A revised abstract will be available during the Poster Session

Spuits, Stuips and Saline Drips
Health-seeking behaviour for childhood illnesses in urban South Africa

Natalie Spark-du Preez[1] *, Paula Griffiths[1], Noël Cameron[1]
[1]Human Sciences Department, Loughborough University, Loughborough, Leicestershire, England LE11 3TU
* Correspondence to N.L.Spark-duPreez@lboro.ac.uk

Background

2004 saw the 10th anniversary of democracy in South Africa. After 10 years of restructuring and free public health care for children under 6, are health services meeting the needs of the under 6 population and how has this impacted upon the choices that caregivers make when their children are not well? This study aims to investigate the main factors influencing choice of health-care provider for Black children under 6 in urban South Africa. Johannesburg and Soweto form a melting pot of languages, cultures, and indeed health paradigms. In this context, it is not surprising that different ideas about childhood illnesses and how to manage them abound. Many studies have been conducted in rural areas, however there is a paucity of data on health-seeking behaviour for childhood illnesses in an urban pluralistic health setting where traditional healers, faith healers, private clinics and public health care facilities all offer very different types of health services. Home remedies, over the counter medicines (OTC), 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 an enema or *spuit* 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.

There are a large number of models of health-seeking behaviour which propose to explain why an individual chooses to use or not use different kinds of health 'services'. Traditionally the types of explanatory variables depended on the methodology (quantitative or qualitative) and the approach: anthropological, medical, sociological, psychological or economic. Today a combination of approaches is usually used (Kroeger, 1983). The most widely applied is Andersen's model (1995) which has been used internationally to evaluate the utilisation of health services (Thind & Andersen, 2002). Many models, such as Andersen's, recognise 'groups' of factors influencing utilisation such as 'predisposing', 'enabling' and 'need' factors. Concepts of health and healing in South Africa today have been shaped by acculturation between African, Indian and European groups present over the centuries. Because these concepts continue to evolve and South Africa's health system is still redressing inequities, the network of explanatory factors for the choice of health care provider or treatment can be complex.

South Africa's health system consists of a large under-resourced public sector mostly offering free basic primary health care to about 80% of the population, a smaller well-resourced private sector for higher earners, usually members of medical aid schemes (McIntyre *et al*., 1995) and a very large traditional health sector. Traditional health and healing concepts run alongside the biomedical model and demand for traditional medicine is high even in urban areas (Williams, 1997, Good, 1997).

Theoretical Focus

Research 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 health and well-being of children, particularly in an environment undergoing rapid urbanisation (Yach *et al*., 1990). By understanding why and how caregivers make choices for their child's health care, information can be produced that informs health promotion and public health policy to be able to provide culturally appropriate systems of healthcare as well as Westernised models. Improving care-seeking behaviour in turn reduces childhood morbidity and mortality. Many childhood illnesses could be prevented by better hygiene and nutritional practices, rather than relying on curative methods in a health sector that is already overstretched (South African Medical Council, 2001). Home treatment is usually the first resort for minor accidents and common ailments and it is important that caregivers use medicines safely and appropriately.

Studies have found that this is not always the case, both with regards to the use of Western medicines (de Wet, 1998; Bland *et al*. 2004) and traditional medicines which may contain harmful ingredients (Popat *et al.*, 2001).

Data and Research Methods

A mixture of qualitative and quantitative methods of data collection was used to address the research question.

Qualitative methods: The aim of the qualitative work was to guide the design of the survey questionnaire and describe the context in which the survey took place, thus informing quantitative results. In-depth interviews (IDIs) in Johannesburg and Soweto with 7 traditional healers focused on the types of caregivers using their services, the main childhood illnesses seen and their causes, their treatment, cost of treatment and the toxicity of traditional medicines. How traditional healers interact with the modern health care system was also addressed. Western perspectives on traditional medicine and the health-seeking behaviour of their patients was also investigated with nurses (2 private, 1 public hospital and 1 public clinic) and a pharmacist. This included the types of illnesses seen, characteristics of caregivers and their use of medicines for children under 6, characteristics of the public and private sectors and knowledge of 'African' illnesses and treatment. Twelve mothers were also invited back for an IDI from the main survey. Five focus groups with Black mothers of children under 6 from similar socio-economic groups, were lead by the researcher and an interpreter. Mothers were recruited from the BT20 cohort for 3 groups and the Paediatric Dispensary queue at Baragwanath Hospital in Soweto for 2 groups. 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. They were then asked why the medicines had been grouped accordingly and about other medicines they might use which were not on the table. Mothers were also asked about childhood illnesses, causes and treatment, the health care system in South Africa, the use of traditional medicine and future health services. Content analysis and coding schemes for the qualitative work were performed manually and using NVIVO, based on the research questions to be investigated in the main survey, as well as the pile-sort results.

Quantitative methods: Because population-based studies are costly, a 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 (Good, 1987), it also tries to overcome the under-reporting of the use of traditional medicine by finding out about the behaviour of traditional healers' patients. 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. Black caregivers of children under the age of 6 were recruited (n = 206) 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. Quantitative data were collected via an interviewer administered semi-structured questionnaire. Outcomes to be investigated in the main survey will be the differences in characteristics, beliefs, knowledge and actions of caregivers attending different health care providers.

Expected findings

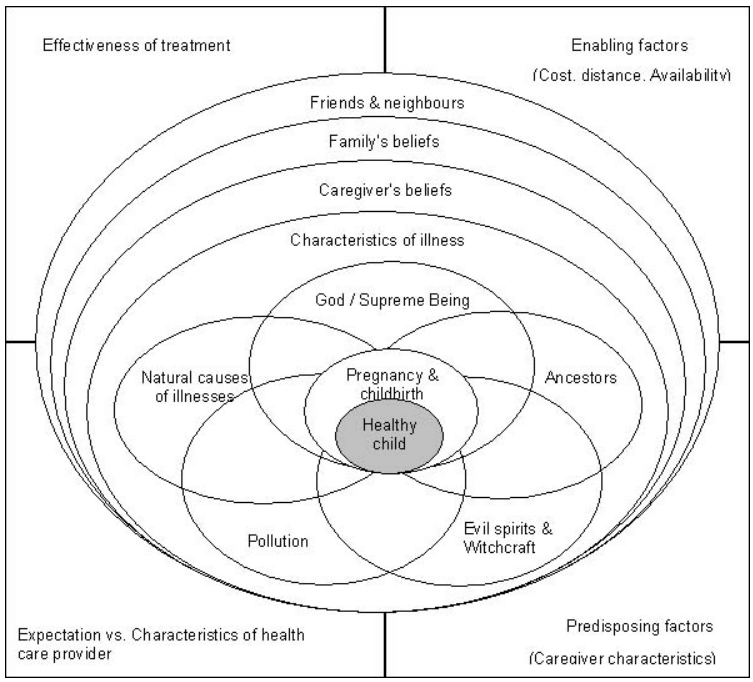
Qualitative and quantitative data have recently been collected and will be triangulated to develop a framework situating choice of health care provider for Black children under 6 within the South African urban context. At the time of writing the abstract only focus group results were available. A revised extended abstract including further results will be available at the Conference.

Medicine pile sort: Illnesses requiring Western as well as traditional medicines were mentioned in all focus groups. The most common health problems treated at home with Western medicines include respiratory infections (colds/ flu/chest problems/cough/tonsillitis), gastro-intestinal problems (diarrhoea/constipation/stomach cramps/colic), fever and teething. Classification of illnesses or health problems needing traditional or home cures included *inyoni*, an African infant illness mainly characterised by green stools and a sunken fontanelle, *ibala* (capillary naevus) which is thought to move up the head and can be fatal. Strengthening and protection is also needed from evil spirits, 'pollution', and witchcraft. Healing the umbilical cord, purging the stomach and teething are other common problems needing traditional treatments. Inappropriate use of popular medicines such as *Stuips (*Dutch Medicines), antacids such as Muthi Wenyoni, enemas with a *spuit* (syringe bulb) and Sunlight soap or Jeys Fluid and the incorrect use of laxatives such as Brooklax, and analgesics such as Panado and Disprin was noted.

Spheres of influence: Some key findings from the focus groups have been used to develop an initial framework of health seeking behaviour (v. Figure 1). Themes and sub-themes were grouped according to motivational

schemas or 'spheres of influence'. These are by no means exhaustive of the factors known to influence patterns of resort. At the heart of the spheres of influence lies the healthy child which is what the caregiver seeks to achieve or maintain through preventative and curative measures. In the South African world view surrounding the baby however are threats to its health in the form of natural and supernatural causes of illness which need to be prevented or treated. Prevention and strengthening start whilst the child is still in the womb and medicines are also used to facilitate labour and cleanse the mother after birth. Illness aetiology and course of action were grouped according to evil spirits, witchcraft and strong medicines; pollution; God and the Ancestors; as well as natural causes of illness.

Figure 1: Motivational schemas / spheres of influence)



Beyond illness aetiology, themes and sub-themes relating to choice of health care provider were grouped according to spheres of influence. Proximate determinants included characteristics of the illness. If an illness is perceived to be severe for example, in general mothers wasted no time in seeking the help of a doctor either at a hospital or GP (if finances allow). For less serious problems a visit to the pharmacy or clinic was sufficient. The causation of illness and subsequent course of action a caregiver takes 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. If this izinyo can help your kids it can help your kids. The thing that you believe in. (FG4)* Similarly, if a mother had strong religious beliefs these soon became apparent when talking about her child's health. In fact one explanation for the non-use of traditional medicine is the influence of Christianity, although this does not always preclude the use of traditional medicine - *I don't have a problem with your belief - you pray God and at the same time you go to the Gogo [traditional healer] (FG4).* Directly influencing a caregiver's personal beliefs are the beliefs of her own family and the family she has married into as well as advice from friends (social networks). When asked who made decisions when their children were not well, the grandmother was quick to be cited as a key decision-maker due to their experience and knowledge - *Grannies - they know everything (FG3).* In a patriarchal society, the father and his family have quite a strong say, particularly when it comes to customs and traditional medicine. Problems may arise when families have different beliefs, with mothers being blamed for any ill that betsets her child if she does not carry out rituals and customs, particularly with regards to the ancestors - *They're blaming me! They're blaming me because of my beliefs… (FG4).* Family influence can also encompass the notion of the habitual as something reliable (Lindbladh & Lyttkens, 2002) - *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).* Personal beliefs, family influence and outcome in the past were strong reasons for the use or non-use of traditional medicine. Caregivers had different attitudes towards traditional medicine although most mothers had used traditional medicine for their child under 6.

More distal determinants of choice of health care provider included caregiver characteristics; characteristics of the provider, such as staff attitudes - *They are very rude, especially clinics (FG2)* and waiting time - *At the clinics…They don't care how sick you are. You have to follow the queue. (FG5)*; effectiveness or outcome of treatment - *But with sicknesses and things like that, they really do help. Because they use mostly African medicines. (FG1)*; enabling factors such as cost - *So its like it's free so you go there, even if you just see a small thing, then you just rush to there…(FG4),* and availability of staff and medicines. Shortly after free health was introduced 10 years, ago lack of preparation and funds led to drug and staff shortages at clinic level as patient loads increased by as much as 300% (South African Health Review, 1995). Today, clinics continue to experience similar problems. A shortage of medicines, particularly at clinics was a big concern for caregivers - *Sometimes they tell you that they don't have medicine so what are you going to do? Take the child back home? (FG1),* especially for those mothers who didn't have money to go and buy medicine at the chemist or see a GP - *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*

Figure 2: Motivational schemas of health care providers

must we do? (FG1). It is also one of the reasons that mothers sometimes bypass primary health care clinics and go straight to the hospital. Other reasons for bypassing PHC clinics included wanting to be examined by a doctor - *But if there is no Doctors, they just give you to the Sisters, and they give you Panado [paediatric syrup], it doesn't work, then what do you do? (FG4),* and lack of examination equipment. It is assumed that poorer groups will use free health care services, however there is evidence is that it is common practice amongst low income groups in South Africa to use private primary health care, mainly because private sector treatment is perceived as having better quality care - *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)*, better staff attitudes, more variety of medicines, reduced waiting times - *It's expensive but you want to be attended immediately so you must pay (FG5)*, more consultation time, and respect shown by the doctors toward the child's caretaker. Figure 2 is a schematic diagram and summary of how different health care providers are generally perceived by caregivers.

This poster will display principle findings from the qualitative results, as well as preliminary results from the quantitative data. It was hypothesised that illness aetiology and caregiver beliefs lie at the centre of the spheres of influence. Other aspects to be investigated include family beliefs, social networks and support, as well as characteristics of the caregiver, the health care provider, efficacy of the treatment and enabling factors. Child health and health services cannot be improved without a better understanding of how these factors interact to shape patterns of resort.

References

Andersen, R. M. (1995). Revisiting the behavioural model and access to medical care: Does it matter? *Journal of Health and Social Behaviour, 36*: 1-10.

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 & Intl Health, 9(1): 118.

de Wet, T. (1998). Muti Wenyoni: commodification of an African folk medicine. South African Journal of Ethnology, 21(4): 165-172.

Good, C. M. (1987). Ethnomedical Systems in Africa: Patterns of Traditional Medicine in Rural and Urban Kenya. New York: The Guilford Press.

Kroeger, A. (1983), Anthropological and Socio-medical Health Care Research in Developing Countries. Social Science & Medicine. 17(3): 147-161.

Lindbladh, E., & Lyttkens, C. H. (2002). Habit versus choice: the process of decision-making in health-related behaviour. Social Science & Medicine, 55(3): 451-465.

McIntyre, D., Bloom, G., Doherty, J., & Brijlal, P. (1995). Health Expenditure and Finance in South Africa. Durban: Health Systems Trust and World Bank.

Popat, A., Shear, N. H., Malkiewicz, I., Stewart, M. J., Steenkamp, V., Thomson, S., et al. (2001). The toxicity of Callilepis laureola, a South African traditional herbal medicine. Clinical Biochemistry, 34(3): 229-236.

South African Health Review (SAHR) (1995). South African Health Review. Durban: Health Systems Trust.

South African Medical Research Council (2001) Initial Burden of Disease Estimates for South Africa 2000, Burden of Disease Research Unit, http://www.mrc.ac.za/bod/initialbodestimates.pdf. Accessed 3/6/03.

Thind, A., & Andersen, R. (2003). Respiratory illness in the Dominican Republic: what are the predictors for health services utilization of young children? Social Science & Medicine, 56(6): 1173-1182.

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.

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. SAMJ 77: 325-326.