MINISTRY OF HEALTH
NATIONAL AIDS/STDS CONTROL PROGRAMME (NASCOP)

AIDS IN KENYA 1999 BOOK SERIES

SERIALISATION OF "AIDS IN KENYA", 1999 BOOK

MACROECONOMIC EFFECTS OF HIV/AIDS ..... *continued*

The *macroeconomic* effect of HIV/AIDS also manifests itself through increased medical expenses, absenteeism, a decline in labour productivity, and the costs of mortality and funeral costs. These costs have been illustrated through surveys that attach some specific values to each of the mentioned items.

- **Medical expenses.** Employer-paid medical costs in the agro-estate surveyed rose from a modest Kshs. 300,000 in the 1980s to Kshs. 8.1 million in 1997. Employee-paid costs also rose from a mere Kshs. 1.5 million in 1989 to Kshs. 11.3 million in 1997. In the absence of HIV/AIDS most of these resources could have been saved or invested in productive ventures. Therefore, AIDS affects savings of both individuals and organizations which cumulatively reduces the general level of saving and investments in the country.

- **Absenteeism.** Absenteeism is a cost in the sense that absent employees continue to be paid for the job they did not perform. Records of labour time lost due to morbidity kept by a company in Nyanza Province showed that between 1995 and 1997, the company lost a total of 8,007 labour days due to illness of its employees of which a significant portion was attributed to HIV related illnesses (Rugalema, 1997). Another Nyanza based company reported having *lost* a total of 660 labour days between 1995 and 1997 due to sick-offs among employees affected by HIV and AIDS.

  The indirect effect of absenteeism is that it results into extra work for other healthy employees who have to stand-in for sick colleagues. In some of the companies, healthy employees were increasingly working for extra hours or overtime to compensate time lost by their absent (sick) colleagues. In so doing, not only did companies pay more in terms of overtime but workers interviewed pointed out that they were overworked and exhausted. According to the engineering manager of one of the companies, working longer hours had produced stress among employees and was responsible for a decline of both quantity and quality of the final product (sugar). Since healthy employees began to work longer hours, around 1993, recovery ratio (raw cane: sugar) had declined by almost 50 percent, that is, from about 8:1 in 1993 to 12:1 in 1997. Another company surveyed reported a 67 percent decline in recovery ratio during the same period.

- **Declining labour productivity**. In a labour intensive industry such as agriculture, and in particular sugarcane growing, labour productivity is the most important determinant of output and profitability. Illness compromises labour productivity because a sick person is unable to work. Even in circumstances where he can still work, his performance is lowered by physical and psychological factors. Thus, the costs of illness do not end by paying an employee who is not working but it also includes other costs related to delays in the production process, loss of quality and quantity of final product. Workers interviewed pointed out that when a worker had a sick family member (wife or child), it was unlikely that he could be as productive as expected of him because his presence at work was more physical than mental and hence poor performance.

- **Costs of mortality.** In the companies heavily affected by AIDS, death is either the leading or one of the leading causes of employees' exit from the company. Illness is the second most important cause of employees' exit. Prior to1990s when deaths were very few, records in two of the surveyed companies in Nyanza (where death rate is currently very high) showed that in the 1980s, the companies lost an average of 2-5 employees per year. The most important reasons for employees exit then were *old age retirement*, resignation, termination, dismissal, illness and death in that order. Today, the order has evidently changed as illness and death has become the leading causes of exit. Could increased illness and death be due to diseases other than those not related to compromised immunity? In general it was argued that, save for AIDS related illnesses, communities living on agro-estates had not experienced epidemics of such constancy that would account for prolonged morbidity and mortality among adults. It can be concluded, therefore, that AIDS is responsible for the observed morbidity and mortality currently experienced in the Province.

IV. Interventions to slow the spread of AIDS

Knowledge of AIDS and Risk of Becoming Infected

Information about personal knowledge of AIDS and risk behaviours in Kenya was collected in a 1998 national survey on fertility, family planning and health; the Kenya Demographic and Health Survey, 1998 (National Council for Population and Development, 1999). The survey interviewed 7,881 women between the ages of 15 and 49 and 3,407 men between the ages of 15 and 54. The results illustrate the level of knowledge and awareness of AIDS in the general population and the extent of risky behaviours.

Knowledge of AIDS. Knowledge of AIDS and the key transmission mechanisms is widespread. Practically everyone has heard of AIDS (99 percent of women and 99 percent of men) and knows that the AIDS virus is transmitted through sexual intercourse.

Sexual behaviour. Risky sexual behaviour was reported by a significant number of men and women. Sixteen percent of married men reported having extramarital sexual partners compared only 2% married women. Among those who are single, 60 percent of men and 40 percent of women reported that they were sexually active, with half reporting more than one sexual partner in the last year.

Knowledge of ways to avoid AIDS. About 40 percent of respondents correctly identified at least two methods of protecting themselves from becoming infected (abstain from sex, use condoms, avoid multiple partners, stay faithful to one partner).

Perception of risk. One-third of women felt that they were at moderate or great risk of becoming infected, primarily because they thought that their partner had other sex partners. About 23% of men felt that they were at moderate or great risk of becoming infected, mostly because they reported that they had many sex partners.

Behaviour change. About 90 percent of men and 80 percent of women reported that they had changed their behaviour in some way to avoid AIDS. Most said that they limited themselves to one sex partner. Eighteen percent of men said that they had reduced the number of sex partners and 16 percent of women said that they had asked their spouse to remain faithful.

Knowledge of some one who has died of AIDS. The majority of respondents (71 percent) said that they personally knew someone who has AIDS or has died of AIDS.

Testing for HIV. About 14 percent of women and 17 percent of men reported that they had been tested for HIV. Two-thirds of those who have not been tested reported that they would like to be tested.

Preventing the Transmission of HIV

The impact of AIDS will be very severe in Kenya if HIV infection continues to spread bat the current rapid rate. However, there are several things that can be done to slow the spread of HIV.

Interventions to limit transmission through heterosexual contact. The major mode of transmission is through heterosexual contact and it is especially in this area that interventions have to be intensified. Interventions include promoting abstinence and faithfulness; promoting reductions in the number of sexual partners; encouraging delays in the onset of sexual activity among adolescents; promoting the correct use and consistent availability of condoms; strengthening programmes for STD control; and encouraging voluntary counselling and testing.

Promoting abstinence before marriage and faithfulness to one partner. One set 'of interventions focuses on encouraging people to abstain from sex before marriage and remain faithful to a single partner. Abstinence and faithfulness could be promoted through a combination of mass media, counselling and education programmes. Delays in the onset of sexual activity among adolescents can have a significant impact on the spread of HIV. Information, education and communication (IEC) and other programmes that address adolescents and the needs of young people are particularly needed. A reduction in HIV incidence (the annual rate of new infections) among today's young people would not only avoid much suffering but it would also be a critical step in controlling the spread of the virus in the country.

Reducing the overall number of sexual partners, but especially limiting the number of concurrent partners, can also have an effect. Given the extremely high rates of HIV infection among commercial sex workers, a reduction in the number of men who have unprotected sexual contact with prostitutes and bar girls can be important in bringing the epidemic under control. Overall, these strategies could make an important contribution to reducing the spread of HIV, although they would not be, by themselves, a complete solution.

Promoting the use and availability of condoms. A second intervention is to promote condom use through mass media, counselling and education and to increase the availability of condoms through expanded public distribution, social marketing programmes, and programmes in the workplace. Special initiatives to promote condom use among high-risk populations (such as commercial sex workers and long-distance truck drivers) have proven effective in some cases.

Controlling other sexually transmitted diseases. Another intervention focuses on controlling the spread of sexually transmitted diseases such as syphilis, *gonorrhoea* and chanchroid. A recent study in Mwanza, Tanzania, for example, found that an improved STD prevention and treatment programme was associated with a reduction of 42 percent in the number of new HIV infections. Services to detect and control STDs can be critically important for managing the HIV/AIDS epidemic.

Preventing infection in young people. Levels of HIV infection are alarmingly high among young people, particularly young women. Special efforts are required to protect the youth. It is very difficult to change any behaviour, and especially sexual behaviour, once it has become a habit.

Around the world, successful prevention programmes among young people are ones that equip adolescents with the knowledge, skills and attitudes that will keep them safe from infection BEFORE they become sexually active.

The government has recognised the vulnerability of youth. In the Sessional Paper on AIDS in Kenya, the government has committed to protect them from HIV infection by equipping young people with adequate knowledge and skills. Further, the government has stated that, as a matter of policy, it will integrate AIDS education programmes into existing school curricula.

Such education does appear to help young people reduce their risk of HIV infection. A family life education programme in Youth Training Service colleges has resulted in more responsible behaviour on the part of people exposed to the programme compared to students from colleges with no family life education. More young people chose to be counselled and tested for HIV, more protect themselves or their partners against unwanted pregnancy and more adopt behaviours that protect them against HIV infection. College medical records show that where 20 percent of students in Youth Training Service colleges suffered from STDs in 1990, the proportion dropped by more than half by 1995, after family life education was instituted. In colleges with no special programmes, a nearly constant 16 percent of students were infected with STDs over the five year period.

Counselling by churches can also play an important role. A high proportion of young church goers are sexually active, and in 1996, 97.7 percent of young churchgoers surveyed asked for more information and guidance on sex and AIDS. A programme sponsored by church authorities to increase the leadership role of the church in this field produced remarkable results. In areas where the programme actively promoted more discussion and counselling on responsible relationships, only one young person in 10 reported that they had had sex with more than one person in the previous six months. Among church-going youth in areas where there was no active increase in counselling, three times as many young people said they had had sex with several partners over the previous six months.

Mother-to-child transmission. A mother who is infected with HIV may transmit it to her newborn child 3 0-40 percent of the time. Around 100,000 children are living with HIV in Kenya, and many more have already died of AIDS. The majority of these children acquired the infection from their mothers at or around the time of birth and between a third and half were probably infected through breast milk. Various approaches can be used to reduce the number of children who are infected. Among them are:

- **Preventing HIV infection in women.** The best way to prevent mother-to-child transmission of HIV is to prevent the woman from becoming infected.

- **Reducing transmission during childbirth.** Delivery by Caesarean section before onset of labour has been shown to reduce the risks of transmitting HIV infection during delivery by as much as 40 percent. Caeserian section after the onset of labour does not reduce mother to child transmission of HIV. HIV infected women are vulnerable to serious post-operative complications like sepsis (Semprini). Therefore this intervention has limited use in resource poor settings.

- **Reducing transmission through breastfeeding.** One-third of mother-to-child transmission occurs through breastfeeding. The Sessional Paper on AIDS in Kenya states that women who are infected with HIV should be discouraged from breastfeeding if safe alternatives are available. There are several difficulties in promoting alternatives to breastfeeding. Breastmilk protects the infact against a range of other diseases and it is convenient and free. Bottle-feeding can cause diarrhoea and other problems if formula is not prepared properly. Infact formula can also be expensive. Promotion of locally available feeding might a safer alternative.

- **Reducing the number of pregnancies.** Women who are HIV-positive may wish to avoid childbearing so that they do not infect their new-born babies or leave behind orphaned children when they die. Counselling and testing needs to be available for couples to help them understand the HIV test and make informed choices.

- **Anti-retroviral therapy**. Mother-to-child transmission can be reduced through the use of AZT (zidovudine) by up to 70 per cent, in the long regiment, short course chemotherapy with AZT has been shown to reduce mother-to-child transmission by 50 percent. Administration of AZT to the new-born alone can reduce transmission by about 40 percent. However, treatment with AZT can be very expensive.

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