Review Article

The HIV Epidemic: factors responsible for the epidemic and the impact of HIV/AIDS

Oguntibeju OO, Van Schalkwyk FE, Van Den Heever WMJ

School of Health Technology, Faculty of Health & Environmental Sciences, Technikon Free State, P/Bag X20539, Bloemfontein 9300 South Africa E-mail: fafemi@webmail.co.za Tel: +27 72 568 3354.

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SUMMARY:

Human immunodeficiency virus (HIV)/AIDS has been seen as one of the most severe infection/disease ever known to have attacked the human population; mostly affecting the economically productive age group (15-49 years). HIV is also seen as an infection of attitude and behaviour as it is closely associated with sexual behaviour especially where person has more than one sexual partner. The factors responsible for the spread of HIV infection are complex. It ranges from social, political, environmental, biological and physical factors. The impacts of HIV/AIDS on various sectors have many implications and are discussed in this paper and methods of reducing the epidemics recommended. (Rawal Medical Journal 2003;28:56-62).

INTRODUCTION:

HIV was first reported in Southern Africa in the early 1980s and linked biologically to the Clade B virus from Western Europe and North America. In late 1980s, a second class of HIV (Clade C virus) believed to have emerged from East and Central Africa also found its way into Southern Africa territory (1).

Available evidence documented that HIV transmission is through unprotected heterosexual and homosexual relationship, infected blood during transfusion, injections with unsterile needles

(intravenous drug abuse) and accidental needle stick injuries. Vertical transmission from mother to child (MTCT) especially during and after birth has been reported (2, 3, 4). The HIV epidemic in Southern African countries seem to follow same pattern of transmission, that is via heterosexual transmission. The factors affecting the spread are not different and the impact of the infection on this region is largely the same. This paper examines the factors contributing to the spread of HIV infection, the impact of HIV/AIDS mainly in Southern African region and offering suggestions as regards ways of reducing the HIV epidemic.

THE SEVERITY OF THE EPIDEMIC:

In Lesotho, a country with a population of about 2 million, 45% of the total population is believed to be HIV positive. The spread here has been rapid. The prevalence of HIV in those attending antenatal clinics in Maseru (the capital) rose from 6% in 1991 to 60% in 2001. In rural areas, the levels rose from 2% in 1991 to 27% in 1999 (5, 6). During 1999, 16,000 people died of AIDS and 24,469 children have been orphaned by AIDS in Lesotho since 1986 (7).

In Botswana, Namibia, Swaziland and Zimbabwe, for example, between 20% and 26% of adults aged 15-49 years are reported to be HIV positive. An estimated 4.7 million of the population of South Africa are HIV-infected and about 1700 people are estimated to be infected daily with virus (8, 9). It is also estimated that nearly 12% of adult South Africans are assumed to be HIV positive and 2.5 million will die of AIDS or an AIDS-related illness by 2005 (8). Although these figures are stunning, unfortunately, it does not reflect the true state of impact caused by the epidemic. People are dying in the years when they are supposed to be most productive and about 80% of those dying are workers between the ages of 20 and 50. They are then not present to raise the next generation. It is thought that by 2010, there would be 40 million orphans from AIDS or AIDS-related death in Africa most of whom will probably grow up in an environment with little or no social and economic structures (10, 11).

FACTORS CONTRIBUTING TO THE EPIDEMIC:

The factors responsible for the rapid spread of HIV infection are complex. These range from social, political, environmental, biological and physical factors including concurrent STDs, deprivation and poverty, socio-economic development, low status of women in society, high mobility of labor, lack of perceived risk, peer norms, low condom use or unavailability of condoms, adults views on sex and condoms, gender power issues, adolescent view on sexuality and economic empowerment, dignity before health (9, 12-15).

Sexually Transmitted Diseases:

Sexually transmitted diseases (STDs) compromise the infection barrier of sexual organs by creating lesions and ruptured membranes, thus enhancing transmission of HIV from one partner to another. Research findings showed that persons living with STD have three to five fold increase in risk of being infected with HIV than those who are not having sexually transmitted diseases (16-18). In one study Royce et al (17) shown that treatment of STDs reduces the risk of HIV transmission by 40%. It is documented that STD prevalence is high in Southern Africa and are generally poorly diagnosed especially in rural areas where facilities for diagnosing STDs are limited or non-existent (7).

Deprivation and Poverty:

Poverty is believed to contribute to the spread of HIV in a number of ways: HIV/AIDS prevention may not be a priority in communities where basic need is a daily battle. Poor general health could lead to increased risk of HIV transmission. Observational studies point out that limited access to recreational facilities results in an earlier age of onset of sexual activity posing a risk to HIV transmission. Also, poverty is said to have forced young women into commercial sex work or give sex in exchange for material benefits (UNAIDS, 2001). High unemployment results in many school

leavers having nothing better to do with their time. Currently, unemployment is high in Southern African Development Communities with 50% unemployment in Lesotho (19).

Socio-economic Development:

As already mentioned, poverty is seen as a contributory factor to the spread of HIV infection. However, attempts to alleviate poverty through greater socio-economic growth can equally contribute to the spread of HIV. Labor migration, urbanization and cultural modernization resulting in separation of members of the family, easy accessibility to sex workers and the disappearance of traditional values such as fidelity and abstinence are factors that contribute to the spread of HIV epidemic.

Mobility/Migrant labor:

Men have to migrate to work either within or outside their countries. The region depends on migrant labor and because many of the men are desperate to earn a living, migrate to the mines and factories in the towns and cities leaving their families at home and return home twice a year mainly during Easter and Christmas holidays. These migrant workers are housed in male hostels where they have access to prostitutes. Many of these men get infected with HIV resulting from their lifestyle and unfortunately transfer the infection to their wives. To some extent, the same is true of ladies who also migrate to cites and towns for the same purpose and keep relationships outside their matrimonial homes and acquire HIV through such relationships (7).

Low Status of Women in Society:

Reports from social and medical scientist have confirmed that majority of women in society in general and the women in this region in particular lack the power to negotiate monogamy or safe sexual practices (9). It is believed that women suffer because many men view them as objects for sexual gratification. As mothers, they do not have control over the decisions concerning childbearing. For women in commercial sex, economic pressures make it difficult if not impossible to negotiate with clients on he use of condoms. In few countries in Southern Africa, females tend to

be better educated than men, but because of traditional belief and norms, even the educated women still lack the power to insist on fidelity or use of condoms. In Africa as whole, men are regarded as the final authority in family matters. Studies show that up to 73% of married men are engaged in extra-marital sex and even in cases where the women are aware of this indecent practices, the women lack the courage to question the men (9, 17, 20).

Ignorance:

HIV infection has been seen as disease among sex workers and homosexual men. Despite extensive sex education in some quarters, ignorance remains a major problem contributing to the spread of the epidemic. About 30% of South African women for example believe that if a man looks healthy he could not have HIV infection (21). Young males and females generally thought that HIV infection is a disease associated with rape, commercial sex or excessive alcohol consumption and felt that if for any reason they get infected, would be a mistake resulting from the actions of others. Although, this may happen in some cases, unfortunately it does not necessarily follow that argument. Others still hold the view that condoms are important among persons already infected with HIV or other sexually transmitted diseases (1). Older adults, while encouraging young women and men not to engage in sex, expect those that do so to be in "serious" and "trusting" relationships. The emphasis on a serious and trusting relationships encourages premature trust of partners and therefore the nonuse of condoms (22). To what extent can you trust a relationship between young men and women especially where older men can afford to provide economic support to the younger women. For many young women, sex is a bargaining tool: to get lifts to school, for good grades at school or for money or other material benefits. For these women, economic necessity results in limited ability to exert control over their sexual behaviour. In some areas within the region, infected men believe that it is possible to be cured of HIV infection by having sex with virgin girls. These cases of incest and rape of young girls are commonly reported by the media in the region with more cases been

reported in South Africa. This has led to increased levels of incest and rape with girls between two and 11 years further spreading the virus (9, 22-25)

Condom unavailability/wrong concept on condom use:

In Lesotho and other countries in the Southern African Development Communities (SADEC), the distribution of condoms is the responsibility of department of health and dispensed by local clinic authorities. Despite this, some young people do not have access to condoms and thus still engaged in unprotected sex. Others feel embarrassed to go to clinics for condoms. On the female side, women carrying condoms are subject to distrust of their male partners (1).

Peer norms:

It is known that individuals are influenced by their peers especially young people. With respect to HIV infection in Southern Africa, it would appear that peer norms encourage high risk behaviour and the trivialisation of issues about sex and sexual behaviour. Peer pressure resulting in the non-use of condoms may seem a bizarre concept in the intimate act of sex. On a positive note, those young people involved in church activities have been found to be unlikely to have casual sex (9, 24, 26) although, this is open to a debate.

Dignity more important than health:

The reluctance of the older and more traditional people to discuss sex and sexuality exacerbates the difficulty of reaching young people through the traditional channels such as public health systems, churches and schools. There is a noticeable silence that surrounds most cases of reported death. Also, for many people, sex is a taboo subject and should not be mentioned or discussed. A significant numbers of adults lack the skills to talk openly with young people about sexual matters and so discussion about safer sexual practices does not take place. The believe that those infected with HIV are morally bad result in many persons with HIV infection to be ostracised and thus make many families and individuals to cover up their HIV status. The silence, denial and cover up only make the epidemic all the more difficult to deal with and serves to further its spread (9, 22).

Deadly silence:

The silence and stigma surrounding HIV/AIDS are igniting its spread and leaving with us a lethal intolerance we must resist will all our mind and strength. In December 1998, Guru Dlamina, a volunteer for an AIDS organization in South Africa, announced that she was HIV positive at a rally in Johannesburg with the mind to dispel some of the prejudice against people with the infection. It was reported that eleven day later, Guru was beaten to death by neighbours who claimed that she had brought shame to the community by her pronouncement. This is a brutal act of prejudice, intolerance and reminding us of the most vulnerable citizens in our developing countries-the women and children who are routinely denied their rights to education, economic opportunity and proper health care. They are silenced by fear and doomed by their powerlessness to resist the dangers they face (23).

THE IMPACT OF HIV/AIDS:

An overview of the impact of HIV/AIDS revealed that it ranges from psychological, social to economic problems (loss of job, stigma, isolation, disownment, divorce, fear of death, increased risk of suicide and ill-health). The direct impact of the HIV/AIDS epidemic in Southern African countries can be presented as follows:

House/Family:

HIV/AIDS mostly affects people between the ages of 15 and 49 years. Thus, the most productive members of the family are affected. Prolonged illness and the resultant additional burden on health, feeding and other needs related to care for the sick takes the money that should have been spent on education and on other legitimate social needs (6, 27).

Children and Orphans:

About 30-40% of children born to HIV positive mothers are infected with HIV. Majority of these children will develop AIDS or an AIDS-related disease and probably die within two years except if there is hope of provision of anti-retroviral drugs. The provision of anti-retroviral drugs has been a

serious debate for couple of years (27). Recently, however, the South African government has announced the provision of anti-retroviral drugs to the citizens. Whether other countries within the region have the political will, manpower and the financial resources to implement this programme is big question to be answered.

Agriculture:

In parts of Southern Africa where farming is a primary occupation and nutritional requirements are usually met through local food production, HIV/AIDS among agricultural workers is affecting farm incomes, food production and nutritional status. In Zimbabwe for example, data suggest that there has been a 61% reduction in maize production, a 49% reduction in vegetable production and a 37% reduction in groundnut as a result of HIV/AIDS. A similar scenario has been reported in Zambia and Lesotho (6, 11)

Community/Nation:

Loss of manpower constitutes a major impact as HIV mainly affects people within the age group of 15-49 years. The cost of overall production is likely to increase as three people are trained for one position, knowing that at least one will die of AIDS. The government may also have to recruit expatriates to replace professionals who died of AIDS in various sectors of the economy. An indirect effect on all sectors is that consumer spending will drop. Health personnel are directly or indirectly affected by this epidemic. There are reported deaths among health personnel resulting from HIV/AIDS. The trend of rising mortality rates among health personnel means that the resources spent on training the service providers may not be recovered as these service providers themselves are being infected with HIV, therefore making service delivery to the people including those living with HIV/AIDS to be compromised. Accompanying HIV/AIDS is tuberculosis making the cost of treatment very expensive. The HIV/AIDS is grossly affecting the educational sector in the region. The sector has lost many of their teachers and learners. School enrolment has dropped as

a result of HIV/AIDS epidemic. The cost of replacing the teachers is likely to increase due to rising cost of living in the region (23, 24, 27).

RECOMMENDATIONS:

In handling the HIV/AIDS epidemic, moral, social, cultural, religious, political and economic factors need to be taken into consideration. The recommendations will be discussed under the following subheadings:

Health care system:

Sexually transmitted diseases need to be treated effectively as treatment of symptomatic STDs has been shown to reduce rates of HIV transmission by 40%. Condoms need to be readily available and accessible. The provision of condoms should be free and groups at high risk should be specifically targeted. The rate of HIV transmission can also be reduced by making sure that only screened blood products is transfused. Government should enter business partnership or agreement with drugs manufacturing companies for the possible provision of anti-retroviral drugs at cheaper and affordable price.

Educational system:

HIV/AIDS and sex education must be made part of the school curriculum and it needs to be said here that government and non-governmental organizations should promote programs that emphasised protected sex, delayed sex and abstinence. AIDS education at school could help reduce the stigma directed towards those living with HIV/AIDS and school should be encouraged to provide counselling and contraceptive services. Lessons from countries such as Uganda and Tanzania, which developed effective HIV/AIDS programs need to be taken on board.

Gender Issues:

Improvement of the status of women should be a priority. Observational studies have shown that women are ready to lead in the fight against HIV/AIDS, therefore for women to continue in that fight, their status needs special attention. If women are involved with the spread of information

about HIV/AIDS and educating others, men need to be educated to treat women with respect and dignity and as equals. Women also need to be assisted to develop the communications needed to be able to negotiate the use of condom, safer sexual practices in the context of long-term relationships.

Leaders:

Leadership at various levels could be involved in the fight against the spread of HIV infection.

These include national leaders, community leaders and church leaders.

National leaders: National leaders are in the position to distribute funds. They need to commit resources to HIV/AIDS programs and to ensure they reach the people. The government should aim at preventing sexual crimes such as rape and child abuse and offenders made to face the law of the land. The government can transform the moral and social climate in which HIV/AIDS can be discussed openly and problems addressed, denial and stigma overcome.

Community leaders: Traditional rulers still have tremendous influence over the people at the local level. It is therefore important that traditional leaders are included in the decision making process, in the drawing of national strategic plan on HIV/AIDS. Also, it is vital that the traditional rulers are sensitized to the issues surrounding the transmission and prevention of HIV. Invitation to attend workshops and seminars presented in the language they understood best could be beneficial.

Church leaders: Church leaders should be involved in the fight against HIV/AIDS as the struggle needs multifactorial approaches. Generally in Africa people are religious so is true for people in Southern Africa. Religious leaders have immense influence over their congregation's morality and behaviour, therefore, they occupy important positions in assisting in removing the stigma of HIV/AIDS and in educating their congregations about HIV infection and AIDS.

Communication:

There need to be effective communication among all concerned in the fight against HIV/AIDS.

Representatives of all national leaders, community leaders, religious leaders, health care workers, youth, the labor force, donors and the people living with HIV/AIDS need to meet on a regular basis

to ensure effective implementation of HIV/AIDS policies. The media can help in properly informing the public about HIV/AIDS and various programs designed to help people living with HIV/AIDS. The public need to understand that HIV is a sexually transmitted disease and not a curse as some people are made to believe. The silence about HIV and sex needs to be broken. People should be motivated for a change of attitudes and behaviour. The people living with HIV/AIDS need to be given a hope.

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