailers of medicines which lack appropriate instructions (i.e. some of the Dutch medicines) or have misleading names (i.e. Muthi Wenyoni), posters, health talks from nurses or advice from the pharmacist or provider during consultations on the potential dangers of overusing medicines containing alcohol (e.g. the Dutch medicines) or the misuse of medicines intended for adults would also be useful for caregivers. Such information should be communicated clearly and effectively however, giving caregivers the opportunity to ask questions and not feel that they are being reprimanded. Furthermore, although a large proportion of caregivers reported giving salt and sugar solutions in the case of diarrhoea and vomiting, it is not clear how this treatment is used in terms of measurement, dosage and frequency. Given the large numbers using such treatment there is potential for inappropriate use and health care providers should therefore continue to give guidelines in their health talks on oral rehydration therapy and the potential dangers involved if solutions are not prepared or administered appropriately.

Although tremendous achievements have been made in South Africa's health care system since 1994, important challenges lie ahead, particularly in the effective implementation of policies and legislation already in place (Ntuli & Day, 2004). If this can be accomplished it will be well on its way to having "an accessible, caring and high quality health system" (Department of Health, 2004b:p.4).

7.4 Conclusion

Although the data from this sample cannot be generalised to all Black caregivers in South Africa or all providers, as Stock (1987:p.297) points out, "holistic microscale analyses constitute an essential starting point." They are useful as preliminary evaluations of which aspects of the health-seeking models might be useful in this context and to make other researchers aware of potential influences on utilisation. Surprisingly few studies were found (in either developed or developing country settings) which used the health-seeking behaviour models as frameworks to examine the health-seeking behaviour of mothers or caregivers on behalf of their children. Many of the studies which had looked at what caregivers did in developing countries were ethnographic studies which focused on one aspect of health-seeking and one illness. This study has contributed to the small body of knowledge on caregivers' health-seeking for their children in South Africa, using a range of methods to study a variety of illnesses in different health care settings. From the data collected, recommendations have been made for more how aspects of the models of health-seeking behaviour may be tested in future studies.

In summary therefore, the results from this study have found that health-seeking for childhood illnesses in urban South Africa is a complex and non-linear process. Caregiver beliefs are at the heart of the decision-making process. These beliefs are shaped by the caregiver's world-view, religion, family, social networks and previous experiences. These beliefs in turn affect the caregiver's perceptions of the child and the illness. The caregiver will be limited however in her decision-making by her age and accumulated knowledge, her socio-economic status as well as the availability of support and social networks. These in turn will affect the degree to which distance and cost are barriers to health-seeking. Characteristics of the provider, experiences in the past as well as outcome of the treatment will also affect these and future decisions made.

In developing countries, approximately 37% of all child deaths occur within the neonatal period (Bryce, Boschi-Pinto, Shibuya & Black, 2005). This is therefore the period when children's lives are most vulnerable. For newborns, infection is the major killer in the first few days of life and hypothermia is also a major risk, particularly amongst low birth weight infants (WHO, 1994; Islam & Gerdtham, 2006). As danger-signs (e.g. loss of appetite, fast breathing, inactivity / lethargy, temperature) (Seidel, 2005) may be more serious in a newborn than in a child, a distinction can therefore be made between the problems that affect newborns and children and how these are perceived and treated. Hence, a child's age may influence where a caregiver takes her child because of the fragility of infants, particularly newborns and their perceived vulnerability both to natural and supernatural causes of illness. For infants in particular, specialist services were therefore preferred over the usual choice of health care provider or home treatment.

When considering who makes the decisions about health care for the child, this was mostly the mother if she was the head of the household, both parents if the partner was the head of the household and the caregiver or grandmother if a relative was the head of the household. Older

relatives, particularly grandmothers continue to play an important role in the management of childhood illnesses even in urban areas. This is especially true for younger mothers. The caregiver's background and family influence played a large role in the use or non-use of traditional medicines.

'Belief' variables in the South African context relate much to the medicine being used and its ability to harm, prevent or heal (the outcome of treatment). The motivation for many caregivers to use both traditional and Western medicines in this sample is faith that they will work. Qualitative results revealed that fear was a strong cue to action in this sample, indicating that in many situations caregivers may not have time to think and act 'rationally'. The symptoms caregivers considered to be most serious (and most worrying) were the child not being themselves, not eating or losing weight and having fever. Fear as a cue to action may explain why interviews with caregivers as well as nurses indicated that caregivers usually judge the efficacy of a medicine by the speed that it works. This may lead to lack of adherence as well as 'doctor-shopping'. A TMP also indicated that if a patient came to her she advised them to stop taking their Western medicine whilst using traditional medicine. Traditional healers also reported that they referred their patients on to Western health care providers however if they are unable to treat their illness. Results from this study indicate that caregivers will usually start with home treatments particularly for diarrhoea, vomiting, fever, constipation and crying. Over-the-counter medicines were commonly used in the case of coughs, fever and teething. Although the use of OTC medicines in this study varied by the illness being treated, overall the higher SES respondents were more likely to use OTC medicines and less likely than other groups to use home treatments. OTC medicines were however used by at least 20% of the lower income groups for constipation, coughs, fever, colds / flu, *inyoni* and teething. Caregivers in the lowest SES group mostly obtained their OTC medicines from a clinic whilst those in the highest SES group mostly obtained their OTC medicines from a pharmacist or supermarket. In some cases poorer caregivers may simply be queuing for hours at a clinic to receive free medicine which they cannot afford to buy themselves. Although the caregivers interviewed at the traditional healers considered traditional medicine to be cheaper than other groups, the lowest SES group still found it to be expensive.

Nearly three-quarters of caregivers had given or would give traditional medicine to their child if the need arose, although this varied by education levels and socio-economic status. Even 58% of caregivers at private clinics had or would give traditional medicine to their child. Fewer caregivers in the sample had taken their child to a faith healer, confirming the authority that traditional healers hold over healing *Abantu* illnesses. Members of the Zion Christian Church had the largest proportion using traditional medicine in this sample indicating that members of some of the African Independent Churches may hold more traditional beliefs than more mainstream Catholic and Protestant Churches. Nearly a third of caregivers in the sample had taken some form of traditional medicine during pregnancy. As well as for protection, many caregivers used it to make the birth easier.

The main reasons for non-use of traditional medicine included non-belief, being a Christian, the dangers involved in using traditional medicine and because of the caregiver's upbringing or family influence. A wide range of childhood illnesses were treated with traditional medicine or church medicine however. The main reasons for using traditional medicine were for supernatural or African illnesses, because Western medicine could not help and because of the caregiver's background and family influence. The most well-known African childhood illnesses were *inyoni* and *ibala*, which in the South African world-view Western medicine is not able to treat. *Ibala* was thought to be very dangerous for the child although from a Western perspective it is defined as capillary naevus and is harmless to the child. From a Western perspective *inyoni* is associated with severe diarrhoea. Witchcraft, 'pollution', the ancestors and bad spirits continue to remain important causes of supernatural and *Abantu* illnesses in Johannesburg and Soweto. Children, particularly infants were thought to be very vulnerable to these causes of illness and as well as traditional medicines, Dutch medicines (*Stuips*) were believed to be very strong and if not used appropriately, or if children were not strengthened accordingly, these medicines could be harmful if coming into contact with others who used them. Because of their perceived strength, Dutch medicines were very popular for protecting and strengthening the child. Just over three-quarters of caregivers used or had given Dutch medicines to their child, the main ones being Haarlemensis, Stuijdruppels, Doepa, Entressdruppels and Groen Amara. Burning *imphepho*, *inyamazane* or Doepa were also very popular for protecting the child (particularly if they were crying a lot or very restless) as well as the pregnant mother from evil spirits.

Results from this study also show that medicines are not always used appropriately. Examples include the OTC medicines Muthi Wenyoni, Baby's Own, Brooklax, the Dutch medicines, as well as traditional purgatives and enemas to treat *inyoni*. *Spuits* containing Sunlight soap were a popular enema given to infants and children in this sample for a variety of health problems but these may irritate the anus and cause the child to hold back bowel movements.

Although individual and household characteristics are important components of health-seeking behaviour, inadequate health service provision will place added constraints on appropriate health-seeking. The health system in Johannesburg and Soweto was found to have a significant influence on the decision-making behind managing childhood illnesses. For example, although primary health care is supposed to be the most equitable level of care, access to primary health care was not found to be uniform in this survey, nor was the quality of care provided. For this reason, even in urban areas distance and transport should therefore be considered when looking at factors affecting health-seeking behaviour. Public hospital workers often claim that caregivers are abusing the system and bypassing the PHC to go straight to the hospital without a referral letter. As well as emergency situations, reasons for bypassing the PHC include no doctor / specialist available at the clinic, medicine-related issues (amount, availability, strength), waiting times and opening hours at the PHC and because of lack of equipment at the PHC (e.g. no drip or no X-ray). Although the public hospitals suffer from similar problems to those found at PHC clinics, compared with the primary health care facilities in the present study they were generally

thought to be better-stocked with medicines and more accessible in terms of opening hours. In general, better examinations, probably as a result of more doctors and more high-tech equipment, were expected and staff were believed to be more attentive than their PHC counterparts. This highlights the importance of not grouping all government health facilities under the same umbrella. Furthermore, some PHC facilities (such as the one used in this study) were perceived to be very good compared to others in the area. The same can be said of staff attitudes which will vary from one facility to another and even within facilities.

In general, private sector care (primary and higher) were perceived to be better than public sector care. Reasons for the higher rating of private facilities included thorough examinations; stronger medicines; enough medicines and generous prescriptions; no queues; friendly staff who listened and were attentive; the availability of a doctor; high-tech equipment; cleanliness and the food provided. Although only applicable to a few caregivers in the very low SES group, private providers had been used by caregivers in all SES groups for their child's current health problem. Caregivers in the lower SES groups indicated that they would use private primary health care providers (GPs) particularly for vomiting, fever, colds / flu or if the child's condition did not improve. Private facility doctors received more positive ratings in the present study and overall doctors received more positive ratings than nurses in terms of their manner and how helpful they were. In terms of private sector health care, a distinction was made between paediatricians and GPs, with higher SES caregivers preferring to use a paediatrician and lower SES caregivers mostly using a GP.

Although caregivers interviewed at different health care facilities had different priorities for how health services could be improved, overall, the majority of caregivers wanted to see staff attitudes improved in the public sector. Other important issues were waiting times and staff numbers, as well as improving the primary health care facilities and their resources. Shortages of medicines were a particular concern. For caregivers interviewed at the TMPs, a particularly salient issue was that of the integration of traditional and Western medicine, if not in the organisational sense, at least in terms of clinic and hospital staff showing more respect towards traditional medicine and cultural beliefs.

Health-seeking behaviour for childhood illnesses in urban South Africa is an important determinant of childhood morbidity and mortality, yet it has received little attention so far. This may be due to the fact that in the past, rural populations have warranted more attention given the greater disadvantages and barriers to health care that they face. This study has shown however that urban dwellers also face problems in terms of access to and the quality of primary care services provided.

A challenge for all who study health-seeking behaviour for childhood illnesses, particularly in an urban environment lies in the complexity of the subject. The large number of factors which can potentially influence health-seeking behaviour as observed in this study make data collection

particularly difficult. Through data triangulation however these variables have been identified and with the help of future studies more appropriate measurements can be taken. Understanding which of these factors are 'mutable' (e.g. caregiver knowledge and the quality of care provided) is essential for trying to improve the future health and well-being of millions of children in South Africa.

8. References

- Aarts, H., Verplanken, B., & van Knippenberg, A. (1998). Predicting behaviour from actions in the past: repeated decision making or matter of habit? *Journal of Applied Social Psychology*, 28, 1355-1374.
- Abel-Smith, B., & Rawal, P. (1992). Can the poor afford 'free' health services? A case study of Tanzania. *Health Policy and Planning*, 7(4), 329-341.
- Abraham, C., & Sheeran, P. (2005). The Health Belief Model. In M. Conner, & P. Norman (Eds.), *Predicting Health Behaviour: Research and practice with social cognition models* (pp. 28-80). Maidenhead, Berkshire: Open University Press.
- Abrahams, N., Jewkes, R., & Mvo, Z. (2001). Health care-seeking practices of pregnant women and the role of the midwife in Cape Town, South Africa. *Journal of Midwifery and Women's Health*, 46(4), 240-247.
- Acuda, S.W. (1983). Mental health problems in Kenya today – A review of research. *East African Medical Journal*, 60, 11-14.
- Adair, J., & Deuschle, K. (1970). *The people's health: Medicine and anthropology in a Navaho community*. New York: Appleton-Century-Crofts.
- Adams, A., Madhavan, S., & Simon, D. (2002). Women's social networks and child survival in Mali. *Social Science and Medicine*, 54, 165-178.
- Aday, L.A., & Andersen, R. (1974). A framework for the study of access to medical care. *Health Services Research*, 9, 208-220.
- Aday, L.A., & Andersen, R. (1981). Equity of access to medical care: A conceptual and empirical overview. *Medical Care*, 19, 4-27.
- Adetunji, J.A. (1991). Response of parents to five killer diseases among children in a Yoruba community, Nigeria. *Social Science and Medicine*, 32(12), 1379-1387.
- African National Congress (1994). *A national health plan for South Africa*. Johannesburg: African National Congress. URL: <http://www.anc.org.za/ancdocs/policy/health.htm> Accessed 14/01/06.
- Agency for Health Care Policy and Research (AHCPR) (1998). The Consumer Assessment of Health Plans (CAHPS) 2.0 Child Core questionnaire. URL: <http://www.ahcpr.gov/qual/cahps/cahpsques.htm> Accessed 05/08/03.
- Aguilar, A.M., Alvarado, R., Cordero, D., Kelly, P., Zamora, A., & Salgado, R. (1998). *Mortality Survey in Bolivia, Final Report: Investigating and identifying the causes of death from children under five*. Arlington, VA: Published for USAID by the Basic Support for Institutionalizing Child Survival (BASICS) Project.
- Airhihenbuwa, C.O. (1991). A Conceptual Model for Culturally Appropriate Health Education Programs in Developing Countries. *International Quarterly of Community Health Education*, 11(1), 53-62.
- Ajai, O. (1990). The integration of traditional medicine into the Nigerian health care delivery system: Legal implications and complications. *Medicine and Law*, 9(1), 685-699.
- Ajzen, I. (1985). From intention to actions: A theory of planned behavior. In J. Kuhl, & J. Beckman, (Eds.), *Action-control: From cognition to behavior*. Chicago, IL: Dorsey Press.
- Ajzen, I. (1988). *Attitudes, personality and behavior*. Chicago, IL: Dorsey Press.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organisational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I., & Driver, B.L. (1991). Prediction of leisure participation from behavioural, normative and control beliefs: An application of the Theory of Planned Behavior. *Leisure Sciences*, 13, 185-204.
- Ajzen, I., & Fishbein, M. (1970). The prediction of behavior from attitudinal and normative beliefs. *Journal of Personality and Social Psychology*, 6, 466-487.
- Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. New Jersey: Prentice-Hall.
- Ajzen, I., & Madden, T.J. (1986). Prediction of goal-directed behavior: Attitudes, intentions and perceived behavioral control. *Journal of Experimental Social Psychology*, 22, 453-474.
- Akin, J., Griffin, C., Guilkey, D., & Popkin, B. (1985). *The demand for primary health services in the Third World*. Totowa, NJ: Rowan & Allenheld.
- Akin, J., Griffin, C., Guilkey, D., & Popkin, B. (1986). The demand for adult outpatient services in the Bicol region of the Philippines. *Social Science and Medicine*, 22, 321-327.
- Akin, J., Guilkey, D., & Denton, H. (1995). Quality of services and demand for health care in Nigeria: A multinomial probit estimation. *Social Science and Medicine*, 40(11), 1527-1537.

- Akin, J.S., & Hutchinson, P. (1999). Health-care facility choice and the phenomenon of bypassing. *Health Policy and Planning*, 14(2), 135-151.
- Alland, Jr., A. (1970). *Adaptation in cultural revolution: An approach to medical anthropology*. New York: Columbia University Press.
- Alubo, S. (1990). Doctoring as a business: a study of entrepreneurial medicine in Nigeria. *Medical Anthropology*, 12, 305-324.
- AmaraSingham, L.R. (1980). Movement among healers in Sri Lanka: a case study of a Sinhalese patient. *Culture, Medicine and Psychiatry*, 4(1), 71-92.
- Amarasiri de Silva, M., Wijekoon, A., Hornik, R., & Martinez, J. (2001). Care seeking in Sri Lanka: one possible explanation for low childhood mortality. *Social Science and Medicine*, 53, 1363-1372.
- Amor, S., & Mehta, S. (1998). Virus infections of the central nervous system. In G. C. Cook (Ed.), *Manson's Tropical Diseases* (pp. 753-794). London: W.B. Saunders Company Ltd.
- Andersen, H.M. (2004). "Villagers": Differential treatment in a Ghanaian hospital. *Social Science and Medicine*, 59, 2003-2012.
- Andersen, R. M. (1968). *A behavioral model of families' use of health services*. Research Series No. 25. Chicago, IL: University of Chicago Press.
- Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior*, 36, 1-10.
- Andersen, R., Kravits, J., & Andersen, O.W. (Eds.) (1975). *Equity in health services: empirical analyses in social policy*. Cambridge, Massachusetts: Ballinger.
- Andersen, R., & Newman, J.F. (1973). Societal and individual determinants of medical care utilization in the United States. *Milbank Memorial Fund Quarterly/Health and Society*, 51, 95-124.
- Anderson, A., (1992). *Prophetic healing and the growth of the Zion Christian Church in South Africa*. Paper presented at the NERMIC conference, July 1993. URL: <http://artsweb.bham.ac.uk/aanderson/> Accessed 07/12/2004.
- Anderson, J.G., & Bartkus, D.E. (1973). Choice of medical care: a behavioral model of health and illness behavior. *Journal of Health and Social Behavior*, 14, 348-362.
- Andrews, G., & Pillay, Y. (2005). Strategic priorities for the national health system (2004-2009). contributions towards building a model development state in South Africa. In P. Ijumba, & P. Barron, (Eds.), *South African health review (SAHR) (2005)* (pp. 2-15). Durban: Health Systems Trust. URL: www.hst.org.za/uploads/files/sahr05_chapter1.pdf Accessed 19/02/06.
- Annis, S. (1981). Physical access and utilization of health services in rural Guatemala. *Social Science and Medicine*, 15D, 515-523.
- Antonovsky, A., & Kats, R. (1970). The model dental patient: an empirical study of preventive health behaviour. *Social Science and Medicine*, 4, 367-379.
- Armitage, C.J., & Conner, M. (2000). Social cognition models and health behaviour: a structured review. *Psychology and Health*, 15, 173-189.
- Armstrong, D. (1984). The patient's view. *Social Science and Medicine*, 18, 737-744.
- Arskey, H. (1994). Expert and lay participation in the construction of medical knowledge. *Sociology of Health and Illness*, 16, 449-468.
- Atkinson, S., & Ngenda, L. (1996). *Quality of urban health services: Lusaka, Zambia* (Research Paper No. 2). New York: UNICEF-Bamako Initiative Operations Research Programme.
- Atkinson, S., Ngwengwe, A., Macwan'gi, M., Ngulube, T.J., Harpham, T., & O'Connell, A. (1999). The referral process and urban health care in sub-Saharan Africa: the case of Lusaka, Zambia. *Social Science and Medicine*, 49, 27-38.
- Azevedo, M.J., Prater, S., & Lantum, D.N. (1991). Culture, biomedicine and child mortality in Cameroon. *Social Science and Medicine*, 32(12), 1341-1349.
- Bailey, W., & Phillips, D.R. (1990). Spatial patterns of use of health services in the Kingston metropolitan area, Jamaica. *Social Science and Medicine*, 30(1), 1-12.
- Bakker, A.B., Buunk, A.P., & Siero, F.W. (1993). Condom use of heterosexuals: a comparison of the Theory of Planned Behaviour, the Health Belief Model and Protection Motivation Theory. *Gedrag and Gezondheid Tijdschrift voor Psychologie and Gezondheid*, 21, 238-254.
- Baleta, A. (1998). South Africa to bring traditional healers into mainstream medicine. *The Lancet*, 352, 554.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice Hall.
- Baranowski, T., Perry, C.L., & Parcel, G.S. (1997). How individuals, environments and health behavior interact. In K. Glanz, B. Rimer, & F. Lewis (Eds.), *Health Behavior and Health Education* (2nd Edition) (pp. 153-178). San Francisco: Jossey-Bass.

- Barnes, J.A. (1954). Class and committees in a Norwegian island parish. *Human Relations*, 7, 39-58.
- Barnlund, D.C. (1976). The mystification of meaning: Doctor-patient encounters. *Journal of Medical Education*, 51, 716-725.
- Basu, A.M., & Stephenson, R. (2005). Low levels of maternal education and the proximate determinants of childhood mortality: a little learning is not a dangerous thing. *Social Science and Medicine*, 60, 2011-2023.
- Beale, D.A., & Manstead, A.S.R. (1991). Predicting mothers' intentions to limit frequency of infant's sugar intake: Testing the Theory of Planned Behaviour. *Journal of Applied Social Psychology*, 21, 409-431.
- Becken, H.J. (1989). *African Independent Churches as healing communities*. In G.C. Oosthuizen, S.D. Edwards, W.H. Wessels, & I. Hexam (Eds.), (1989). *Afro-Christian religion and healing in Southern Africa* (pp. 227-240). United Kingdom: The Edwin Mellen Press Ltd.
- Becker, M.H. (Ed.) (1974). The Health Belief Model and Personal Health Behavior. *Health Education Monographs*, 2, (entire issue).
- Becker, M.H., Drachman, R.H., & Kirscht, J.P. (1974). A new approach to explaining sick-role behaviour in low-income populations. *American Journal of Public Health*, 64, 205-216.
- Becker, M.H., Haefner, D.P., & Maiman, L.A. (1977a). The Health Belief Model in the prediction of dietary compliance: a field experiment. *Journal of Health and Social Behaviour*, 18, 348-366.
- Becker, M.H., Kaback, M., Rosenstock, I., & Ruth, M. (1975). Some influences on public participation in a genetic screening program. *Journal of Community Health*, 1, 3-14.
- Becker, M.A., & Maiman, L.A. (1983). Models of health-related behavior. In D. Mechanic (Ed.), *Handbook of health, health care and the health professions* (pp. 539-568). New York: The Free Press.
- Becker, M.H., Nathanson, C.A., Drachman, R.H., & Kirscht, J.P. (1977b). Mothers' health beliefs and children's clinic visits: A prospective study. *Journal of Community Health*, 3, 125-135.
- Becker, M.H., Radius, S.M., Rosenstock, I.M., Drachman, R.H., Schuberth, K.C., & Teets, K.C. (1978). Compliance with a medical regimen for asthma: a test of the health belief model. *Public Health Reports*, 93(3), 268-277.
- Becker, M.H., & Rosenstock, I.M. (1984). Compliance with medical advice. In A. Steptoe & A. Matthews (Eds.), *Health care and human behaviour* (pp. 135-152). London: Academic Press.
- Becker, M.H., & Rosenstock, I.M. (1987). Comparing Social Learning Theory and the Health Belief Model. In W.B. Ward, (Ed.), *Advances in Health Education and Promotion* (pp. 245-249). Greenwich, CT: JAI Press.
- Becker, S., Peters, D.H., Gray, R.H., Gultiano, C., & Black, R.E. (1993). The determinants of use of maternal and child health services in Metro Cebu, the Philippines. *Health Transition Review*, 3(1), 77-91.
- Beisecker, A.E., & Beisecker, T.D. (1990). Patient information-seeking behaviours when communicating with doctors. *Medical Care*, 28(1), 19-28.
- Bender, D. E., Rivera, T. & Madonna, D. (1993). Rural origin as a risk factor for maternal and child health in periurban Bolivia. *Social Science and Medicine*, 37, 1145-1349.
- Ben-Sira, Z. (1976). The function of the professional's affective behaviour in client satisfaction: A revised approach to interaction theory. *Journal of Health and Social Behavior*, 17(1), 3-11.
- Ben-Sira, Z. (1980). Affective and instrumental components in the physician-patient relationship: An additional dimension in interaction theory. *Journal of Health and Social Behavior*, 21, 170-180.
- Ben-Sira, Z. (1988). *Politics and primary medical care: Dehumanization and overutilization*. Aldershot, England: Gower.
- Ben-Sira, Z. (1997). Professionals' characteristics and health behavior. In D.S. Gochman (Ed.), *Handbook of Health Behavior Research II. Provider Determinants* (pp.37-48). New York: Plenum Press.
- Benyoussef, A., & Wessen, A.F. (1974). Utilization of health services in developing countries – Tunisia. *Social Science and Medicine*, 8, 287-304.
- Berger, P.L., & Luckman, T. (1967). *The social construction of reality*. Garden City, New York: Anchor Books.
- Bernhardt, M.H., Wiadnaya, I.G.P., Wiwardjo, H., & Pohan, I., (1999). Patient satisfaction in Developing countries. *Social Science and Medicine*, 48, 989-996.
- Bhardwaj, S.M., & Paul, B.K. (1986). Medical pluralism and infant mortality in a rural area of Bangladesh. *Social Science and Medicine*, 23(10), 1003-1010.
- Bhatia, J. C., & Cleland, J. (2001). Health-care seeking and expenditure by young Indian mothers in the public and private sectors. *Health Policy and Planning*, 16(1), 55-61.

- Bhatia, J. C., & Cleland, J. (2004). Health care of female outpatients in south-central India: comparing public and private sector provision. *Health Policy and Planning*, 19(6), 402-409.
- Bibeau, G., Corin, E., Buganza, M.H., Mandela, M., Mahoya, M., Mukana, M.K., Makengo, N.M., Ahluwalia, R., & Mechin, B. (1980). *Traditional Medicine in Zaire*. Ottawa: International Development Research Centre.
- Bijlmakers, L., & Chihanga, S. (1996). *District health service costs, resource adequacy and efficiency: a comparison of 3 districts*, Harare: UNICEF / Ministry of Health and Child Welfare, Zimbabwe
- Bland, R., Rollins, N., Van den Broeck, J., Coovadia, H., & Child Health Group. (2004). The use of non-prescribed medication in the first 3 months of life in rural South Africa. *Tropical Medicine & International Health*, 9(1), 118.
- Bledsoe, C., & Goubaud, M.F. (1988). The reinterpretation and distribution of Western pharmaceuticals: An example from the Mende of Sierra Leone. In S. van der Geest, & S. Reynolds White (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp. 253-276). Dordrecht: Kluwer Academic Publishers.
- Blumhagen, D. (1980). Hyper-tension: a folk illness with a medical name. *Culture, Medicine and Psychiatry*, 4(3), 197-229.
- Bodecker, G. (2000). Planning for cost-effective traditional health services. In WHO. *Traditional medicine, Better Science, Policy and Services for Health Development* (pp. 31-70), Awaji Island, Hyogo Prefecture, Japan, 11-13 September 2000.
- Bodenstein, J.W. (1977). Toxicity of traditional herbal remedies. *South African Medical Journal*, 52, 790.
- Boerma, J.T., Sommerfelt, A.E., & Shea, O.R. (1991). *Childhood morbidity and treatment patterns*. DHS Comparative Studies, No. 4. Columbia, Maryland: Institute for Resource Development.
- Bohland, J. (1984). Neighbourhood variations in the use of hospital emergency rooms for primary care. *Social Science and Medicine*, 19, 1217-1226.
- Bojalil, R. (2002). *Understanding influences on the quality of care given to children by private doctors in Hidalgo, Mexico*. PhD Thesis. London: University of London.
- Bonu, S., Rani, M., & Bishai, D. (2003). Using willingness to pay to investigate regressiveness of user fees in health facilities in Tanzania. *Health Policy and Planning*, 18(4), 370-380.
- Booyens, J.H. (1989). Aspekte van Populere Opvattinge oor Diareesiektes onder Tswana-sprekende Stedelinge (Aspects of the Popular Attitude about Diarrhoea among Tswana-speaking Urbanites). *Curationis*, 12(3-4), 11-16.
- Bowling, A. (1997). *Research methods in health: investigating health and health services*. Buckingham: Open University Press.
- Bowling, A. (2002). *Research methods in health* (2nd Edition). Buckingham: Open University Press.
- Bourdillon, M. (1991). *The Shona Peoples*. 3rd Edition. Gweru, Zimbabwe: Mambo Press.
- Bradshaw, D., Groenewald, P., Laubscher, R., Nannan, R., Nojilana, B., Norman, R., Pieterse, D.I., & Schneider, M. (2003). *Initial Burden of Disease Estimates for South Africa, 2000*. Cape Town: Medical Research Council. URL: <http://www.mrc.ac.za/bod/initialbodestimates.pdf> Accessed 20/01/06.
- Brody, H. (1992). *The healer's power*. New Haven, CT: Yale University Press.
- Brookes, K. B., Candy, H. A. & Pegel, K.H. (1985). Two thymol derivatives from *Callilepis laureola*. *Planta Medica*, 51, 32-34.
- Bryant, A.T. (1909). Zulu Medicine and medicine-men. *Annals of the Natal Museum*, 2, 1-103.
- Bryant, A.T. (1983). Zulu Medicine and Medicine-Men. Cape Town: Centaur.
- Bryce, J., Boschi-Pinto, K., Shibuya, K., & Black, R.E. (2005). WHO Child Health Epidemiology Reference Group. WHO Estimates of the causes of death in children. *The Lancet*, 365(9665), 1147-1152.
- Buch, E. (2000). The Health Sector Strategic Framework: A Review. *SA Health Review*, 2000, 53-74.
- Bührmann, M.V. (1989). Religion and Healing: The African Experience. In G.C. Oosthuizen, S.D. Edwards, W.H. Wessels, & I. Hexam (Eds.), (1989). *Afro-Christian religion and healing in Southern Africa* (pp. 25-34). United Kingdom: The Edwin Mellen Press Ltd.
- Burger, D. (2005). *South Africa Yearbook 2004/2005*. STE Publishers: Houghton, South Africa. URL: http://www.qcis.gov.za/docs/publications/yearbook/land_people.pdf Accessed 14/03/06.
- Burnett, A., Baggaley, R., Ndove-MacMillan, M., Sulwe, J., Hang'omba, B., & Bennett, J. (1999). Caring for people with HIV in Zambia: are traditional healers and formal health workers willing to work together? *AIDS Care*, 11(4), 481-491.
- Bush, P.J., & Iannotti, R.J. (1990). A children's Health Belief Model. *Medical Care*, 28, 69-86.
- Bye, S. & D. B. Dutton (1991). The inappropriate use of traditional medicines in South Africa. *Journal of Ethnopharmacology*, 34(2-3), 253-259.

- Byrne, P.S., & Long, B.E.L. (1976). *Doctor talking to patient*. London: HMSO.
- Caldwell, J.C. (1979). Education as a factor in mortality decline. *Population Studies*, 33, 395-414.
- Caldwell, J. C. (1986). Routes to low mortality in poor countries. *Population and Development Review*, 12(2), 171-220.
- Caldwell, J.C., & Caldwell, P., (1994). The Nature and Limits of the sub-Saharan African AIDS epidemic: Evidence from Geographic and other Patterns. In O. Orubuloye, J.C. Caldwell, P. Caldwell, G. Santow (Eds.), *Sexual Networking and AIDS in Sub-Saharan Africa: Behavioural Research and the Social Context* (pp. 195-216). Canberra: Health Transition Centre, The Australian National University.
- Calnan, M. (1988a). Lay evaluation of medicine and medical practice: Report of a pilot study. *International Journal of Health Services*, 18(2), 311-322.
- Calnan, M. (1988b). Towards a conceptual framework of lay evaluation of health care. *Social Science and Medicine*, 27, 927-933.
- Campbell, S.S. (1998). *Called to heal*. Gauteng: Zebra Press.
- Candy, H. A., Pegel, K., Brookes, K.B., & Rodwell, M. (1978). The occurrence of atractyloside in *Callilepis laureola*. *Phytochemistry*, 17, 1681-1682.
- Cartwright, A., & Anderson, R. (1981). *General practice revisited: A second study of patients and their doctors*. London: Tavistock Publications.
- Castle, S. (1993). Intra-household differentials in women's status: household function and focus as determinants of children's illness management and care in rural Mali. *Health Transition Review*, 3, 137-157.
- Cay, E.L. Philip, A.E., Small, W.P., Neilson, J., & Henderson, M.A. (1975). Patient assessment of the result of surgery for peptic ulcer. *Lancet*, 1(7897), 29-31.
- Celik, Y. & Hotchkiss, D. (2000). The socio-economic determinants of maternal health care utilization in Turkey. *Social Science and Medicine*, 50(12), 1797-1806.
- Chabikuli, N., Schneider, H., Blaauw, D., Zwi, A., & Brugha, R. (2002). Quality and equity of private sector care for sexually transmitted diseases in South Africa. *Health Policy and Planning*, 17(1), 40-46.
- Chalmers, B. (1990). *African Childbirth in Transition*. Berev: River Club.
- Chavunduka, G. (1978). *Traditional healers and the Shona Patient*. Mambo Press: Gwelo (Gweru), Rhodesia (Zimbabwe).
- Chavunduka, G. (1986). *The organisation of traditional medicine in Zimbabwe*. In M. Last & G. Chavunduka (Eds.), *The professionalisation of African medicine* (pp.29-50). Manchester: Manchester University Press in Association with the International African Institute.
- Chifundera, K., Kizungu, B., & Mbuyi, W. (1991). Antibacterial activity of *Mirabilis Jalapa* seed powder. *Journal of Ethnopharmacology*, 35(2), 197-199.
- Chrisman, N., & Kleinman, A. (1983). Popular health care, social networks and cultural meanings: the orientation of medical anthropology. In D. Mechanic (Ed.), *Handbook of health, health care and the health professions* (pp. 569-590). New York: The Free Press.
- City of Johannesburg (2005). *The 11 regions*. URL: www.joburg.org.za/regions Accessed 13/01/06.
- City of Johannesburg (2006a). *City of Johannesburg Statistics*. URL: http://www.joburg.org.za/facts/index_demographics.stm Accessed 15/03/06.
- City of Johannesburg (2006b). *Soweto*. URL: <http://www.joburg.org.za/soweto/> Accessed 15/03/06.
- Claeson, M., & Waldman, R.J. (2000). The evolution of child health programmes in developing countries: From targeting diseases to targeting people. *Bulletin of the World Health Organization*, 78(10), 1234-1245.
- Cleland, J., & van Ginnekin, J. K. (1988). Maternal education and child survival in developing countries: the search for pathways of influence. *Social Science and Medicine*, 27(12), 1357-1368.
- Cocks, M. & Dold, A. (2000). The role of 'African Chemists' in the health care system of Eastern Cape province of South Africa. *Social Science and Medicine*, 51, 505-1515.
- Cohen, G., Forbes, J., & Garraway, M. (1996). Can different patient satisfaction survey methods yield consistent results? Comparison of 3 surveys. *British Medical Journal*, 313, 841-4.
- Colson, A.C. (1971). The differential use of medical resources in developing countries. *Journal of Health and Social Behaviour*, 12(3), 226-237.
- Community Agency for Social Enquiry (CASE) for the Henry J. Kaiser Family Foundation (1995). *A National Household Survey of Health Inequalities in South Africa*. URL: <http://www.hst.org.za/uploads/files/case.pdf>. Accessed 09/01/2004.
- Conco, W.Z. (1972). The African Bantu practice of medicine: Some preliminary observations. *Social Science and Medicine*, 6(3), 283-322.

- Conner, M., & Armitage, C.J. (1998). Extending the Theory of Planned Behaviour: a review and avenues for further research. *Journal of Applied Social Psychology*, 28, 1430-1464.
- Conner, M., & Norman, P. (1994). Comparing the Health Belief Model and the Theory of Planned Behaviour in health screening. In D.R. Rutter, & L. Quine (Eds.), *Social Psychology and Health: European Perspectives* (pp. 1-24). Aldershot: Avebury.
- Conner, M., & Norman, P. (2005). *Predicting Health Behaviour: A social cognition approach*. In M. Conner, & P. Norman, (Eds.), *Predicting Health Behaviour: Research and practice with social cognition models* (pp. 1-27). Maidenhead, Berkshire: Open University Press.
- Conner, M., & Sparks, P. (2005). Theory of Planned Behaviour and Health Behaviour. In M. Conner, & P. Norman (Eds.), *Predicting Health Behaviour: Research and practice with social cognition models* (pp. 170-222). Maidenhead, Berkshire: Open University Press.
- Cosminsky, S. (1987). Women and health care on a Guatemalan plantation. *Social Science and Medicine*, 25(10), 1163-1173.
- Cosminsky, S., Scrimshaw, S. (1980). Medical Pluralism on a Guatemalan Plantation. *Social Science and Medicine*, 14B, 267-278.
- Couper, I., & Hugo, J., (2002). *Management of District Hospitals. Exploring success*. Durban: Health Systems Trust.
- Couper, I., Tumbo, J, Harvey, B., & Malete, N. (2004). *Key issues in clinic functioning: A case study of 2 clinics*. Durban: Health Systems Trust. URL: [ftp://ftp.hst.org.za/pubs/research/clinicstudy.pdf](http://ftp.hst.org.za/pubs/research/clinicstudy.pdf) Accessed 28/02/06.
- Creese, A.L. (1991). User charges for health care: a review of recent experience. *Health Policy and Planning*, 6(4), 309-319.
- Csete, J. (1993). Health-seeking behavior of Rwandan women. *Social Science and Medicine*, 37(11), 1285-1292.
- Cummings, K.M., Jette, A.M., & Brock, B.M. (1979). Psychological determinants of immunization behaviour in a swine influenza campaign. *Medical Care*, 17, 639-649.
- Cummings, K.M., Becker, M.H., & Maile, M.C. (1980). Bringing the models together: an empirical approach to combining variables used to explain health actions. *Journal of Behavioral Medicine*, 3, 123-145.
- Cunningham, A.B. (1993). *Imithi-isiZulu: Trade in traditional medicines in Natal/KwaZulu Natal*. Master of Social Science thesis. Durban: University of Natal.
- Daily Nation (Nairobi) (1978). Witchcraft warning..., 27 January, 1978.
- DasGupta, M. (1990). Death clustering, mother's education and the determinants of child mortality in rural Punjab. In J. C. Caldwell, S. Findley, P. Caldwell, G. Santow, W. Cosford, J. Braid & D. Broers-Freeman (Eds.), *What we know about health transition: The cultural, social and behavioural determinants of health. Health Transition series*. Australian National University. 2(1), 441-461.
- Dawson, S., Gunsalam, J., Khan, N., & McNee, A. (1991). *The application of qualitative research methods in the study of health seeking behaviour in relation to childhood acute respiratory infections, Bohol, Philippines*. Report for Master of Tropical Health Degree. Brisbane: Tropical Health Program, University of Queensland.
- Dawson, S., Manderson, L., & Tallo, V. (1993). *A manual for the use of focus groups. Methods for social research in disease*. WHO Social and Economic Research (SER); UNDP / World Bank / WHO Special Programme for Research and Training in Tropical Diseases (TDR) Boston, MA: International Nutrition Foundation for Developing Countries (INFDC). URL: <http://www.unu.edu/unupress/food2/UIN03/uin03e00.htm> Accessed 26/03/03.
- Day, C., & Gray, A. (2002). Health and Related Indicators. In P. Ijumba (Ed.), *South African health review (SAHR) (2002)* (pp. 419-532). Durban: Health Systems Trust. URL: <http://www.hst.org.za/uploads/files/chapter21.zip> Accessed 10/05/03.
- de Bartolome, C. A., & Vosti, S. A. (1995). Choosing between public and private health-care: A case study of malaria treatment in Brazil. *Journal of Health Economics*, 14(2), 191-205.
- de Bethune, X., Alfani, S., & Lahaye, J.P. (1989). The influence of an abrupt price increase on health service utilization: evidence from Zaïre. *Health Policy and Planning*, 4, 76-81.
- De Paola, L.M., Roberts, M.C., Blaiss, M.S., Frick, P.J., & McNeal, R.E. (1997). Mothers' and children's perceptions of asthma medication. *Children's Health Care*, 26(4), 265-283.
- de Wet, T. (1998a). *Doepa after dark: Protective medicines for infants in Soweto, South Africa*. Ph.D. Dissertation. University of Florida.
- de Wet, T. (1998b). Muti Wenyoni: commodification of an African folk medicine. *South African Journal of Ethnology*, 21(4), 165-172.
- de Zoysa, I., Carson, D., Feachem, B., Kirkwood, E., Lindsay-Smith, E., & Loewenson, R. (1984). Perceptions of Childhood Diarrhoea and its Treatment in Rural Zimbabwe. *Social Science and Medicine*, 19(7), 727-734.

- du Toit, B. (1980). Religion, ritual and healing amongst among urban Black South Africans. *Urban Anthropology*, 9(1), 21-49.
- du Toit, B. (1998). Modern folk medicine in South Africa. *South African Journal of Ethnology*, 21(4), 145-153.
- Department of Education (2005a). *Net enrolment rate: SA close to universal primary enrolment*. Press Release – 10 October 2005. Pretoria: Department of Education. URL: <http://www.education.gov.za/mainMedia.asp?src=mvie&xsrc=955> Accessed 15/03/06.
- Department of Education (2005b). *Education statistics in South Africa at a glance in 2003*. Pretoria: Department of Education. URL: <http://www.education.gov.za/EMIS/emisweb/03stats/2003%20Stat%20at%20a%20Glance.pdf> Accessed 15/03/06.
- Department of Health (2001a). *The District Health System in South Africa: Progress made and next steps*. Pretoria: Department of Health. URL: <http://www.doh.gov.za/docs/policy/dhsystem.html> Accessed 22/10/05.
- Department of Health (2001b). *The Primary Health Care Package for South Africa – a set of norms and standards*. Pretoria: Department of Health. URL: www.doh.gov.za/docs/policy/norms Accessed 01/03/06.
- Department of Health (2003a). Speech by the Minister of Health, Dr Manto Tshabalala-Msimang, MP, during the signing of a memorandum of understanding between the indigenous healers of KwaZulu Natal and the Nelson R. Mandela School of Medicine, 22 October 2003. URL: <http://www.doh.gov.za/search/index.html>; <http://www.info.gov.za/speeches/2003/03102911461008.htm> Accessed 24/01/06.
- Department of Health (2003b). *Traditional Health Practitioners Bill [B66B-2003]*. URL: <http://www.info.gov.za/gazette/bills/2003/b66b-03.pdf> Accessed 24/01/06.
- Department of Health (2004a). *Department of Health Annual Report for 2003/2004*. Pretoria: Department of Health. URL: <http://www.doh.gov.za/docs/reports/annual/2003-04/index.html> Accessed 01/03/06.
- Department of Health (2004b). *Strategic priorities for the National Health System, 2004-2009*. Pretoria: Department of Health. URL: <http://www.doh.gov.za/docs/policy/stratpriorities.pdf> Accessed 01/03/06.
- Department of Health (2005a). *SA delegation supports call for development of Policy Framework for Traditional Medicine*. Issued by: National Department of Health, 19 September 2005. URL: <http://www.doh.gov.za/search/index.html> Accessed 24/01/06.
- Department of Health (2005b). *Traditional Health Practitioners Act No. 35 of 2004*. *Government Gazette*, Vol. 476. Cape Town. URL: <http://www.info.gov.za/gazette/acts/2004/a35-04.pdf> Accessed 24/01/06.
- Department of Health, Medical Research Council & Measure DHS+ (1998). *South African Demographic Health Survey (SADHS) 1998*. Pretoria: Department of Health.
- DermNet NZ (2004). *Capillary Vascular Malformation*. URL: <http://dermnetnz.org/vascular-malformation.html> Accessed 10/09/04.
- Develay, A., R., Sauerborn, R., & Diesfield, H.J. (1996). Utilization of health care in an African urban area: Results from a household survey in Ouagadougou, Burkina-Faso. *Social Science and Medicine*, 43(11), 1611-1619.
- DeVellis, R.F., DeVellis, B.M., Revicki, D.A., Lurie, S.J., Runyan, D.K., & Bristol, M. (1985). Development and validation of the Child Improvement Locus of Control (CILC) scales. *Journal of Social and Clinical Psychology*, 3, 307-324.
- DeVellis, B.M., DeVellis, R.F., & Spilsbury, J.C. (1988). Parental actions when children are sick: The role of belief in divine influence. *Basic and Applied Social Psychology*, 9, 185-196.
- DiMatteo, M.R. (1991). *The psychology of health, illness, and medical care: An individual perspective*. Pacific Grove, CA: Brooks/Cole.
- DiMatteo, M.R. (1993). Expectations in the physician-patient relationship: Implications for patient adherence to medical treatment recommendations. In P.D. Blanck (Ed.), *Interpersonal expectations* (pp. 296-315). New York: Cambridge University Press.
- DiMatteo, M.R. (1994). Enhancing patient adherence to medical recommendations. *Journal of the American Medical Association*, 271(1), 79-83.
- DiMatteo, M.R. (1997). Health behaviours and care decisions: An overview of professional-patient communication. In D.S. Gochman (Ed.), *Handbook of health behavior research II. Provider determinants* (pp. 5-22). New York: Plenum Press.
- Diop, F., Yazbeck, A., & Bitran, R. (1995). The impact of alternative cost recovery systems on access and equity in Niger. *Health Policy and Planning*, 10(3), 223-240.
- Djukanovic, V. & Mach, E.P. (1975). *Alternative approaches to meeting basic health needs in developing countries*. Geneva: World Health Organization.

- Doctors for life International (2004). *One last call for empirical science before parliament passes the traditional health practitioners bill*. Media release. August, 16 2004. URL: http://www.doctorsforlifeinternational.com/about/media/releases/healers/16aug04_trad_parliament.cfm Accessed 25/01/06.
- Doke, C.M., Malcolm, D.M., Sikakana, J.M.A., & Vilakazi, B.W. (2001). *English-Zulu Zulu-English Dictionary*. Johannesburg: Witwatersrand University Press.
- Donabedian, A. (1980). *Explorations in quality assessment and monitoring. Volume 1: The definition of quality and approaches to its assessment*. Ann Harbor, MI: Health Administration Press, School of Public Health, the University of Michigan.
- Donabedian, A. (1985). *Explorations in quality assessment and monitoring. Volume 3: The methods and findings of quality assessment and monitoring*. Ann Harbor, MI: Health Administration Press, School of Public Health, the University of Michigan.
- Dorrington, R., Bradshaw, & Budlender, D. (2002). *HIV/AIDS profile of the provinces of South Africa. Indicators for 2002*. Cape Town: Centre for Actuarial Research, South African Medical Research Council and Actuarial Society of South Africa. URL: <http://mrc.ac.za/bod/AIDSindicators2002.pdf> Accessed 19/01/06.
- Dorrington, R., Bradshaw, D., Johnson, L., & Budlender, D. (2004). *The Demographic Impact of HIV/AIDS. National Indicators for 2004*. Cape Town: Centre for Actuarial Research, South African Medical Research Council and Actuarial Society of South Africa. URL: <http://mrc.ac.za/bod/demographic.pdf> Accessed 19/01/06.
- Druss, B. & Mechanic, D. (2003). Should visit length be used as a quality indicator in primary care? *The Lancet*, 361, 1148.
- Dube, D. (1989). *A Search for Abundant Life: Health, Healing and Wholeness in the Zionist Churches*. In G.C. Oosthuizen, S.D. Edwards, W.H. Wessels, & I. Hexam (Eds.), (1989). *Afro-Christian religion and healing in Southern Africa* (pp. 109-136). United Kingdom: The Edwin Mellen Press Ltd.
- Dutton, D. (1986). Financial, organizational and professional factors affecting health care utilization. *Social Science and Medicine*, 23(7), 721-735.
- Earl-Taylor, M. (2002). HIV/AIDS, the stats, the virgin cure and infant rape. *Science in Africa*, April 2002. URL: <http://www.scienceinafrica.co.za/2002/april/virgin.htm> Accessed 24/01/06.
- Eckblad, M., & Chapman, L.J., (1983). Magical ideation as an indicator of schizotypy. *Journal of Consulting and Clinical Psychology*, 51, 215-225.
- Edgerton, R.E. (1992). *Sick societies: Challenging the myth of primitive harmony*. New York: Free Press.
- Edwards, N. (1954). The theory of decision making. *Psychological Bulletin*, 51, 380-417.
- Edwards, S. (1983). Indigenous African Healers and Western-trained Psychologists: A Comparative Study of Interview Methods Number 38. In *Publication Series of University of Zululand, Series B*. Kwa Dlangezwa, South Africa: University of Zululand.
- Edwards, S. (1986). Traditional and modern medicine in South Africa: a research study. *Social Science and Medicine*, 22(11), 1273-1276.
- Ekanem, E.E., Akitoye, C.O., Adediji, O.T., & Salako, Q.A. (1993). A quantitative assessment of the Nigerian mothers' ability to prepare salt-sugar solution for the home management of diarrhoea. *Journal of the Royal Society of Health*, 113(5), 243-246.
- Elliott, H. (1997). The use of diaries in sociological research on health experience. *Sociological Research Online*, 2(2). URL: <http://www.socresonline.org.uk/socresonline/2/2/7.html> Accessed 25/4/04.
- Elliott, V., Morgan, S., Day, S., Mollerup, L., & Wang, W. (2001). Parental health beliefs and compliance with prophylactic penicillin administration in children with sickle cell disease. *Journal of Pediatric Hematology/Oncology*, 23(2), 112-116.
- Ellis, C. (2004). *Communicating with the African patient*. Scottsville, South Africa: University of Kwa-Zulu Natal Press.
- Elo, I.T. (1992). Utilization of maternal health-care services in Peru: The role of women's education. *Health Transition Review*, 2, 49-69.
- EQUINET Steering Committee (2000). *Equity in Health in Southern Africa: Turning Values into Practice*. Overview prepared for the EQUINET Regional Conference on *Building Alliances for Equity in Health*, South Africa, September, 2000. EQUINET Policy Series No. 7.
- Etkin, N.L. (1988). Cultural Constructions of Efficacy. In S. van der Geest, & S. Reynolds White (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp. 299-326). Dordrecht: Kluwer Academic Publishers.
- Etkin, N.L. (1992). "Side effects": Cultural constructions and reinterpretations of Western pharmaceuticals. *Medical Anthropology Quarterly*, 6(2), 99-113.
- Fabrega, H. Jr. (1973). Toward a model of illness behaviour. *Medical Care*, 11, 470-484.

- Fabrega, H. Jr. (1974). *Disease and social behaviour: an interdisciplinary perspective*. Cambridge, Massachusetts: Massachusetts Institute of Technology Press.
- Fabrega, H., Jr. (1997). Historical and cultural foundations of health behavior. A comparative approach. In D.S. Gochman (Ed.), *Handbook of health behavior research I. Personal and social determinants* (pp. 29-40). New York: Plenum Press.
- Farge, E.J. (1978). Medical orientation among a Mexican-American population: an old and a new model reviewed. *Social Science and Medicine*, 12, 277-282.
- Fassin, D., Jeanne, E., Cèbe, D., & Réveillon, M. (1988). Who consults and where? Sociocultural differentiation in access to health care in urban Africa. *International Journal of Epidemiology*, 17(4), 858-864.
- Feacham, R. G., & Jamison, D.T. (Eds.) (1991). *Disease and mortality in sub-Saharan Africa*. Washington D.C.: The International Bank for Reconstruction and Development / The World Bank.
- Feierman, S. (1979). Change in African therapeutic systems. *Social Science and Medicine*, 13B, 277-284.
- Feierman, S. (1984). *The social origins of health and healing in Africa*. Commissioned by American Council of Learned Societies/Social Science Research Council Joint Committee on African Studies. Presented at 27th Annual Meeting of the African Studies Association. October 25-28, 1984, Los Angeles.
- Feierman, S., & Janzen, J.M. (1992). *The social basis of health and healing in Africa*. Los Angeles: City of California Press.
- Feinsilver, J. (1993). *Healing the masses: Cuban health politics at home and abroad*. Berkeley: University of California Press.
- Felhaber, T. (Ed.), & Mayeng, I. (1997). *South African traditional healers' primary health care handbook*. Cape Town: Kagiso Publishers.
- Ferguson, A. (1988). Commercial pharmaceutical medicine and medicalization: a case study from El Salvador. In S. van der Geest, & S. Reynolds White (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp. 19-46). Dordrecht: Kluwer Academic Publishers.
- Filmer, D., & Pritchett, L. (2001). Estimating wealth effects without expenditure data – or tears. An application to educational enrollments in States of India. *Demography*, 38(1), 115-132.
- Fishbein, M. (1967). Attitude and the prediction of behaviour. In M. Fishbein (Ed.), *Readings in attitude theory and measurement* (pp. 477-492). New York: Wiley.
- Fishbein, M. (1980). A Theory of Reasoned Action: Some applications and implications. In H. Howe, & M. Page (Eds.), *Nebraska Symposium on Motivation*, 1979 (pp. 65-116). Lincoln: University of Nebraska Press.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M., Triandis, H.C., Kanfer, F.H., Becker, M., Middlestadt, S.E. & Eichler, A. (2001). Factors influencing behaviour and behaviour change. In A. Baum, T.A. Revenson, & J.E. Singer (Eds.), *Handbook of health psychology* (pp. 3-17). Mahwah, NJ: Lawrence Erlbaum Associates.
- Fisher, S. (1983). Doctor talk/patient talk: How treatment decisions are negotiated in doctor/patient communication. In S. Fisher, & A. Todd (Eds.), *The social organization of doctor-patient communication* (pp. 135-157). Washington DC: Center for Applied Linguistics.
- Floyd, D.L., Prentice-Dunn, S., & Rogers, R.W. (2000). A meta-analysis of Protection Motivation Theory. *Journal of Applied Social Psychology*, 30, 407-429.
- Flynn, M.F., Lyman, R.D., & Prentice-Dunn, S. (1995). Protection motivation theory and adherence to medical treatment regimens for muscular dystrophy. *Journal of Social and Clinical Psychology*, 14, 61-75.
- Fonn, S., & Xaba, M. (2001). Health workers for change: developing the initiative. *Health Policy and Planning*, 16(1), 13-18.
- Foster, G. (1976). Disease etiologies in non-Western medical systems. *American Anthropologist*, 78(4), 773-782.
- Foster, G. (1977). Medical anthropology and international health planning. *Social Science and Medicine*, 11, 527-534.
- Foster, G., & Anderson, B. (1978). *Medical anthropology*. New York: John Wiley & Sons.
- Fosu, G.B. (1986). Implications of mortality and morbidity for health care delivery in Ghana. *Sociology of Health and Illness*, 8(3), 252-277.
- Fosu, G. B. (1989). Access to health care in urban areas of developing countries. *Journal of Health and Social Behavior*, 30, 398-411.

- Fosu, G.B. (1992). The use of injections for treating childhood diseases: determinants and consequences for preventive health care in developing countries. *Sociological Focus*, 25(4), 329-343.
- Fosu, G. B. (1994). Childhood morbidity and health services utilization: Cross-national comparisons of user-related factors from DHS data. *Social Science and Medicine*, 38(9), 1209-1220.
- Frankenberg, R., & Leeson, J. (1976). Disease, illness and sickness: social aspects of the choice of healer in a Lusaka suburb. In J.B. London (Ed.), *Social anthropology and medicine* (pp. 223-258). New York: Academic Press.
- Freeman, M. (1991). Mental health for all – moving beyond rhetoric. *South African Journal of Psychology*, 21(3), 141-147.
- Freeman, D.H., Gesler, W.M., Mieras, B.J., & Schymura, M. (1983). A categorical data analysis of contacts with the family health clinic, Calabar, Nigeria. *Social Science and Medicine*, 17(9), 571-578.
- Freeman, M., & Motsei, J.M. (1992). Planning health care in South Africa: Is there a role for traditional healers? *Social Science and Medicine*, 34(11), 1183-1190.
- Freund, P.J. (1989). Traditional Healers and Diarrhoea: Results of a Recent Survey in Zambia. Paper presented at the 117th Annual Meeting of the American Public Health Association (APHA), Chicago, 22-26 October 1989.
- Friedson, E. (1970). *Profession of medicine: a study of the sociology of applied knowledge*. New York: Dodd, Mead.
- Gaines, A. (1979). Definitions and diagnoses: cultural implications of psychiatric help-seeking and psychiatrists' definitions of the situations in psychiatric emergencies. *Culture, Medicine and Psychiatry*, 3(4), 381-418.
- Gálvez, C.A., Modeste, N., Lee, J.W., Betancourt, H., & Wilkins, R. (2001). Predictors of intention to seek medical help by Peruvian mothers for children who have signs of pneumonia. *International Quarterly of Community Health Education*, 20(4), 347-368.
- Ganatra, B., & Hirve, S. (1994). Male bias in health care utilization for under-fives in a rural community in western India. *Bulletin of the World Health Organization*, 72, 101-104.
- Garenne, M. (2003). Sex differences in health indicators among children in African DHS surveys. *Journal of Biosocial Science*, 35, 601-614.
- Gebhardt, W.A. & Maes, S. (2001). Integrating social-psychological frameworks for health behaviour research. *American Journal of Health Behaviour*, 25, 528-536.
- Geertsen, R. (1997). Social attachments, group structures, and health behaviour. In D.S. Gochman (Ed.), *Handbook of health behavior research I. Personal and social determinants* (pp.267-288). New York: Plenum Press.
- Geertsen, R., Klauber, M.R., Rindflesh, M., Kane, R.L., & Gray, R. (1975). A reexamination of Suchman's views on social factors in health care utilization. *Journal of Health and Social Behavior*, 16, 226-237.
- Geertz, C. (1966). Religion as a cultural system. In M. Banton (Ed.), *Anthropological approaches to the study of religion* (pp. 1-46). London: Tavistock.
- Geguld, S. (2003) *New law will make sangomas watch their bones*. Durban: Health Systems Trust, (30-04-2003). URL: <http://www.hst.org.za/> Accessed 10/05/03.
- Geissler, P. W., Harris, S. A., Prince, R.J., Olsen, A., Achieng' Odhiambo, R., Oketch-Rabah, H., Madiaga, P.A., Andersen, A., & Molgaard, P. (2002). Medicinal plants used by Luo mothers and children in Bondo district, Kenya. *Journal of Ethnopharmacology*, 83(1-2), 39-54.
- Gerlach, L. (1959). Some basic Digo conceptions of health and disease. In *One-day symposium on attitudes to health and disease among some East African tribes*. Kampala, Uganda: East African Institute of Social Research.
- Gertler, P., Locay, L., & Sanderson, W. (1987). Are user fees regressive? *Journal of Econometrics*, 36, 67-88.
- Gertler, P., & van der Gaag, J. (1990). *The willingness to pay for medical care: Evidence from two developing countries*. Washington DC: The World Bank and Baltimore, MD: John Hopkins University Press.
- Geschiere, P. (1997). *The modernity of witchcraft*. Charlottesville: University Press of Virginia.
- Gesler, W.M. (1979a). Illness and health practitioner use in Calabar, Nigeria. *Social Science and Medicine*, 13D(1), 23-30.
- Gesler, W.M. (1979b). Barriers between people and health care practitioners in Calabar, Nigeria. *Southeastern Geography*, 19, 27-41.
- Gesler, W.M. (1984). *Health care in developing countries*. Washington, DC: Association of American Geographers.

- Gesler, W.M., & Gage, G. (1987). Health care delivery for under five children in rural Sierra Leone. In: R. Akhtar (Ed.), *Health and Disease in Tropical Africa* (pp. 427-468). London: Harwood.
- Gibson, D. (2004). The gaps in the gaze in South African Hospitals. *Social Science and Medicine*, 59, 2013-2024.
- Gilbert, L. (1998). Pharmacy's attempts to extend its roles: a case study in South Africa. *Social Science and Medicine*, 46(1), 83-95.
- Gilbert, L. & Soskolne, V. (2003). Self-assessed health – a case study of social differentials in Soweto, South Africa. *Health and Place*, 9, 193-205.
- Gilson, L. (2006). Personal communication 28/02/06.
- Gilson, L., Alilio, M., & Heggenhougen, K. (1994). Community satisfaction with primary health care services: An evaluation undertaken in the Morogoro region of Tanzania. *Social Science and Medicine*, 39(6), 767-780.
- Gilson, L., Palmer, N., & Schneider, H. (2005). Trust and health worker performance: exploring a conceptual framework using South African evidence. *Social Science and Medicine*, 61, 1418-1429.
- Glanz, K., Rimer, B., & Lewis, F. (Eds.) (1997). *Health Behavior and Health Education*. (2nd Edition). San Francisco: Jossey-Bass.
- Glaser, B.G., & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Glik, D.C., Ward, W.B., Gordon, A., & Haba, F. (1989). Malaria treatment practices among mothers in Guinea. *Journal of Health and Social Behaviour*, 30(4), 421-435.
- Gochman, D.S. (Ed.) (1997a). *Handbook of health behavior research II. Provider determinants*. New York: Plenum Press.
- Gochman, D.S. (1997b). Provider determinants of health behavior. In D.S. Gochman (Ed.), *Handbook of health behavior research II. Provider determinants: An integration* (pp. 397-418). New York: Plenum Press.
- Goldman, N., & Heuveline, P. (2000). Health-seeking behaviour for child illness in Guatemala. *Tropical Medicine & International Health*, 5(2), 145-155.
- Goldman, N., Pebley, A. R., & Gragnolati, M. (2002). Choices about treatment for ARI and diarrhea in rural Guatemala. *Social Science and Medicine*, 55(10), 1693-1712.
- Good, B. (1977). The heart of what's the matter: The semantics of illness in Iran. *Culture, Medicine and Psychiatry*, 1, 25-58.
- Good, B.S., & Good, M.D. (1981). The meaning of symptoms: a cultural hermeneutic model for clinical practice. In L. Eisenberg & A. Kleinman (Eds.), *The relevance of social science for medicine* (pp. 165-196). Dordrecht, Holland: D. Reidel.
- Good, C.M. (1987a). *Ethnomedical systems in Africa*. New York: The Guildford Press.
- Good, C.M. (1987b). Community health in tropical Africa: Is medical pluralism a hindrance or a resource? In R. Akhtar (Ed.), *Health and Disease in Tropical Africa* (pp. 13-49). London: Harwood.
- Goody, J., & Watt, I. (1963). The consequences of literacy. *Comparative Studies in Society and History*, 5, 304-345.
- Government Communication and Information System (GCIS) (2005). *South African Government Information: Education*. URL: <http://www.info.gov.za/aboutsa/education.htm> Accessed 21/01/06.
- Grady, K.E., & Strudler Wallston, B. (1988). Research in health care settings. *Applied Social Research Methods Series, Vol. 14*. Newbury Park, California: Sage Publications.
- Gray, R., Smith, G., & Barss, P. (1990). *The use of verbal autopsy methods to determine selected causes of death in children*. Occasional Paper No. 10, Baltimore: Institute for International Programs, John Hopkins University.
- Green, E.C. (1985). Traditional healers, mothers and childhood diarrhoeal disease in Swaziland: The interface of anthropology and health education. *Social Science and Medicine*, 20(3), 277-285.
- Green, E.C. (1999). *Indigenous theories of contagious disease*. California: Altamira Press, A Division of Sage Publications.
- Green, E.C. Jurg, A, & Dgedge, A. (1994). The snake in the stomach: Child diarrhea in central Mozambique. *Medical Anthropology Quarterly*, 8(1), 4-24.
- Green, E.C., & Zokwe, B. (1993). Evaluation of the "second generation" of South African Traditional Healers Trained in HIV/AIDS Prevention and Management. *Family Health International*, August Report, Arlington.
- Green, L.W. (1975). Manual for scoring socioeconomic status for research on health behaviour. *Public Health Reports*, 85, 815-827.

- Gumede, M.V. (1990). *Traditional healers. A medical doctor's perspective*. Johannesburg: Skotaville Publishers.
- Gutierrez, G., Reyes, H., Martinez, H., Tome, P., & Guiscafre, H. (1994). Study of the disease-health seeking-death process: Another use of the verbal autopsy. *International Journal of Epidemiology*, 23(2), 427-428.
- Habib, O.S., & Vaughan, J.P. (1986). The determinants of health services utilization in Southern Iraq: a household interview survey. *International Journal of Epidemiology*, 15(3), 359-403.
- Hackett, T.P., Cassen, N.H., & Raker, J.W. (1973). Patient delay in cancer. *New England Journal of Medicine*, 289, 14-20.
- Haddad, S., & Fournier, P., (1995). Quality, cost and utilization of health services in developing countries. A longitudinal study in Zaïre. *Social Science and Medicine*, 40(6), 743-753.
- Haddad, S., Fournier, P., Machouf, N., & Yatara, F. (1998). What does quality mean to lay people? Community perceptions of primary health care services in Guinea. *Social Science and Medicine*, 47(3), 381-394.
- Hall, J.A., Roter, D.L., & Katz, N.R. (1988). Meta-analysis of correlates of provider behavior in medical encounters. *Medical Care*, 26, 657-675.
- Hammond-Tooke, W.D. (1981a). *Boundaries and belief: The structure of a Sotho worldview*. Johannesburg: Witwatersrand University Press.
- Hammond-Tooke, W.D. (1981b). *Patrolling the herms: Social structure, cosmology and pollution concepts in Southern Africa*. Johannesburg: Witwatersrand Press.
- Hammond-Tooke, W.D. (1989). *Rituals and medicines*. Johannesburg: AD Donker.
- Hardon, A. (1987). The use of pharmaceuticals in a Filipino village: Doctors prescriptions and self-medication. *Social Science and Medicine*, 25(3), 277-292.
- Hardon, A. (1991). *Confronting ill-health. Medicines, self-care and the poor in Manila*. Quezon City: Health Action Information Network.
- Hardon, A. (1994). A people's understanding of efficacy for coughs and cold medicines in Manila in the Philippines. In N. Etkin, & M. Tan. (Eds.), *Medicines: meanings and contexts* (pp. 47-67). Quezon City: Philippines Health Action Information Network.
- Hardon, A., Boonmongkon, P., Streefland, P., Tan, M., Hongvivatana, T., van der Geest, S., van Staa, A., & Varkevisser, C. (1994). *Applied health research manual. Anthropology of health and health care*. Joint Initiative of Mahidol University, De La Salle University, & Royal Tropical Institute.
- Harrison, D. (1997). *A pocket guide to district health care in South Africa*. Durban: Health Systems Trust. URL: <http://www.healthlink.org.za/hst/isds> Accessed 22/10/05.
- Harrison, J.A., Mullen, P.D., & Green, L.W. (1992). A meta-analysis of studies of the Health Belief Model with adults. *Health Education Research*, 7, 107-116.
- Haug, M.R. (1997). Physician power and patients' health behaviour. In D.S. Gochman, (Ed.), *Handbook of Health Behavior Research II. Provider Determinants* (pp. 49-62). New York: Plenum Press.
- Hausmann-Mueula, S., Mushi, A.K., & Muela Ribera, J. (2000). The paradox of the cost and affordability of traditional and government health services in Tanzania. *Health Policy and Planning*, 15(3), 296-302.
- Hayes-Bautista, D.E. (1976). Modifying the treatment: Patient compliance, patient control and medical care. *Social Science and Medicine*, 12, 369-376.
- Hayes-Bautista, D.E. (1978). Chicano patients and medical practitioners: A sociology of knowledges paradigm of lay-professional interaction. *Social Science and Medicine*, 12, 83-90.
- Health Systems Trust (2004). *The national primary health care facilities survey 2003: Gauteng*, Durban: Health Systems Trust and Department of Health.
- Heaney, C.A., & Israel, B.A. (1997). Social networks and social support. In K. Glanz, B. Rimer & F. Lewis (Eds.), *Health behavior and health education*. (2nd Edition) (pp. 179-205). San Francisco: Jossey-Bass.
- Heap, M., & Ramphela, M. (1991). The quest for wholeness: health care strategies among the residents of council-built hostels in Cape Town. *Social Science and Medicine*, 32(2), 117-126.
- Heelas, P. (1977). The evil eye: A review of C. Maloney (Ed.), New York: Columbia University Press, 1976. *Religion*, 7(1), 96-103
- Heggenhougen, H.K. (1980). The utilization of traditional medicine – a Malaysian example. *Social Science and Medicine*, 14B, 39-44.
- Heller, P.S. (1982). A model of the demand for medical and health services inn peninsular Malaysia. *Social Science and Medicine*, 16, 267-284.
- Helman, C.G. (1985). Communication in primary care: The role of patient and practitioner explanatory models. *Social Science and Medicine*, 20, 923-931.
- Helman, C.G. (1996). *Culture, Health and Illness: An introduction for health professionals*. Oxford: Butterworth-Heinemann.

- Hennink, M., & Diamond, I. (1999). Using focus groups in social research. In A. Memon, & R. Bull (Eds.), *Handbook of the psychology of interviewing* (113-142). London: John Wiley & Sons.
- Hershey, J.C., Luft, H.S., & Gianaris, J.M. (1975). Making sense out of utilization data. *Medical Care*, 13, 838-853.
- Herskovits, M.J. (1950). The hypothetical situation: The technique of field research. *Southwest Journal of Anthropology*, 6, 32-40.
- Heszen-Klemens, I., & Lapinska, E. (1984). Doctor-patient interaction, patients' health behaviour and effects of treatment. *Social Science and Medicine*, 19, 9-18.
- Heuveline, P. & Goldman, N. (2000). A description of child illness and treatment behaviour in Guatemala. *Social Science and Medicine*, 50, 345-364.
- Hill, K. (2003). Frameworks for studying the determinants of child survival. *Bulletin of the World Health Organization*, 81, 2.
- Hill, D., Gardner, G., & Rassaby, J. (1985). Factors predisposing women to take precautions against breast and cervix cancer. *Journal of Applied Social Psychology*, 15(1), 59-79.
- Hill, Z., Kirkwood, B.R., & Edmond, K. (2001). *Family and community practices that promote child survival, growth and development: a review of the evidence*. Geneva: World Health Organization. URL: http://www.who.int/child-adolescent-health/New_Publications/CHILD_HEALTH/ISBN_92_4_159150_1.pdf Accessed 28/02/06.
- Hirschowitz, R. (1995a). Chapter 13. Provincial Comparisons. In Community Agency for Social Enquiry (CASE) for the Henry J. Kaiser Family Foundation. *A national household survey of health inequalities in South Africa*. URL: <http://www.hst.org.za/uploads/files/case.pdf> Accessed 09/01/04.
- Hirschowitz, R. (1995b). Chapter 12. Health knowledge. In Community Agency for Social Enquiry (CASE) for the Henry J. Kaiser Family Foundation. *A national household survey of health inequalities in South Africa*. URL: <http://www.hst.org.za/uploads/files/case.pdf> Accessed 09/01/04.
- Hirst, M. (1990). *The healer's art: Cape Nguni diviners in the townships of Grahamstown*. Unpublished Ph.D thesis. Grahamstown: Rhodes University.
- Hiss, T. (1987a). Experiencing places – I. The New Yorker, June 22, 45-68.
- Hiss, T. (1987b). Experiencing places – II. The New Yorker, June 29, 73-86.
- Hochbaum, G.M. (1958). *Public participation in medical screening programs: A sociopsychological study*. PHS publication no. 572. Washington DC: US Government Printing Office.
- Hodgkins, S., & Orbell, S. (1998). Can Protection Motivation Theory predict behaviour? A longitudinal study exploring the role of previous behaviour. *Psychology and Health*, 13, 237-250.
- Hogle, J., & Prins, A. (1991). *Indigenous knowledge and management of childhood diarrhoeal diseases*. Management Sciences for Health (PRITECH Project): Arlington, VA.
- Holdsworth, G., Garner, P., & Harpham, T. (1993). Crowded outpatient departments in city hospitals of developing countries: a case study from Lesotho. *International Journal of Health Planning and Management*, 8, 315-324.
- Honwana, A. (1994). *Nyamusoro: Spirit possession, ritual and social change among the Tsonga of southern Mozambique*. Ph.D. thesis (draft summary), University of London.
- Hopa, M., Simbayi, L.C., & du Toit, C.D. (1998). Perceptions on integration of traditional and Western healing in the New South Africa. *South African Journal of Psychology*, 28(1), 8-14.
- Horwitz, S.M., Morgenstern, H., & Berkman, L.F. (1985). The impact of social stressors and social networks on pediatric medical care use. *Medical Care*, 23, 946-959.
- Houghton, A., Bowling, A., Clarke, K., Hopkins, A., & Jones, I. (1996). Does a dedicated discharge coordinator improve the quality of hospital discharge? *Quality in Health Care*, 5, 89-95.
- House, J.S. (1981). *Work, stress and social support*. Reading, Massachusetts: Addison-Wesley.
- Houtrouw, S.M., & Carlson, K.L. (1993). The relationship between maternal characteristics, maternal vulnerability beliefs, and immunization compliance. *Issues in Comprehensive Pediatric Nursing*, 16(1), 41-50.
- Howard, G. R. (1978). Socio-economic factors affecting utilization of a rural Indian hospital. *Tropical Doctor*, 8, 210-218.
- Huby, G., (1997). Interpreting silence, documenting experience: An anthropological approach to the study of health service users' experience with HIV/AIDS in Lothian, Scotland. *Social Science and Medicine*, 44, 1149-1160.
- Hudelson, O. (1993). ORS and the treatment of childhood diarrhoea in Managua, Nicaragua. *Social Science and Medicine*, 37(1), 97-103.
- Hussain, R., Lobo, M.A., Inam, B., Khan, A., Qureshi, A.F., & Marsh, D. (1997). Pneumonia perceptions and management: An ethnographic study in urban squatter settlements of Karachi, Pakistan. *Social Science and Medicine*, 45(7), 991-1004.

- Hutchings, A., & Terblanche, S. E. (1989). Observations on the use of some known and suspected toxic Liliiflore in Zulu and Xhosa medicine. *South African Medical Journal*, 75, 62-69.
- Ijumba, P. (2002). Voices of primary health care facility workers. In P. Ijumba (Ed.), *South African health review (SAHR) (2002)* (pp. 181-200). Durban: Health Systems Trust. URL: www.hst.org.za/uploads/files/chapter10.pdf Accessed 19/02/06.
- International Development Research Center (1980). *Traditional medicine in Zaïre. Present and potential contribution to the health services*. IDRC-137e. Ottawa: International Development Research.
- Islam, M.K., & Gerdtham, U-G. (2006). The costs of maternal-newborn illness and mortality. In WHO (2006). *Moving towards universal coverage. Issues in maternal-newborn health and poverty*. URL: http://www.who.int/making_pregnancy_safer/publications/2_CostofMNH_islam_gerdtham.pdf Accessed 26/09/06.
- Jali, E.C. (1950). Bantu customs in relation to disease and health in the Bantu. *The Leech*, (November), 17-22.
- Janz, N., & Becker, M. (1984). The Health Belief Model: A decade later. *Health Education Quarterly*, 11(1), 1-47.
- Janz, N., Champion, V., & Strecher, V. (2002). The Health Belief Model. In K. Glanz, B. Rimer, & F. Lewis (Eds.), *Health behavior and health education* (3rd Edition) (pp. 45-66). San Francisco: Jossey-Bass.
- Janzen, J. M. (1978). *The quest for therapy - medical pluralism in Lower Zaïre*. Berkeley: University of California Press.
- Janzen, J., & Prins, G. (1981). Causality and classification in African medicine and health. *Social Science and Medicine*, 15B(3), 169-172.
- Jefferys, M., Brotherston, J.H.F., & Cartwright, A. (1960). Consumption of medicines on a working-class housing estate. *British Journal of Preventive Social Medicine*, 19, 179-189.
- Jewkes, R., Abrahams, N., & Mvo, Z. (1998). Why do nurses abuse patients? Reflections from South African Obstetric services. *Social Science and Medicine*, 47(11), 1781-1795.
- Jewkes, R., Martin, L., & Penn-Kekana, L. (2002). The virgin cleansing myth: Cases of child rape are not exotic. *The Lancet*, 359, 711.
- Joosub, S.O. (2004). *Dispensing law will burden poor*. Letter to the Editor, The Star, Tuesday April 27 2004.
- Joseph, A.E., & Phillips, D.R. (1984). *Accessibility and utilization: geographical perspectives on health care delivery*. London: Harper and Row.
- Joubert, P.H. (1982). Toxicology units in developing countries: Different priorities? *Journal of Toxicology - Clinical Toxicology*, 19(5), 509 – 516.
- Joubert, P. H. (1990). Poisoning admission of Black South Africans. *Clinical Toxicology*, 28, 85-94.
- Junod, H. (1962) [1926]. *The Life of a South African Tribe*. Vol. 2, *Mental Life*. New Hyde Park: New York University Books.
- Kabatesi, D. (1998). Use of traditional treatments for AIDS-associated diseases in resource-constrained settings. In L. Robertson *et al.* (Eds.), *Health in the Commonwealth: challenges and solutions 1998/1999*. London: Kensington Publications.
- Kale R. (1995). Traditional healers in South Africa: a parallel health care system. *British Medical Journal*, 310, 1182-1185.
- Kane, R. Olsen, D., Leymaster, C., Woolley, F.R., & Fisher, F.D. (1974). Manipulating the patient: A comparison of the effectiveness of physicians and chiropractic care. *Lancet*, 1, 1333-1336.
- Kanji, N. (1989). Charging for drugs in Africa: UNICEF's Bamako Initiative. *Health Policy and Planning*, 4, 110-120.
- Kasilo, O. (2000). Traditional African medicine. In WHO, *Traditional medicine, better science, policy and services for health development* (pp. 86-94), Awaji Island, Hyogo Prefecture, Japan, 11-13 September 2000.
- Kasilo, O. M. J. & Nhachi, C. F. B. (1992). The pattern of poisoning from traditional medicines in urban Zimbabwe. *South African Medical Journal*, 82(3), 187-188.
- Kasl, S.V., & Cobb, S. (1966a). Health behaviour, illness behaviour and sick role behaviour I. Health and illness behaviour. *Archives of Environmental Health*, 12, 246-266.
- Kasl, S.V., & Cobb, S. (1966b). Health behaviour, illness behaviour and sick role behaviour II. Sick role behaviour. *Archives of Environmental Health*, 12, 531-541.
- Kasper, J. (2000). Health-care utilization and barriers to health care. In G. Albrecht, R. Fitzpatrick, & S. Scrimshaw (Eds.), *Handbook of social studies in health and medicine*. London: Sage Publications.
- Kasteler, J., Kane, R.L., Olsen, D.M., & Thetford, C. (1976). Issues underlying prevalence of "doctor-shopping" behavior. *Journal of Health and Social Behavior*, 17, 328-339.

- Kato, L.L. (1970). Functional psychosis and witchcraft fears. *Law and Society Review*, 4, 385-406.
- Kauchali, S., Rollins, N., & Van den Broeck, J. (2004). Local beliefs about childhood diarrhoea: Importance for healthcare and research. *Journal of Tropical Pediatrics*, 50(2), 82-89.
- Keith, P., & Wickrama, K. (1990). Use and evaluation of health services by women in a developing country: Is age important? *Gerontologist*, 30, 262-268.
- Kelley, H.H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska symposium on motivation* (pp. 192-238). Lincoln: University of Nebraska Press.
- Kempen, G., & Suurmeijer, T.P. (1991). Professional home care for the elderly: An application of the Andersen-Newman model in the Netherlands. *Social Science and Medicine*, 33, 1081-1089.
- Kerr, H.D. (1993). White liver: a cultural disorder resembling AIDS. *Social Science and Medicine*, 36(5), 609-614.
- Khosa, S. & Thomas, E. (1995). Chapter 14: Free health care policies. In D. Harrison (Ed.), *South African health review (SAHR) (1995)* (pp. 222-228). Durban: Health Systems Trust. URL: <http://www.hst.org.za/publications> Accessed 15/03/06.
- Kibel, M., (2001). Acute respiratory infection in the developing world. In M.A. Kibel, & L.A. Wagstaff (Eds.), *Child health for all. A manual for Southern Africa* (pp. 325-333). Cape Town: Oxford University Press Southern Africa.
- Kibukamusoke, J.W., & Coovadia, H.M. (1984). Renal hazards from plant products. In J.W. Kibukamusoke (Ed.), *Tropical Nephrology*. Australia: Citiforge Pty Ltd.
- Kielmann, A.A., DeSweemer, C., Chernichovsky, D., Uberoi, I.S., Masih, N., Taylor, C.E., Parker, R.L., Reinke, W.E., Kakar, D.M., & Sarma, R.S. (1983). *Child and maternal health services in rural India: The Narangwal experiment. Volume 1*. Baltimore and London: The John Hopkins University Press.
- Kilaru, A., Brookes, M., Ganapathy, S., Matthews, Z. (2002). *Maternal health care in south India: Do adolescents seek more care than older women?* Working Paper No. 8. Opportunities and Choices, Southampton University. URL: Accessed 5/1/06 <http://socstats.soton.ac.uk/chocices/Maternal%20Health%20in%20South%20India%20wp8.pdf>
- King, J.B. (1982). The impact of patients' perceptions of high blood pressure on attendance at screening: an extension of the Health Belief Model. *Social Science and Medicine*, 16, 1079-1091.
- Kirigia, J.M., Fleuret, P., Renzi, M., & Byrne, D.J., (1989). *Effects of health care user fees: Evidence from Meru district*, Nairobi: UNICEF/USAID.
- Kirkwood, B. (1991). Acute respiratory infections. In R. Feacham & D. T. Jamison (Eds.), *Disease and mortality in sub-Saharan Africa*. Washington D.C.: The International Bank for Reconstruction and Development / The World Bank.
- Kirscht, J.P. (1974). The Health Belief Model and illness behaviour. *Health Education Monographs* 2, 387-408.
- Kirscht, J.P. (1982). Preventive health behaviour: A review of research and issues. *Health Psychology*, 2, 277-301.
- Kleinman, A. (1978). Concepts and a model for comparison of medical systems as cultural systems. *Social Science and Medicine*, 12(2B), 85-95.
- Kleinman, A. (1980). *Patients and healers in the context of culture. An exploration of the borderland between anthropology, medicine and psychiatry*. Berkeley: University of California Press.
- Kleinman, A. (1988). *The illness narratives: Suffering, healing and the human condition*. New York: Basic Books.
- Kleinman, A., & Sung, L.H. (1979). Why do indigenous practitioners successfully heal? *Social Science and Medicine*, 13B, 7-26.
- Kloos, H. (1990). Utilization of selected hospitals, health centres and health stations in central, southern and western Ethiopia. *Social Science and Medicine*, 31, 101-114.
- Kloos, H., Etea, A., Degefa, A., Aga, H., Solomon, B., Abera, K., Abegaz, A., & Belemo, G. (1987). Illness and health behaviour in Addis Ababa and rural central Ethiopia. *Social Science and Medicine*, 25(9), 1003-1019.
- Kloos, H., Getahun, B., Teferi, A., Gebre Tsadik, K., & Belay, S. (1988). Buying Drugs in Addis Ababa: A Quantitative Analysis. In S. van der Geest, & S. Reynolds White (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp. 81-106). Dordrecht: Kluwer Academic Publishers.
- Kloosterhouse, V., & Ames, B. (2002). Families' use of religion / spirituality as a psychosocial resource. *Holistic Nursing Practice*, 16(5), 61-76.

- Knippenberg, R., Levy-Bruhl, D., Osseni, R., Drame, K., Soucat, A., & Debeugny, C. (1990). *Children in the Tropics: The Bamako Initiative primary health care experience*. Paris: International Children's Center.
- Kohn, R., & White, K.L. (Eds.) (1976). *Health care: An international study*. London: Oxford University Press.
- Kohnert, D. (1996). Magic and witchcraft: Implications for democratization and poverty-alleviating aid in Africa. *World Development*, 24, 1347-1355.
- Koop, C.E. (1993). Revitalizing primary care: A 10-point proposal. *Hospital Practice*, Oct. 15, 55-62.
- Kosa, J., & Robertson, L.S. (1975). The social aspects of health and illness. In J. Kosa, & I.K. Zola (Eds.), *Poverty and health: A sociological analysis* (pp. 40-79). Cambridge, Massachusetts: Harvard University Press.
- Kresno, S., Harrison, G., Sutrisna, B., & Reingold, A. (1994). Acute respiratory illnesses in children under five years in Indramayu, West Java, Indonesia: A rapid ethnographic assessment. *Medical Anthropology*, 15(4), 425-434.
- Krige, E.J. (1950). *The social system of the Zulus* (2nd Edition). London: Longmans.
- Krige, E.J., & Krige, J.D. (1943). *The realm of a Rain-Queen, a study of the pattern of Lovedu society*. London: Oxford University Press.
- Kroeger, A. (1983). Anthropological and socio-medical health care research in developing countries. *Social Science and Medicine*, 17(3), 147-161.
- Kutty, V.R. (1989). Women's education and its influence on attitudes to aspects of child-care in a village community in Kerala. *Social Science and Medicine*, 29, 1299-1303.
- Kviz, F.J., Dawkins, C.E., & Ervin, N.E. (1985). Mothers' health beliefs and use of well-baby services among a high-risk population. *Research in Nursing and Health*, 8(4), 381-387.
- Lam, C.L.K., Catarivas, M.G., Munro, C., & Lauder, I.J. (1994). Self-Medication among Hong Kong Chinese. *Social Science and Medicine*, 39(12), 1641-1647.
- Lambrechts, T., Bryce, J., & Orinda, V. (1999). Integrated management of childhood illness: A summary of first experiences. *Bulletin of the World Health Organization*, 77(7), 582-594.
- Landy, D. (1977). Traditional curers and the impact of Western medicine. In D. Landy (Ed.), *Culture, disease and healing. Studies in medical anthropology* (pp. 468-481). London: Macmillan Press.
- Lane, S.D., & Millar, M.I. (1987). The 'Hierarchy of Resort' re-examined: Status and class differentials as determinants of therapy for eye disease in the Egyptian Delta. *Urban Anthropology*, 16(2), 151-182.
- Langlie, J.K. (1977). Social networks, health beliefs, and preventive health behaviour. *Journal of Health and Social Behaviour*, 18, 244-260.
- Larsen, J., Msane, C., & Mohnke, M.C. (1983a). The fate of women who deliver at home in rural KwaZulu. *South African Medical Journal*, 63, 543-545.
- Larsen, J., Msane, C., & Monkhe, M.C. (1983b). The Zulu traditional birth attendant. An evaluation of her attitudes and techniques and their implications for health education. *South African Medical Journal*, 63(14), 540-542.
- Lashley, M.E. (1987). Predictors of breast self examination practice among elderly women. *Advances in Nursing Science*, 9, 25-34.
- Lasker, J. (1981). Choosing among therapies: Illness behaviour in the Ivory Coast. *Social Science and Medicine*, 15A, 157-168.
- LeBeau, D. (1998). *Urban patients' utilisation of traditional medicine: upholding culture and tradition*. Windhoek: Sociology Dept, University of Namibia. URL: <http://www.treff-raum-espaciotime.com/englisch/artikel2/upholdingculture.html> Accessed 12/11/03.
- Ledogar, R.J. (1975). *Hungry for profits: US food and drug multinationals in Latin America*. New York: IDOC.
- Légaré, F., Godin, G., Dodin, S., Turcot, L., & Lapèrrière, L. (2003). Adherence to hormone replacement therapy: a longitudinal study using the Theory of Planned Behaviour. *Psychology and Health*, 18(3), 351-371.
- Lehmann, U., & Sanders, D. (2002). Chapter 7: Human Resource Development. In P. Ijumba (Ed.), *South African health review (SAHR) (2002)* (pp. 119-134). Durban: Health Systems Trust. URL: <http://www.hst.org.za/uploads/files/chapter7.pdf> Accessed 11/04/03.
- Leonard, K. L. (2001). African Traditional Healers: Are they as good at Economics as they are at Medicine? URL: http://www.arec.umd.edu/kleonard/papers/trhl_pd_sc.pdf Accessed 11/04/03.
- Leonard, K.L. (2003). African traditional healers and outcome-contingent contracts in health care. *Journal of Development Economics*, 71(1), 1-22.
- Levin, J.S. (1994). Religion and health: Is there an association, is it valid, and is it causal. *Social Science and Medicine*, 38, 1475-1482.

- Levy, R. (1983). Social support and compliance: A selective review and critique of treatment integrity and outcome measurement. *Social Science and Medicine*, 17, 1329-1338.
- Lewin, K. (1935). *A Dynamic Theory of Personality*. New York: McGraw-Hill.
- Lewin, K. (1936). *Principles of Topological Psychology*. New York: McGraw-Hill.
- Ley, P. (1981). Professional non-compliance: a neglected problem. *British Journal of Clinical Psychology*, 20, 151-154.
- Ley, P. (1988). *Communicating with patients*. London: Croom Helm.
- Ley, P. (1989). Improving patients' understanding, recall, satisfaction and compliance. In A. Broome (Ed.), *Health Psychology*. London: Chapman & Hall.
- Lindblad, E., & Lyttkens, C. H. (2002). Habit versus choice: the process of decision-making in health-related behaviour. *Social Science and Medicine*, 55(3), 451-465.
- Lindenbaum, S. (1990). Maternal education and health care processes in Bangladesh: The health and hygiene of the middle classes. In J. C. Caldwell, S. Findley, P. Caldwell, G. Santow, W. Cosford, J. Braid & D. Broers-Freeman (Eds.), *What we know about health transition: The cultural, social and behavioural determinants of health. Health Transition series*. Australian National University. 2(1), 425-440.
- Litvack, J., & Bodart, C. (1993). User fees plus quality equals improved access to health care: Results of a field experiment in Cameroon. *Social Science and Medicine*, 37(3), 369-383.
- Loewenson, R., Sanders, D., & Davies, R. (1991). Challenges to equity in health and health care: A Zimbabwean case study. *Social Science and Medicine*, 32(10), 1079-1088.
- Loewenson, R. (1999a). *Can research fill the equity gap in Southern Africa?* Paper presented to the African Regional Conference on Essential National Health Research, Harare, September, 1999. EQUINET Policy Series No.1. Co-published by Regional Network for Equity in Health in Southern Africa (EQUINET) and Training and Research Support Centre (TARSC).
- Loewenson, R. (1999b). *Public participation in Health: Making people matter*. Working Paper 84. IDS (UK) and TARSC (Zimbabwe).
- Logan, K. (1988). 'Casi como Doctor': Pharmacists and their Clients in a Mexican Urban Context. In S. van der Geest, & S. Reynolds White (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp. 107-129). Dordrecht: Kluwer Academic Publishers.
- Long, A. (1984). *Research into health and illness. Issues in design, analysis and practice*. USA: Gower Publishing Company.
- Longmore, L. (1959). *The dispossessed - A study of the sex-life of Bantu women in and around Johannesburg*. London: Jonathan Cape.
- Louw, D.A. & Pretorius, E. (1995). *The traditional healer in a multicultural society: The South African experience*. In L.L. Adler, & B.R. Mukherji, (Eds.), *Spirit versus scalpel. Traditional healing and modern psychotherapy* (pp. 41-57). Westport, Connecticut: Bergin & Garvey.
- Lukmanji, Z. (1988). Formulae of sugar-salt solutions recommended for treatment of diarrhoeal dehydration at home in African countries. *Annals Tropical Paediatrics*, 8(1), 35-37.
- Lund, F. & Patel, Z. (1995). Socio-economic context of health. In D. Harrison (Ed.), *South African health review (SAHR) (1995)* (pp. 33-42). Durban: Health Systems Trust. URL: <http://www.hst.org.za/uploads/files/sahr95.pdf> Accessed 09/01/04.
- Luszczynska, A., & Schwarzer, R. (2005). Social Cognitive Theory. In M. Conner, & P. Norman (Eds.), *Predicting health behaviour: Research and practice with social cognition models* (pp. 127-169). Maidenhead, Berkshire: Open University Press.
- Mabina, M. H., Pitsoe, S. B., & Moodley, J. (1997). The effect of traditional herbal medicines on pregnancy outcome. The King Edward VIII Hospital Experience. *South African Medical Journal*, 87(8), 1008-1010.
- MacCormack, C. & Draper, A. (1988). Cultural meanings of oral rehydration salts in Jamaica. In S. van der Geest, & S. Reynolds White, (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp. 277-288). Dordrecht: Kluwer Academic Publishers.
- Maclean, C.M.U. (1966). Hospitals or healers? An attitude survey in Ibadan. *Human Organization*, 25, 131-139.
- Maddux, J.E., & Rogers, R.W. (1983). Protection motivation and self-efficacy: a revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology*, 19, 469-479.
- Madeley, C. R. & J. S. Peiris (1998). Respiratory viruses. In G. C. Cook (Ed.), *Manson's Tropical Diseases* (pp. 736-745). London: W.B. Saunders Company Ltd.
- Mahougbe Hounsa, A., Godin, G., Alihonou, E., Valois, P., & Girard, J. (1993). An application of Ajzen's theory of planned behaviour to predict mothers' intention to use oral rehydration therapy in a rural area of Benin. *Social Science & Medicine*, 37(2), 253-261.

- Maiman, L.A., Becker, M.H., Cummings, K.M., Drachman, R.H., & O'Connor, P.A. (1982). Effects of socio-demographic and attitudinal factors on mother-initiated medication behavior for children. *Public Health Reports*, 97(2), 140-149.
- Maiman, L.A., Becker, M.H., & Katlic, A.W. (1986). Correlates of mothers' use of medications for their children. *Social Science and Medicine*, 22(1), 41-51.
- Makinen, M., Waters, H., Rauch, M., Almagambetova, N., Bitran, R., Gilson, L., McIntyre, D., Pannarunothai, S., Prieto, A.L., Ubilla, G., & Ram, S. (2000). Inequalities in health care use and expenditures: an empirical data from eight developing countries in transition. *Bulletin of the World Health Organization*, 78, 55-65.
- Mamdani, M., & Walker, G. (1985). *Essential drugs and developing countries: A review and selected annotated bibliography*. London: London School of Hygiene and Tropical Medicine.
- Mander, M. (1997). *The utilization of natural resources in Sadiola District, western Mali: economic importance and implications for village relocation*. Pietermaritzburg: Institute of Natural Resources. (INR Investigation Report No. 155).
- Mander, M. (1998). *Marketing of indigenous medicinal plants in South Africa – A case study in KwaZulu-Natal*. Rome: Food and Agricultural Organization of the United Nations. URL: <http://www.fao.org/docrep/W9195E/w9195e00.htm> Accessed 03/07/03.
- Mariko, M. (2003). Quality of care and the demand for health services in Bamako, Mali: The specific roles of structural, process, and outcome components. *Social Science and Medicine*, 56(6), 1183-1196.
- Marsh, V.M., Mutemi, W.M., Mutiri, J., Haaland, A., Watkins, W.M., Otieno, G., & Marsh, K. (1999). Changing home treatment of childhood fevers by training shop keepers in rural Kenya. *Tropical Medicine and International Health*, 4(5), 383-389.
- Mashego, T.A., & Peltzer, K. (2005). Community perception of quality of (primary) health care services in a rural area of Limpopo Province, South Africa: a qualitative study. *Curationis*, 28(2), 13-21.
- Mathiane, N. (1994). *Free medical services put pressure on PWV clinics*. Business Day, August 3, 1994.
- Matsitukwa, L., & Pisacane, A. (1988). Correct measures: home-made ORS. *Dialogue Diarrhoea*, Dec(35), 6.
- Matsuda, D. (2002). *Beliefs about immunization and children's health among childbearing mothers in Nepal*. Unpublished Senior Honours Thesis, Stanford University. URL: <http://www.stanford.edu/group/beagle2/matsuda/DonnieThesis.pdf#search=%22donald%20matsuda%20beliefs%22> Accessed 02/10/06.
- Maxwell, D. (1995). Witches, prophets and avenging spirits: The second Christian movement in North-East Zimbabwe. *Journal of Religion in Africa*, 25, 309-339.
- Maxwell, J. (1996). *Qualitative research design. An interactive approach*. California: Sage Publications.
- Mayer, A.C. (1966). The significance of quasi-groups in the study of complex societies. In M. Banton (Ed.), *The social anthropology of complex societies* (pp. 97-122). ASA Monograph No. 4. London: Tavistock.
- Mbugua, J.K., Bloom, G.H., & Segall, M.M. (1995). Impact of user charges on vulnerable groups: the case of Kibwezi in rural Kenya. *Social Science and Medicine*, 41(6), 829-835.
- Mburu, F.M. (1973). *A socioeconomic epidemiology study: Traditional and modern medicine among the Akamba ethnic group of upland Machakos – Kenya*. Unpublished M.A. thesis, Department of Sociology, Makerere University, Kampala, Uganda.
- McClain, J., Bernhardt, J.M., & Beach, M.J. (2005). Assessing parents' perception of children's risk for recreational water illnesses. *Emerging Infectious Diseases*, 11(5), 670-676.
- McCoy, D. (1996). *Free health care for pregnant women and children under six in South Africa: An impact assessment*. Report prepared by the Child Health Unit for Durban: Health Systems Trust. URL: <http://www.hst.org.za/uploads/files/fhc.pdf> Accessed 23/03/06.
- McCoy, D. & Gilson, D. (1998). *Improving and monitoring the equity of health care provision: A discussion of the selection of indicators*. In: L. Franklin; D. Harrison, & M. Sinclair (Eds.), *A travelling seminar on the attainability and affordability of equity in health care provision*. Workshop Proceedings (pp. 66-79). The Philippines, 28 June - 5 July, 1997. Durban: Health Systems Trust. URL: http://www.gega.org.za/download/equity_sem.pdf Accessed 23/03/06.
- McCoy, D., & Khosa, S. (1996). Chapter 14: Free health care policies. In D. Harrison (Ed.), *South African health review (SAHR) (1996)* (pp. 157-164). Durban: Health Systems Trust. URL: <http://www.hst.org.za/uploads/files/sahr96.pdf> Accessed 15/03/06.
- McCray, T.M. (2004). An issue of culture: the effects of daily activities on prenatal care utilization patterns in rural South Africa. *Social Science and Medicine*, 59, 1843-1855.

- McIntyre, D., Bloom, G., Doherty, J., & Brijlal, P. (1995). *Health expenditure and finance in South Africa*. Durban: Health Systems Trust and the World Bank. URL: <http://www.hst.org.za/uploads/files/hstefsa.pdf> Accessed 23/03/06.
- McIntyre, D., Gilson, L., Valentine, N., & Söderlund, N. (1998). *Equity of health sector revenue generation and allocation: A South African case study*. Major Applied Research 3, Working Paper 3. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc. URL: <http://www.phrplus.org/Pubs/m3wp3.pdf> Accessed 23/03/06.
- McIntyre, D., & Gilson, L. (2002). Putting equity back onto the social policy agenda: experience from South Africa. *Social Science and Medicine*, 54, 1637-1656.
- McKinlay, J.B. (1972). Some approaches and problems in the study of the use of services – an overview. *Journal of Health and Social Behavior*, 13(2), 115-152.
- McMillen, H. (2004). The adapting healer: pioneering through shifting epidemiological and sociocultural landscapes. *Social Science and Medicine*, 59, 889-902.
- McPake, B. (1993). User charges for health services in developing countries: A review of the economic literature. *Social Science and Medicine*, 36(11), 1397-1405.
- McPake, B., Hanson, K., & Mills, A. (1993). Community financing of health care in Africa: An evaluation of the Bamako Initiative. *Social Science and Medicine*, 36(11), 1383-1395.
- McVann, A., Havlik, I., Joubert, P.H., & Monteagudo, F.S. (1992). Cardiac glycoside poisoning involved in deaths from traditional medicines. *South African Medical Journal*, 81(3), 139-141.
- Mechanic, D. (1962). The concept of illness behaviour. *Journal of Chronic Diseases*, 15, 189-194.
- Mechanic, D. (1968). *Medical sociology: a selective view*. New York: Free Press.
- Mechanic, D. (1975). Illness and care. In J. Kose, A. Antonovsky, & I.K. Zola (Eds.), *Poverty and health* (p. 205). Cambridge: Cambridge University Press.
- Mechanic, D. (1979). Correlates of physician utilization: Why do major multivariate studies of physician utilization find trivial psychosocial and organizational effects? *Journal of Health and Social Behavior*, 20, 387-396.
- Mechanic, D. (1989). Theory, method and substance. *Journal of Health and Social Behaviour*, 30, 147-160.
- Melrose, D. (1982). *Bitter pills: Medicines and the Third World poor*. Oxford: Oxfam.
- Mgobozi, P. (1974). The problem of tuberculosis among Africans. *The Lancet*, 44 (2), 45-45.
- Michel, J. (1985). Why do people like medicines? A perspective from Africa. *The Lancet*, January 26, 1(8422), 210-211.
- Michie, C., Hayhurst, M., Knobel, G.J., Stokol, J.M., & Hensley, B. (1991). Poisoning with traditional remedy containing potassium dichromate. *Hum Exp Toxicol*, 10, 129-131.
- Miller, N.E., & Dollard, J. (1941). *Social learning and imitation*. New Haven, Connecticut: Yale University Press.
- Mills, A. Palmer, N., Gilson, L., McIntyre, D., Schneider, H., Sinanovic, E., & Wadee, H. (2004). The performance of different models of primary care provision in Southern Africa. *Social Science and Medicine*, 59, 931-943.
- Milne, S., Sheeran, P., & Orbell, S. (2000). Prediction and intervention in health-related behavior: a meta-analytic review of Protection Motivation Theory. *Journal of Applied Social Psychology*, 30, 106-143.
- Mirza, N.M., Macharia, W.M., Wafula, E.M., Agwanda, R., & Onyango, F.E. (1990). Mortality patterns in a rural Kenyan community. *East Africa Medical Journal*, 67(11), 823-829.
- Mishler, E.G. (1981). Social contexts of health care. In E.G. Mishler, L.R. Amarasingham, S.D. Osherson, S.T. Hauser, N.E. Waxler, & R. Liem (Eds.), *Social contexts of health, illness and patient care* (pp. 79-103). Cambridge, England: Cambridge University Press.
- Mitchell, J.C. (1965). The meaning of misfortune for urban Africans. In M. Fortes, & G. Dieterlen (Eds.), *African systems of thought* (pp. 192-203). London: Oxford University Press.
- Mitri, F., Hofmeyer, G.J., & van Gelderen, C.J. (1987). Meconium during labour - self-medication and other associations. *South African Medical Journal*, 71, 431-433.
- Mkhwanazi, I. (1989). *The Isangoma as a Psychotherapist*. In G.C. Oosthuizen, S.D. Edwards, W.H. Wessels, & I. Hexam (Eds.), (1989). *Afro-Christian religion and healing in Southern Africa* (pp. 261-280). United Kingdom: The Edwin Mellen Press Ltd.
- Modiba, P., Gilson, L., & Schneider, H. (2001). Voices of service users. In A. Ntuli (Ed.), *South African health review (SAHR) (2001)* (pp. 187-202). Durban: Health Systems Trust. URL: www.hst.org.za/uploads/files/chapter10_01.pdf Accessed 19/02/06.
- Mohseni, M. (1979). Attitudes towards modern and traditional medicine in an Iranian community. *Social Science and Medicine*, 13A, 499-500.
- Molyneux, C.S., Murira, G., Masha, J., & Snow, R.W., (2002). Intra-household relations and treatment decision-making for childhood illness: A Kenyan case study. *Journal of Biosocial Science*, 34, 109-13.

- Montaño, D.E., Kasprzyk, D., & Taplin, S.H. (1997). The Theory of Reasoned Action and the Theory of Planned Behavior. In K. Glanz, B. Rimer, & F. Lewis (Eds.), *Health Behavior and Health Education* (2nd Edition) (pp. 85-112). San Francisco: Jossey-Bass.
- Moodley, N. (2004). *Medical aids to examine bill on traditional healers*. Health Systems Trust, news article 17/09/2004. URL: <http://www.hst.org.za/news/20040494> Accessed 24/01/06.
- Moore, D.A. & Moore, N.L. (1998). Paediatric enema syndrome in a rural African setting. *Annals of Tropical Paediatrics*, 18, 139-154.
- Morris, A. (Ed.) (1999). *Change and continuity: A survey of Soweto in the late 1990s*. Johannesburg: Department of Sociology, University of the Witwatersrand.
- Morris, G., & Mdlalose, B. (1991). The use of isihlambezo in the upper Tugela Region. *South African Family Practice*, 10(5), 169-173.
- Mosley, W.H. & Chen L.C. (1984). An analytic framework for the study of child survival in developing countries. *Population and Development Review*, 10, 25-45.
- Mugisha, F., Bocar, K., Dong, H. Chepng'eno, G. & Sauerborn, R. (2004). The two faces of enhancing utilization of health-care services: determinants of patient initiation and retention in rural Burkina Faso. *Bulletin of the World Health Organization*, August 2004, 82(8), 572-579.
- Mull, D.S., Mull, J.D., Kundi, M.Z., & Anjum, M. (1994). Mothers' perceptions of severe pneumonia in their own children: A controlled study in Pakistan. *Social Science and Medicine*, 38(7), 973-987.
- Mullen, P.D., Hersey, J.C., & Iverson, D.C. (1987). Health behaviour models compared. *Social Science and Medicine*, 24, 973-981.
- Murdock, G.P. (1980). *Theories of illness*. Pittsburgh: University of Pittsburgh.
- Murdock, G.P., Ford, C.S., Hudson, A.E., Kennedy, R., Simmons, L.W., & Whiting, J.W.M. (1961). Outline of cultural materials. In *Behavior Science Outlines* (4th Revised Edition), Volume 1. New Haven: Human Relations Area Files, Inc.
- Murray, C.J.L., & Chen, L.C. (1993). In search of a contemporary theory for understanding mortality change. *Social Science and Medicine*, 36(2), 143-156.
- Mwabu, G.M. (1984). *A model of household choice of medical treatment alternatives in Kenya*. Unpublished Ph.D thesis. Boston University, Department of Economics, January 1984.
- Mwabu, G.M. (1986). Health care decisions at the household level: Results of a rural health survey in Kenya. *Social Science and Medicine*, 22, 315-319.
- Mwabu, G.M. (1995). Health care reform in Kenya: a review of the process. *Health Policy*, 32, 245-255.
- Mwabu, G.M., & Mwangi, W.H. (1986). Health care financing in Kenya: a simulation of the welfare effects of user fees. *Social Science and Medicine*, 22, 23-27.
- Mwenesi, H.A. (1993). Mothers' definition and treatment of childhood malaria on the Kenyan coast. *Social and Economic Research Project Reports, No. 13*. UNDP/World Bank/TDR. Geneva: World Health Organization.
- Mwenesi, H.A., Harpham, T., & Snow, R.W. (1995). Child malaria treatment practices among mothers in Kenya. *Social Science and Medicine*, 40, 1271-1277.
- National Centre for Health Statistics (NCHS) (2000). *2000 CDC Growth Charts: United States*. URL: <http://www.cdc.gov/growthcharts/> Accessed 26/01/05.
- National Centre for Health Statistics (NCHS) (2004). *The international classification of diseases, tenth revision, clinical modification (ICD-10-CM)*. URL: www3.who.int/icd Accessed 28/04/05.
- National Health Service (NHS, UK) (2005). *Choose and Book: Frequently asked questions*. URL: <http://www.chooseandbook.nhs.uk/patients/faqs> Accessed 30/12/05.
- Naylor, D. (1988). Private medicine and the privatisation of health care in South Africa. *Social Science and Medicine*, 27(11), 1153-1170.
- Ndaki, K. (2004). *Regulating traditional healers*. URL: <http://www.health-e.org.za/news/article.php?uid=20031097> Accessed 10/05/03.
- Neumark, Y., Palti, H., Donchin, M., & Ellencweig, A.Y. (1992). Utilization of pediatric health services in Jerusalem. *Journal of Community Health*, 17, 271-281.
- Newman, R., Gloyd, S., Nyangezi, J., Machobo, F., & Muiser, J. (1998). Satisfaction with outpatient health care services in Manica Province, Mozambique. *Health Policy and Planning*, 13(2), 174-180.
- Ngubane, H. (1977). *Body and mind in Zulu medicine*. London: Academic Press.
- Ngubane, H. (1981). Clinical practice and organization of indigenous healers in South Africa. *Social Science and Medicine*, 15B(3), 361-366.
- Nichter, M. (1994). Acute respiratory illness: Popular health culture and mother's knowledge in the Philippines. *Medical Anthropology*, 15(4), 353-275.
- Nichter, M., & Vuckovic, N. (1994). Agenda for an anthropology of pharmaceutical practice. *Social Science and Medicine*, 39(11), 1509-1525.

- Norma, P., Searle, A., Harrad, R., Vedhara, K. (2003). Predicting adherence to eye patching in children with amblyopia: an application of protection motivation theory. *British Journal of Health Psychology*, 8(1), 67-82.
- Norman, P., & Conner, M. (1993). The role of social cognition models in predicting attendance at health checks. *Psychology and Health*, 8, 447-462.
- Norman, P., Boer, H., & Seydel, E. (2005). Protection Motivation Theory. In M. Conner, & P. Norman (Eds.), *Predicting health behaviour: Research and practice with social cognition models* (pp. 28-80). Maidenhead, Berkshire: Open University Press.
- Norman, P., & Fitter, M. (1989). Intention to attend a health screening appointment: Some implications for general practice. *Counselling Psychology Quarterly*, 2, 261-272.
- Ntuli, A., & Day, C. (2004). Ten years on – have we got what we ordered? In P. Ijumba, C. Day, & A. Ntuli (Eds.), *South African health review (SAHR) (2003/2004)* (pp. 1-10). Durban: Health Systems Trust. URL: http://www.hst.org.za/uploads/files/chap1_03.pdf Accessed 31/08/05.
- Nyamongo, I. (2002). Health care switching behaviour of malaria patients in a Kenyan rural community. *Social Science and Medicine*, 54, 377-386.
- Nyatoti, V., Nyati, Z., & Mtero, S. (1993). Knowledge, attitudes and practices of mothers and health workers in relation to the use of sugar and salt solution in Masvingo Province, Zimbabwe. *Central African Journal of Medicine*, 39(5), 95-102.
- Oaks, S., Mitchell, V., Pearson, G., & Carpenter, C. (Eds.) (1991). *Malaria: obstacles and opportunities*. Washington DC: National Academy Press.
- Ogden, J. (2004). *Health Psychology*. Buckingham: Open University Press.
- Ogden, J., Bavalia, K., Bull, M., Frankum, S., Goldie, C., Gossiau, M., Jones, A., Kumar, S., & Vasant, K. (2004). "I want more time with my doctor": a quantitative study of time and the consultation. *Family Practice*, 21(5), 479-483.
- Okwu, A.S.O. (1979). Life, death, reincarnation, and traditional healing in Africa. *Issues (African Studies Association)*, 9, 19-24.
- Olango, P., & Aboud, F. (1990). Determinants of mothers' treatment of diarrhoea in rural Ethiopia. *Social Science and Medicine*, 31(11), 1245-1249.
- Oliver, R.L., & Berger, P.K. (1979). A path analysis of preventive care decision models. *Journal of Consumer Research*, 6, 113-122.
- Onwujekwe, O. (2005). Inequities in healthcare seeking in the treatment of communicable endemic diseases in Southeast Nigeria. *Social Science and Medicine*, 61, 455-463.
- Oosthuizen, G.C. (1989). Indigenous healing within the context of the African Independent Churches. In G.C. Oosthuizen, S.D. Edwards, W.H. Wessels, & I. Hexam (Eds.), (1989). *Afro-Christian religion and healing in Southern Africa* (pp. 71-90). United Kingdom: The Edwin Mellen Press Ltd.
- Orbell, S., Crombie, I., & Johnston, G. (1995). Social cognition and social structure in the prediction of cervical screening uptake. *British Journal of Health Psychology*, 1, 35-50.
- Ornstein, S. (1992). First impressions of the symbolic meanings connoted by reception area design. *Environment and Behavior*, 24(1), 85-110.
- Oskowitz, B., Schneider, H., & Hlatshwayo, Z. (1997). *Taking care of quality: Perspectives of patients and providers of a STD clinic*. Johannesburg: Centre for Health Policy, Department of Community Health, University of Witwatersrand.
- Oyenye, O.Y., & Orubuloye, I.O. (1985). Some aspects of traditional medicine in Bendel State of Nigeria: An exploratory study number 14. In *Niser Monograph Series*. Ibadan, Nigeria: Nigerian Institute of Social and Economics Research.
- Palmer, N. (1999). Patient choice of primary health care provider. In N. Crisp (Ed.), *South African health review (SAHR) (1999)* (pp. 95-102). Durban: Health Systems Trust. URL: http://www.hst.org.za/uploads/files/chapter8_99.pdf Accessed 08/06/05.
- Palmer, N. (2006). Personal communication 14/02/06.
- Pantanowitz, D. (1994). *Alternative medicine: A doctor's perspective*. Cape Town: Southern Book Publishers.
- Parker, D., Manstead, A.S., & Stradling, S.G. (1995). Extending the Theory of Planned Behaviour: the role of personal norm. *British Journal of Social Psychology*, 34, 127-137.
- Patel, S. (2002). *A pilot project to evaluate the effectiveness of the Integrated Management of Childhood Illness Strategy in two districts in the Western Cape* (Master's minithesis). Tygerberg: University of the Western Cape, November, 2002.
- Pebley, A.R., Goldman, N., & Rodriguez, G. (1996). Prenatal and delivery care and childhood immunization in Guatemala: Do family and community matter? *Demography*, 33(2), 231-247.
- Pelto, P.J., Bentley, M.E., & Pelto, G.H. (1990). Applied anthropology research methods: Diarrhoea studies as an example. In J. Coreil, & J.D. Mull (Eds.), *Anthropology and primary health care*. Boulder: Westview Press.

- Pelto, P.J., & Pelto, G.H. (1997). Studying knowledge, culture and behaviour in applied medical anthropology. *Medical Anthropology Quarterly*, 11, 147-63.
- Peltzer, K. (2003). Magical thinking and paranormal beliefs among secondary and university students in South Africa. *Personality and Individual Differences*, 35, 1419-1426.
- Peltzer, K., & Khoza, L.B. (1998). Attitudes and knowledge of nurse practitioners towards traditional healing, faith healing and complementary medicine in the Northern Province of South Africa. *Curationis*, 25(2), 31-41.
- Pepperall, J., Garner, P., Foxrushby, J., Moji, N., & Harpham, T. (1995). Hospital or health centre – a comparison of costs and quality of urban outpatient services in Maseru, Lesotho. *International Journal of Health Planning and Management*, 10(1), 59-71.
- Pescolido, B. (1991). Illness careers and networks ties: A conceptual model of utilization and compliance. *Advances in Medical Sociology*, 2, 161-184.
- Pfeiffer, J. (2002). African Independent Churches in Mozambique: Healing the Afflictions of Inequality. *Medical Anthropology Quarterly*, 16(2), 176-199.
- Phillips, D.R. (1986a). The demand for and utilisation of health services. In M. Pacione (Ed.), *Medical geography: progress and prospect* (pp. 200-247). London: Croom Helm.
- Phillips, D.R. (1986b). Primary health care in the Philippines: banking on the barangays? *Social Science and Medicine*, 23(10), 1105-1117.
- Phillips, D. R. (1990). *Health and health care in the Third World*. England: Longman Group UK Ltd.
- Pillai, R. K., Williams, S. V. Glick, H.A., Polsky, D.B., Berlin, J.A., & Lowe, R.A. (2003). Factors affecting decisions to seek treatment for sick children in Kerala, India. *Social Science and Medicine*, 57(5), 783-790.
- Pio, A., Leowski, J., & Ten Dam, H.G. (1985). The magnitude of the problem of acute respiratory infection. In R. M. Douglas & E. Kerby-Eaton (Eds.), *Acute respiratory infections in childhood*. Adelaide, Australia: University of Adelaide.
- Popat, A., Shear, N. H., Malkiewicz, I., Stewart, M., Steenkamp, V., Thomson, S., & Neuman, M. (2001). The toxicity of *Callilepis laureola*, a South African traditional herbal medicine. *Clinical Biochemistry*, 34(3), 229-236.
- Povey, R., Conner, M., Sparks, P., James, R., & Shepherd, R. (2000). The Theory of Planned Behaviour and healthy eating: examining additive and moderating effects of social influence variables. *Psychology and Health*, 14, 991-1006.
- Press, I. (1978). Urban folk medicine: a functional overview. *American Anthropologist*, 80, 71-84.
- Preston, S.H. (1975). The changing relation between mortality and level of development. *Population studies*, 29(2), 231-248.
- Pretorius, E. (1999). Traditional healers. In Crisp, N. (Ed.), *South African health review (SAHR) (1999)* (pp. 249-256). Durban: Health Systems Trust. URL: http://www.hst.org.za/uploads/files/chapter14_99.pdf Accessed 10/05/03.
- Putnam, S.M., Stiles, W.B., Jacob, M.C., & James, S.A. (1985). Patient exposition and physician explanation in initial medical interviews and outcome of clinic visits. *Medical Care*, 23, 74-83.
- Reed, R. (1995). Traditional enema therapy in rural African children. *South African Medical Journal* 85(2), 113-114.
- Reeder, L.G., & Berkanovic, E. (1973). Sociological concomitants of health orientations: a partial replication of Suchman. *Journal of Health and Social Behavior*, 14, 134-143.
- Resources for Child Health (REACH) (1988). *Nairobi Area Study*. Nairobi: REACH/USAID.
- Reyes, H., Perez-Cuevas, R., Salmeron, J., Tome, P., & Guiscafere, H., Gutierrez G. (1997). Infant mortality due to acute respiratory infections: the influence of primary care processes. *Health Policy and Planning*, 12(3), 214-223.
- Rhi, B.J. (1973). A preliminary study on the medical acculturation problems in Korea. *Korean Neuropsychiat. Ass. J.*, 12, 15-27.
- Richard, R., & van der Pligt, J. (1991). Factors affecting condom use among adolescents. *Journal of Community and Applied Social Psychology*, 1, 105-116.
- Richter, L.M. (1994). *The early introduction of solids: An analysis of beliefs and practices among African women in Soweto*. Grant Report Prepared for Gerber-Purity. Johannesburg: University of the Witwatersrand.
- Richter, L. (2004). Rape only the tip of the iceberg in the sexual abuse of young children. *HSRC Review*, 2(2), July 2004. URL: http://www.hsrb.ac.za/about/HSRCReview/Vol2No2/index.html?child_abuse.html~content Accessed 24/01/06.
- Rimer, B.K. (1997). Perspectives on intrapersonal theories of health behavior. In K. Glanz, B. Rimer, & F. Lewis (Eds.), *Health Behavior and Health Education* (2nd Edition) (pp. 139-148). San Francisco: Jossey-Bass.

- Rivera, G. Jr., & Wanderer, J.J. (1986). Curanderismo and childhood illnesses. *The Social Science Journal*, 23(3), 361-372.
- Roden, J. (2004). Revisiting the Health Belief Model: Nurses applying it to young families and their health promotion needs. *Nursing & Health Sciences*, 6(1), 1-10.
- Rogers, A., Hassell, K., & Nicolaas, G. (1999). *Demanding patients?: Analysing primary care use*. Buckingham: Open University Press.
- Rogers, A., & Nicolaas, G. (1998). Understanding the patterns and processes of primary care use: A combined quantitative and qualitative approach. *Sociological Research Online*, 3(4) URL: <http://www.socresonline.org.uk/socresonline/3/4/5.html> Accessed 25/4/04.
- Rogers, R.W. (1975). A Protection Motivation Theory of fear appeals and attitude change. *Journal of Psychology*, 91, 93-114.
- Rogers, R.W. (1983). Cognitive and physiological processes in fear appeals and attitude change: A revised theory of protection motivation. In J.R. Cacioppo, & R.E. Petty (Eds.), *Social psychology: A source book* (pp. 153-176). New York: Guilford Press.
- Rogers, R.W. (1985). Attitude change and information integration in fear appeals. *Psychological Reports*, 56, 179-182.
- Romanucci-Ross, L. (1977). The hierarchy of resort in curative practices: The Admiralty Islands. In D. Landy (Ed.), *Culture, disease and healing. Studies in medical anthropology* (pp. 481-486). London: Macmillan Press.
- Rosenstock, I.M. (1960). What research in motivation suggests for public health. *American Journal of Public Health*, 50, 295-301.
- Rosenstock, I.M. (1966). Why people use health services. *Millbank Memorial Fund Quarterly*, 44, 94-124.
- Rosenstock, I. M. (1974). Historical origins of the Health Belief Model. *Health Education Monographs*, 2, 328-325.
- Rosenstock, I.M., Strecher, V.J., & Becker, M.H. (1994). The Health Belief Model and HIV risk behavior change. In J. Peterson & R. DiClemente (Eds.), *Preventing AIDS: Theory and Practice of Behavioral Interventions* (pp. 5-24). New York: Plenum Press.
- Ross, C.E., & Duff, R.S. (1982). Returning to the doctor: The effect of client characteristics, type of practice, and experience with care. *Journal of Health and Social Behavior*, 23, 119-131.
- Ross, D.A., & Vaughan, J.P. (1986). Health interview surveys in developing countries: A methodological review. *Studies in Family Planning*, 17, 78-94.
- Roter, D.L. (1984). Patient question asking in physician-patient interaction. *Health Psychology*, 3(5), 395-410.
- Roter, D.L., & Hall, J.A. (1992). *Doctors talking with patients/patients talking with doctors*. Westport, CT: Auburn House.
- Roter, D. L. & Hall, J. A. (1997). Patient-provider communication. In K. Glanz, F. M. Lewis, & B.K. Rimer (Eds.), *Health behavior and health education: Theory, research, and practice* (pp. 206-226). San Francisco: Jossey-Bass.
- Rousham, E.K., Northrop-Clewes, C.A., & Lunn, P.G. (1998). Maternal reports of child illness and the biochemical status of the child: the use of morbidity interviews in rural Bangladesh. *British Journal of Nutrition*, 80, 451-456.
- Rundall, T. (1981). A suggestion for improving the behavioral model of physician utilization. *Journal of Health and Social Behavior*, 22, 103-104.
- Rundall, T.G., & Wheeler, J.R.C. (1979). The effect if income on use of preventive care: An evaluation of alternative explanations. *Journal of Health and Social Behavior*, 20, 397-406.
- Rutter, D.R. (1989). Models of belief-behaviour relationships in health. *Health Psychology Update*, November, 8-10.
- Ryan, G.W. (1995). *Medical decision making among the Kom of Cameroon: Modeling how characteristics of illnesses, patients, caretakers and compounds affect treatment choice in a rural community*. Ph.D. Dissertation, University of Florida.
- Ryan, G.W. (1998). What do sequential behavioral patterns suggest about the medical decision-making process? Modeling home case management of acute illnesses in a rural Cameroonian village. *Social Science and Medicine*, 46(2), 209-225.
- Ryan, G.W., & Martinez, H. (1996) Can we predict what mothers do? Modeling childhood diarrhea in rural Mexico. *Human Organization*, 55(1), 47-57.
- Salmon, J.W., Heavens, J., Lombard, C., & Tavrow, P. (2003). The impact of accreditation on the quality of hospital care: KwaZulu-Natal Province, Republic of South Africa. *Operations Research Results*, 2(17). Bethesda, MD: Published for the U.S. Agency for International Development (USAID) by the Quality Assurance Project, University Research Co., LLC. URL: <http://www.qaproject.org/pubs/PDFs/SAfrAccredScreen.pdf> Accessed 14/02/06.

- Sanders, D. (with Carver, R.) (1985). *The struggle for health: Medicine and the politics of underdevelopment*. Basingstoke: MacMillan.
- Sauerborn, R., Adams, R., & Hien, M. (1996). Household strategies to cope with the economic costs of illness. *Social Science and Medicine*, 43(3), 291-301.
- Sauerborn, R., Nougara, A., & Diesfeld, H.J. (1989). Low utilization of community health workers: results from a household interview survey in Burkina Faso. *Social Science and Medicine*, 29(10), 1163-1174.
- Scarpaci, J.L. (1988). Help-seeking behaviour, use, and satisfaction among frequent primary care users in Santiago de Chile. *Journal of Health and Social Behavior*, 29, 199-213.
- Scarpaci, J.L. (1993). On the validity of language: Speaking, knowing and understanding in medical geography. *Social Science and Medicine*, 37, 719-724.
- Scarpaci, J.L., & Kearns, R.A. (1997). Locational attributes of health behaviour. In D.S. Gochman, (Ed.), *Handbook of health behavior research II. Provider determinants* (pp. 81-102). New York: Plenum Press.
- Schapera, I. (1940). *Married life in an African tribe*. London: Faber & Faber.
- Schellenberg, J., Victora, C., Mushi, A., de Savigny, D., Schellenberg, D., & Mshinda, H. (2003). Inequalities among the very poor: health care for children in rural southern Tanzania. *The Lancet*, 361(9357), 561-566.
- Schiller, P.L., & Levin, J.S. (1988). Is there a religious factor in health care utilization?: A review. *Social Science and Medicine*, 27(12), 1369-1379.
- Schmitt, B.D. (1991). *Your child's health: The parents' guide to symptoms, emergencies, common illnesses, behavior, and school problems*. New York: Bantam Books. URL: http://www.med.umich.edu/1libr/pa/pa_enemahom_hhg.htm Accessed 21/02/06.
- Schneider, H. (2006). Personal communication 28/02/2006.
- Schneider, H., Blaauw, D., Magongo, B., & Khumalo, I. (1999). STD care in the private sector. In N. Crisp (Ed.), *South African health review (SAHR) (1999)* (pp. 83-94). Durban: Health Systems Trust. URL: http://www.hst.org.za/uploads/files/chapter7_99.pdf Accessed 10/04/06.
- Schneider, H., & Gilson, L. (1999). The impact of free maternal health care South Africa. In M. Berer, T. Ravindran, (Eds.), *Safe motherhood initiatives: Critical issues* (pp. 93-101). Oxford: Blackwell Science.
- Schneider, H., Kaka, Z., Jina, S., Koobair, S., Kamalanathan, J., Asmal, E., & Peer, A. (1997). *A survey to assess the impact of free primary health care on the Soweto community health centres*. Technical Report. Johannesburg: Centre for Health Policy, University of Witwatersrand.
- Schneider, H., Magongo, B., Cabral, J., & Khumalo, I. (1998). *Bridging the quality gap: Report of a project to improve the quality of primary health care in the North West Province*. Johannesburg: Centre for Health Policy, Department of Community Health, University of Witwatersrand.
- Schneider, H., & Palmer, N. (2002). Getting to the truth? Researching user views of primary health care. *Health Policy and Planning*, 17(1), 32-41.
- Schultz, T.P. (1984). Studying the impact of household economic and community variables on child mortality. *Population and Development*, 10, 215-235.
- Schutz, A. (1970). *On phenomenology and social relations*. Chicago: University of Chicago Press.
- Schwartz, L.R. (aka Lola Romanucci-Ross) (1969). The Hierarchy of Resort in curative practices: The Admiralty Islands, Melanesia. *Journal of Health and Social Behavior*, 10(3), 1201-1209.
- Schwarzer, R. (1992). Self efficacy in the adoption and maintenance of health behaviours: Theoretical approaches and a new model. In R. Schwarzer (Ed.), *Self efficacy: Thought control of action* (pp. 217-243). Washington DC: Hemisphere.
- Scrimshaw, S., & Hurtado, E. (1984). Field guide for the study of health-seeking at the household level. *Food and Nutrition Bulletin*, 6(2). Tokyo, Japan: United Nations University Press and WHO. URL: <http://www.unu.edu/unupress/food/8F062e/8F062E05.htm> Accessed 26/03/03.
- Seedat, Y.K., & Hitchcock, P.J. (1971). Acute renal failure from *Callilepis laureola*. *South African Medical Journal*, 45, 832-833.
- Segar, J. (1997). Hard lives and evil winds: Illness aetiology and the search for healing amongst Ciskeian villagers. *Social Science and Medicine*, 44(10), 1585-1600.
- Segel, K., & Hirschowitz, R. (1995). Chapter 3: Research Findings: Children aged 5 years and younger. In Community Agency for Social Enquiry (CASE) for the Henry J. Kaiser Family Foundation. *A national household survey of health inequalities in South Africa*. URL: <http://www.hst.org.za/uploads/files/case.pdf> Accessed 09/01/04.
- Seidel, R. (2005). *Newborn health*. In Behavior change perspectives and communication guidelines on six child survival interventions. A joint publication of the Academy for Educational Development and the Johns Hopkins Bloomberg School of Public Health /

- Center for Communication Programs with support from the United Nations Children's Fund. URL: http://www.globalhealthcommunication.org/tool_docs/76/behavior_change_perspectives...-chap_2_-newborn_health.pdf Accessed 26/09/06.
- Semali, I.A.J. (1986). Associations and healers: Attitudes towards collaboration in Tanzania. In M. Last, & G. Chavunduka (Eds.), *The professionalisation of African medicine* (pp. 87-98). Manchester: Manchester University Press in Association with the International African Institute.
- Sena, L.V., Maranhao Hde, S., & Moraes, M.B. (2001). Evaluation of mothers' knowledge about oral rehydration therapy and sodium concentration in homemade sugar-salt solutions. *Jornal de Pediatria (Rio J)*, 77(6), 481-486.
- Sharp, J. (1988). Ethnic group and nation: the apartheid vision in South Africa. In E. Boonzaier & J. Sharp (Eds.), *South African keywords: The uses and abuses of political concepts* (pp. 79-99). Cape Town: David Phillip.
- Shears, P. & C. A. Hart (1998). Gastrointestinal bacteria. In G. C. Cook (Ed.), *Manson's tropical diseases* (pp. 824-848). London: W.B. Saunders Company Ltd.
- Sheridan, D. (1993). 'Writing to the archive: Mass-observation as autobiography. *Sociology*, 27(1), 27-40.
- Shortell, S. (1980). Factors associated with the utilization of health services. In S.J. Williams, & P.R. Torrens (Eds.), *Introduction to health services*. New York: Wiley.
- Simon, J. (1997). *Mandela counts the cost of free health care*. InterPress News Service (IPS), 19/05/97. URL: <http://www.aegis.com/news/ips/1997/IP970502.html> Accessed 15/06/05.
- Singer, M., Davison, L., & Gerdes, G., (1988). Culture, critical theory, and reproductive illness behaviour in Haiti. *Medical Anthropology Quarterly*, 2, 370-385.
- Sitzia, J. & Wood, N. (1997). Patient satisfaction: A review of issues and concepts. *Social Science and Medicine*, 45, 1829-1843.
- Slikkerveer, L.J. (1990). *Plural medical systems in the Horn of Africa: The legacy of "Sheikh" Hippocrates*. London: Kegan Paul.
- Smith, M., Solanki, G., & Kimmie, Z. (1999). *The second Kaiser Family Foundation survey of health care in South Africa*. The Community Agency for Social Enquiry (CASE). URL: <http://www.hst.org.za/uploads/files/sahousesurvey.pdf> Accessed: 21/12/05.
- Smyth, A., Martin, M. & Cairns, J. (1995). South Africa's health: Traditional healers may cause dangerous delays. *British Medical Journal*, 311(7010), 948.
- Snow, B., & Marsh, K. (1992). How useful are verbal autopsies to estimate childhood causes of death? *Health Policy Planning*, 7, 22-29.
- Snow, R., Armstrong, J., Forster, M., Winstanley, M.T., Marsh, V.M., Newton, C.R., Waruiru, C., Mwangi, I., Winstanley, P.A., & Marsh, K. (1992). Childhood deaths in Africa: Uses and limitations of verbal autopsies. *The Lancet*, 340(8815), 351-355.
- Sodemann, M., Jakobsen, M.S., Molbak, K., Alvarenga, I.C. Jr, & Aaby, P. (1997). High mortality despite good care-seeking behaviour: A community study of childhood deaths in Guinea Bissau. *Bulletin of the World Health Organization*, 75(3), 205-212.
- Sodi, T. (1996). Towards recognition of indigenous healing: Prospects and constraints. *CHASA Journal of Comprehensive Health*, 7(1), 5-9.
- Solarsh, G., & Goga, A. (2004). Child health. In P. Ijuma, C. Day, & A. Ntuli (Eds.), *South African health review (SAHR) (200/2004)* (pp. 101-128). Durban: Health Systems Trust. URL: http://www.hst.org.za/uploads/files/chap8_03.pdf Accessed 31/8/05.
- Soucat, A., Gandaho, T., Levy-Bruhl, D., de Bethune, X., Alihonou, E., Ortiz, C., Gbedonou, P., Adovohekpe, P., Camara, O., Ndiaye, J.M., Dieng, B., & Knippenberg, R. (1997). Health-seeking behaviour and household health expenditures in Benin and Guinea. The Equity implications of the Bamako Initiative. *International Journal of Health Planning & Management*, 12, S137-S163.
- South Africa Labour Development Research Unit (SALDRU) (1994). *South Africans rich and poor: Baseline household statistics*. Cape Town: University of Cape Town.
- Sparks, P. (1994). Food choice and health: applying, assessing and extending the theory of planned behavior. In D.R. Rutter, & L. Quine (Eds.), *Social psychology and health: European perspectives* (pp. 25-46). Aldershot: Avebury.
- Sparks, P., & Shepherd, R. (1992). Self-identity and the theory of planned behavior: assessing the role of identification in green consumerism. *Social Psychology Quarterly*, 55, 1388-1399.
- Speedling, E.J., & Rose, D.N. (1985). Building an effective doctor-patient relationship: From patient satisfaction to patient participation. *Social Science and Medicine*, 21(2), 115-120.
- Spogter, S.W. (1999). Office of the Secretariat, The Interim Co-ordinating Committee of the Traditional Medical Practitioners of South Africa (ICC). Communication to Health Systems Trust, 17 September 1999.

- Stanton, B., & Clemens, J. (1989). User fees for health care in developing countries. A case study of Bangladesh. *Social Science and Medicine*, 29(10), 1199-1205.
- Statistics South Africa (1995) *October Household Survey 1995*. Pretoria: Statistics South Africa. URL: <http://www.statssa.gov.za/publications/P0317/P03171995.pdf> Accessed 15/03/06.
- Statistics South Africa (1999) *October Household Survey 1999*. Pretoria: Statistics South Africa. URL: <http://www.statssa.gov.za/publications/publicationsearch.asp?PN=fqtrx&PM=&PY=&PS=1> Accessed 15/03/06.
- Statistics South Africa (2001a). *Census 2001*. URL: <http://www.statssa.gov.za/census01/html/default.asp> Accessed 29/05/05.
- Statistics South Africa (2001b). *Census 2001: Census in brief*. Pretoria: Statistics South Africa. URL: <http://www.statssa.gov.za/census01/html/C2001CensusBrief.asp> Accessed 13/01/06.
- Statistics South Africa (2002). *General Household Survey (GHS) 2002*. Pretoria: Statistics South Africa. URL: <http://www.statssa.gov.za/publications/P0318/P03182002.pdf> Accessed 3/6/03.
- Statistics South Africa (2003). *General Household Survey (GHS) 2003*. Pretoria: Statistics South Africa. URL: <http://www.statssa.gov.za/publications/P0318/P03182003.pdf> Accessed 4/2/06.
- Statistics South Africa (2004a) *General Household Survey (GHS) 2004*. Pretoria: Statistics South Africa. URL: <http://www.statssa.gov.za/publications/P0318/P0318July2004.pdf> Accessed 4/2/06.
- Statistics South Africa (2005a). *Mid-year population estimates, South Africa, 2005*. Pretoria: Statistics South Africa. URL: <http://www.statssa.gov.za/Publications/information.asp?ppn=fqtqs> Accessed 12/01/06.
- Statistics South Africa (2005b). *Labourforce Survey: September 2000 – March 2005. Historical series of revised estimates*. Pretoria: Statistics South Africa. URL: <http://www.statssa.gov.za/publications/P0210/P0210September,March2000,2005.pdf> Accessed 2/1/06.
- Stata Co-operation, College Station, Texas, USA.
- Stayt, H.A. (1968). *The Bavenda*. London: Frank Cass & Co. Ltd.
- Steele, R.G., Anderson, B., Rindel, B., Dreyer, M.L., Perrin, K., Christensen, R., Tyc, V., & Flynn, P.M. (2001). Adherence to antiretroviral therapy among HIV-positive children: examination of the role of caregiver health beliefs. *AIDS Care*, 13(5), 617-629.
- Steenkamp, V., Stewart, M. J., Curowska, E., & Zuckerman, M. (2002). A severe case of multiple metal poisoning in a child treated with a traditional medicine. *Forensic Science International*, 128(3), 123-126.
- Steenkamp, V., Stewart, M.J., & Zuckerman, M., (1999). Detection of poisoning by Impila (*Callilepis laureola*) in a mother and child. *Hum Exp Toxicol*, 18, 594-597.
- Stewart, M.A. (1984). What is a successful doctor-patient interview? A study of interactions and outcomes. *Social Science and Medicine*, 19, 167-175.
- Stewart, D. & Shamdasani, P. (1990). *Focus groups. Theory and practice. Applied social research methods series, Volume 20*. California: Sage Publications.
- Stewart, M. J., Moar, J. J., Steenkamp, P., & Kokot, M. (1999). Findings in fatal cases of poisoning attributed to traditional remedies in South Africa. *Forensic Science International*, 101(3), 177-183.
- Stewart, M.K., Parker, B., Chakraborty, J., & Begum, H. (1994). Acute respiratory infections (ARI) in rural Bangladesh: Perceptions and practices. *Medical Anthropology*, 15(4), 377-394.
- Stock, R. (1980). *Health care behaviour in a rural Nigerian setting with particular reference to the utilization of western type health care facilities*. Unpublished Ph.D dissertation. Department of Geography, University of Liverpool.
- Stock, R. (1983). Distance and the utilization of health facilities in rural Nigeria. *Social Science and Medicine*, 17, 563-570.
- Stock, R. (1987). *Understanding health care behaviour: a model, together with evidence from Nigeria*. In R. Akhtar (Ed.), *Health and disease in Tropical Africa* (pp. 279-292). London: Harwood.
- Streatfield, K., Singarimbun, M., & Diamond, I. (1990). Maternal education and child immunization. *Demography*, 27(3), 447-455.
- Strecher, V., & Rosenstock, I.M. (1997). The Health Belief Model. In K. Glanz, B. Rimer, & F. Lewis (Eds.), *Health behavior and health education* (2nd Edition) (pp. 41-59). San Francisco: Jossey-Bass.
- Strobino, D., Keane, V., Holt, E., Hughart, N., Guyer, B. (1996). Parental attitudes do not explain underimmunisation. *Paediatrics*, 98(6), 1076-1083.
- Subedi, J. (1989). Modern health services and health care behavior: A survey in Kathmandu, Nepal. *Journal of Health and Social Behavior*, 30(4), 412-420.

- Suchman, E.A. (1965a). Social patterns of illness and medical care. *Journal of Health and Social Behavior*, 6, 2-16.
- Suchman, E.A. (1965b). Stages of illness and medical care. *Journal of Health and Social Behavior*, 6, 114-128.
- Suchman, E.A. (1966). Health orientation and medical care. *American Journal of Public Health*, 56, 97-105.
- Sundkler, B. (1961). *Bantu Prophets in South Africa*. Oxford: Oxford University Press.
- Sussman, L.K. (1988). The use of herbal and biomedical pharmaceuticals on Mauritius. In S. van der Geest, & S. Reynolds White (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp.199-215). Dordrecht: Kluwer Academic Publishers.
- Sutrisna, B. Reingold, A., Kresno, S., Harrison, G., & Utomo, B. (1993). Care-seeking for fatal illnesses in young children in Indramayu, West Java, Indonesia. *The Lancet*, 25, 342(8874), 787-789.
- Sutton, S.R. (1982). Fear-arousing communications: A critical examination of theory and research. In J.R. Eiser (Ed.), *Social Psychology and Behavioural Medicine* (pp. 303-307). Chichester: John Wiley.
- Sutton, S. (1998). Predicting and explaining intentions and behavior: How well are we doing? *Journal of Applied Social Psychology*, 28, 1317-1318.
- Sutton, S.R., & Hallett, R. (1989). Understanding the effect of fear-arousing communications: The role of cognitive factors and amount of fear aroused. *Journal of Behavioral Medicine*, 11, 353-360.
- Swantz, L. (1990). *The medicine man among the Zaramo of Dar es Salaam*. Udevalla (Sweden): Scandanavian Institute of African Studies.
- Swift, A.C. (1998). Ear, nose and throat infections. In C.A. Bartzokas, & G.W. Smith (Eds.), *Managing infections. Decision-making options in clinical practice*. Oxford: BIOS Scientific Publishers Ltd.
- Taffa, N., & Chepngeno, G. (2005). Determinants of health care seeking for childhood illnesses in Nairobi slums. *Tropical Medicine and International Health*, 10(3), 240-245.
- Tanner, J., Cockerham, W., & Spaeth, J. (1983). Predicting physician utilisation. *Medical Care*, 21, 360-369.
- Taussig, M. (1980). Reification and the consciousness of the patient. *Social Science and Medicine*, 14B, 3-13.
- Terra de Souza, A.C., Peterson, K.E., Andrade, F.M.O., Gardner, J., & Ascherio, A. (2000). Circumstances of post-neonatal deaths in Ceara, Northeast Brazil: mothers' health care-seeking behaviors during their infants' fatal illness. *Social Science and Medicine*, 51(11), 1675-1693.
- Thale, T. (2003). *Mai Mai market - the muti capital of the city*. Johannesburg News Agency 20/01/03. URL: http://www.joburg.org.za/2003/jan/jan20_market.stm Accessed 3/3/04.
- Thind, A., & Andersen, R. (2002). Respiratory illness in the Dominican Republic: what are the predictors for health services utilization of young children? *Social Science and Medicine*, 56(6), 1173-1182.
- Thind, A. (2005). Analysis of health services use for respiratory illness in Indonesian children: Implications for policy. *Journal of Biosocial Science*, 37, 129-142.
- Tobacyk, J., & Milford, G. (1983). Belief in paranormal phenomena: assessment instrument development and implications for personality functioning. *Journal of Personality and Social Psychology*, 44, 1029-1037.
- Tolman, E.C. (1932). *Purposive behaviour in animals and men*. Englewood Cliffs, NJ: Appleton-Century-Crofts.
- Townend, J. (2004). *Practical statistics for environmental and biological scientists*. Chichester: John Wiley and Sons, Ltd.
- Trafimow, D (2000). Habit as both a direct cause of intention to use a condom and as a moderator of the attitude-intention and subjective norm intention relations. *Psychology and Health*, 15, 383-393.
- Triandis, H.C. (1995). The self and social behaviour in differing cultural contexts. In N.R. Goldberger & J.B. Veroff (Eds.). *The culture and psychology reader* (pp. 326-365). New York: New York University Press.
- Troskie, T. R. (1997). The importance of traditional midwives in the delivery of health care in the Republic of South Africa. *Curationis*, 20(1), 15-20.
- Tuma, J.N., Smith, S.M., Kirk, R.H., Hagmann, C.E., Zemel, P.C. (2002). Beliefs and attitudes of caregivers toward compliance with childhood immunisations in Cameroon. *Public Health*, 116, 55-61.

- Tyiso, S. & Bhat, R. B. (1998). Medicinal plants used for child welfare in the Transkei region of the Eastern Cape (South Africa). *Angewandte Botanik*, 72, 92-98.
- Ugalde, A. (1984). Where there is a doctor: Strategies to increase productivity at lower costs. The economics of rural health care in the Dominican Republic. *Social Science and Medicine*, 19, 441-450.
- Ugalde, A., & Homedes, N. (1988). Medicines and rural health services: An experiment in the Dominican Republic. In S. van der Geest, & S. Reynolds White (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp. 57-79). Dordrecht: Kluwer Academic Publishers.
- UK Department of Health (2005). *Research projects on patient choice, and the findings of pilot schemes*. URL: http://www.dh.gov.uk/PolicyAndGuidance/PatientChoice/Choice/ChoiceArticle/fs/en?CONTENT_ID=4084336&chk=i6/T0q Accessed 30/12/05.
- Ulin, P.R., McNeill, E.T., & Tolley, E.E. (2002). *Qualitative methods: A field guide for applied research in sexual and reproductive Health*. USA: Family Health International.
- United Nations (2000). *United Nations Millennium Declaration*. New York: United Nations. URL: <http://www.un.org/millennium/declaration/ares552e.pdf> Accessed 21/01/06.
- UNDP (2005). *Human Development Report 2005. International cooperation at a crossroads: Aid, trade and security in an unequal world*. New York: United Nations Development Programme. URL: http://cfapp2.undp.org/hdr/statistics/data/xlfiles/hdr_dat_70142770.xls Accessed 21/01/06.
- UNFPA (2005). *The state of world population 2005. Demographic, social and economic indicators*. URL: http://www.unfpa.org/swp/2005/images/e_indicator1.pdf Accessed 15/01/06.
- UNICEF (1987). *Toward maternal and child health for all: a Bamako Initiative*. Address by James P. Grant, Executive Director of UNICEF to the 37th session of the WHO Regional Committee for Africa. Bamako, Mali.
- UNICEF (1988). *The Bamako Initiative Recommendations to the Executive Board for Program Coordination 1989-1993*. UNICEF E/ICEF/1988/P/L.40, New York: United Nations Children's Fund.
- UNICEF (2005). *UNICEF Statistics. Child Mortality*. New York: United Nations Children's Fund. URL: <http://www.childinfo.org/areas/childmortality/u5data.php> Accessed 21/01/06.
- Unger, J.P., Mbaye, A., & Diao, M., (1990). From Bamako to Kolda: a case study of medicines and the financing of district health service. *Health Policy and Planning*, 5, 367-377.
- U.S. Library of Congress (2004). *Zion Christian Church*. URL: <http://countrystudies.us/south-africa54.htm> Accessed 07/12/04.
- Uyanga, J. (1979). The characteristics of patients of spiritual healing homes and traditional doctors in southeastern Nigeria. *Social Science and Medicine*, 13A, 323-329.
- Uyanga, R. (1983). Rural-urban migration and sickness/health care behaviour: A study of Eastern Nigeria. *Social Science and Medicine*, 17, 579-583.
- Uzochukwu, B., Onwujekwe, O., & Akpala, C. (2004). Did the Bamako Initiative improve the utilization of maternal and child health care services in Nigeria? A case study of Oji River local government area in Southeast Nigeria. *World Health and Population [Journal of Health and Population in Developing Countries]*, 9 February, 1-18. URL: <http://www.longwoods.com/product.php?productid=17635&cat=396&page=1> Accessed 23/01/06.
- van der Geest, S. (1982). The efficiency of inefficiency: Medicine distribution in South Cameroon. *Social Science and Medicine*, 16, 2145-2153.
- van der Geest, S. (1987). Pharmaceuticals in the Third World: The local perspective. *Social Science and Medicine*, 25(3), 273-276.
- van der Geest, S. (1988). The articulation of formal and informal medicine distribution in south Cameroon. In S. van der Geest, & S. Reynolds White (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp.131-148). Dordrecht: Kluwer Academic Publishers.
- van der Geest, S., Macwan'gi, M., Kamwanga, J., Mulikelela, D., Mazimba A., & Mwangelwa, M. (2000). User fees and drugs: what did the health reforms in Zambia achieve? *Health Policy and Planning*, 15(1), 59-65.
- van der Geest, S., & Reynolds White, S. (Eds.) (1988). Medicines in context: An introduction. In S. van der Geest, & S. Reynolds White. *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp. 3-11). Dordrecht: Kluwer Academic Publishers.
- van der Geest, S., & Reynolds Whyte, S. (1989). The charm of medicines: metaphors and metonyms. *Medical Anthropology Quarterly*, 3, 345-367.
- van der Geest, S., Reynolds White, S., & Hardon, A. (1996). The anthropology of pharmaceuticals: A biographical approach. *Annual Review of Anthropology*, 25, 153-178.

- Vane, J. R. (1979). Drugs and the Third World. *Africa Health*, 1(7), 28-30.
- Vanneste, A. (2003). Personal communication to Bland *et al.* from the Verbal Autopsy Unit at the Africa Centre for Health and Population Studies, Mtubatuba, KwaZulu-Natal, South Africa.
- Varga, C.A., & Veale, D.J.H. (1997). Isihlambezo. Utilization patterns and potential health effects of pregnancy-related traditional herbal medicine. *Social Science and Medicine*, 44, 911-924.
- Veale, D. J. H., Furman, K. I., & Oliver, D. W. (1992). South African traditional herbal medicines used during pregnancy and childbirth. *Journal of Ethnopharmacology*, 36(3), 185-191.
- Veeder, N. (1975). Health services utilization models for human services planning. *Journal of the American Institute of Planners*, 41, 101-109.
- Venter, C. P., & Joubert, P. H. (1988). Aspects of poisoning with traditional medicines in Southern Africa. *Biomed Environ Sci*, 1, 388-391.
- Verbrugge, L.M. (1980). Health diaries. *Medical Care*, 18, 73-95.
- Verbrugge, L. M. (1985). Triggers of symptoms and health care. *Social Science and Medicine*, 20, 855 - 870.
- Waddington, C., & Enyimayew, K. (1989). A price to pay: the impact of user charges in Ashanti-Akim district, Ghana. *International Journal of Health Planning and Management*, 4, 17-48.
- Waddington, C., & Enyimayew, K. (1990). A price to pay, part 2: The impact of user charges in the Volta region of Ghana. *International Journal of Health Planning and Management*, 5, 287-312.
- Wadee, H., Gilson, L., Thiede, M., Okorafor, O., & McIntyre, D. (2003). Health care inequity in South Africa and the public/private mix. *Work in progress*. URL: www.wits.ac.za/chp/docs/B51.pdf Accessed 15/03/06.
- Wagstaff, L. (2001). Child health cards – The Road to Health Chart. In M.A. Kibel, & L.A. Wagstaff (Eds.), *Child health for all. A manual for Southern Africa* (pp. 160-165). Cape Town: Oxford University Press Southern Africa.
- Wainwright, J., Schonland, M.M., & Candy, H.A. (1977). Toxicity of *Callilepis laureola*. *South African Medical Journal*, 52, 313-315.
- Waitzkin, H., & Stoeckle, J.D. (1972). The communication of information about illness: Clinical, sociological, and methodological considerations. *Advances in Psychosomatic Medicine*, 8, 180-215.
- Walker, L., & Gilson, L. (2004). 'We are bitter but we are satisfied': nurses as street-level bureaucrats in South Africa. *Social Science and Medicine*, 59, 1251-1261.
- Wallston, K.A. & Wallston, B.S. (1982). Who is responsible for your health? The construct of health locus of control. In G.S. Sanders, & J. Suls (Eds.), *Social Psychology of Health and Illness* (pp. 65-95). Hillsdale, NJ: Erlbaum.
- Wallston, K.A. & Wallston, B.S., & DeVellis, R. (1978). Development of the multidimensional health locus of control (MHLC) scales. *Health Education Monographs*, 6, 161-170.
- Walraven, G. (1996). Willingness to pay for district hospital services in rural Tanzania. *Health Policy and Planning*, 11, 428-437.
- Walsh, M. (1995). The health belief model and use of accident and emergency services by the general public. *Journal of Advanced Nursing*, 22(4), 694.
- Wan, T., & Soifer, S. (1974). Determinants of physician utilization: A causal analysis. *Journal of Health & Social Behavior*, 15, 100-108.
- Wang'ombe, J. (1984). Economic evaluation in primary health care: The case of Western Kenya Community Based Health Care Project. *Social Science and Medicine*, 18, 375-385.
- Warren, D. M. (1978). The interpretation of change in a Ghanaian ethnomedical study. *Human Organization*, 37(1), 73-77.
- Wartman, S.A., Morlock, L.L., Malitz, F.E., & Palm, E. (1981). Do prescriptions adversely affect doctor-patient relationships? *American Journal of Public Health*, 71, 1358-1361.
- Watson, A.R., Coovadia, H.M., & Bhoola, K.D. (1979). The clinical syndrome of Impila (*Callilepis laureola*) poisoning in children. *South African Medical Journal*, 55, 290-292.
- Weaver, T. (1970). Use of hypothetical situations in a study of Spanish American illness referral systems. *Human Organization*, 29, 140-154.
- Weaver, M., Ndamobissi, R., Kornfield, R., Blewane, C., Sathe, A., Chapko, M., Bendje, N., Nguembi, E., & Senwara-Defiobona, J. (1996). Willingness to pay for child survival: Results of a national survey in Central African Republic. *Social Science and Medicine*, 43(6), 985-998.
- Weinstein, W.D. (1993). Testing four competing theories of health-protective behaviour. *Health Psychology*, 12, 324-333.
- Weiss, M. (1988). Cultural models of diarrhoeal illness: Conceptual framework and review. *Social Science and Medicine*, 27(1), 5-16.

- Weller, S., & Kimball Romney, A. (1988). *Systematic data collection*. Newbury Park, CA: Sage Publications.
- Weller, S.C., Pachter, L.M., Trotter, R.T. 2nd, & Baer, R.D. (1993). Empacho in four latino groups: A study of intra- and intercultural variation in beliefs. *Medical Anthropology*, 15, 109–136.
- Weller, S.C., Ruebush II, T.R., & Klein, R.T. (1997). Predicting treatment behavior in Guatemala: A comparison of the health services research and decision-theoretic approaches. *Medical Anthropology Quarterly*, 11(2), 224–245.
- Wennberg, J.E. (1990). Outcomes research, cost containment, and the fear of health care rationing. *New England Journal of Medicine*, 323, 1202–1204.
- Wessels, W.H. (1989). Healing practices in the African Independent Churches. In G.C. Oosthuizen, S.D. Edwards, W.H. Wessels, & I. Hexam (Eds.), (1989). *Afro-Christian religion and healing in Southern Africa* (pp. 91–108). United Kingdom: The Edwin Mellen Press Ltd.
- West, M.E. (1975). *Bishops and Prophets in a Black city*. Cape Town: David Philip.
- Westaway, M., Rheeder, P., Van Zyl, D., & Seager, J. (2003). Interpersonal and organizational dimensions of patient satisfaction: the moderating effects of health status. *International Journal for Quality in Health Care*, 15(4), 337–344.
- Westaway, M., Viljoen, E., & Chabalala, H. (1998). Satisfaction with family planning services. Interpersonal and organisational dimensions. *Curationis*, 21(4), 3–7.
- Wheeldon, P.D. (1969). The operation of voluntary associations and personal networks in the political processes of an inter-ethnic community. In J.C. Mitchell (Ed.), *Social networks in urban situations* (pp.128–180). Manchester: Manchester University Press.
- Whitty, C., & Jones, R.J., (1992). A comparison of prospective and retrospective diary methods for assessing alcohol use among university graduates. *Journal of Public Health and Medicine*, 14, 264–270.
- WHO (1987). *Women and children's health through funding and management of essential drugs at community level: the Bamako Initiative*. WHO/AFR/R37/H. Brazzaville: World Health Organization.
- WHO (1991). *Indicators for assessing breastfeeding practices*. Report of an informal meeting. Division of Child Health and Development. WHO/CDD/SER/91.14. Geneva: World Health Organization
- WHO (1994). *Mother–baby package: implementing Safe Motherhood in countries*. WHO/FHE/MSM/94.11. Geneva: World Health Organization URL: http://www.who.int/reproductive-health/publications/MSM_94_11/MSM_94_11_table_of_contents.en.html Accessed 26/09/06.
- WHO (1999). *Workshop in the development of tools to promote improved careseeking*, 26–30 July 1999. WHO/FCH/CAH/99.3. Geneva: World Health Organization.
- WHO (2002a). *New research shows workplace violence threatens health services*. Press Release WHO/3710, May 2002. URL: <http://www.who.int/inf/en/pr-2002-37.html> Accessed 3/6/03.
- WHO (2002b). *World health report 2002*. Geneva: World Health Organization. URL: <http://www.who.int/whr/2002/en/index.html> Accessed 3/6/03.
- WHO (2005). *Annex Table 2a Under-five mortality rates: estimates for 2003, annual average percent change 1990–2003*. URL: <http://www.who.int/whr/2005/annex/annex2a.xls> Accessed 20/01/06.
- WHO/CAH (1997). *Improving child health. IMCI: the integrated approach*. WHO/CHD/97.12 Rev.2. URL: http://www.who.int/child-adolescent-health/New_Publications/IMCI/WHO_CHD_97.12_Rev.2.pdf Accessed 01/02/06.
- WHO-IMCI (2000). *Integrated management of childhood illnesses*. URL: <http://www.who.int/child-adolescent-health/integr.htm> Accessed 6/6/03.
- Wilkinson, D., Gouws, E., Sach, M., & Karim, S. (2001). Effect of removing user fees on attendance for curative services and preventive services in rural South Africa. *Bulletin of the World Health Organization*, 79(7), 665–671.
- Williams, B., Coyle, J., & Healy, D. (1998). The meaning of patient satisfaction: an explanation of high reported levels. *Social Science and Medicine*, 47, 1351–1359.
- Williams, V. (1996). The Witwatersrand muti trade. *Veld and Flora*, 82, 12–14.
- Williams, V. L., Balkwill, K., & Witkowski, E.T.F. (1997). Muthi traders on the Witwatersrand, South Africa - an urban mosaic. *South African Journal of Botany*, 63(6), 378–381.
- Wilson, A & Childs, S. (2002). The relationship between consultation length, process and outcomes in general practice: A systematic review. *British Journal of General Practice*, 52, 1012–1020.
- Winch, P.J., Alam, M.A., Akther, A., Afroz, D., Ali, N.A., Ellis, A.A., Baqui, A.H., Darmstadt, G.L., El Arifeen, S., Seraji, M.H.R. & the Bangladesh PROJAHNMO Study Group (2005). Local

- understandings of vulnerability and protection during the neonatal period in Sylhet district, Bangladesh: a qualitative study. *The Lancet*, 366(9484), 478-485.
- Winch, P.J., Leban, K., Casazza, L., Walker, L., & Pearcy, K. (2002). An implementation framework for household and community integrated management of childhood illnesses. *Health Policy and Planning*, 17(4), 345-353.
- Wiseman, V., Conteh, L., & Matovu, F. (2005). Using diaries to collect data in resource-poor settings: questions on design and implementation. *Health Policy and Planning*, 20(6), 394-404.
- Wittenberg, D.F. & Bonnici, F. (1998). Metabolic disorders. In H.M. Coovadia, & D.F. Wittenberg, (Eds.), *Paediatrics and child health - a manual for health professionals in the Third World* (pp. 229-238). Cape Town: Oxford University Press.
- Woldemicael, G. (2001). Diarrhoeal morbidity among young children in Eritrea: Environmental and socioeconomic determinants. *Journal of Health Population and Nutrition*, 19(2), 83-90.
- Wolffers, I. (1987). Drug information and sales practices in some pharmacies of Colombo, Sri Lanka. *Social Science and Medicine*, 25(3), 319-321.
- Wolffers, I. (1988). Traditional practitioners and Western pharmaceuticals in Sri Lanka. In S. van der Geest, & S. Reynolds White (Eds.), *The context of medicines in developing countries: Studies in pharmaceutical anthropology* (pp. 47-56). Dordrecht: Kluwer Academic Publishers.
- Wolinsky, F.D. (1978). Assessing the effects of predisposing, enabling and illness-morbidity characteristics. *Journal of Health and Social Behavior*, 19, 384-396.
- Wolinsky, F.D. (1980). *The sociology of health, principles, professions, and issues*. Boston: Little, Brown and Company.
- Wong, E.L., Popkin, B.M., Guilkey, D.K., & Akin, J.S. (1987). Accessibility, quality of care and prenatal care use in the Philippines. *Social Science and Medicine*, 24(11), 927-944.
- Wood, R., Mills, P. B., Knobel, G.J., Hurlow, W.E., & Stokol, J.M., (1990). Acute dichromate poisoning after use of traditional purgatives. A report of 7 cases. *South African Medical Journal*, 77, 640-642.
- World Bank (1987). *Financing health services in developing countries: An agenda for reform*. Washington DC: The World Bank.
- World Bank (2005). World Bank list of economies (July 2005). URL: <http://siteresources.worldbank.org/DATASTATISTICS/Resources/CLASS.XLS> Accessed 21/01/06.
- Wortel, E., de Geus, G.H., & Kok, G. (1995). Behavioral determinants of mothers' safety measures to prevent injuries of pre-school children. *Scandinavian Journal of Psychology*, 36(3), 306-322.
- Wyler, A.R., Masuda, M., & Holmes, T.H. (1968). Seriousness of illness rating scale. *Journal of Psychosomatic Research*, 11, 363-374.
- Wyper, M.A. (1990). Breast self examination and Health Belief Model. *Research in Nursing and Health*, 13, 421-428.
- Yach, D., Padayachee, G.N., Cameron, N., Wagstaff, L.A., & Richter, L. (1990). 'Birth to Ten' – a study of children of the 1990s living in the Johannesburg-Soweto area. *South African Medical Journal*, 77, 325-326.
- Yassin, K.M. (2002). *Structural adjustment, user fees, utilization and quality of health care services*. Unpublished Thesis. School of Public Health, University of Bielefeld. URL: http://www.bieson.uni-bielefeld.de/volltexte/2002/96/pdf/09_chapter9.pdf Accessed 20/02/06.
- Yoder, P.S. (1981). Knowledge of illness and medicine among the Cokwe of Zaïre. *Social Science and Medicine*, 15B, 237-245.
- Yoder, P.S. (1982). Biomedical and ethnomedical practice in rural Zaïre. *Social Science and Medicine*, 16, 1851-1857.
- Yoder, P.S. (1991). Cultural conceptions of illness in the measurement of changes in morbidity. In J. Cleland, & A. Hill (Eds.), *The health transition: Methods and measures* (pp. 43-60). Canberra: Australian National University.
- Yoder, P.S. (1995). Examining ethnomedical diagnoses and treatment choices for diarrhoeal disorders in Lubumbashi Swahili. *Medical Anthropology*, 16, 211-247.
- Yoder, P. S., & Hornik, R. C. (1996). Symptoms and perceived severity of illness as predictive of treatment for diarrhea in six Asian and African sites. *Social Science and Medicine*, 43, 429-439.
- Yoder, P.S. (1997). Negotiating relevance: Belief, knowledge and practice in international health projects. *Medical Anthropology Quarterly*, 11(2), 131-146.
- Yoder, R.A. (1989). Are people willing to pay for health services? *Social Science and Medicine*, 29, 35.

- Young, J. (1980). *Medical choice in a cultural context: treatment decision making in a Mexican town*. New Brunswick, New Jersey: Rutgers University Press.
- Young, J. (1981). *Medical choice in a Mexican village*. New Brunswick, New Jersey: Rutgers University Press.
- Yudkin, J. (1982). *Drugs, drug companies and the underdevelopment of health*. Paper presented at the Conference of Technology Transfer to the Third World, Gonoshasthaya Pharmaceuticals Ltd, Bangladesh, 10 - 12 January 1982.
- Zurovac, D., Midia, B., Ochola, S.A., Barake, Z., & Snow, R.W. (2002). *Evaluation of malaria case management of sick children presenting in outpatient departments in government health facilities in Kenya*. (pp. 1-37). Nairobi: Division of Malaria Control, Ministry of Health.

