

EXECUTIVE SUMMARY

This report is the result of an eight month study, commissioned by the World Health Organization (WHO) through the Water Research Commission. However, it was soon realised during the initial phases of the study that this study could provide very useful information in the provision and planning of services to HIV and AIDS affected people in South Africa. The study was expanded to include aspects of importance to South Africa and the Water Research Commission funded the additional research done by the project team.

BACKGROUND

The spread of the human immunodeficiency virus (HIV), which causes Acquired Immunodeficiency Syndrome (AIDS) in sub-Saharan Africa, is taking place at an alarming rate. More than 70% of all adults and children infected with HIV/AIDS (25.3 million people) live in sub-Saharan countries (Crewe, 2000; UNAIDS, 2000a; 2000b). Approximately 3.8 million adults and children had died during 2000 as a direct result of HIV and AIDS or AIDS related diseases (Karim, 2000; UNAIDS, 2000b). South Africa faces major challenges in addressing the severe impact of the HIV and AIDS epidemic. At the end of 2005 the estimated number of adults and children living with HIV and AIDS in South Africa, was 5.3 million (USAID, 20053). HIV and AIDS typically strikes adults in the prime of their lives when these people are the most economically active, and although rates of infection are higher in women than men, infection rates peak between 18 to 40 years for both men and woman (World Bank, 1999; Karim, 2000; UNAIDS, 2000A; 2000B). Children are also at risk of infection, and at the end of 2001, approximately 250 000 children between the ages of 0 and 15 years were infected with HIV in South Africa (Whiteside and Sunter, 2000). Not only does the HIV and AIDS epidemic hold a devastating effect on the health and well-being of the South African nation, but it also holds grave consequences for the socio-economic development of South Africa.

HIV and AIDS is not a water-borne disease. Water, HIV and AIDS therefore appear to bear very little relation to each other. However, closer scrutiny reveals significant linkages between HIV and AIDS and water. These linkages hold serious long-term implications for the effective management of water resources and, above all, the provision of safe water to individuals and communities. Studies in Canada have suggested that 35% of endemic gastrointestinal illness in a community might be due to drinking water (Payment et al., 1991; 1997). Provision of safe water to HIV positive and AIDS individuals is paramount because they live with compromised immune systems and are therefore more susceptible to water-borne diseases (USAID, 2004). In reality their requirements for safe water are greater than that of uninfected individuals (Ashton, 2000). In developing countries, many people are living in rural communities and have to collect their drinking water some distances away from the household and transport it back in various types of containers (Sobsey, 2002). Microbiological contamination of the water may occur between the collection point and the point of use in the household due to unhygienic practices causing the water to become a health risk (Sobsey, 2002). Even if the water supply is of acceptable microbiological quality, other transmission routes of diarrhoea such as presence of animals on the dwelling, poor hygiene practices, inadequate excreta disposal, unsafe handling of foods and improper water storage conditions, could be associated with the risk of diarrhoeal diseases, especially in people living with HIV and AIDS (Moe et al., 1991; Curtis et al., 2000; Sobsey, 2002). Hayes and co-workers (2003) have shown that people with HIV and AIDS are more susceptible to serious food- and waterborne illnesses and that secondary infections transmitted through food and water contribute greatly to the morbidity and mortality of HIV infected individuals.

The majority of HIV and AIDS patients are cared for within their local communities. During 2001 and 2002, the South African Department of Health has conducted an audit of all home/community-based care projects in the country (DOH, 2003). The results indicated that there were 892 home/community-based care related projects around the country of which 50.4% were non-governmental organizations (NGO's) and 36% were community-based organizations (CBO's) (DOH, 2003). These caregivers need water for bathing patients, washing soiled linen and clothing, keeping the home environment clean, assisting the patients in taking medicine and preparation of food. Water supply points and latrines have to be accessible and close to where they are needed to reduce the burden of a long walk and to maintain the dignity of patients and caregivers. Therefore the caregivers needs to be properly trained in safe water handling and sanitation practices, personal hygiene, domestic hygiene, food hygiene and safe waste water disposal and drainage to effectively reduce the exposure to water and sanitation related diseases.

The situation for HIV and AIDS infected individuals living in sub-Saharan Africa is exacerbated by the fact that a large proportion of the African population has no access to safe water or adequate sanitation. In rural Africa 65% do not have access to an adequate supply of safe water and 73% are without adequate sanitation (ECA, 2001). In urban areas, 25% and 43% have no access to safe water or sanitation respectively. High numbers of rural and urban Africans therefore suffer from water related diseases. The far reaching political and development implications with regard to the lack of access to safe water and adequate sanitation in South Africa are similar to those of the rest of Africa. In 2001 there were 44.8 million people living in South Africa. Of these, 5 million (11%) had no access to safe water supply and 18.1 million (41%) did not have adequate sanitation services (Statistics South Africa Census, 2001). However, South Africa has reduced this inequality and it is estimated that 9 million people have been provided with water supply since 1994 (Strategic Framework for Water Services, September 2003).

METHODOLOGY

This report is based on the following:

- National review of policies on water, sanitation and home-based care and HIV and AIDS
- Key informant interviews (Semi-structured interviews based on a list guiding questions conducted with staff of the NGO's, Voluntary Counselling and Testing centres (VCT), nurses in the clinics serving the study areas, representatives of the local Municipalities and people living with HIV and AIDS) were administered to assess to what extent these policies were impacting at various levels and to determine the general state/condition of water, sanitation, health and home based care services
- Review of local water and sanitation facilities and the type and state of water and sanitation infrastructures in the study areas
- The water and sanitation coverage in the study areas
- The continuity of the water supplies in the communities
- The consumer patterns of water in the households
- The different uses of water in the households
- The condition and placing of sanitation systems at the households

RESULTS

The results of this assessment demonstrated that the people in the study areas mostly lived below R1 500 a month. Most of the households only lived from the social grants that the government provided. These social grants included pension grants, disability grants (which HIV and AIDS infected people also received) and child support grants.

Most of these areas were serviced with safe water in some serviced form. They did not always have easy access to these water sources nor was the water always available to them. It could be concluded that this had an effect on the quantity of water that these people brought into their households. None of these areas brought in the minimum baseline of 25 lpppd according to the RDP guidelines. This meant that some area of their general well being related to water was suffering due to the lack of sufficient quantities of water.

Apart from the fact that the households brought in very little water for personal use, they also created opportunities for the water to get contaminated during storage at the point of use. They did not always take precautions to treat and protect their water. Many believed that the water provided by the government was treated water and they did not have to treat or protect it properly. The storage conditions were also not always the safest conditions to prevent water from being contaminated. These poor conditions included the dung smeared floors, roof of the fires in the huts and insects which were also ever present in these huts due to the animals and the uncovered left-over food.

Collecting water from remote sources when the water is not available at the taps or the households not having tap water was a formidable task. To get to the rivers and springs, the water collectors had to walk through bushes and uneven terrain to get to the sources, climb over farm fences, many times through secluded areas or cross busy roads and walk in unbearable heat in the summer times or rain in the rainy seasons which were very exhausting for weak people. Those households whose only alternative water source was the next village's standpipes had to walk from 2 to 5 km to get there and then back again.

Although most of the households that participated in the study did have toilets, many of these toilets were constructed by the participants themselves and it was not safe to use. Toilets that were provided by the RDP schemes were not built according to VIP guidelines because they were given to local people to build and follow-up guidance were not efficient. These toilets were not only used by weak elderly people and young children, but also by people living with HIV and AIDS. The toilets bore ample opportunity to cause/transmit diseases but they also were structurally dangerous. These toilets were also not user friendly for Home Based Care (HBC) services where the caregivers had to assist their patients in using the toilets. The toilets were many times narrow and made it difficult for two people to fit into these toilets. The distance of the toilets from the households also made it difficult for weak patients to walk to.

An attitude of apathy also reigned in these areas. The people did not want to clean their toilets. Many felt that the toilets were not worth cleaning and felt that they would only clean their toilets if the government provided them with toilets, but even the RDP toilets (provided by the government), were not cleaned.

From the interviews it was clear that the households in the study were more likely to wash their hands after they had used the toilet and before eating their meals than any other time. Most of the households in all the areas disposed of their household waste in pits in their own yards because they did not have refuse removal, or burned it or dumped it in the open streets. The presence of animal faeces meant that animals did have access to these waste disposal sites in the yards and in the open streets. Children also had access to these sites because they were not fenced off. These waste disposal sites posed various dangers to the environment, animals and humans. The animal faeces and other waste could wash into the ground and water sources in the rainy seasons and thus polluting the water sources. Animals and children could also pick up various potential diseases from these sites and spread it inside the household cohort.

All the HBC groups were established quite recently. Various organizations were involved with HBC but it was the NGOs that played the more prominent roles in HBC as they managed these groups. The churches had their own relief groups that provided food parcels, clothes and prayer for the poor and sick. They were not closely working with HBC and did not see it as their sole duty. The communities were not 100% aware what HBC was or what they did. This meant that HBC was not as exposed to the communities as they wanted to or thought they were. Better exposure to the communities meant better community participation in caring for the sick and more community members could also volunteer for HBC and so alleviate stress on the caregivers. This could assist HBC in identifying those that urgently need HBC and in training family members to care for their own people in their homes and to avoid getting infected.

Water plays a very important role in HBC. Caregivers used water for hand washing, bathing the patients, brushing their teeth, cleaned the dwelling and the yard, cleaned the toilet, and did the laundry, drinking, cooking and preparing food. They also used it for medical purposes such as drinking medication, cleaning wounds and keep the patients and their environment hygienic to improve the lives of the patients and to have a positive impact in a given community.

The aim of this study was to provide insight into the extent to which water, sanitation and hygiene issues/practices are important and relevant for service providers and people living with HIV and AIDS, especially with regards to home-based care. In addition, it aimed to provide information on the development of water, sanitation and hygiene mechanisms and how HIV and AIDS infected individuals, their carers, and other household members' access to these services, especially in resource poor situations. Accordingly two rural and two peri-urban communities in different regions of South Africa with different cultural groups were selected. Therefore the objectives of the study were to:

- carry out a short-term assessment of water, sanitation and hygiene resources in rural and urban communities and households of HIV and AIDS infected individuals,
- establish needs assessment criteria:
- obtain information from people concerned, communities, service agencies about their experiences and recommendations for strategies related to water supply (domestic and productive), sanitation and hygiene at household, community and national levels
- provide information for advocacy on water, sanitation and hygiene in relation to home-based care through emphasizing the multi-sectoral character of HIV and AIDS.

RECOMMENDATIONS

The following is a summary of the specific recommendations, which are expanded upon in this report:

1. In the rural areas where people did not have easy access to the clinics, it is recommended that more mobile clinics should be mobilised more frequently to make it easier for these people to have access to primary health care.
2. More caregivers should be trained and deployed in the communities where they live. This would increase the effectiveness of HBC because more patients could be cared for in their own homes.
3. Good administrative systems should be developed and maintained by HBC and the NGOs. HBC groups lack resources such as their own office buildings, administrative resources such as computers and stationary to keep better record of patients and the volunteers, communication systems and transport. This would enable the caregivers to communicate

with each other and the clinics and hospitals and ensure faster reaction time when a patient urgently needs to go to the hospital or clinic.

4. The caregivers should be given training and suitable work schedules and could be employed in the health sector to ensure that they see as many patients as possible in a day. People lose interest in HBC because they either do not get paid at all or they are paid too little. This will also decrease the unemployment rate in the country.
5. More males should be encouraged to become caregivers. This will enable HBC to give care to male patients if they prefer male caregivers.
6. Support systems should be developed not only for the patients but also for the caregivers to help them deal with the illness and death that surrounds them in their working environment.
7. Funding to provide the caregivers with proper HBC kits and protective clothing is fundamental.
8. Community leaders and members should become more involved in HBC to assist the caregivers to make their jobs easier. More HIV and AIDS awareness campaigns should be done amongst the communities so that they understand the disease better and are more tolerant towards people living with HIV and AIDS. This will encourage the people to ask for assistance from HBC.
9. Although local governments are in the process of providing basic water services, they should reconsider the effectiveness of the current systems. Although they claim their water systems are according to RDP standards from this study, it is not the situation in all the areas. Larger water systems, more water supply points and treated/safe water supplies are needed to correct this problem. People do not collect enough water in their houses from water supply points because of the difficulty of collecting the water.
10. Educating people are a key factor that can lead to better health. People need to be better informed about the quality of water they receive. In some areas people believe that the ground water they receive is treated and therefore they do not need to treat their water at the point of use.
11. Sanitation systems should also be reconsidered. The communities that do not have toilets should become first priority. Existing toilets need to be upgraded to VIP toilets.
12. People in the communities should be equipped with skills needed to build the VIP toilets according to specifications. It is also imperative that this process is continually monitored to ensure that the sanitation systems are properly constructed.
13. Education on the dangers of unimproved pit toilets and veldt defecation should be provided to communities.
14. Education on how to operate and maintain the sanitation facility should be provided in order for households to understand the technical aspects of the system and the benefits the toilet has to their health.
15. Refuse removal should be more available to communities. This would ensure a clean environment. Education and awareness campaigns could assist and inform people to know how to keep their toilet clean and what the safest way of disposing of the household waste is.