

# The interesting cross-paths of HIV/AIDS and water in Southern Africa with special reference to South Africa

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## Abstract

HIV/AIDS and water-borne diseases account for a substantial degree of morbidity and mortality in different age groups across the globe, but their ripple effects are more devastating in developing countries. Estimates of the HIV/AIDS epidemic in South Africa vary but attest to a mature and generalised epidemic. Antenatal sero-prevalence data show a rising epidemic from less than 1% prevalence among pregnant women attending antenatal clinics in 1990 to over 29.5% in 2004. Prevalence is generally higher among females than males, indicating feminisation of the epidemic. Race analyses in 2003 reveal the highest prevalence to be among African (13%) followed by Whites and Coloureds (6.2%) and least among Indians (1.6%).

The epidemic which has left a wave of orphans, child-headed households and its attendant ripple effects on household structures, demography, economy and education is characterised by a 'pigeon-hole' of several opportunistic infections.

In rural areas, devoid of electricity and potable water, the impact is more profound because of the role of water in cooking, drinking, consumption of anti-retrovirals and in the preparation of milk supplements for infants.

People with compromised immune systems are more prone to several diseases than individuals whose immune systems are not compromised by HIV/AIDS. HIV/AIDS patients therefore have greater requirements for potable water than uninfected individuals. Improving water quality will lead to a decline in child and adult mortality as well as diarrhoeal diseases in people living with HIV/AIDS.

One of the hallmarks of HIV/AIDS is diarrhoea and about 90% of HIV/AIDS patients in Africa suffer from chronic diarrhoea, an easily recognisable clinical manifestation of water-borne infections. Other linkages between HIV/AIDS and water are breast feeding; unsafe water used in infant formula preparation which increases the risk of diarrhoeal diseases and deaths in infants; anti-retroviral treatment, as safe water is needed during anti-retroviral treatment or treatment for opportunistic infections in HIV.

In addition to providing safe water, supply points and latrines should be close to points of use as this will reduce the long distances that care givers and HIV/AIDS patients undertake to fetch water and appropriate water system design is required.

Added to the above-mentioned are poverty alleviation aspects; poverty enhances vulnerability to HIV infection and AIDS exacerbates poverty.

Secured access to sufficient safe water and sanitation is also a human rights issue, just as stigmatisation of HIV/AIDS has made the disease a human rights issue.

The cross-paths between HIV/AIDS and water have long-term implications for effective water resource management and the provision of wholesome water to communities. Such implications include faltering payment for water supply because HIV and AIDS are financially dis-empowering, erosion of social capital and waning productivity.

Mainstreaming of HIV/AIDS in the water sector is of utmost importance, including development of work-place policies, adaptation and reorganisation of workload, development of strategies for reserve staff, adjustment of performance appraisal systems, pro-poor financing with a focus on water for health and economic benefit and integration of HIV and AIDS into training activities.

**Keywords:** HIV and AIDS, water, linkages, diarrhoea, poverty, sanitation, stigmatisation, human rights

## Introduction

### General considerations

The linkage between HIV/AIDS and water may appear superficial but is indeed an in-depth association which reflects the ripple effects of the scourge of HIV and AIDS on society and the undisputed implications for the provision of water and water resource management. Water resource management and water

supplies to communities operate within the context of a mature and generalised HIV and AIDS epidemic. World-wide, HIV/AIDS and water-borne diseases account for a substantial degree of morbidity and mortality in different age groups. Incontrovertibly, water supply to communities in South Africa must take into account the HIV and AIDS epidemic in their design and operations. However, the interaction between HIV/AIDS and water has received only cursory attention in South Africa. In trying to unravel the intricate linkages between HIV/AIDS and water, this paper first documents issues around HIV and AIDS, followed by matters of safe water supply. Thereafter, the various perspectives on the linkages and the importance of HIV and AIDS on the demand for water and sanitation services are presented.

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