

HIV and Development Programme



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The HIV Epidemic and the Education Sector in sub-Saharan Africa

By Desmond Cohen, 1999

There are many ways in which the HIV epidemic intersects with the educational system and the following is simply a stylistic representation of some of the more important aspects of the relationship. Relatively little is known about these issues and systematic research is largely absent. As with all work on the epidemic it is essential that what is done meet certain criteria. These include-

- the involvement wherever possible of those affected by the epidemic including organisations that reflect their interests,
- sensitivity to the human rights of those affected by HIV and AIDS and the conduct of research in ways that are professionally ethical,
- prior involvement of those with policy and programming responsibilities to ensure that activities represent their needs,
- acceptance of the key principle that activities are undertaken in ways that maximise participation and have as an important objective the development of national capacity,
- ensure that activities do in fact lead to a better understanding of the issues of HIV for development and do contribute directly to policy formulation and to programme design and implementation,
- recognise the urgency of the need to establish effective programmes for the educational sector, given the gravity of the problems already being experienced by many countries in sub-Saharan Africa.

1. HUMAN RESOURCES AND THE EDUCATION SYSTEM

There is little direct information on the impact of the HIV epidemic on human resources directly employed in education in developing countries. What is probable is that HIV infection is at least as high amongst employees in the education sector as it is in the adult population, and there are some reasons for thinking that it may be higher. It follows that in countries with high HIV prevalence (with rates of HIV infection in adults of 15-25%) morbidity and mortality are reducing institutional and human capacities at an alarming rate. The situation is worse in urban than rural areas where HIV infection is generally much, much higher - an HIV rate of almost 50% in Francistown (Botswana) and in Harare (Zimbabwe) a third of pregnant women were already infected in 1995. HIV infection is more or less gender neutral in SSA, with slightly more women infected than men, although there are significant differences in the age distribution with girls and women infected at much younger ages than boys and men.

The human resources at risk are not confined simply to teachers but include all those who have roles in the delivery of educational services, whether in the private or public sectors. They include, therefore, those with important functions in public administration, i.e. in departments of education, whether at central or local level, and those involved in the education and training of teachers (in colleges, universities etc.).

Education is seen as having a key role in the transformation of developing countries although the situation in the poorest countries is that there remains a wide gap between hope and reality. The sector is seen as critical for human development where raising the

skills and education of the population are perceived both as desirable goals in themselves and as a means to raising living standards for the country as a whole. Education is to a degree an example of a "public good" where there are social as well as private benefits. This is widely recognised, and is reflected in the international community's designation of basic (primary) education as a fundamental right.

Rights are one thing access to education another. One out of every two children of primary school age in sub-Saharan Africa is not attending school. There is enormous variation in both gross and net primary school enrollment ratios in Africa. Furthermore there remain significant gender and income inequalities in access to primary education, and the gaps between female and male educational enrollment ratios remain stubbornly large. The gender differences are especially great at secondary and tertiary levels where the proportions of the age group enrolled continues to be very small. It should also be noted that there are significant inter and intra regional variations in basic educational provision within countries - again often differentiated by income and gender.

In pursuit of these development objectives there has been considerable public and private investment in the educational sector. Much of this investment is embodied in those employed directly and indirectly in the provision of educational services. But this private and social investment is now threatened by the HIV epidemic which in high prevalence countries, especially in Africa, is eroding the human resource base of the educational system in ways that are generally not being measured, not being assessed, and not being responded to.

What is the evidence of the impact of HIV and AIDS on the Education Sector?

There are no comprehensive data on the situation in sub-Saharan Africa on what is happening in education to institutional and human capacities. But there is partial and incomplete information which supports the proposition that capacity is being undermined by the HIV epidemic with potentially devastating consequences. The following are examples of the situation in three countries where the epidemic is mature:

- In Côte D'Ivoire a recent study has concluded that 8 teachers are dying from HIV and AIDS every week - 5 at primary level and 3 at secondary.
- The World Bank study of Malawi (AIDS Assessment Study, 1998) concluded that for personnel (military, education and health), "By 1997, over 10% of the cohort in these sectors will have died from AIDS. By the year 2005 (less than 10 years from now) about 40% of this cohort are projected to die from AIDS. This loss in personnel does not include "normal" attrition such as early retirement, relocations, and deaths from other causes, that may be expected for any sector."
- In South Africa in 1998 there was a total enrollment in the primary and secondary sectors of 12,300,000 and these were supported by 370,000 educators, directly managed by 5000 subject advisors and inspectors, with a further 68,000 officials, managers and support personnel. The system costs the country some 22% of the national budget making it the largest single item. Additional private outlays on education are also undertaken by families, so the proportion of national output on education in total (public and private) is significant. While no direct estimates of staff losses are known it has been concluded that, "The indiscriminate path of HIV infection is as likely to cut down scarce mathematics and science teachers and effective principals as it is their less specialised peers. ...Education may well be blithely unaware of the potential for system disruption and even catastrophe that lies ahead." (HIV/AIDS and Human Development in South Africa, UNDP/UNAIDS, 1998)

Undertaking a Situation Assessment

An initial first step towards addressing the costs for the sector, and more generally for development, is the need to carry out a rapid assessment of the impact of the HIV

epidemic on labour resources and on educational institutions (as defined above) in a number of high prevalence countries in sub-Saharan Africa.

This includes:

- assessment of the effects of the epidemic on labour absenteeism caused directly by higher staff morbidity (and indirectly by sickness of family members and relatives, attendance at funerals, etc),
- assessment of exceptional mortality amongst different classes of workers in the sector so as to identify the probable losses to skilled and professional and other employees that have already taken place,
- assessment of the direct costs to the sector of the impact of the epidemic on human resources in the educational sector due to absenteeism, labour turnover and replacement (including costs of disruption of services as well as costs due to recruitment, training, health and medical costs, support for dependents, etc).
- assessment of the indirect effects on the performance of educational institutions, the public services etc. of the HIV epidemic, due to losses of experienced and skilled human resources, including qualitative evaluation of the effects of morbidity and mortality on morale and cultural cohesion in institutional settings,
- estimation of the probable effects of the HIV epidemic on the educational sector's capacity over the next 5-10 years, and
- evaluation of existing policies and programmes to address the impact of the HIV epidemic on the educational sector and recommendations for future action by governments, donors and other interested groups (including religious organisations, trade unions, professional associations, NGOs, CBOs, etc).

2. EDUCATIONAL SERVICES - ASSESSING NEEDS AND PERFORMANCE

There are at least three aspects of the issue of educational needs and performance that are worth looking at in detail. These are -

- the effects on the quantity and quality of the educational services that the sector is able to supply as a result of erosion of human resources and the consequent effects on institutional capacity (both in schools, colleges, universities and in educational support services),
- the changing needs of children, students and employers which will reflect in part the direct and indirect effects of the HIV epidemic (families have fewer resources to meet the costs of education and this will affect the gender balance of those seeking education, with fewer girls and young women at all levels of education),
- the fact that employers across the economy will increasingly attempt to substitute staff with less education for those with more training given the likely losses of labour due to HIV and AIDS; there will also be a changing balance of labour needs generally as expenditure and output are adjusted as a result of the impact of the epidemic on incomes and thus on the pattern of demand.

All of the above are actually and potentially researchable although some elements are easier to research than others. Thus it is possible through quantitative and qualitative analysis to undertake assessments of the changing capacity of the educational sector broadly defined, and to attempt to explain what is observed. This could be confined to sub-sectors or be more comprehensive (cover the whole of the educational sector). For the moment it might be easier to concentrate on what is happening to public primary and secondary education as being the segments of provision of greatest importance for most children and families. This analysis could subsequently be extended to cover tertiary education, including teacher training, and perhaps private sector provision at all levels.

How are families and communities responding?

Analysing the effects of the HIV epidemic on changing demands for education both in terms of quantity and type could be more problematic - but this is researchable. Thus there is increasing evidence from many countries that families affected by HIV and AIDS are responding to pressure on resources by reducing their demands on the educational system. Typically this takes the form of taking girls out of school but decisions are also being taken with respect to the age on entry and length of schooling for boys and girls (related to the needs of households for different categories of labour as well as to constraints on the income of households). The changing gender composition of children in primary education will have knock-on effects on later stages of education which need to be understood and responded to. But they will also have important social and economic consequences for the achievement of sustainable human development, most obviously in terms of reducing gender based inequalities.

As noted above large numbers of children have experienced the trauma of one or both parents dying from HIV and AIDS. This has clear and important implications for these children in terms of the need for psycho-social and economic support that these children and their families require. One direct effect of HIV and AIDS for families is a deepening of poverty. This has implications for the education of children through its effects on nutrition, inability to pay school fees, meeting the cost of uniforms, transport costs, and so on. Furthermore, there is increasing evidence that extended family systems in Africa cannot cope, and that new and different problems are encountered by children who are fostered, and by the families who are fostering the children (with implications for child attendance at school and their performance when enrolled and attending). Even more worrisome is the condition of increasing numbers of children who have lost both their parents to HIV and AIDS and who are surviving as child-headed households - often socially excluded and suffering deep poverty.

What urgently needs to be better understood and responded to through policies and programmes are issues such as -

- How are families and children affected by the epidemic responding to the epidemic in ways that have implications for education, and why are they acting in the ways that they do?
- What are the social and economic development implications for children, families and communities of the changes that are identified through action research ?
- What are the policy and programme implications of the identified responses and coping methods of families and communities for educational and other socio-economic policies (eg. nutrition supplementation programmes, income generation and poverty programmes, support to foster families and guardians, and so on)?
- What evidence is there that some communities are coping better than others with the effects of the epidemic on children and families, and are the lessons of such experience transferable?

Planning for the impact on the educational system

One obvious effect of the epidemic will be on the growth of the population and on its age distribution. There do exist models and projections of the impact of HIV-related mortality on demographic variables - on under-five and adult mortality, and on fertility - and thus on the likely demand for educational services. An example of estimates which take account of HIV and AIDS is the UN 1998 Revision of the World Population Estimates and Projections - AIDS Mortality and Population Change (UN, November 1998). Since HIV infection is not evenly distributed in countries - but is often spatially concentrated and differentiated by social class - there will be important implications not only for the size of the age groups seeking education, but also for its geographical and socio-economic distribution.

- Effective planning for education needs to be based on the changing size and distribution of those seeking education and thus country projections need urgently

to be made so as to better inform policy.

Policy development in education and other sectors

Ministries of Education and other relevant government and private sector organisations need to look again at policy and programme development for education. Support needs to be provided for re-evaluation of the Education Sector in the light of the mounting evidence of the impact of the HIV epidemic on capacity and on needs. In part this is so as to be able to respond to the effects of HIV on the education sector itself, and in part so that the sector can respond more effectively to the needs of the economy and society. It follows that:

- There is an urgent need to undertake assessment of the effects of the epidemic on the supply of specific skills in the labour force. These include high level professional skills (doctors, lawyers, water engineers, accountants, university teachers, school teachers, and so on) as well as other skills (mechanics, carpenters, bank tellers, nurses, agricultural extension workers, etc). Modelling and predicting the changing supply of labour and the needs of different sectors will be difficult but it is worth attempting and it can be done. This is a first step towards identifying the changes required of the educational sector in terms of the pattern of its activities in meeting the changing balance of needs for labour brought about by the epidemic. It is possible to plan for this outcome and not simply leave it to the market (for doing this will have results which are totally inadequate and inefficient).
- There is an urgent need to review educational policies so as to ensure that these are consistent with educational capacity and needs. Thus decisions are required on issues relating to teacher supply where critical issues are emerging about losses of capacity and how to replace it (through review of teacher training), as well as a myriad of issues relating to the funding of education (particularly issues of fees which an increasingly impoverished population cannot meet).

The educational sector needs to begin to plan for and to respond to a changing set of demands which will inevitably face it. In part it will have to respond because teachers, school administrators etc. will in any case suffer mortality such that there will be increasingly severe problems of managing and meeting demands. But there are broader issues at work also - the need to adjust educational institutions to a changing set of requirements for different types of education (less costly), different quantities of education, and with different skill and training components.

3. RESTRUCTURING EDUCATIONAL INSTITUTIONS - EPIDEMIC IMPERATIVES

There are many internal factors operating on the performance of educational institutions which will generate a momentum for change in the ways that they operate. In part these are endogenous - such as the morbidity and mortality of staff which will inevitably change what is done in schools and colleges and how it is done. For example, there will have to be adjustment to teaching inputs to reflect the additional burdens falling on women who everywhere are expected to take on additional responsibilities (such as the care of those affected by HIV and AIDS). It follows that adjustment of workplace conditions will be undertaken by institutions as a response to changing labour supply conditions and to a degree also in response to the demands being placed on them (by parents and others).

One important change that has been placed on educational institutions in many countries has been the expectation that they introduce sex education in some form or other into the curriculum. This is recognition of the role that information can play in prevention of HIV transmission where it is assumed that schools and colleges can influence the sexual behaviour of young people. How far they have in fact been able to achieve changes in behaviour is a moot point, and there is a good deal of evidence that providing information is insufficient by itself in bringing about sustained behaviour change. For a review of some of the evidence see *Impact of HIV and Sexual Health Education on the Sexual Behaviour of Young People: A Review Update* (UNAIDS, 1997).

The evidence on HIV infection and young people is deeply worrying. Data suggests that about half of new HIV infections are in young people under the age of 25 years - precisely the cohort that is the clientele of the educational system. Even more worrying is the fact that in sub-Saharan Africa the rate of HIV infection in girls and young women is much, much higher than it is in young men of the same age (by factors of 5 or 6 - even higher in some countries). There is also clear and unambiguous evidence that sexual activity begins at a very young age - often as low as 10 years, such that delaying sex education to later stages of education will simply be too late for many children. It should also be noted that about half the age group are excluded from primary education and will never be reached at all. Similarly, many boys and girls never reach secondary education and thus will be entirely bypassed by delaying sex instruction to that level (this is especially worrying for girls given the gender disparities in enrolment at secondary level).

What follows from the foregoing? There is clearly an important role for educational institutions in HIV prevention, care and support. The question is, "what precisely is their role" and how can one ensure that activities undertaken by schools and colleges actually does make a difference to HIV prevention (and increasingly to care and support)?

- Since such a significant proportion of the relevant age group for reducing HIV transmission is engaged with the educational system it follows that these institutions do need to develop appropriate and effective ways to reach young people.
- Some school and college systems have understood the need to develop activities for young people but these seem generally to be unsuccessful in hanging sexual behaviours as is evidenced by the incidence of new HIV infections in almost all countries in SSA.
- Extremely worrying is the fact that levels of HIV infection for girls and young women are much higher than in boys and young men of the same age. Many factors contribute to this state of affairs but it is clear that young women have to be given greater control of their sexual lives. In part this means giving young women the means to effectively resist sexually exploitative relationships, including such relationships with men in authority in the educational system.
- The central principle of present prevention activities for young people, both in-school and out-of-school, is that they should act "responsibly", i.e. they should modify their sexual behaviour in ways that protect them from HIV infection.
- But there is a clear conflict between the institutional context for delivering the message of "responsible behaviour" and the absence of responsibility in the lives of young people. This is most obvious in the context of schools and colleges where young people are generally subjected to regimes which are directive, sometimes exploitative, and offer few opportunities for participation in educational matters.
- There exists, therefore, a disconnect between what is being urged on young people in terms of responsible sexual behaviour in a world of HIV and AIDS and the reality of their lives - particularly the directive nature of educational processes and institutions. It is unsurprising, therefore, that suggestions that young people act responsibly in their sexual lives falls on deaf ears.

The implications of the above are clear for all to see. If responsible sexual behaviour is essential for slowing the growth in new HIV infections amongst young people then the context of their lives has to be changed dramatically. The educational system is simply a microcosm of society as a whole and reflects its core values - including hierarchical structures based on gender and age. It follows that the changes in the structural characteristics and values in schools and colleges required for effective responses to the HIV epidemic need to be supported by similar conditions in society as a whole.

This is as much true of the conditions within families as it is in schools and colleges. For the latter it requires changes in organisation and in culture so that youth can actively be

involved with their education in all areas where they can make a contribution (including the governance of such institutions).

What is needed is no less than revolutionary change in the ways in which schools and colleges function. This will require prior changes in most countries in the management of education by central government ministries of education and by local authorities, and by others with similar functions (such as religious institutions). It means, for example, re-assessing policies of expelling young women who become pregnant (but where there are no sanctions on young men). But until these changes of the loci of responsibility are brought about there will be little scope for changing the sexual behaviour of young people. The inevitable consequence of not changing the reality of the lives of young people in schools and colleges will be ever increasing rates of HIV infection.

The issue is how to bring about such a change in the functioning of educational institutions - a requirement that the culture of education be realigned with the needs of young people living in a world of HIV and AIDS. Defining the problem as one of making sex education part of the school and college curriculum misses the point entirely. Rather the issue is how to ensure that young persons are provided with the opportunity to act responsibly 'tout court', and not just in their sexual lives. It also means giving meaning to their lives - and not just in an educational context. For many young people, both those in school and those who are not, what is missing is a supportive economic and social structure that addresses poverty, and ensures that youth have access to employment and to sustainable livelihoods.

What is needed now is an assessment of those few cases where young people have been given responsibilities, in sports clubs, anti-AIDS Clubs, and so on, and to identify the conditions which seem to determine their success. To review and to evaluate those countries where HIV incidence amongst young people has fallen, such as Uganda and Thailand. To then experiment with changing important institutional conditions within schools and colleges so as to bring about the shift in the locus of responsibilities in ways that actually make a difference to the context of young people's lived experience. To relate these organisational and value changes within the educational structure to supportive economic and social environments. Then, and only then, will it be possible to change the sexual behaviour of young men and women in ways that will in a sustained way reduce the transmission of HIV.

CONCLUSIONS

A functioning and effective educational system is seen as central for achieving the goals of sustainable human development. In part because an educated population which embodies the skills and capacities needed for development is essential if production levels are to be increased, and in part because one, possibly the most important, of the benefits of development is an educated society. To achieve these outcomes countries have everywhere invested in education - in teachers, administrators and other service personnel, and in children. Even in the poorest region of the world - sub-Saharan Africa - there has been extensive investment in human capital over many decades. This can be measured in various ways; some 20% of total public expenditure is spent on education. This is equivalent to almost 6% of GNP for the region as a whole - year in and year out. This represents an enormous cumulative investment over many years in institutions and in human resources.

These investments by countries, by the often very poor citizens of many countries in Africa, are now increasingly threatened by the HIV epidemic. Not only is much of the previous investment in education - in literacy, vocational and professional skills and qualifications - at risk, but so also is current and future investment in young men and women. Human resources are being lost at an alarming rate in many African countries, representing losses of investments which poor countries can ill afford to bear.

It follows that in a world where resources (financial and human) are scarce, and where

the HIV epidemic is systematically eroding the capacity for development, that urgent actions are needed to ensure that socio-economic sectors do not collapse. Not the least of the sectors which is threatened is education where factors are operating which are systematically destroying what can be achieved. But a functioning education sector is both fundamental to achieving sustained development and eradicating poverty and to an effective response to the HIV epidemic.

The foregoing discussion has identified some of the more important and urgent actions that are needed and there is no need to summarise what these are. On the other hand it is worth emphasising what is required for effective policy and programme response. It is to think in terms of systems, and to analyse and respond in ways that are themselves systemic. To understand that the educational sector is an integrated process for ensuring that citizens possess appropriate capacities - embodying the human qualities required for sustainable development. But unless sectoral capacity as a whole is protected it is hard to see how the objectives of development can be met.

BIOGRAPHICAL NOTE

Desmond Cohen is an economist with university teaching experience in Africa, Canada, the UK and the USA. Formerly he was a Governor and Associate Fellow at the Institute of Development Studies, University of Sussex in the United Kingdom and until 1990, he was Dean of the School of Social Sciences. He has both research and applied macro-economic policy experience in a number of African and Asian countries. Previously he was an adviser to the British Treasury on international financial policy. In 1997-98 he was Director of the HIV and Development Programme (UNDP), and currently he is Senior Adviser on HIV and Development.