Strategies for HIV/AIDS Control in Adults in Sub-Saharan Africa

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Sub-Saharan Africa is the region that has been hardest hit by the HIV epidemic; containing 63% of the estimated world total of HIV infections. In some east, central and southern African countries infection rates among adults in excess of 20% have been recorded. The demographic, social and developmental impact of the AIDS epidemic is likely to be huge in the next decade. Strategies that have potential for reducing the spread of the epidemic in this part of the world must be continuously explored and implemented. In this paper behavioural interventions that include condom use, and improved management of STDs are discussed.

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In the continued absence of a biomedical solution to the HIV/AIDS epidemic, interventions for prevention remain the only way of arresting the pandemic. By the year 2000 approximately 40 million people worldwide will have been infected by HIV, most of them from sub-Saharan Africa. In this article I will highlight some facts about HIV transmission in adults in sub-Saharan Africa and basing on these facts attempt to summarise strategies that have potential for reducing the spread of the epidemic in this part of the world.

HIV TRANSMISSION AMONG ADULTS IN SUB-SAHARAN AFRICA

The predominantly heterosexual nature of the AIDS epidemic in adults in Africa is well documented 1-6 as well as risk factors associated with increased risk of infection, main ones being number of sexual partners and a history of sexually transmitted diseases 5-10. While blood transfusion is a potential source of infection given the substantial infection rates that have been reported in blood donors in many sub-Saharan African countries, the relative contribution to the infection burden is small. The contribution of injections with contaminated needles and syringes to the spread of HIV in Africa remains unresolved. Available data for intramuscular injections suggest that occasional transmission of HIV may occur but that the efficiency of transmission is low11. Strategies for HIV/AIDS control in adults in sub-Saharan Africa must therefore aim, primarily, at reducing heterosexual transmission.

BEHAVIOURAL INTERVENTIONS FOR HIV/AIDS PREVENTION

AIDS is essentially a sexually transmitted disease (STD). This makes sexual behaviour the prime focus for interrupting transmission. Until such a time that an effective vaccine or a pharmacological cure is developed, modification of sexual behaviour and sexual practices must therefore be one of the major strategies for arresting the HIV/AIDS epidemic. Desirable actions implied by this strategy should include delaying sexual debut, reduction in levels of pre-marital sexual activity, rates of partner change, sexual encounters outside marriage, casual sex and commercial sex12. The strategy should include three components: information and education, backed up by health and social services, and a social environment supportive of behaviour change. The required behaviour modification assumes rational decision making which may not

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always prevail due to the kind and strength of existing social norms, duties and obligations. Persuasive approaches aiming to increase personal awareness and perception of risk combined with provision of the skills necessary to effect behaviour change stand a higher chance of being successful.

**CONDOM PROMOTION**

Proper and consistent use of high quality condoms is one of the best protection against the risk of transmission of the HIV and STDs\(^{13}\). People who have multiple sexual partners, as well as those who are unsure of the infection status of their regular partner, need to be informed that they can reduce the risk of HIV infection by using condoms consistently and correctly during intercourse. Condom programmes must include not only condom promotion but ensuring that the policy environment is positive, that sufficient numbers of condoms are available and that there are appropriate distribution systems set up to make condoms accessible.

Establishing suitable condom programmes has been a special challenge in sub-Saharan Africa where, in several countries seriously threatened by the AIDS epidemic, political authorities have been reluctant to support wide-scale condom promotion campaigns, claiming that condoms are not sufficiently effective at preventing HIV infection and may prove too expensive in the long run. Other arguments against condom promotion have been that they may increase promiscuity especially among young people, that they are foreign to the traditional African culture and that they are associated with a range of side effects.

**CONTROL OF SEXUALLY TRANSMITTED DISEASES**

Many studies have demonstrated a strong association between both ulcerative and non-ulcerative STDs (including chancroid, syphilis, herpes, gonorrhoea, chlamydia and trichomoniasis) and HIV infection\(^{14,15}\). These STDs serve as biological co-factors enhancing HIV transmission and acquisition.

Grosskurth and colleagues recently reported the results of a well-designed community randomised trial which has shown a 42% reduction in HIV incidence as a result of improved STD case management in a rural area of Tanzania\(^{16}\). Despite these two glaring facts, STD prevention and management seldom rank high on the national health care priorities of developing countries. This situation must change if the HIV epidemic in sub-Saharan Africa is to be averted.

It has become apparent that a substantial proportion of STDs are asymptomatic or remain unrecognised. These infections will not be treated by conventional STD services, but may contribute to enhanced HIV transmission. Strategies that entail mass treatment of all adults for STDs, regardless of symptoms, are currently being evaluated\(^{17}\).

**CONCLUSION**

HIV is still spreading fast in sub-Saharan Africa. No single existing approach will contain the epidemic and combinations of more targeted interventions are urgently needed. Sub-Saharan Africa needs all the means of HIV prevention that are available.

**REFERENCES**

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