

AIDS IN AFRICA: AN ECONOMIC PERSPECTIVE

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The global Acquired Immune Deficiency Syndrome (AIDS) pandemic has had severe economic ramifications for some countries in Africa. Third World countries have scarce resources to devote to AIDS education or treatment, and they have other health and development concerns which need funding. A large proportion of the labor force is infected with the HIV virus, which will have negative consequences for the economy when these people become ill and are no longer a part of the work force (Sebatier 1987). Many of the urban elite are infected with HIV; these are the people who are considered to be the leaders of the next generation. The stigma and fear attached to AIDS may prevent foreign corporations from investing in Africa and could cause a decline in tourism, which is a major factor in economies of some countries. According to a report by the Panos Institute, an international research and information organization based in London, "The survival of whole industries and national economies may be at stake" (Mallet 1987:53). The countries most seriously affected are those of Central and Eastern Africa, so this paper will mainly address them; however, special concerns of South Africa and parts of West Africa will be mentioned as well.

Jonathan Mann, director of the World Health Organization's AIDS program, has said that, "Africa has the largest gap between the seriousness of the [AIDS] problem and the resources to deal with it" (Dickson 1987:605). Many African countries have gone through years of civil upheavals as a result of unstable political regimes. Much of the infrastructure has been destroyed and the economies are very weak. As a result, resources for development are scarce in these countries (Select Committee on Hunger [SCH] 1988). In some cases this lack of resources did not allow the government to respond expediently to the diagnosis of AIDS in their countries. In Rwanda, Uganda and Zaire, the first AIDS cases were identified between 1982 and early 1984. Government sponsored education programs did not begin until 1985.

Although there was a time lag between the diagnosing of these **first** cases and the beginning of the campaign to stop the spread of AIDS, this lag may be due to the lack of resources, communication facilities and an inadequate understanding of the threat than to indifference on the part of the governments (Waite 1988: 146).

However, once the World Health Organization (WHO) became **involved**, these countries worked quickly to institute programs to deal with the AIDS epidemic. Representatives from 45 African countries came together to develop a plan of action.

Each country will (i) establish a national AIDS committee that includes representatives from the health and social services and from communications, education, and other relevant governmental and nongovernmental sectors; (ii) conduct an epidemiological assessment of the burden of HIV infection and associated risk factors; and (iii) institute a surveillance system for AIDS and HIV infection that includes serological surveys of selected populations..." (Quinn 1986:962)

In addition there are plans to equip laboratories with instruments to diagnose human immunodeficiency virus [HIV] infection and train health care personnel to recognize and manage HIV associated disease in hospitals and the community (Quinn 1986). Several countries have already put these plans into action. Uganda has carried out a national serosurvey to determine the prevalence of HIV infection in the country. AIDS primers and wall charts have been provided to schools. A group of HIV-positive people are running a counseling service. Three million pairs of gloves and crates of rubber boots have been brought in to protect health care workers, especially midwives, from possible parenteral transmission of the virus through blood of infected patients (Wilson 1988). Educational programs have been set up in all of the primary and secondary schools and teachers are being trained to teach AIDS education. The Health Education division of the government has been strengthened and is printing educational leaflets, bumper stickers and posters,

holding prevention **seminars** and facilitating teachers' training. Uganda is developing new blood screening centers, purchasing special blood testing equipment for areas of the country with no electricity, and providing money to virus research institutes (SCH 1988). Popular education campaigns have been using the mass media - radio and television commercials, public meetings, political rallies and church gatherings to inform the people of prevention strategies (Okware 1988b). Education campaigns in Zaire have included pop songs, posters, comic books, television and radio programs (Brooke 10/10/88), and a six-part series on AIDS prevention in one of the national newspapers (Waite 1988). The Rwandan and Kenyan programs are similar to those of Uganda and Zaire. Although these education and **prevention** programs are entirely necessary to combat the spread of AIDS in these countries, the money used to implement them will "... take funds and personnel needed for other programs in health, family planning, and education" (SCH 1988:70).

This redirection of resources will further deplete already impoverished health care systems in Africa. Per capita spending on health care in many nations has declined over the past decade (Sebatier 1987). Medical treatment facilities are largely unavailable in Central and East Africa, and those existing are taxed in treating endemic diseases such as malaria, leprosy, tuberculosis, and undernourishment which are rampant in these areas. In fact, the AIDS problem is small (in regards to the numbers of people sick and dying) compared to other problems such as intestinal parasites, diarrhea in children, malaria and tuberculosis, all of which require money to upgrade the existing programs of treatment (Novicki 1988). The child immunization and tuberculosis control programs in Tanzania are threatened by the redirection of money to AIDS care in that country (Pede 1988).

The treatment of **people** with AIDS in these countries is a problem given the small budgets of the health care organizations. The cost of caring for ten AIDS patients for a year in the United States (approximately US\$450,000) is greater than the entire annual budget of

a large hospital in **Zaire** (Quinn 1986). It is estimated that "... the cost of providing medical services to an AIDS patient is about 100 times what the Tanzanian Government spends annually on health care per person" (perlez 1988:A34). The Ugandan AIDS budget for 1988 was less than five million US dollars. Ugandan hospitals do not have medicine to treat opportunistic infections, and neither hospitals nor the patients can afford to pay for constant health care. The use of **AZT** to slow the course of AIDS is entirely out of the question given the cost of the drug (Wilson 1988). Hospitals in these countries also have limited amounts of space. "These [AIDS) patients occupy hospital beds and consume scarce resources (phannaceuticals, personnel time) in palliative treatment that might be better used for illnesses that can be cured" (Piot 1988:577-8). The hospitals are often forced to send AIDS patients home to make room for patients with diseases that can be cured. In many countries, there is a shortage of medical staff. For instance, in Uganda there is one doctor for every 40,000 people (SCH 1988). Doctors and nurses do not have the time or training to counsel AIDS patients and their families. Unfortunately, these health care workers have had their time wasted by western journalists looking for sensational stories on the epidemic in Africa (SCH 1988).

In some cases this general lack of funding for health care may have contributed to the spread of **HIV** infection. HIV can be transmitted through the sharing of needles or the reuse of needles without sterilization. In rural areas, sterilization of needles is not easy to perform because of scarce resources such as water and fuel (SCH 1988). Because many mothers believe that medication by injection is more effective than medicine taken orally (Mann 3(26/87), large numbers of children receive a great many injections, which puts them at risk when ,the needles are not properly sterilized. These needles are reused because health care workers can not afford to throw them away. They are much too expensive and in short supply. Dr. Mathilde Krim, a research scientist and founding co-chair of the

American Foundation for AIDS Research, has said, " A needle is very valuable and it cannot be used only once. Even the disposable ones must be reused, and we should never talk them out of doing it, because if we don't reuse needles, people may go untreated" (Novicki 1988:24).

The scarcity of water does not affect only sterilization of needles. "The lack of a pure water supply in **central** Africa, however, makes bottle feeding a poor alternative [to breastfeeding]" (Feldman 1987:97). As **HIV** can be transmitted through breast milk, children of infected mothers are at risk. Another transmission factor involves the irregular use of gloves and masks in hospitals due to the high cost of supplying them. This may pennit some parenteral transmission of HIV through contact with blood of infected patients.

South Africa is experiencing a special set of problems regarding health care. Although the hospitals that are maintained for white South Africans are well equipped, "[t]he inadequate number of *black* state hospitals that do exist are grossly overcrowded, underserviced, and poorly equipped and fmanced" (SefteI1988:19) [*italics mine*]. White AIDS patients receive state-of-the-art intensive care unit and AZT treatment, mostly paid for by the government. In contrast, black patients are forced to used the overcrowded, understaffed state medical care facilities. These hospitals are not even adequately equipped to deal with the load of curable diseases they get. The government has refused to provide proper plastic gloves in the emergency rooms of these hospitals. There are no intensive care or isolation facilities. "...[T]hey [AIDS patients] simply lay among the rest of the patients, often bleeding onto other patients because their intravenous lines were neglected by heavily overworked nurses in chronically understaffed wards" (Seftel 1988:21). This inequity in care for blacks and whites is a **direct** indication of the racist policy of the apartheid government of South Africa. The situation for black people with AIDS will not get much better unless the policies of the government are changed.

Some countries in West Africa are also suffering from lack of health care resources. If the Cote d'Ivoire is to be taken as an example, hospitals in West Africa do not have the proper supplies to prevent the spread of HIV. Needles are reused and gloves are scarce (Brooke 3/12/89). Although the AIDS epidemic in West Africa is not presently of the same proportion as in other parts of Africa, the situation could get worse if the hospitals cannot obtain proper supplies.

The blood supply for transfusions also presents problems because of the state of the economy in many African countries. AIDS cases due to blood transfusions are a major problem which needs to be addressed. However, the funds for blood screening are either seriously lacking or completely nonexistent

In most areas of Africa, unfortunately, the cost of screening and the general infrastructure requirements for bloodbanking have limited the implementation of such safety measures...voluntary abstention of infected individuals from donating blood or the screening of donors is not likely to protect the blood supply and could drastically reduce the available donor pool (Mann 10/88:89).

The upgrading of blood transfusion services to prevent HIV infection is likely to cost approximately 30 times the annual per capita health budget in many countries (Quinn 1986). The risk of blood transfusion recipients for HIV infection may be as high as one in ten and yet in many areas blood is still not being screened because the facilities for this procedure are nonexistent. This is especially true in many rural areas. Intennittent electricity and unreliable cold-storage facilities are two of the problems facing blood screening in these areas. The cost of the tests used to screen blood is another deterrent. The desire of A.merican companies to profit from this epidemic has led them to charge five to eight dollars (US\$5-8) per test kit, as compared to the two dollars (US\$2) it costs to obtain a kit in West Germany (Klingholtz 1987). The failure to screen blood has

contributed greatly to the spread of **HIV** infection among children. "The high rate of seropositivity among **African** children with sickle cell disease has been related to their total number of transfusions" (Von Reyn 1987:699). The spread of **HIV** by contaminated blood transfusions is a tremendous problem which could be eliminated if the infrastructure and financial means existed to test **blood** for antibodies to **HIV** (Mann 3/26/87). Unfortunately, the means do not exist. One official from Uganda **said**, "Instituting [blood] testing would cost more than our entire national health budget" (Klingholtz 1987:57).

The problem of **blood** transfusions is especially pertinent to the AIDS epidemic in South Africa. Although **blood** screening became mandatory in the United States in September of 1984, by September 1985 the South **African** provincial health services were still buying from a U.S. blood bank Factor 8 and 9 **blood** concentrate products that had not been tested. These blood products were distributed to all of the state hospitals. The health agency probably thought it was saving money by not having these blood products screened. The unfortunate result of this act of omission was the contraction of the **HIV** virus through blood transfusions by 87% of South Africa's hemophiliacs. This situation was further exacerbated by the failure of the government to attempt to trace or inform any of the black hemophiliacs that had been infected (Seftel 1988).

West Africa also has some special economic concerns regarding the testing of blood for **HIV** seropositivity. In West Africa, it has been found that AIDS is caused by a virus known as **HIV-2**, which is different from the **HIV-1** virus prevalent in Central Africa. Unfortunately, screening tests for **HIV-1** do not always detect **HIV-2** seropositivity (Dickson 1987). The use of the existing screening tests in this area may be a waste of money as blood samples containing **HIV-2** may be considered seronegative and will be distributed for use in transfusions. A new test must be developed to detect the specific antibodies to **HIV-2**. In many West African countries, funding for research is limited, and

money will need to be diverted from other development programs.

In Africa., **HIV** is spread predominantly through sexual intercourse between heterosexuals. Heterosexual contact accounts for approximately 75 percent of **HIV** infections among adults (Mann 3/26/87). It is mainly an urban phenomenon. In many urban centers of the Congo, Rwanda, Tanzania, Uganda, Zaire, and Zambia from five to ten percent of the sexually-active age group is HIV-positive (Mann 10/88). Migration to cities, famine, war, and economic **turmoil** tend to break down the traditional relationships and increase the amount of sexual relations (Press 1987).

...[T]he social and political upheavals which occurred in Central and East Africa since the 1960's and the very large population migration to the cities during the 1970's, which may have disrupted the social values of traditional rural Africa, are believed to be important factors in the documented spread of **HIV** in Africa (WHO 1988:15).

It has been estimated that six percent of the general population of Kinshasa, Zaire is infected, mostly men and women between 20 and 35 years old (Swenson 1988). Men and women are affected equally. This has economic ramifications for a number of reasons.

It has been shown that a significant number of AIDS cases in urban centers are among people in the middle and upper classes (Altman 1985 and Von Reyn 1987). "A Zairean study presented at the conference [Third International Conference on AIDS] indicated that workers with higher salaries and senior positions had a higher prevalence of the AIDS virus" (Perlez 1988:A34). In Zambia's copper belt, 68 percent of the men who tested positive for **HIV** were skilled professionals (Mallet 1987). This will have a direct effect on the businesses, hence the economies, of these countries. Those people who are infected are the most economically productive generation,

... on which the government has expended vast resources in terms of educational and other social services. It also provides the bulk of the professions, the police, the

Armed Forces, the businessmen, and therefore if the problem is uncontrolled, one can see that there can be a serious effect on the economic activities of the country... (SCH 1988:4)

These are the future leaders of Africa. Because of the traditional family structure, the rest of society is economically dependent upon these people. In traditional African society, the extended family is the only social security system. This continues to be true in contemporary Africa because the government is usually unable to provide any means of social security to its citizens. The young, **infirm** and elderly are all dependent upon those members of their family who are economically productive. Unfortunately, these economically productive people are the very group that is at the greatest risk for AIDS (SCH 1988). Businesses are also affected. There has been a two to ten percent decline of skilled manpower in urban centers (Press 1987). Half of the staff of a Kinshasa bank is infected with the HIV virus (Altman 1985). Skilled professionals are already in short supply in Africa. These nations cannot afford to have more die. Loss of work indirectly costs Tanzania from US\$2425 to US\$5093 for each AIDS case (perlez 1988). This is a serious problem for developing countries. In trying to rebuild their economies, they are dependent upon these very people who increasingly are becoming seropositive.

The Harvard Institute of International Development estimates that by 1995 the annual loss to Zaire from AIDS deaths will be [US]\$350 million, or 8 percent of the country's 1984 G.N.P.: this was more than Zaire received that year from all sources of development assistance combined. The same study estimates that economic losses in Central Africa by 1995 will be [US]\$980 million. It is not inconceivable that such social and economic impacts could lead to political destabilization of the countries involved (Mann 10/88:88).

The effects of AIDS have already been seen in some urban areas. Several townships in the Rakai district of Uganda have been hit particularly hard by the epidemic. Badru Rashid, a

Rakai local government official, was quoted:

In the last week ten people that I know of died. I myself have lost two brothers and a sister. And our town, it used to be so busy. But a lot of traders **died**, and others left because they were afraid. Can you see all the empty shops? So many orphans come into my town, but there is nothing for them, and they start to steal to get food (Caputo1988:484).

In some areas of Africa, the AIDS epidemic came about as a result of the growth of commerce. For example, AIDS was **first** noticed in Uganda in small **fishing** villages around Lake Victoria. In these villages, smuggling is a major economic activity. Boats and lorries traveling between these villages and towns in other countries around Lake Victoria brought a large number **of** transitory people into the area. Bars, hotels, breweries and prostitutes increased in number as a result of the increased commercial activity (Caputo 1988). This may have brought more people in contact with those already infected with the HIV virus and served as a mode of transmission. "The lines of AIDS concentration in centre:1 and eastern Africa follow very closely those of commerce" (484). The prostitutes working in these towns and the **truckdrivers** passing through have shown an unusually high rate of seropositivity. In Kampala, Uganda, 67 percent of **truck-stop** barmaids are HIV positive (Wilson 1988). Thirty percent or more of **truckdrivers** and 90 percent of prostitutes working in towns along **truck** routes in Kenya, Uganda, Rwanda, Tanzania, and Zaire are infected with **HIV** (Hilts 1988).

The AIDS epidemic may also affect foreign investment in these areas of Africa. Because a large proportion of the labor force is dying, foreign firms may resist investing in these areas. Reduced local markets, the cost of sick pay for AIDS-affected employees, higher premiums for health or life insurance and reluctance of non-African employees to be transferred there all may influence transnational corporations to remove existing investment from African countries (Klingholtz 1987). This reluctance to invest is understandable,

considering the costs to companies relative to AIDS: sick pay, pensions for relatives, wasted investment in skilled employees, time off (for funerals, hospital visits, doctor appointments), and lack of motivation among people with AIDS (Mallet 1987). The earnings of existing companies may already be in jeopardy. "AIDS epidemics in export industries could possibly affect both potential foreign exchange earnings and international commodity prices" (SCH 1988:40). Unfortunately, this will have a serious impact on the economies of the countries involved, as foreign investments are a large source of revenue for many African countries.

Tourism is another international industry whose revenues are important to the economies of some African nations. The leaders of these nations have every reason to fear that the AIDS epidemic will jeopardize tourism and deprive their economies of a leading source of foreign exchange (Altman 1985). The tendency of western media to overestimate the numbers of people infected and to 'blame' Africa for the origin of the **HIV** virus has encouraged the resurfacing of racist beliefs about Africa

Unfortunately, as anxiety and fear cause some to blame others, AIDS has unveiled thinly disguised prejudices about race, religion, social class, sex, and nationality. As a result, AIDS now threatens free travel between countries and open international communication and exchange (Mann 1988:7).

Some areas have already experienced a loss of tourism. The British Ministry of Defense banned members of the Parachute Regiment from going to Kenya's coastal resorts at Mombasa and Malindi (Mallet 1987). Other countries in East, Central and West Africa have reported a drop in tourist revenue as a result of the negative publicity about AIDS infections there. This negative publicity has induced other countries to subject African students studying abroad to compulsory screening for the **HIV** virus. If a student is found to be infected, he or she is sent home at his or her own expense (Sebatier 1987). This

practice has negative ramifications for the economies of African countries. **If** these students are denied the quality education they can receive at foreign Universities, they will not have the **training** to participate in the reconstruction of the economies in their native countries.

In countries where trained manpower is in short supply, as is the case in central Africa, a reduction in the number of university graduates, whether through deaths from AIDS or through loss of educational opportunity, it is likely to reverberate through the economy (20).

AIDS in Africa is a largely urban phenomenon. It is relatively rare in traditional rural villages where codes of morality forbid casual sexual conduct, thus limiting the spread of HIV through heterosexual contact (Okware 1988a). In some traditional African **societies**, chastity plays a large role in the qualification of women to be considered for marriage. Among the Luo of Kenya, for example, bridewealth prices are very high. In order for a son of one clan to pay a bridewealth, the clan must receive equally high prices for their own women. Therefore, the chastity of the women is strictly guarded to insure the women's 'worth' (Southall 1981). This limiting factor is very important to the survival of agriculture in Africa.

AIDS will no doubt seriously hamper both industrial and agricultural production **if** it spreads from the urban to the rural areas. Given the subsistence, labor-intensive agriculture in many African countries, food production may be significantly reduced (SCH 1988:40)

Unfortunately, the spread of AIDS to rural areas may already be taking place. There is a tradition in some areas for a widow to return to her native village when her husband dies (Dickson 1987). **If** her husband died of AIDS, she is likely to be infected, and may pass on the virus **if** she has sexual contact with another person. Although traditional codes of morality forbid casual sex, this does not mean it does not occur. The woman may marry

again, in which case she will be likely to infect her husband, or if she becomes pregnant, her child. This method of transmission is likely to occur in polygamous societies where tradition dictates that the brother of the husband must marry the widow. This situation is especially problematic because the brother may then pass on the infection to his other wives and the wives to any newly conceived or currently nursing children.

In addition to the threat of infection in rural villages, AIDS poses serious problems for the future of agriculture in Africa. Women provide the majority of the work force for both domestic and export-oriented agricultural production. At **present**, these women are not at high risk for infection with HIV. However, as the incidence of seropositivity increases, the risk of infection will increase for all sexually active people. Since these women are in their sexually active years, they will be at higher risk for **HIV** infection. **If** a significant number of these women die of AIDS, there will be a negative effect on the output of agriculture. Profits from export of produce will decline, and the amount of food available for domestic consumption will also decrease (SCH 1988).

The threat of AIDS is especially prevalent in the urban areas of Central and Southern Africa. This has direct bearing on the women who live in these areas, many of whom are prostitutes. As a result of poverty in these developing countries and the limited amount of traditional work available for women in the towns [i.e. food raising, marketing], many women are forced to work as prostitutes to support themselves and to pay for their children's schooling (Press 1987 and Southall 1961). "Apartheid-induced poverty" is the reason many black South African women turn to prostitution (Seftel 1988:20). Women are leaving their rural villages to look for employment in the cities. Cities and towns are especially attractive to country **women** who are barren due to the stigma attached to barrenness in many traditional societies. In many cases, the disqualification of women from becoming wives due to this stigma perpetuates the resortion to prostitution (Southall

1961).

In many developing countries there is an increasing displacement of women to urban slum areas. There, because of what is considered acceptable or appropriate behavior for men and women, and because of discrimination in access to education, training and land ownership, many women drift into prostitution and become vulnerable to infection with the [HIV] virus (Reid 1988:28-9).

In urban centers in Central Africa, a large majority of the prostitutes are already infected with the virus. In Kinshasa, Zaire, 27 percent are seropositive. The numbers are even higher for Nairobi, Kenya and Butare, Rwanda: 66 percent and 88 percent respectively (Mann 10/88). At Kenyatta Hospital in Nairobi, within six years 60 percent of the prostitutes examined there tested seropositive (Klingholtz 1987). AIDS is spreading at an alarming rate among these urban prostitutes. Unfortunately, economic and cultural conditions prevalent in these areas make **it** necessary, and even desirable, for these women to continue prostitution. These women are at high risk for contracting HN, and due to the nature of their work, for aiding in the spread of the virus. Many of the men who frequent prostitutes are truck drivers or migrant workers who are very mobile.

If urban prostitutes constitute a major reservoir of AIDS virus in such African capitals..., we may expect that the virus will continue to be spread throughout the African continent by heterosexual men serving as vectors of infection from one community of urban prostitutes to another (Kreiss 1986:417).

Another issue concerning women is the cultural acceptance of the habit among single and married men of having many affairs (Hilts 1988). "...[M]ost Africans still consider that sexual access to a plurality of women is a male right". However, economic change has **undermined** the traditional structure of polygamy, resulting in a practice of serial monogamy or a combination of affairs with official monogamy (Southall 1961:52). This creates a demand for available sexual partners. Some women become mistresses, instead

of prostitutes, in order to support themselves.

The young women arrive in the city from the village, are unable to find work and so turn to the simplest means available to gain some money and security. They seek men with means. The older men, who have jobs and are often married, find they can carry on such affairs with relative ease. Thus...there is a relatively small group of young, sexually active women who are serving the sexual needs of a relatively large group of somewhat older men. There is a combination of male dominance and female freedom to have sexual relations that is specially African (Hilts 1988:29).

This small group of women is at high risk for contracting **HIV**. Even if a woman has a monogamous relationship, under these circumstances, there is no way of knowing with whom the man has had sexual relations. If he has had several affairs, as is culturally acceptable, there is a greater chance that he is infected with the virus. The women in these areas are culturally and economically coerced into high-risk behaviors.

Another contributor to the AIDS epidemic in Africa is the migrant labor system which is especially prevalent in South Africa. "The [South African] mining industry imports 40 percent of its workforce from high-risk AIDS countries like Malawi, Angola, Zambia, **Zaire**, and Burundi" (Seftel 1988:20). The widespread system of migrant workers acts as a mode of transmission of the **HIV** virus. "The single-sex migrant labor system institutionalizes many factors that facilitate the spread of AIDS - long absences of men away from their partners, ... and single sex hostels creating a market for prostitution" (20). **If** these workers are infected with **HIV**, they are likely to spread it to prostitutes in the communities in which they are working, which in turn will spread the virus to local clientele and other migrant workers. Over 2,000 Malawian miners have already tested positive to **HIV** antibodies in tests administered by the South African government. These men will **lose** their jobs and be **sent** back to **their** homelands (Seftel 1988), where they will no doubt infect still more people.

In conclusion, the AIDS epidemics in Africa have serious ramifications for the

economies of these developing nations. If the HIV virus continues to spread at the current rate, several countries may face political and economic destabilization. There will be a **decimation** of the industrial, agricultural and intellectual labor force. The education and prevention programs that have been put into practice are necessary to curb the spread of HIV, however this will be done at the expense of other development concerns. In this perspective, Africa may face a more significant threat to society relative to AIDS than any other country in the world.

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