# **HIV/AIDS** and education

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Anecdotal evidence supports the intuitive suggestion that the HIV/AIDS epidemic will be a major obstacle for achieving the objective of 'education for all' by 2015. For instance, Rakai district — one of Uganda's most heavily AIDS-affected areas — saw enrolment in three primary schools drop by nearly 40 per cent between 1989 and 1993 (Shaeffer, 1994). HIV/AIDS affects the demand for as well as the supply of primary education (Kelly, 2000).

# Supply of education

Supply is reduced due to higher levels of morbidity and mortality among teachers. Absenteeism among teachers increases because of AIDS-related illness and deaths, care for HIV infected family members, funerals of community members, and/or increased moonlighting. Countries where the epidemic has reached a mature stage show high levels of HIV infection among teachers — often in excess of 20-30 per cent. Several African countries are reportedly losing more teachers every year to AIDS that the number of annual new recruits who enter the labour market. Supply is also likely to be affected by decreased fiscal spending or restructuring of the national budget away from primary education, both as a result of the HIV/AIDS epidemic.

### Demand for education

Demand for education is reduced for several reasons, including (i) changing demographics, (ii) rising opportunity costs, (iii) less affordability, (iv) concerns about sexual activity at school, (v) declining quality, (vi) lower expectations, (vii) stigmatisation, and (viii) weakening traditional safety nets.

First, the epidemic leads to lower fertility and higher under-five mortality so that fewer children will enter school.<sup>3</sup> Second, children are kept out of school because they are needed at home to care for sick family members or to supplement family income. Third, children attend school intermittently and eventually drop out because their family can no longer afford fees and related out-of-pocket costs due to reduced family income or

<sup>1</sup> In Zambia, for instance, 1,300 teacher died in the first 10 months of 1998. This was more than twice the number of deaths reported in the previous year (UNICEF, 2000).

<sup>&</sup>lt;sup>2</sup> To compensate for falling real wages that may result from the overall impact of HIV/AIDS on the national budget. 'Sunlighting' is perhaps a more accurate term since the second job is often carried out during the normal working hours of the first job.

<sup>&</sup>lt;sup>3</sup> Whereas the impact of the epidemic on mortality is obvious, its effect on fertility is indirect. The number of births falls because women die before the end of their childbearing years. Increased condom use, as well as other social and physiological factors, reduce the average number of children per woman.

increased health spending. Fourth, parents keep children at home because of growing concern about non-consensual sexual activity at school.<sup>4</sup>

Fifth, the HIV/AIDS epidemic erodes the quality of education as a result of absenteeism, less qualified and more inexperienced teachers, and fewer teaching materials, so that children lose interest and parents grow less willing to invest scarce resources in education. Sixth, lower levels of life expectancy may reduce demand for education on the part of parents (principal-agent interaction). Seventh, social stigma often excludes children from families living with AIDS; not only those infected with the HIV virus, but also those directly affected by it. AIDS orphans in particular face high odds of being enrolled in primary school. Finally, once the epidemic reaches a mature stage, it undermines the capacity of the extended family and the community for solidarity and mutual self-help.

### Education and HIV diffusion

Not only does HIV/AIDS impact on education; education also affects the evolution of the epidemic. It has been observed that the social epidemiology of HIV/AIDS is changing over time (Vandemoortele and Delamonica, 2000). In the early stage of the epidemic, it seems that the better educated are more vulnerable to HIV infection than those with lower levels of education; mainly because they are better off and more mobile. But once information and knowledge about the disease become available, the more educated are best able to change their behaviour and protect themselves against HIV; whereas the less educated become more vulnerable once the virus has spread more widely among the population.

The diagram below illustrates the different diffusion curves of HIV among those with and without education; based on evidence from sub-Saharan African countries. The horizontal axis depicts the stages of the HIV epidemic; the vertical axis measures the HIV prevalence rate.

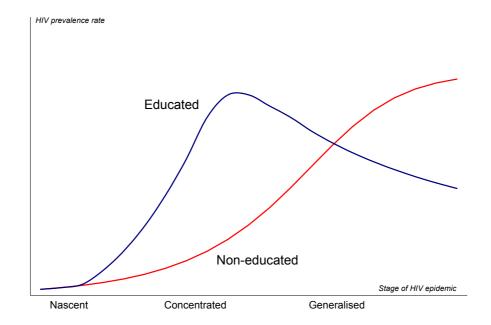
The pattern for people with education follows an inverted U-shaped curve as the epidemic progresses from the nascent stage to the concentrated phase and subsequently to the generalised stage. The pattern for those without education follows a more gradual curve during the nascent and concentrated stages, but grows exponentially in the generalised stage, before levelling off.

<sup>&</sup>lt;sup>4</sup> The sad truth is that schools are not always sanctuaries and safe havens for children.

<sup>&</sup>lt;sup>5</sup> Results of Demographic and Health Surveys support the premise that children who are have lost one or both parents are less likely to be enrolled than those whose parents are alive (World Bank, 1999).

<sup>&</sup>lt;sup>6</sup> A more fashionable expression would be to say that the HIV/AIDS epidemic reduces 'social capital'.

Diagram HIV diffusion pattern for the educated and non-educated



Even in countries where the overall HIV prevalence rate is high and rising, the level of HIV infection among the better educated has started to decline during the 1990s. The 'education vaccine' against HIV is taking effect as the awareness about the epidemic increases. Evidence shows that HIV infection is not random, and that new infections are increasingly concentrated among the illiterate and the poor. AIDS is becoming a disease of the poor.

In the future, however, it is unlikely that a similar pattern will be observed in countries where the epidemic started later, mainly because the educated will be less vulnerable to HIV infection during the nascent and concentrated stages.

An ounce of prevention is better than a pound of cure; and prevention of HIV begins with education. AIDS is a disaster; but this disaster does not simply happen, it gradually unfolds (Whiteside and Sunter, 2000). The unfolding of the HIV/AIDS epidemic at the country level will depend, at least in part, on how quickly the objective of education for all becomes a practical reality for the millions of out-of-school children.

It is clear that the impact of the HIV/AIDS epidemic on the education sector will be farreaching. Several countries are potentially on the verge of missing the opportunity of achieving the education goal in the foreseeable future. It is safe to say that the cost of 'education for all' will be larger with AIDS than without AIDS, but it is impossible to determine with any degree of precision the magnitude of the extra cost involved.

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