

The battle against HIV is not over – invest locally

The number of new cases of HIV infection has declined globally since the late 1990s. However, the battle is far from won – least of all in parts of Africa where extremely severe epidemics have become only a little less extensive and are still having a disastrous social and economic impact. A crucial factor for success going forward will be investment in local capacity.

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The prevalence of HIV was strongly overestimated for a long time because of inadequate national epidemiological systems. Improved data led to a sharp downward revision of the extent of the pandemic in 2007. The estimated prevalence of HIV was reduced by 33 per cent globally and 36 per cent for sub-Saharan Africa (1). The improvement of national surveillance systems in Africa primarily took the form of investment in population studies as a supplement to data from pregnant women attending antenatal clinics. The data were also improved in countries where HIV is concentrated in particular risk groups. HIV prevalence trends amongst young people provide a good indication of trends in incidence (rate of new infections) in epidemics that are generalised, and more reliable prevalence data permit more reliable estimation of incidence.

Approximately 2.6 million people became infected with HIV worldwide in 2009. This is almost 20 per cent fewer than in 2001 (after adjustment of earlier overestimates). The incidence in 33 countries has been reduced by more than 25 per cent since 2001, and 22 of these countries lie in sub-Saharan Africa (1). 67 per cent of all those infected with HIV live in this region, and most of the transmission is heterosexual and occurs in the general population. The greatest concentration of the epidemic is to be found in ten countries in southern Africa. The prevalence of HIV in West and Central Africa is low by comparison – only 2 per cent among adults. At an early stage of the epidemic, the less infectious HIV-2 dominated in this region, but later HIV-1 also spread to West Africa, albeit without causing as severe an epidemic as in eastern and southern Africa. Widespread male cir-

cumcision in West Africa has been postulated as an important reason for this (2). Despite the decline in incidence, the prevalence in sub-Saharan Africa has increased because of increased access to treatment. In 2009, 37 per cent of those who met the criteria for treatment received it, which is a great improvement since 2002, when the corresponding figure was 2 per cent (1).

In other regions, the epidemics are with few exceptions concentrated among particular risk groups, and in some countries the epidemics in these groups are still growing. The increase is greatest in Eastern Europe and Central Asia. In former Soviet states, a rapid increase in injecting drug use has led to a large increase in HIV incidence in this group. In Asia, the epidemic is stable and concentrated among injecting drug users, men who have sex with men and sex workers. The prevalence in Central and South America is also low and stable. In this region HIV is concentrated in networks of men who have sex with men and among injecting drug users. In North America and Western Europe, there are alarming signs of a growing incidence among men who have sex with men, associated with an increase in high-risk sexual behaviour. In the Middle East and North Africa, there is also a rising incidence, but there is a lack of reliable data from this region. The prevalence of HIV is low here, except in Djibouti and South Sudan, which have generalised epidemics.

Socioeconomic differences

In its most recent update on HIV trends, UNAIDS reported that the incidence of HIV in sub-Saharan Africa probably peaked in the mid-1990s (1). This is a statement based on averages that may be misleading because it masks wide geographical variations. There are also major contrasts between different sociodemographic groups within a country. In an early phase of the HIV pandemic, those with the highest education were hardest hit. This had serious implications because of particularly high mortality among groups of professionals (doctors, nurses, teachers), who were already in very short

supply. The association between level of education and HIV has subsequently reversed. In other words, when preventive measures were taken, it was those with the highest education who responded best (3, 4) (Fig. 1). In general, the fall in the incidence of HIV is associated with a reduction in high-risk behaviour in the form of more consistent use of condoms and a reduction in the number of partners (5). Nevertheless, after a long heterosexual epidemic that has probably lasted for 40–50 years in a number of countries (6), there is a high number of discordant couples. This applies to around 10 per cent of married couples in East Africa (Kenya, Uganda and Tanzania), 15 per cent in Zambia and 27 per cent in South Africa (7, 8). Estimates based on data from Rwanda and Zambia indicate that at least 60 per cent, and perhaps as much as 90 per cent, of all heterosexual transmission in these countries takes place among married or cohabiting couples (9). This type of transmission appears to be difficult to reduce.

The global response

The global mobilisation of resources for HIV/AIDS programmes was not a success in either the 1980s or the 1990s. For a long time, response in the countries where the epidemics were most serious was obstructed by a widespread belief that HIV/AIDS was an American disease that affected homosexuals and drug users (10). As a result, the response in Africa did not come about before

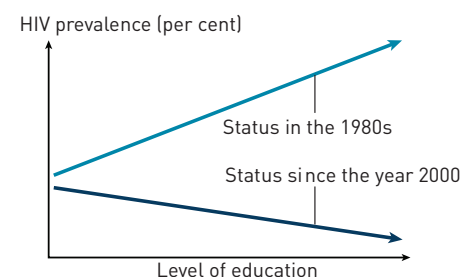


Figure 1 Change over time in the distribution of HIV infection (among young people) according to educational background in sub-Saharan Africa

late in the 1980s when the epidemics in many African countries had raged for more than ten years. The WHO established the Global Programme on Aids (GPA) which was intended to be a door-opener for all resources for national AIDS programmes. Unfortunately, the programme was not a success, largely because of internal conflicts and the failure of important donors to accept the door opener strategy. In 1995 it was discontinued, and the UN system joined forces to establish UNAIDS, the principal objective of which was to act as promoter and coordinator for multisectoral efforts. The organisation was not to be responsible for financing AIDS programmes (10). However, UNAIDS assumed responsibility for assembling epidemiological data. For the first five years, UNAIDS had limited success as a promoter, as it failed to mobilise any resources worth mentioning for HIV programmes in low-income countries. The tide did not turn until after the first special session on HIV/AIDS (UNGASS) under the auspices of the UN in 2001 and the establishment of the Global Fund for HIV, TB and Malaria in 2002. The period 2000–2010 was a successful period for the global HIV/AIDS initiative, with growth in the annual budget framework from USD 1 billion to USD 16 billion. In other words, it is only during the last decade that the global community can really be said to have succeeded in mobilising resources for HIV/AIDS work in low-income countries. UNAIDS has a loose coordination system, which has affected priorities, and unfortunately we see only too clearly that the prevailing rule tends to be «Those who have the gold, make the rules».

Knowledge of local context

The differences between and within countries apply not only to the prevalence of HIV, but also to how infection takes place, which people constitute risk groups, sexual behaviour in the general population, the extent of sexual contact between high-risk and other groups, the prevalence of other sexually transmitted infections, the stage of the HIV epidemic and the incidence level in different groups. These factors are part of the epidemiological context, and determine which preventive interventions will have an effect on epidemic and incidence (11). For example, an intervention that brings about a reduction in the risk behaviour of a group with a low incidence will probably have little effect on a generalised HIV epidemic. In other words, it is important to have good local knowledge before planning HIV prevention interventions. It is obviously not feasible to study the local context of all local communities, but thorough interdisciplinary studies in areas with different epidemic developments may be decisive. The insight gleaned from these studies may provide a better basis for determining what sort of measures will have the greatest effect

in different parts of a country. A country should not have only one strategy for HIV prevention work. In practice, this need for good local knowledge makes local research expertise necessary to determine what is effective and where, in part because it is easier for local than foreign researchers to engage in continuous cooperation with governments to find good preventive measures in different contexts.

Criticism of the current prioritisation of measures

Our research group at the University of Bergen has extensive experience of research in partnership with universities in a number of African and Asian countries. We see the

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need for a number of strategic changes in international development assistance. It is hard to fault the rhetoric, but it often conceals actual priorities – and action. The priority given to effective primary prevention is a good example here: prevention receives lower priority as soon as treatment is available. The editor of *The Lancet*, Richard Horton, sums this up in an editorial: «It may be right that WHO calls the finding that nearly 3 million people are now receiving antiretroviral therapy a remarkable achievement. But it is surely scandalous that this access to medicines campaign has not been matched by an access to prevention campaign» (12). History repeats itself: research has revealed a number of lost opportunities for effective prevention (13, 14).

De-integration or verticalisation of programmes is a major obstacle to cost-effective measures. An example here is the extensive programme to prevent mother to child transmission of HIV (PMTCT). The programme restricts its approach to the prevention of the vertical infection and does not make use of the high preventive potential the programme could have had in connection with the risk of infection of the parents. Key actors have realised this, and have for example proposed integrating measures associated with Millennium Development Goals 4, 5 and 6, i.e. associated with child health, reproductive health and HIV. There is also a need to study the synergy effects of such integrated measures. The problem of lack of integration is probably related to an even more extensive and serious problem: limited local ownership. The various donors often want different approaches, and the largest bilateral donor, the USA, is in a class of its own in establishing its own goals and strategies

(15). Once again we see that practice is not consistent with the rhetoric about local ownership that is central to the OECD's Paris Declaration of 2005 (16).

It is a major paradox that the global community is not willing to invest in local capacity. A strengthening of higher education and local research expertise is not only crucial for effective HIV/AIDS programmes: research also shows that higher education is crucial for combatting poverty and for improving health generally (17, 18). This has also become the position of the World Bank: «Higher education is likely the only course that will lead to sustained development [...] and partnerships in capacity building could be an effective way to acce-

lerate the pace towards excellence» (17). However, Africa is falling further and further behind in the area of higher education and its own research. Whereas 70 per cent of young people in the wealthy part of the world have access to higher education, the corresponding figure for Africa is 6 per cent. Norway was at the forefront with a programme for building capacity at partner universities in Africa and Asia through collaboration with Norwegian universities on research through the National Programme for Development, Research and Education (NUFU), established in 1988. This programme has received a very good evaluation, and links to other sources of funding (the quota programme, NORAD's programme of masters' studies (NOMA), the Research Council of Norway, the EU) have yielded extensive synergy effects in terms of both local capacity building and research. It is therefore a major paradox that the funding for this programme has been more than halved since its establishment.

Development aid policy

We see a need for a far more critical Norwegian voice in development aid policy and more long-term thinking. Success in strengthening local ownership and effective prevention is closely related to success in building local capacity. Norway should take the lead in an international solidarity movement by investing in education, particularly higher education, and research. Such an investment will have a general development aid policy justification. Building up institutions through South-North partnerships is an effective strategy in this respect, and research collaboration is a crucial component.

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