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HIV/AIDS and its implications for the water and sanitation

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Introduction

AIDS HAS BECOME the most devastating global epidemic the world has ever faced. At the end of 2002, over 20 million people have died, an estimated 42 million people globally were infected with HIV and over 5 million people are newly infected each year (UNAIDS, AIDS epidemic update 2002). Because the epidemic is concentrated in the most productive age group regardless of economic or educational status, it has a systemic impact on economic development at all levels, affects all development sectors, threatens the social fabric of society and fundamentally challenges the security and stability of a growing number of countries.

For the Water and Sanitation sector, the epidemic jeopardizes the Millennium Development Goal to halve the proportion of people, who are unable to reach or afford safe drinking water, and the goal set in the World Summit on Sustainable Development in Johannesburg in 2002 to halve the number of people without access to improved sanitation. In many affected countries, there is or will be a negative impact on the quantity and quality of services provided by the sector. Not only will the budget be reduced because of a decreased tax base and reduced government budget, but sector staff performance will also decline as a result of diminishing productivity and capacity. At the same time community capacity to operate and maintain the systems is reduced.

So far, the response of the water and sanitation sector to the HIV/AIDS epidemic has been limited. The aim of this article is to explain the links between the sector and prevention and mitigation of HIV/AIDS and to discuss the implications of HIV/AIDS on sector performance. For a more in depth review see www.irc.nl/tops.

The links between water, sanitation, hygiene and HIV/AIDS

Staying healthy

The main objective of the water supply sector is to improve people's health by providing access to safe water supply and (environmental) sanitation. With HIV/AIDS, this becomes even more urgent because water and sanitation related diseases such as diarrhoea and various types of skin diseases, belong to the most common opportunistic infections. In addition, unventilated houses with inadequate drainage increase the risk for tuberculosis infection and inadequate waste management attracts insects and vermin that carry diseases. Thus, adequate water supply and

sanitation are of the utmost importance for HIV infected people to remain healthy as long as possible and for people with AIDS to reduce their exposure to infections.

Water and sanitation is key in ensuring that one is healthy. You cannot cook with nor drink unsafe water because of the risks of being infected with diseases. Opportunistic infections like diarrhoea are also caused by lack of clean water and proper sanitation. Ensuring that people living with HIV/AIDS have access to clean water and sanitation reduces the risk of developing diarrhoea and cholera. Many people living with HIV/AIDS have died because of these diseases. Provision of clean water and sanitation becomes one of the strategies to manage opportunistic infections. (From a speech by the director of the South African National Association of People living with AIDS (NAPWA), Nkululeko Nxesi, at a national sanitation workshop convened by the South African NGO, Mvula Trust, in August 2002)

Home based care

The majority of AIDS patients are being cared for within their local communities, often by trained volunteers: this is called home-based care. For this care, good access to safe water and sanitation is indispensable. Water is needed for bathing patients, washing soiled clothing and linen and keeping the home environment clean. Safe drinking water is needed for taking medicines and to make food easier to eat for patients suffering from mouth ulcers or thrush. Water supply points and latrines have to be accessible and close to where they are needed to reduce the burden of distance and to maintain a sense of dignity of patients and caregivers.

These caregivers need to be 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 of their patients. Therefore, hygiene education must be one of the elements in training for home-based care.

Most training manuals for home based care do mention the need for hygiene and the use of safe water and latrines, but the manuals are based on an assumption that everyone has access to safe water and sanitation. They moreover assume that caregivers are informed on safe water handling practices. The

advice that most care givers give to households with people living with HIV/AIDS (PLWHA) is to boil water for drinking. This is not always realistic. (authors experience)

Infant feeding

If a mother is HIV positive, there is a one in three risk that she may transmit the virus to her baby through breastmilk, even if the child was born HIV negative. The 'obvious' solution would be to not breastfeed the child, but this has proven to be very difficult because of social, cultural and financial reasons, including the cost and availability of powdered milk, stigma and tradition. Whether breast feeding or not, clean water is crucial for infant feeding and HIV positive babies need to be protected even more from unsafe water because it will weaken their resistance and shorten their lives.

Water for productive use

Water is also needed for productive use, increasing food security and nutrition levels, keeping people longer healthy. People who are weakened by AIDS can still be involved in growing of vegetables in kitchen gardens, provided that they do not need to haul water from far away. The same applies to tending of domestic animals and home based businesses, such as beer brewing.

In Livingstone, Zambia, the home based care volunteers are growing vegetables as an income generating activity. Of the produce, part is used as a food supplement for their patients, part is used by the women themselves for their own food security, the rest is sold. One major problem they face is lack of a reliable water supply near their fields. (Maramba HBC group, Zambia)

The impact of HIV/AIDS on service provision

Government agencies in countries with a high HIV/AIDS prevalence face increasing difficulties in addressing their mandate and in responding to the challenges posed by HIV/AIDS. First of all, the organization itself will be affected, especially in high prevalence countries where staff infection rates that can be as high as 30%. The implications of this in terms of human resource management are enormous as planning has to be taking into account requirements for staff recruitment, training, multi-skilling and replacement procedures. In addition, policies have to be developed and funding made available for staff benefits, insurance, sick and compassionate leave and funeral expenses. Staff morale will be affected caused by stress and financial pressures, leading to absenteeism and loss of productivity. Yet, due to the stigma associated with HIV/AIDS, only very few organisations (public, private and NGOs) have developed an internal HIV/AIDS policy and created an atmosphere that facilitates prevention and action to mitigate impact. Such a policy would, for example, have to address the implications of mobility of staff, the number of nights away

in the field and postings away from families, all of which may increase susceptibility to infection. Of course, the involvement of PLWHA in the development of a policy is very important to ensure adequate responses and to reduce stigma in the workplace.

Service provision is affected because of loss of skilled staff leading to reduced quality of planning and construction of water supply systems. The loss of staff also results in reduced technical support for operation and maintenance and quality monitoring. Thus, more robust and reliable water supply systems (and treatment processes) that do not require intensive supervision or management, are needed. Of course this requires an increased budget. This is difficult at a time where service delivery costs are increasing as a consequence of the 'internal' impact of HIV/AIDS and budgets are generally decreasing because of a reducing tax base, and declining ability of end-users to contribute to the capital or operating costs of installations. Loss of staff also affects provision of training at community level for operation and maintenance and in hygiene education. Yet, the need for water and sanitation is increasing and so is the need for training, because turnover of trained committees is likely to be high.

The impact on sustainability of community based water supply and sanitation systems

So far the water and sanitation sector has paid little or no attention to the actual and potential impact of HIV/AIDS on the financial, social and economic feasibility and sustainability of water supply and sanitation systems. This is remarkable, as increasing evidence exists, that the epidemic affects the entire structure and functioning of both rural and urban households and communities. Sustainability is affected because of reduced ability of water users to pay water fees due to loss of household breadwinners, overall livelihood insecurity and increased medical expenditures. Management of water supply systems is affected because of reduced ability of water users to spend time and energy on management activities or because of loss of trained community members. The basic principles of sustainable community water supply are eroded, because affected households may not be able to participate in planning, decision-making and implementation and their specific needs may not be taken into account.

Child-headed and grandparent headed households are particular at risk of being excluded from decision making and valuable operational and hygiene information. Finally, the overall sustainability of systems is jeopardized because they are dependent on the involvement of women. Everywhere, women are bearing the main burden of AIDS care, leading to 'time poverty', whereby water collection and operation and maintenance tasks become increasingly burdensome. This is particularly significant when women themselves suffer from bad health, whether related to AIDS or not.

Way forward

Water, sanitation and hygiene education are key services for impact mitigation

Safe water and sanitation are a basic need and a human right and this applies even more to people affected by HIV/AIDS as it will help to sustain them longer in good health, will facilitate care for ill patients and will increase their dignity. The sector has to assess how best it can support communities to access safe water supply, sanitation and hygiene education to mitigate the impact of HIV/AIDS and to support community care for those affected and infected by HIV/AIDS. This also implies that water organizations actively offer to support organizations involved in home based care in hygiene education.

Commitment by the sector to address HIV/AIDS in internal planning and procedures

Although the links between water and AIDS are clear and the sector is being affected in many ways, very little attention is being given to this issue by policy makers, water departments or even by water NGOs. The water and sanitation sector, like all other sectors, must make a commitment to address HIV/AIDS and need to develop workplace policies that create a supportive organization and include prevention strategies such as IEC and peer education and adjustment of working conditions to reduce susceptibility to infection. Work planning procedures need to incorporate HIV/AIDS concerns and impact on productivity to maintain service provision to the required level.

Mainstreaming HIV/AIDS in sector programming

Water sector planners and decision makers at all levels need to assess, address and continuously monitor the current

and expected impact of HIV/AIDS on the demand and need for water and sanitation and on the ability of communities to finance and manage water supply and sanitation. In a context of AIDS, systems need to be sustained without reliance on a declining pool of skilled outsiders and village level operation and maintenance principles are more important than ever. At the same time, current demand responsive approaches and policies that promote full cost recovery and private sector involvement have an inherent risk of further marginalising these communities and jeopardising their access to improved water supply and sanitation. In the face of the epidemic, these approaches and policies will have to be reviewed to ensure that the Millennium Development Goals for the sector will be reached.

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