UNPACKING THE RELATIONSHIP BETWEEN RURAL HEALTHCARE, MOBILITY & ACCESS

M. MASHIRI, G. MAPONYA, Z. NKUNA, S. DUBE, J. CHAKWIZIRA and B. MARRIAN

CSIR Built Environment, P.O. Box 395, Pretoria, 0001
Tel: (0)12 841 2942, Fax: (0)12 841 4054
E-mail: mmashiri@csir.co.za

ABSTRACT

This paper seeks to unpack the relationship between mobility and accessibility on the one hand, and rural healthcare delivery on the other, within the ambit of the sustainable livelihoods approach using four villages in the Thaba Chweu municipality in Mpumalanga Province, South Africa as case studies. The main argument is that service delivery such as quality healthcare in rural South Africa is fraught with deep-rooted intractable challenges, many of which are to do with access problems emanating, in part, from the remoteness and spatial dispersion of rural communities. A variety of qualitative and quantitative instruments were employed to gather data to respond to the study hypotheses and research questions. The findings indicate a symbiotic relationship between the health-seeking behaviour of villagers and mobility and accessibility. In addition, rural healthcare delivery (particularly for the terminally ill), and by extension, the healthcare access burden appears to have significantly shifted from the formal healthcare system (especially with regard to emergency cases) onto the shoulders of home-based care practitioners. Unravelling and understanding mobility and access issues relating to both formal and informal rural healthcare delivery, is indeed a vital step to generating sustainable intervention options, as well as ensuring that the nexus between transport and healthcare is fully recognized and integrated into practical interventions.

Keywords

Rural healthcare, mobility, accessibility, volunteerism, poverty, infrastructure, sustainability, livelihoods

1. INTRODUCTION

1.1 Background

Service delivery such as quality healthcare in rural South Africa is fraught with deep-rooted challenges, many of which are to do with access problems emanating, in part, from the remoteness and spatial dispersion of rural communities. Access to emergency medical services, for example, is often purchased at a high social and economic cost. Clearly, mobility and access factors exercise significant impact on rural communities' ability to gain access to, and hence benefit from both the decentralized formal and informal healthcare systems. This has been corroborated by a national transport survey which established that, while rural communities had significant difficulties accessing socio-economic opportunities in general, accessing healthcare services, was the most cumbersome in terms of distance, time and affordability (South African Department of Transport, 2005).

Often, where transport services are available, spatial dispersion, poor quality road infrastructure and low supply and demand patterns make these services largely unaffordable for rural households. Furthermore, access to emergency medical services, for example, in the case of complicated births, is often purchased at a premium, in part, due to limited public transport frequencies, affordability considerations, and unavailability of transport services (Health & Mobility, 2008).

Given that most rural communities experience severe infrastructure backlogs, inadequate services and appropriate technology challenges, they are hard-pressed to respond creatively to improve their stations in life. Thus, against the backdrop of the many socio-economic burdens such as poverty, economic marginalisation, and the worsening impacts of HIV/AIDS – understanding mobility and access issues relating to both formal and informal rural healthcare delivery, is indeed a vital step to generating sustainable intervention options aimed at breaking this vicious cycle.

1.2 Purpose of study

This study sought to unpack the influence of mobility and access issues on rural healthcare delivery within the ambit of the sustainable livelihoods approach using four villages in the Thaba Chweu municipality in Mpumalanga Province, South Africa, as case studies.

2. STUDY APPROACH

2.1 Methodology

Informed by extensive literature reviews, the study was broadly divided into the following sections: project conceptualization (August 2006), stakeholder mapping and mobilization (October 2006), reconnaissance visits (November 2006), pilot investigations (January 2007) and the main study (February-March 2007). In order to determine and frame the research questions, the following hypotheses were generated:

- The largely point-based (spatially defined node from which services are dispensed – as opposed, for example, to mobile services) healthcare delivery system in rural South Africa cannot function effectively without the provision of a basic minimum level of transport infrastructure and services
- Rural home-based healthcare strengthens the decentralized healthcare system by improving the accessibility and affordability of healthcare, particularly for chronically or terminally ill patients

A non-experimental design mixed method approach was employed using purposeful sampling techniques to gather data. Qualitative (in-depth interviews with key informants, thematic discussions with institutions, focus group discussions, life histories, observations) and quantitative (questionnaire and windshield surveys, accompanied walks) methods were employed to gather data. Broadly, these instruments sought to solicit information grouped under facility information, mobility and accessibility issues, services offered, service area information, relationships with other institutions, and key healthcare provision challenges.

2.2 Location of the study area

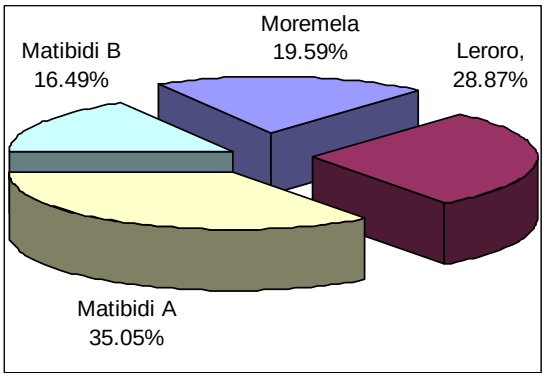
The study area is located in the Thaba Chweu local municipality in Ehlanzeni District, one of the three districts constituting Mpumalanga province. The district, which is made up of four local municipalities, including Thaba Chweu, which is located to the north-west of the province, is bordered by Mozambique to the east, Swaziland in the south and Limpopo province in the north. Thaba Chweu is located to the. Large scale crop and game farming

characterise the western half of the municipality centred at Lydenburg, while forestry activities predominate in the eastern half, with Sabie and Graskop as the centres. Communal areas of Leroro, Matibidi and Moremela, which are hemmed in between these major land uses to the northern tip of the municipality, were chosen as the study areas. The study villages with a combined population of 27 470 are characterised by an undeveloped agricultural base largely due to meagre agricultural resource utilization and dependency on an outside system of economics, begetting high levels of out-migration to wage employment in the wider South African economy. Local livelihood activities where they exist are confined to subsistence levels.

3. STUDY FINDINGS AND ANALYSIS

3.1 Community participation in the survey

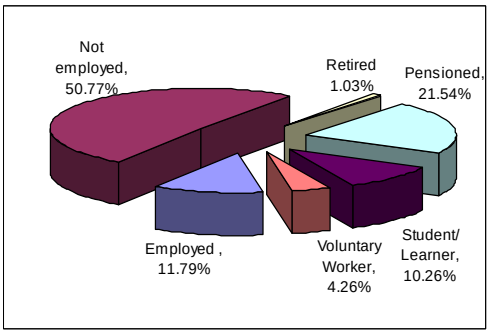
At upwards of 76 percent, the greater majority of the respondents were women. The preponderance of women participants partly stems from the fact that they are relatively quicker at embracing strangers and talking to them. In addition, because men tend to gravitate towards employment centres, the study team was much more likely to encounter women in sampled households. On the other hand, although men were not apathetic, they were relatively lethargic providing women with the opportunity to be interviewed. Female-headed households although not predominant are certainly common.



Of the four study sites most participants came from Matibidi, in part, because Matibidi has a much bigger and more settled population than the other settlements.

3.2 Sources of income

Only twelve percent of the survey population was formally employed. Income in the community is mainly derived from social grants and pensions accounting for upwards of twenty-four percent. What is of interest is that upwards of fifty-one percent of the respondents are unemployed – which could be an understatement given the observed poverty in the study area. In addition, under-employment is rife. In fact, most villagers do not engage in any meaningful agricultural production for their subsistence living. It is thus pertinent to observe that for the greater majority of the study area households, the margin of safety against food security is perilously small, and alarmingly, the area of poverty painfully wide. This has a direct bearing on their health.



3.3 Healthcare access challenges

Villagers travel to healthcare facilities using various transport modes including walking, private automobile and by public transport. The predominant mode of transport is walking. Figure 1 below shows the results of an accessibility mapping exercise performed for the study area highlighting travel times to access healthcare facilities using motorized transportation. Whereas it takes upwards of forty-five minutes by automobile to access healthcare facilities in most of the study area, there are pockets especially in Moremela village where it takes much more than an hour. These travel times increase markedly where villagers walk to the healthcare facilities. Furthermore, where villagers prefer

facilities other than those nearest to them (for many reasons some of which are to do with availability of healthcare staff, medicines and the attitude and service levels associated with a specific healthcare institution), these travel times are much higher, the cost forbidding and the risk untold, especially in emergency cases. For Ensor & Cooper (2004), cost and distance are considered as significant factors hindering rural households' access to healthcare. The cost and time that are expended on transport constitute an additional burden to households in the context of their negative impact on productive activities. Mahapa (2003) argues that such expenditure on transport could be better utilised for improving the health of vulnerable members of the family especially children and the elderly.

It is germane to note that given the economic challenges posed by the remoteness, spatial dispersion and low supply and demand patterns in rural areas, the provision of adequate transport services and infrastructure is made difficult for government and the uptake of available services largely unaffordable for rural households (Mashiri et al, 2005). So, while concern is often raised on the quality of health facilities, the benefits accruing from the provision of health services is hinged largely on access to these facilities. In addition to the provision of emergency and non-emergency transport, a well functioning referral system is pivotal to addressing access to rural healthcare.

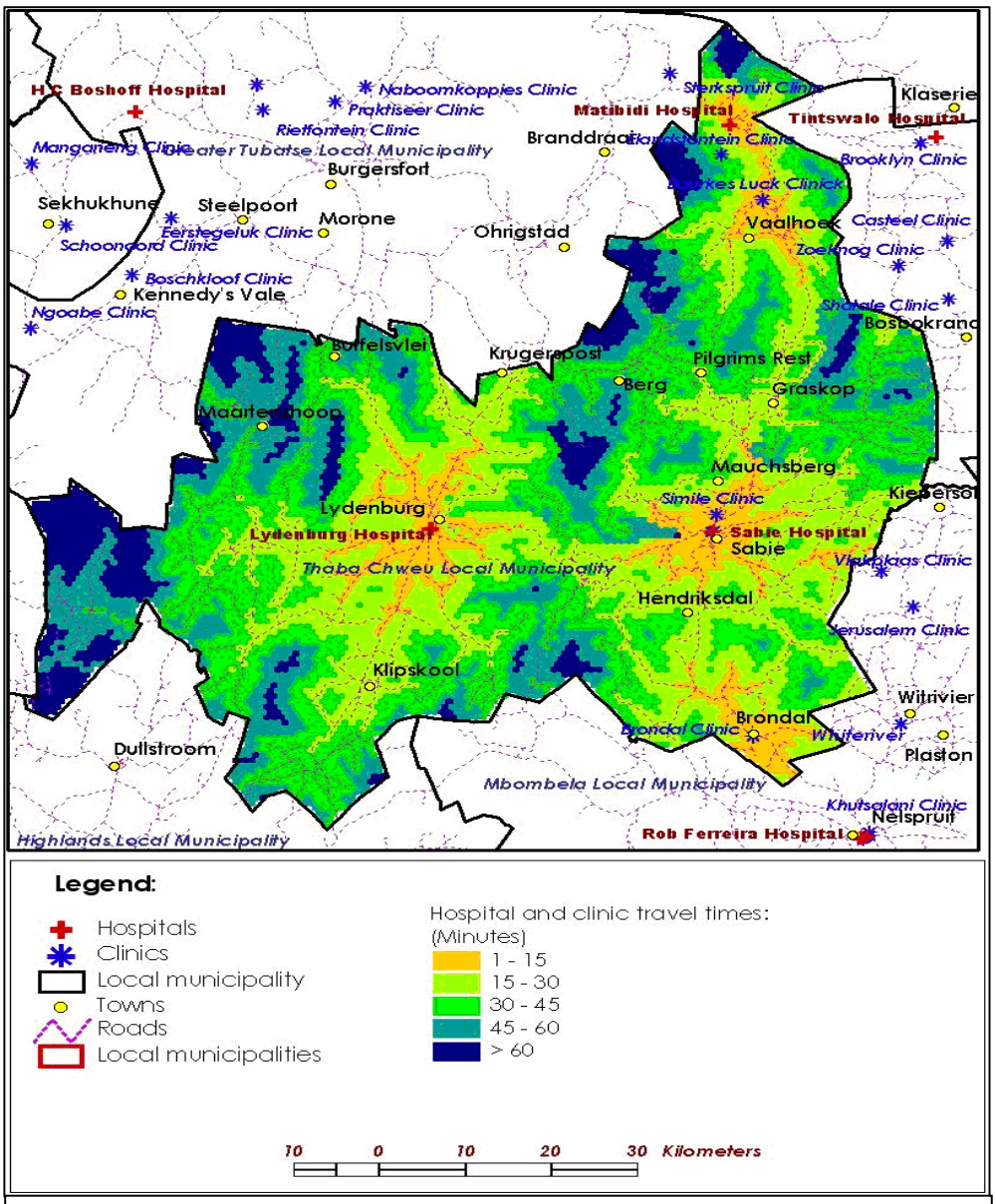
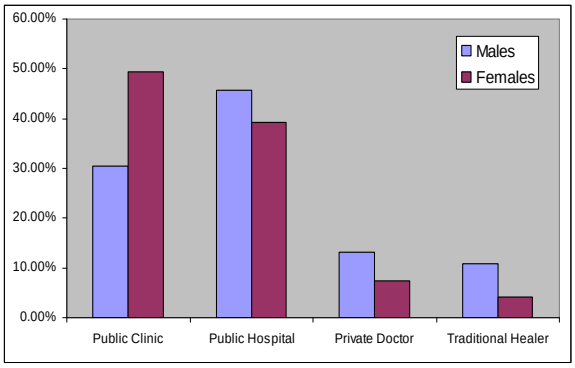


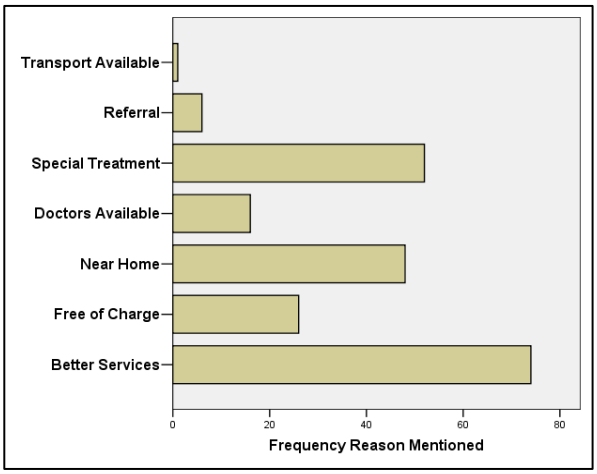
Figure 1 Travel times to healthcare institutions in Thaba Chweu

3.4 Health facility preferences and rationale

Although the service could be decidedly of a superior quality, the private doctor is almost always more expensive, and in this regard, it is also relatively expensive to access their services as they are located close to fifty kilometres from the study community. This finding is confirmed by Watt and Sheldon (1993) who have noted that lower rural consultation rates are often a result of poor physical access to health services.



Upwards of fifty percent of women prefer to use the local clinic. Suffice to say, women are often motivated to use the local clinic because their day often involves multiple chores. They therefore do not have too much time to travel to a big hospital, where they could queue up for hours on end, and which is often impersonal – given the regular movement of personnel.



Villagers in the study area rate better service as a chief motivating factor for their stated preferences. Significantly, upwards of fifty percent of respondents indicated access as an important issue influencing their decision matrix to choose a specific healthcare centre (in terms of time and financial resources). Special treatment refers to both better service and often a specific infirmity that an institution regularly treats. Although it does not stand out as the other major decision pillars, cost is also a significant factor in determining preference, especially for women whose meagre resources are hard-pressed to accommodate various household demands, let alone visitations to health facilities. Because most household members walk to healthcare facilities, access is an important consideration in villagers' decision matrix in terms of choosing a specific healthcare facility to use.

3.5 Public transport satisfaction levels

Most women respondents estimated the average waiting time for public transport to access healthcare facilities to an hour – half an hour more than men. This could stem from the fact that women have to undertake many chores before they go to hospital and therefore might miss the peak time (when there are more public transport vehicles on the road), which for a rural environment, is very narrow indeed. Due to gendered norms and power relations, women's assigned roles and work burdens tend to confer a greater transport burden on women, whose socio-reproductive tasks often involve significant transport related work, coupled with socio-economic and socio-cultural factors that limit their access to transport resources (Venter et al, 2006). On the other hand, men who are less likely to be encumbered by such daily chores, often travel at peak periods when public transport vehicles frequencies are much higher. In addition, women are often accompanied by children and where a minibus taxi just needs one person, for example, a man, who is usually alone and unencumbered, is able to board the minibus taxi, whereas the woman would be left behind.

Although upwards of sixty-eight percent of all respondents were not satisfied with transport services to healthcare facilities especially to the hospital, women expressed more dissatisfaction chiefly because women undertake more visitations to health facilities, and thus tend to encounter this problem on a consistent basis than their male counterparts. In addition, the gendered distribution of rural labour lends itself to high levels of involvement of women in household and community healthcare. Women are often the primary caregivers in their communities, within their own homes as well as through women's groups and home-based care organisations. Clearly, health and mobility issues have a far more profound impact on women than their male counterparts.

3.6 Health-seeking behaviour and fatalism

Discussions with officials in the formal healthcare system revealed that in general they felt that rural dwellers had little propensity for health-seeking behaviour. They often described

the behaviour in terms of a deep sense of fatalism where the sick seek help too late or in some extreme cases, not at all. They argued that it was one thing to have made a "mistake" (referring to HIV/AIDS) but quite another to display a congenital proclivity for self-destruction. They therefore proclaimed that such persons are indeed not health-seeking. This assertion warrants some examination. In traditional society, most illnesses can be traced back into society. No one is sick of natural causes. When villagers get sick, their first reaction is most probably to find out the nature of the infirmity and who is responsible for causing it. This usually means consulting extensively with *sangomas.* Sometimes, they eventually come for bio-medical diagnosis and treatment when it is too late. The point is villagers are indeed health-seeking, but their first port of call, particularly where they have contracted HIV may not necessarily be government or private bio-medical healthcare institutions. Often, these *sangomas* live in the same community, and perhaps are open for business "24/7". In other words, they are more accessible, more private, more affordable (payments can be made in kind and can be deferred) than their bio-medical counterparts. Clearly, the seemingly ambiguous or inconsistent health-seeking behaviour is influenced by many other considerations not least of which is access.

4. CHARACTERISTICS OF MOHOLOHOLO HOME BASED CARE

4.1 Moholoholo HBC profile

Moholoholo community home-based care centre (MCC) based in Leroro village in the Thaba Chweu local authority is a community-based organisation which was established in 2000. It is made of a board of seven directors, an executive committee of nine persons, twelve child carers and sixty caregivers. The Multipurpose community centre (MPCC), Community home-based care centre (HBC), Love Life campaign centre, and Planned Parenthood Association of South Africa (PPASA) are entities operating within the ambit of Moholoholo community home-based care centre.

Sixty (60) caregivers under the Moholoholo HBC wing service upwards of 1299 clients (incorporating 554 patients and 745 orphans and vulnerable children). Just over half (50.5%) of the 554 patients (280) are living with HIV/AIDS and 236 have disabilities some of which are as a result of HIV/AIDS. Fifty-five percent of those with HIV/AIDS are women, which partly serves to confirm the view that women are more vulnerable to the pandemic than men. Of the 280 HIV/AIDS patients, only 13% are on anti-retrovirals (ARV), which implies more visitations to healthcare facilities as the disease matures.

Each caregiver is responsible for upwards of ten patients. Given that the MCC is a charitable organisation dependent on funding from government and the private sector to discharge its responsibilities, it is clear that the HBC sector in the area faces significant challenges in terms of resources and, by extension, accessibility to healthcare.

4.2 Moholoholo HBC services

Moholoholo HBC offers comprehensive home-based care services (refer, for example, to Russell & Schneider, 2000), including a package consisting of palliative care and a relatively well-developed referral network to healthcare facilities as well as welfare agencies. Some of its offerings include health education, healthcare tasks such as administration of prescribed medication to patients, patient identification and referral, and support activities. The duties and activities enumerated above are performed as part of the caregivers' daily visits to households.

4.3 Transportation challenges for caregivers

Moholoholo HBC currently services four villages that are approximately 10-15 kilometres apart, namely: Moremela, Leroro, Matibidi-A and Matibidi-B. Caregivers travel largely on

foot to the Mohololoholo HBC offices (to attend meetings, workshops, etc.), as well as to field sites where they perform their healthcare work as transportation services are unaffordable, especially considering that close to forty-three percent of them do not receive stipends. Caregivers experience significant transport challenges to access their clients given the spatial extent of the villages they service and the mostly scattered homestead settlement pattern. The centre has thus allocated to each caregiver patients resident in the caregivers' own settlements to reduce distances to be travelled as well as ensuring wider acceptability of the services they offer. However, as indicated below, carers still spend a great deal of time walking and servicing their clients.

Table1 Accompanied visitations to patients							
Research Assistant (RA)		Walking to patient			Conducting patient life history		
	Origin – Destination	**Start**	**End**	**Time taken [minutes]**	**Start**	**End**	**Time taken [minutes]**
RA1	Carer's home to patient 1	09h30	10h30	60	10h35	11h10	35
	Patient 1 to patient 2	11h10	11h25	15	11h25	12h00	35
	Patient 2 to patient 3	12h00	12h12	12	12h12	12h52	40
	Patient 3 to patient 4	12h52	13h08	16	13h08	13h40	42
	Patient 4 to patient 5	13h40	13h59	19	13h59	14h38	39
		Total time spent walking		**122**	**Total time spent with patients**		**191**
RA2	Carer's home to patient 1	09h35	10h00	25	10h00	10h35	35
	Patient 1 to patient 2	10h35	11h00	25	11h00	11h45	45
	Patient 2 to patient 3	11h45	12h20	35	12h20	12h35	15
	Patient 3 to patient 4	12h35	12h45	10	12h45	13h20	35
		Total time spent walking		**95**	**Total time spent with patients**		**130**
RA3	Carer's home to patient 1	09h27	10h10	43	10h10	10h50	40
	Patient 1 to patient 2	10h50	11h05	15	11h05	12h35	90
		Total time spent walking		**58**	**Total time spent with patients**		**130**

Table 1 above shows the findings of the accompanied walks where research assistants (RAs) accompanied HBC practitioners from Moremela village on their regular round of visits to their "clients" – persons suffering mainly from HIV/AIDS related illnesses in March 2007. The exercise enabled the RAs to "live" the experiences of caregivers to fully

appreciate the enormity of a volunteer's task, particularly with regard to access issues. When they reached a patient, the HBC practitioner would undertake their regular tasks while the RAs recorded the life history of the client. On an average day, caregivers spend at least three hours walking to their patients and close to six hours undertaking care activities. For Jackson and Kerkoven (1995:12), community-based healthcare and support of this nature is important for both the affected household and the health service "as it reduces cost to the family (such as hospital fees, transport costs to the hospital, and time spent visiting a sick family member in the hospital), because the patient is taken care of at home". Caregivers walk to their clients often in difficult terrain and unfavourable weather conditions due to the unavailability of reliable public transport in their service areas as well as affordability considerations (given that the stipend for carers is only R500 per month).

Even where caregivers can afford to pay for public transport, they still walked long hours to service their clients due to a lack of feeder modes from the public transport routes, deep into their service area, which are areas often characterized by dirt roads, tracks and paths. Minibus taxis ply the main road only. Caregivers, eighty-two percent of whom are women, unanimously expressed a need for low-cost mobility interventions, such as bicycles, to alleviate their mobility challenges and lighten their burden with a view to improving their service delivery.

"…For a person living with HIV/AIDS, or any other chronic disease, there are many instances of transport or access requirements – for me to make my regular visit, I need transport; to get medicine from the hospital for them, I need transport; for them to go to the clinic accompanied by me or alone, they need transport; when they die, they need transport, sometimes to the mortuary, and back to the community graveyard or just directly to the graveyard…all this costs money, which is difficult to come by…One just has to believe that God will provide…"

Transcript of an interview involving the life history of an HBC caregiver – March 2007

Caregivers also experience problems when they accompany a patient for check-up (or travel alone on behalf of the patient to collect, for example, repeat medicines) to a hospital or clinic. Terminally ill patients in severe stages of their disease, require a helper to travel with them to collect medication, substantially increasing transport costs to medical facilities given the endemic poverty among catchment communities (refer to Table 2 below). It also means travelling on foot to the main road and then waiting for public transport modes to take them to the hospital/clinic. Depending on the time of day, the waiting could be interminably long. At the hospital/clinic, queues for accessing the service itself are also often long – generally contributing to time poverty. And, as Mashiri et al (2005) have observed these time burdens further impact on their ability to engage in productive work, including income-generating activities.

Table 2 Transport costs					
Trip Purpose		**Mode**	**Distance (km)**	**Costs (Rand)**	**Fare (Rand)**
				Hired	**Regular route**
HBC	Buy provisions from nearest town (Graskop)	Light delivery vehicle	50	1200	
		Minibus taxi	50	700	
Villager	Appointment at private doctor in town	Minibus taxi	50		40
Villager	Appointment at local clinic	Minibus taxi	15		20
		Minibus taxi	15	100	
Villager	Intra-village visit *(sangoma)*	Minibus taxi			10

5. HEALTHCARE, VOLUNTEERISM, UBUNTU AND THE SLF

5.1 Altruism, volunteerism and *ubuntu: A rejoinder*

The impact of HIV/AIDS on poverty and inequality has, to a considerable extent, been cushioned by informal safety nets and the oft practised tradition of reciprocal assistance within extended families. These safety nets are under severe strain from the high prevalence of HIV/AIDS, and are threatening to implode. However, as family networks are saddled with the unrelenting and incessant pressure, volunteerism underpinned by a deep sense of *ubuntu* (an African philosophy whose departure point is “I am because you are”) among community members has inadvertently relieved family members from individually carrying and enduring the load that is the epidemic.

As this study has clearly demonstrated, volunteerism sustains the informal healthcare system and as such warrants some focused discussion. And as indicated above, the fulcrum of volunteerism itself appears to be altruism anchored on ubuntu. It is not uncommon, for example, to come across caregivers in the study area who go out of the way to assist orphans and vulnerable children (OVCs) including buying school uniforms using their meagre stipends. This enables the beneficiaries to seamlessly integrate into the “greater community family” and to concentrate on schoolwork and less on their deprivation. From observations and conversations with both caregivers and OVCs, it is clear that these altruistic tendencies are not a passing fad but genuine outpouring of goodwill anchored in age old tradition, upbringing and the disposition of the caregiver (which is indeed the definition of ubuntu). Given the central role of volunteerism in the study, it was considered important to understand and unravel this phenomenon, especially the motive forces that propel its widespread proliferation in South Africa, especially in healthcare. In the same vein, it was also deemed crucial to seek to anchor the overall study within the context of an overarching framework to better explain and unpack, for example, the various relationships that influence rural change and development.

5.2 Rural healthcare, volunteerism and Ubuntu

5.2.1 Definition of concepts

Volunteerism is the willingness of people to work on behalf of others without the expectation of pay or other tangible gain. In the context of rural healthcare, volunteers often undergo specialist training, for example, as home-based caregivers. The majority of volunteers work on an impromptu or ad hoc basis, recognizing a need and filling it, such as an emergency need for midwifery services. Quite often, these voluntary services are also provided by untrained persons with or without experience, e.g., mature women who practise midwifery. It may be done for altruistic reasons, e.g. charity, as a hobby, community service or vocation, or for the purpose of gaining experience. Skills-based volunteerism refers to volunteers who use their professional skills, e.g. retired doctors could offer their services for free while those contracted can team up to offer similar services as outreach programs. This is in contrast to generic volunteerism where specific skills are not necessary (http://en.wikipedia.org/wiki/Volunteerism). The concept of service and volunteering is engraved in the African philosophical concept of humanity termed "*ubunt*u". *Ubuntu* denotes voluntary community, human caring and sharing for each other and is intrinsic to the socio-economic and political African fabric. Perold (2006) contends that in Africa, a tradition of self-help, individual and collective responsibility for the well being of families and kinship groups predates the colonial era. A person with *"ubuntu"* is open and available to others, affirming of others, does not feel threatened that others are able and good, for he or she has a proper self-assurance that comes from knowing that he or she belongs in a greater whole. For Tutu *"ubuntu"* entails meaningful sharing, cooperation, networking, collaboration and partnerships in distinctly ethical and philosophical ways meant to benefit and improve the social fabric, and uphold the integrity of communities and societies fighting and struggling against various challenges (Mako, 2004).

Volunteering and working without pay have been linked to positive economic and political outcomes such as "participation" in community affairs and a way of ensuring the sustainability of public investments (Uphoff, 1992; Isham et al, 1995). As can be gleaned from the experiences of the Moholoholo HBC, there can be no doubt volunteering also nurtures civil society, builds trust, and may even be a key ingredient in a virtuous cycle of accountable government and high rates of economic growth (Putnam, 1993; Fukuyama, 1995 sited by Schably, 2001).

5.2.2 Motivation for volunteering in healthcare

Despite the stress, risks, opportunity cost, depression, sacrifices and conflicts that are the hallmark of voluntarism in practice, the need to build friendship, support humanity and the feeling of bonding and belongingness that volunteerism tends to engender are compelling motives underpinning its apparent proliferation in rural healthcare – a bedrock for *"ubuntuism*".

"…The demands for the job of care giving can be so draining and exhausting. I often have to dig deep inside myself to find the extra strength, love and care that I need to do my job. Because we face such hard situations, we must find it in ourselves not to become hardened and loose empathy for those suffering – for that is the hallmark of our trade…"

Transcript of an interview with an HBC caregiver – March 2007

5.2.3 Volunteerism and access to healthcare

It is instructive to note that activities undertaken by volunteers are a saving to the state or private capital, hence volunteering contributes to the overall economic output of a country

and reduces the burden on government spending. In this regard, volunteering helps in building more cohesive communities by fostering greater trust between citizens, and developing norms of solidarity and reciprocity, which are essential for stable and sustainable communities. This social benefit often plays a key role in economic regeneration, poverty reduction and local economic development. Volunteerism has the effect of improving rural healthcare delivery by way of enhancing access to formal and informal healthcare systems. It also provides a window of opportunity and platform to tap on the latent skills, resources and energy of locals (and outsiders) to strengthen rural healthcare services, and by extension, livelihood chances.

5.3 Anchoring rural healthcare and mobility in the SLF

The Sustainable Livelihoods Framework (SLF) concept resonates with the overall purpose of the study in the sense that its intension is to seek to nurse and ultimately improve community or household health status with a view to enabling such beneficiaries to "cope with and recover from stresses and shocks" (Chambers & Conway, 1992:9) emanating from among others, ill-health. This would then free them to contribute meaningfully to their socio-economic advancement. It is pertinent to note that the concept recognises the pivotal role of access in development practice. The study thus adopted this overarching framework to anchor as well as to unravel the relationship between rural healthcare, mobility and access.

Within the SLF, the study villagers are depicted as operating in a context of vulnerability (refer to Figures 2 & 3 below which are derived from the work of Mshinda *et al,* 2006).

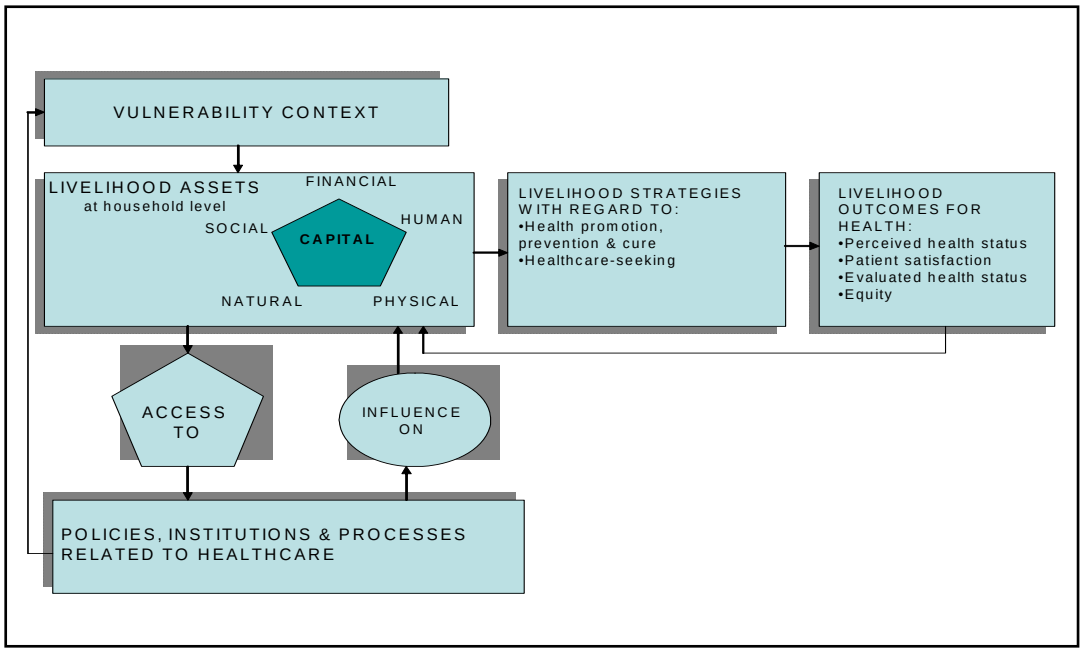


Figure 2 Sketching the relationship between healthcare & the SLF

Figures 2 and 3 enumerate the key sustainability parameters/guiding principles as well as map out the impact of various factors, including mobility and access on healthcare delivery within the ambit of the livelihoods approach. The SLF thus frames the health-seeking and treatment continuum and trajectory highlighting the inflexion points for generating and designing intervention options as well as for undertaking participative monitoring and evaluation to ensure effective treatment as a basis for livelihoods improvement.

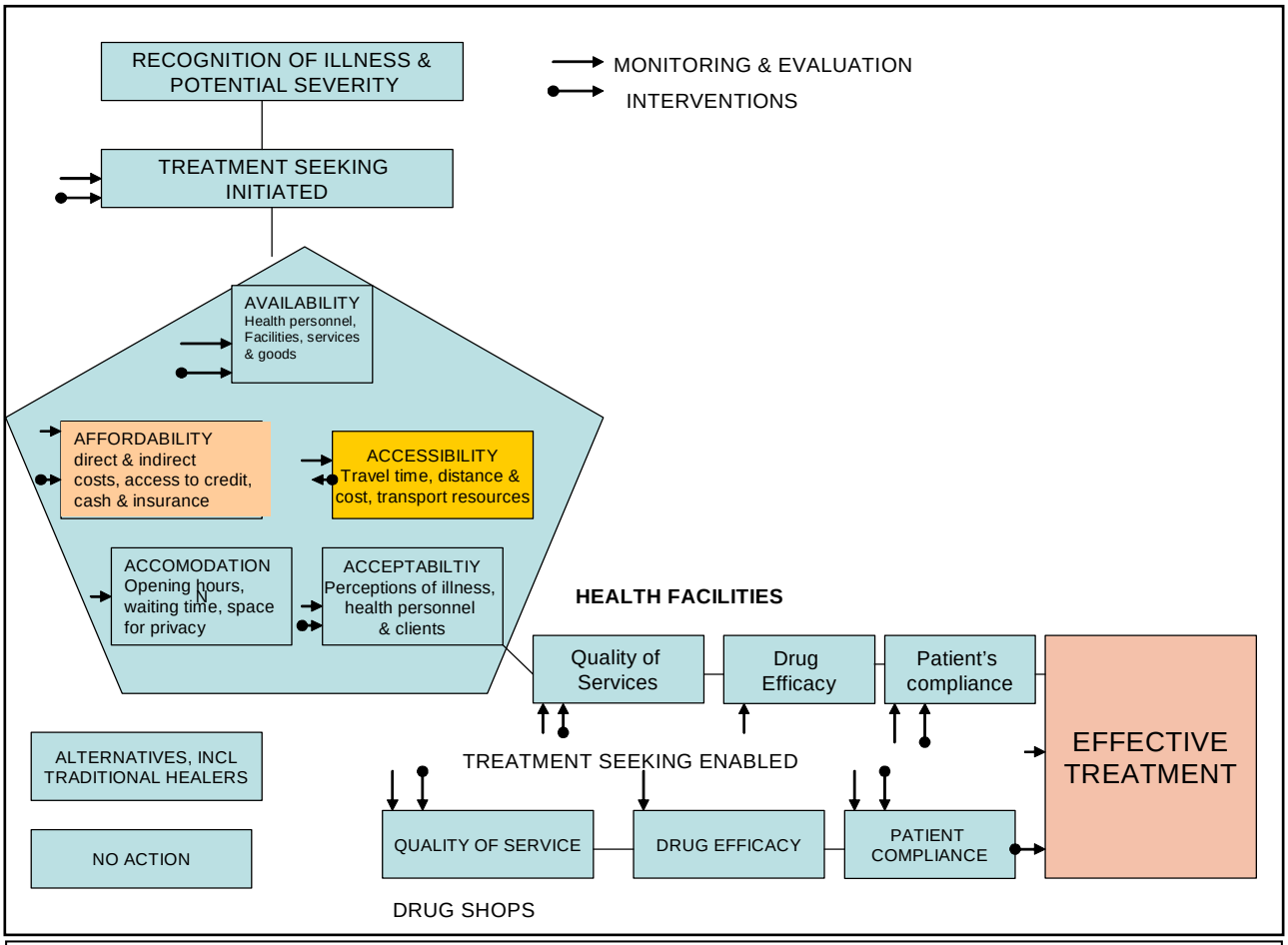


Figure 3 Arenas for intervention, monitoring & evaluation

So, while access-related solutions are crucial to improved healthcare delivery in the short-term, it is equally beneficial to begin to identify and nurture livelihood strategies (including shoring support for traditional safety networks for basic social protection) to enable households to better cope with their adverse conditions.

6. RECOMMENDATIONS

Recommendations emanating from the study discussed in this paper include:

- The spatial configuration of rural settlements has a direct bearing on rural transportation infrastructure and services in terms of trip generators, nature, and type, intensity of rural trips and modes of transport used. Solutions that relate to the need for the creation of multi-purpose self-contained rural settlements located in a balanced and functioning settlement hierarchy will go a long way in addressing issues of socio-economic deprivation and isolation that characterise deep rural communities in South Africa such as the study area.
- Strengthening the demonstrated relationship between rural healthcare, mobility and access requires an integrated approach that recognises that "roads are not enough". The need to move beyond traditional rural transportation approaches and provide platforms for implementing a menu of innovative intervention options incorporating the provision of low-cost, but robust transport technology (including non-motorized transport), rural logistical operations under-girded by information and communication technologies underpinned by appropriate infrastructure cannot be over-emphasized. This intervention suite has been coined IRMA – Integrated Rural

Mobility and Access (Naude et al, 2005). The implementation of IRMA needs to take into consideration availability of local materials, appropriate technology, local labour and community participation so that interventions are a reflection, extension and expression of the targeted beneficiary needs (Mashiri et al, 2007a).

- The central role played voluntarily by home-based care community-based institutions in rural healthcare delivery in contemporary South Africa has been amply demonstrated by the Moholoholo HBC's work. Efforts not only to remove their mobility and access pain points, but also to improve their institutional and administrative configuration need to be intensified. And, as Russell & Schneider (2000) have observed, large scale technical assistance and capacity building programmes, networking and co-ordinating opportunities, development and dissemination of standards/guidelines, and the establishment of monitoring and evaluation systems are all key to the creation of an effective and sustainable community-based care and support movement
- This study focused on the demand side of community healthcare access in rural areas. It would be necessary to undertake a similar study to unravel supply side issues to enable a complete picture to emerge which would facilitate the generation of a holistic intervention regime.

7. CONCLUDING REMARKS

The literature scan and the results of the fieldwork corroborate the importance of mobility and access to equitable rural healthcare delivery. However, while access-related solutions are crucial to improved healthcare delivery in the short-term, it is equally beneficial to begin to identify and nurture livelihood strategies (including shoring support for traditional safety networks for basic social protection) to enable households to better cope with their adverse conditions. Lastly, while a rich base of experience in community/home-based care and support is being developed and entrenched in South Africa, access to these services is still far from universal.

8. REFERENCES

[1] CHAMBERS, R. & Conway, G. (1992) Sustainable rural livelihoods: practical concepts for the 21st century. *IDS Discussion Paper no. 296*, University of Sussex, Institute of Development Studies, Brighton, UK

[2] ENSOR, T. & Cooper, S. (2004) ***"Overcoming barriers to health service access: influencing the demand side"***. Health Policy Plan 19(2):69-79

[3] HEALTH & MOBILITY (2008) ***"Impact of transport on access to health services for PLWHA in Namibia"*** (Article accessed February 2007 on: http://www.mobilityandhealth.org/news/full.php?view=263&Submit3.x=125&Submit3.y=6)

[4] JACKSON, H. & Kerkoven, R. (1995) ***"Developing AIDS care in Zimbabwe: a case of residential community centres".*** AIDS CARE 7(5): 663-673

[5] MAKO, B. (2004) "Debian GNU/Linux & Ubuntu," GNU/Linux Beginners Group, New York

[6] MASHIRI, M., Buiten, D & Zukulu, R. (2005a) "***Towards setting a research agenda around mainstreaming gender in the transport sector",*** Proceedings: Southern African Transport Conference, CSIR International Convention Centre, Pretoria.

[7] MASHIRI, M. Kistan, K. Marrian, B & Elrahman, O.A. (2007), ***"Uplifting developing communities through sustained technology transfer"***, Proceedings: 3rd Africa

Technology Transfer Conference, Sun 'N' Sand Holiday Resort, Mangochi, Malawi, 22 – 25 May 2007

[8] MASHIRI, M, Maponya, G. Nkuna, Z. Dube, S.M. & Chakwizira, J. 2007. ***Unpacking the relationship between healthcare, mobility & access.*** CSIR PG Report

[9] MSHINDA, H., Lengeler, C., Schulze, A., & Obrist, B. (2006). "Access to Healthcare: A framework for analysing & improving access to healthcare" [accessed in March 2007 at: http://www.narvotisfoundation.com/en/health_cooperation/index.htm]

[10] PEROLD, H (2006) ***"Volunteering as a strategy to foster civic participation among youth in southern Africa",*** Proceedings: Southern African Transport Conference 2005, 11-13 July 2005. Pretoria, South Africa.

[11] PETERS, D. (1999) "***Gender issues in transportation: A short introduction".*** UNEP Regional Workshop, 28 – 30 July 1999, ITDP

[12] RUSSELL, M & Schneider, H (2000) ***"A rapid appraisal of community-based HIV/AIDS & support programmes in South Africa".*** Centre for Health Policy, University of Witwatersrand.

[13] SOUTH AFRICAN DEPARTMENT OF TRANSPORT (2005) ***"National Household Travel Survey 2003"***, Technical Report, Pretoria