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Social and Economic Impacts of HIV/AIDS in Sub-Saharan Africa, with Specific Reference to Aging

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In the 80s and early 90s . . . obviously the models were wrong. They were all underestimating what is happening now.

-- UNAIDS Executive Director, Peter Piot, of the HIV/AIDS epidemic in Africa (Cobb 2002).

I. Introduction

This paper is a survey of current materials and references relating to the social and economic impacts of HIV/AIDS, primarily with respect to sub-Saharan Africa, and with specific emphasis on aging and the elderly. Knowledge about human immuno-virus (HIV) and acquired immunodeficiency syndrome (AIDS) has increased at a great rate since the first significant appearances of the disease at the beginning of the 1980s. But complicating factors have also affected distribution across populations, the way the disease manifests in certain places, and which groups are at risk. These factors include migration/mobility, stigma, socio-cultural practices, human behavioral changes, prostitution, the absence or presence of education and awareness interventions (and their extent and quality) undertaken by health, non-governmental and governmental organizations, and the prevalence rate.

For example, an increased prevalence rate in a given place can change which age groups are most at risk, as UNAIDS Senior Epidemiologist Neff Walker explains:

We missed the fact [in previous models] that people move in and out of risk groups... How you define being at risk for HIV when there is low prevalence is very different once you get higher levels of prevalence. One of the insidious things about HIV/Aids is that people get infected [and] live for nine or ten years. It can be passed across generations. And that=s just not something that most of our modeling work in terms of infectious disease has really encountered before (Cobb 2002).

Dr. Peter Piot, Director of UNAIDS, has admitted that earlier forecasts for AIDS turned out to be “awfully wrong;” the disease has overrun worst-case predictions in Africa and Asia (Garrett 2000:572). Garrett notes:

Piot believed that HIV might by 2005 hit the top of its bell [curve] in some hard-hit African countries, such as Uganda, Tanzania, Zambia, and Zimbabwe.

But...the peak was only reached when upward of a third of all adults under fifty years of age were infected in most parts of those societies (ibid: 573).

As Garrett (2000:573) points out, the first to reach an HIV bell curve was the gay population in San Francisco in the mid-1980s, “when the infection rate exceeded 50 percent.” Though declining, largely due to the gay community’s educational efforts, it still remained at 20 percent in 1998. Garrett quotes Larry Gostin, professor of law at Georgetown University and expert on AIDS human rights, who calls it “the modern equivalent of the great Plague” and predicts that in the developing world it will result in “losses of whole generations” (ibid.)

Knodel et al. (2003), in an international perspective, assert that the impacts of AIDS on older people “could change dramatically” as consequences and responses to the disease - both social and medical - develop further. At the moment in their lives when increasing elder populations need support, and with fewer able-bodied children to care for them, the AIDS pandemic threatens to engulf them in sub-Saharan Africa (SSA).

Fast-aging populations in *developed* nations receive support in the form of pensions, social security schemes, and health care systems (Khan 2003:2). In the *developing* world, however, the family is the primary – and sometimes only – basis of support, but it is under great strain (cf. Munthali 2002). Children and the elderly in Malawi, for example, are increasingly assuming roles as caregivers to the chronically ill, since insurance, pensions and worker's compensation are available only to a very small percentage of the population (Munthali 2002). (An exception in Africa is South Africa, which has a formal program of support for older people; cf. Kinsella and Ferreira 1997:5. However, “bureaucracy or corruption often means nothing is paid,” according to *The Economist* 05/09/2002.)

As Khan (ibid: 3) points out in his case study on Bangladesh, because it is still assumed that the family is able to care for its elderly in developing countries, there is a “need to look at measures of elderly well-being other than living arrangements.” A rising concern about aging has developed due to declining fertility and increasing life expectancy, leading to greater proportions of older people in populations. Increased morbidity, mortality, and population loss will be felt as the world population ages faster in the next 50 years, increasing the median age (UNPD 2003). Now there may be fewer children to support their longer-living elders, creating an increased “burden of elderly dependency” (Khan ibid.)

With 2.2 million deaths from AIDS in 2001, and while receiving only a minute percentage of available anti-retroviral treatment, Africa remains “the worst-affected region in the world” (Cobb 2002; UNAIDS 2003). As ABC News reported on September 22, 2003, United Nations Secretary General Kofi Annan lamented the fact that, despite the original proposal to have anti-retroviral medicines (ARVs) available to 3,000,000 patients by 2005, currently only 300,000 receive them worldwide. A mere 50,000 of those treated with ARVs in 2002 live in Africa (ICASA, AF-AIDS eForum 2003: af-aids@healthdev.net¹).

¹ ICASA – refers to the 13th Annual International Conference on AIDS and Sexually Transmitted Diseases in Southern Africa, held in Nairobi, Kenya, September 21-26, 2003. For brevity from here on in

Background

The first cases of AIDS were recognized in the United States in 1981. As Garrett (2000:551) suggests, however, it might more truly be considered as

the first great pandemic of the twenty-first century. It spread swiftly...in a retrovirus form that used human DNA as vehicle and hideaway. Globalized sex and drug trades ensured HIV's ubiquity. And HIV, in turn, facilitated the circumnavigation of new, mutant forms of tuberculosis, the one taking advantage of the weakened human state caused by the other.

The first cases in Uganda, and in children, were reported in 1982; AIDS is now "among the top 10 leading causes of death in children" over the age of one year (Bond and Vincent 1997:85; Kalichman 1995:26). However, some writers note that HIV was most likely present much earlier (Ainsworth & Dayton 2003:135); as early as the late 1950s, having "hopped over the 'species barrier' and into mankind from another animal" (*The Economist* 9/5/1998).

One aspect of its epidemiology that is common worldwide is the tendency for socially disadvantaged groups to be at greater risk for HIV/AIDS, which, in the West in the 1980s, were gay men, minorities, and injection drug users. In Africa, however, the situation is different; with long-distance truck drivers and sex workers known as the earliest groups infected (Williams et al. 2002:29; Burayo 1991; Marcus 2001:110), AIDS has manifested as a primarily heterosexual disease, accounting for 93 percent of adult infections in sub-Saharan Africa (Webb 1997:5).

Nevertheless, the label "socially disadvantaged" in the African setting implies a host of aspects including endemic poverty and lack of empowerment, conditions that describe a majority of the population. As this literature review will show, elderly populations could also be included under the socially disadvantaged label, not due initially to high sero-prevalence rates among their ranks, but due to the extraordinary burdens the effects of the disease have placed upon them (which are discussed more fully in Section IV).

There also exists a strong "moral dimension" to the AIDS epidemic, as Lindenbaum (1997) notes, reflecting biological as well as socio-cultural patterns and perceptions. Defined as "a

this paper, I refer to information from this source (published on-line and received by email list) by using the general citation "ICASA AF-AIDS 2003." [AF-AIDS is a regional forum on HIV/AIDS in Africa, coordinated by the Health & Development Networks Moderation Team (HDN, www.hdnet.org) with technical support from Health Systems Trust (HST) on behalf of the AF-AIDS Steering Committee (HST, HDN & SAfAIDS), with the support of the government of Ireland. Reproduction welcomed provided source is cited as: AF-AIDS eForum 2003: af-aids@healthdev.net.]

metaphor for the sin of homosexuality” (cf. Gilman 1987; Poirier 1988) when at first it appeared limited to “marginalized groups... in the Christian West,” the recognition of different transmission modes in other parts of the world resulted in a “moral mutation... providing us with culturally misleading and judgmental images of the sexual propensities and promiscuity of others...[including]...racist views held about Africans” (Lindenbaum 1997; cf. Lyons 1997; Chirumuuta and Chirumuuta 1997).

In early reports of the disease in Uganda, risk factors recognized in the West –homosexuality and intravenous drug abuse – were declared to be absent because, according to a Kampala weekly, “in Uganda there are neither homosexuals nor drug abusers” (Lyons 1997: 133). The ‘promiscuity’ and ‘risk behavior’ presumed of such groups carried implications of personal responsibility and the individual’s power of choice. Thus, to explain transmission differences in the African context, a definition of an “African AIDS” was constructed, based on the principal features of this paradigm, wherein risk behavior and promiscuity were transferred from homosexuals and drug abusers to other risk groups such as “truck drivers, businessmen, bureaucrats and prostitutes” (ibid: 133-34).

Even some Ugandan researchers, as Maryinez Lyons (1997: 135) shows, mirrored this subjective and sweeping view by opining that the sexual behavior of their study subjects was “by Western standards, heterosexually promiscuous” (Serwadda et al. 1985, cited in Lyons). This was asserted again a couple of years later in an article in the journal *Reviews of Infectious Diseases*: “[M]ost African societies are promiscuous by Western standards” (Hrdy 1987).² Views of such “casual attitudes” (ibid.) imply notions of ethical, moral, legal, or scientific “standards” that cannot be subscribed to uniformly by any society, argues Lyons (1997:136). Related views also sometimes contain hints of bizarre sexual and magical practices.

In contrast to views about sexual promiscuity among Africans, others have stated that such claims are based on old western stereotypes and prejudices, and that “there is no evidence that Africans are more likely to be sexually promiscuous than people from any other continent” (Miller and Rockwell 1988:xxvi, cited in Caldwell et al. 1989:186).³ These judgmental propensities warn against allowing bias into scientific investigation, as well as illustrating the racial, ethnic, and social stereotypes that can perpetuate “cavernous inequalities” in the international political arena pertinent to issues of disease, care, and suffering (Lindenbaum 1997:194).

² Lyons (1997:135) notes that neither “Western standards” nor the methodology used in such observations are described, but she points out that scientists at a British university later replaced ‘promiscuity’ with more “restrained language” by referring instead to “*higher rates of sexual partner change* in African societies” (Anderson et al. 1991 in Lyons, emphasis added).

³ Waite (1988, in Caldwell et al. 1989) asserts “Most of the stereotypes were based on myths... [T]here was nothing inherent in African practices to support the notion that sexual excesses were widespread.” Caldwell et al. (1989:186) go farther by saying that the use of such language is itself part of a stereotype, terms like “promiscuous” and “excesses” and this specific Western world view render the discussion hazardous when it “finds cultures guiltless by concluding that they do not significantly differ from Western patterns.”

Lindenbaum (1997:193) points out that view about AIDS are similar to those manifested during other epidemics such as the late 19th century Indian plague, which fired in the British imagination “a variety of dangers, political, moral, cultural and sanitary”:

As Arnold comments, the Indian plague provides an “extended commentary on the developing relationship between indigenous elites, subaltern classes and the colonial state” (1987:56), an interpretation that applies well to the participants in the AIDS debate ... [and that according to] well publicized reports of some evangelists, politicians and others... the epidemic is God’s judgment on a society that does not live by His rules (Lindenbaum *ibid*: 193; cf. Poirier 1988).

To illustrate this point in Tanzania, for example, the clergy have for several years mounted strong resistance against condom usage, and in order to avoid antagonizing them, government leaders have stepped lightly around the debate on this “sensitive issue” (Rwambali 2002). In an unpublished article on AIDS as a risk factor for Maasai labor migrants, it was observed that migrants characterized HIV/AIDS as a reflection of immoral behavior (May and McCabe 2003). The authors suggest that the views are associated, in part, with messages about the disease heavily interlaced with references to decency, virtuous behavior and sexual morality found frequently in government media and other official sources From the Rwambali article in *The East African* newspaper, a typical example:

Tanzanian businessman Reginald Mengi [of the National AIDS Control Program) last week drew the ire of Christian and Muslim leaders when he urged them to encourage their followers to use condoms to prevent the spread of HIV... Sheikh Yahya Hussein, head of the Anti-Aids Project of the National Muslim Council of Tanzania, warned that the indiscriminate promotion of condom use would *undermine individual morality*... He further said [Christian and Muslim] religious leaders were doing God's work by *condemning promiscuity and marital infidelity* (Rwambali 2002; emphasis added; cf. May and McCabe 2003).

But, discouraging condom use and linking the virus to immoral behavior is not exclusively an African theme. Fox News reported on October 9, 2003, that the Vatican opposes condom use as contraception because it promotes promiscuity, and believes that there is no proof the condom prevents transmission of disease. The religious right and conservative political groups in the United States also argue vehemently along these lines, that “both domestically and in Africa condom use promotes ‘immorality’ (‘promiscuous’ premarital and extra marital sex),” and instead, they advocate abstinence-only programs, such as the religious-based so-called “Uganda ABC model” (Feldman 2003).⁴ The effective manner in which it was conveyed to the public by the government in Uganda in 1986, however, owes much to political will and commitment. The government launched an aggressive campaign to discuss and de-stigmatize the disease, breaking the “wall of denial” there.

But the ABC model has been tried and has failed elsewhere in Africa, and ignores the diverse

4 A=Abstain; B= Be faithful (to one partner); or C=Use a condom.

populations that should be targeted separately, according to Feldman, (ibid.). Some argue that fighting AIDS requires political commitment as well – the vital component in Uganda’s success but a missing ingredient in other countries – in order to find solutions (Pillsbury 2003).

What has become clear is that transmission patterns, distribution, spread, and impacts of the virus vary widely among populations (Lindenbaum 1997:192). The fact that as many women as men are affected by HIV/AIDS in sub-Saharan Africa (in contrast to Western Europe, North America, and Australia, where more men have been infected), is partially linked to behavior pattern differences. Douglas Webb, who conducted AIDS research in Namibia, South Africa, and Zambia, discusses the several modes – Pattern I spread (primarily men having sex with men and injection drug users), affecting the United States, Western Europe, and Australia), and Pattern II spread (heterosexual, with male to female ratio 1:1, and, increasingly, pediatric AIDS through vertical transmission).⁵ The Pattern II type affects sub-Saharan Africa, Latin America, parts of South America and India (1997:11). Webb warns, “The complexity of HIV spread is not to be underestimated” (ibid: xii):

Many of the reasons for the failure of prevention programmes to date lie in this oversimplification, in reducing the epidemic to medical or health terms, to talk of HIV/AIDS as if socioeconomic processes were merely incidental... generalizations negate the reality of the great diversity and variety in the way people react to this unprecedented situation (Webb 1997: xii-xiii).

In fact, the pandemic is not a single phenomenon, and therefore, different solutions and intervention strategies are required (ibid; cf. Jonsen and Stryker 1993; Aggleston et al. 1994). The development and efficacy of future medicines will likely depend on “ability to target specific populations and their associated subtypes” (ICASA AF-AIDS 2003).

Statistics - What is known?

Firm, reliable statistics about the pandemic are not easy to come by, which is one of the major challenges to understanding and fighting HIV/AIDS. Case figures should be treated with “extreme caution,” primarily because of under-reporting, AIDS cases being conflated with cases of HIV patients in some cases (Webb 1997:13), and the difficulty of collecting accurate data in rural areas where the bulk of the developing world’s population lives. A further consideration is that symptoms and ultimate cause of death are often not given (and conceivably, not recognized) as AIDS for a variety of reasons, including lack of access to health facilities, ignorance, fear, and shame. Although “about fifty million people died on earth every year in the late 1990s: only fourteen million deaths were ascribed to any cause in formal death certificates” (Garrett 2000:580). It is likely that certain possibly unscrupulous political interests also under-report cases due to embarrassment, or conversely, over-report in order to access donor aid funds targeted towards AIDS programs. Bennell (2003) argues that both orphan numbers and numbers of infected teenagers have been overstated, some by as much as 30 to 50 percent. One reason for the later is that statistics are emanating from

⁵ Pattern III is through infected needles, or contained within a small prostitute population (Webb 1997:11).

antenatal clinics where teenagers have obviously had unprotected sex and may not be representative.

Approximately 36.1 million people were living with AIDS worldwide in 2000; 70 percent of them in sub-Saharan Africa (UN 2002), despite the fact that only ten percent of the global population lives in the SSA region (ICASA AF-AIDS 2003). This is an increase of over a million and a half, from 24.5 million Africans in 1999 (Ainsworth and Dayton, 2001). (Ainsworth and Dayton [2003] cite a UNAIDS [2002] figure of 28.5 million in SSA in 2001.) The UN reported that by the end of 2001, there were 40 million living with HIV and AIDS worldwide, 83 percent living in SSA, and that little is known of the epidemiology of the diseases in this region. A fact sheet from UNAIDS (2003) notes that these numbers represent “a severe development crisis” and that even with an optimum scenario of an immediate application of “exceptionally effective” care, prevention, and treatment programs, the toll will be massive for many generations.

Moreover, HIV-related illnesses increase the cases of tuberculosis (TB) across SSA by about six percent per year. This occurs most often among young adults and children; however, “wherever the percentage of HIV-positive adults exceeded ten percent of a given society waves of opportunistic secondary epidemics followed, notably of tuberculosis” (Garrett 2000:553). It is estimated that about one-third of AIDS patients are co-infected with TB, and that TB accounts for approximately one-third of AIDS deaths worldwide. Seventy percent of those living with both HIV and TB live in SSA. Approximately 90 percent of HIV patients die within a few months of becoming ill with TB unless they receive adequate health treatment (WHO 2000).

The “double epidemics” of AIDS and TB have set health advances and life expectancies in SSA back to nineteenth century levels (Garrett 2000:547). WHO has recently called for provision of free anti-TB treatments – a combination of several drugs – to be made available, noting that they are 95 percent effective in curing TB, and “cost only \$10 per patient for the entire course of treatment” (ibid.). Along with TB, other opportunistic infections found among AIDS populations are “cryptosporidium (gastro-enteritis), and herpes zoster, combined with various oral and skin lesions such as candidiasis and pharyngitis” known also as AIDS-related complexes (Webb 1997:4). Also, Kaposi’s sarcoma, a form of cancer now understood as a sexually transmitted herpes virus, is a common manifestation, in Zambia, for instance (ibid.).

Scott Drimie (2002: 6) suggests that demographic changes will be wide-ranging in SSA due to AIDS; it is expected that by 2010, there will be 71 million fewer people of productive age, thus expanding the elderly dependent sector (cf. Khan 2002). Projected decreasing life expectancies and population growth rates are spectacular in some cases. For example, AIDS has brought life expectancy in Zimbabwe down to 49 years (Garrett 2000:557). In Mozambique, it has been below 40 since about 1999, and in Botswana, from 64 years in 1998, life expectancy is expected to drop to 42 years by 2010 (*The Economist* 05/09/02). In Namibia, life expectancy drops from 70.1 years to 38.9 years with AIDS; growth rate decreases from 2.8 percent to 1.2 percent. In Kenya, from 69.2 years to 43.7 years; 1.8 percent population growth dwindles to 0.6 percent; and for South Africa, life expectancy drops from 68.2 years to 48 years with AIDS, and population growth from 1.4 percent to

0.4 percent (Fourie and Schonteich 2001:31, cited in Drimie 2002:6).

Distribution of AIDS in Sub-Saharan Africa

The extent of the epidemic is astonishing. With the highest prevalence rates in the world (according to the UNAIDS *Report on the Global HIV/AIDS Epidemic*, 2000), by the end of 1999, over 10 percent of the populations in 16 sub-Saharan Africa countries in the 15 to 49 year age range, were affected. Percentage rates among adults ranged from 4.16 in Gabon, to 35.8 in Botswana (Drimie 2002:3-4). In Zambia in the late 1990s, the rate soared: between 20 and 30 percent of adults were HIV-positive, “and thus destined to die within ten years or so” (Webb 1997: xii).

According to an ICASA conference (2003) on-line article written by H  l  ne Badini of Nigeria, HIV/AIDS also “is quickly and deeply ravaging the basis of the socioeconomic structure in West and Central Africa.” Countries in that region with prevalence rates over 5 percent include Burkina Faso, Togo, Chad, C  te d’Ivoire and Guinea, “particularly within vulnerable populations.”

In all regions where the virus is spreading, it predominates in urban areas, at an urban-rural ratio of approximately 3.6:1 in SSA, the rural epidemic considered to be about seven years behind the urban (Webb 1997:12, 13). This differentiation is associated with:

[t]he concentration of high risk behavior in urban localities, linked to prostitution and multi-partner behavior, as well as the fact that cities and large towns are often the first entry point of the virus into a country, leading to a ‘cascade’ diffusion down the urban hierarchy (ibid.).

Moreover, although the regional story masks much variability relating, for example, to urban/rural status and proximity to major road networks, it appears that the infection moves primarily south from “the central African AIDS belt (Uganda, Kenya, Rwanda, Burundi and Tanzania) towards and through southern Africa” (ibid:13; cf. Caldwell and Caldwell 1993).

Aging in Africa

The exact definition of an “older person” is nebulous; but many writers use 50 years as the separation point between prime-age adults (15-50), the approximate group most at risk of AIDS, and the beginning of old age (cf. Ainsworth & Dayton 2003). The perceived urgency of the need to address issues of older people, related to AIDS, can be seen in the following specifics: According to HelpAge International (2002), nearly 75 percent of those who have already died of AIDS lived in SSA. In Uganda, “nearly a third of AIDS patients were cared for by their parents in 1995” (ibid: 132). In northwestern Tanzania where the AIDS prevalence rate is very high, the caregivers of over 25 percent of sick relatives are between 50 and 65 years old (ibid.). A World Bank forecast projected that by the mid-twenty-first century, elders living in developing nations “could, for the first time in human history, exceed the numbers of children under fifteen years of age” (Garrett 2000:552). Given a lack of public health and social security programs, older persons are most often the default caregivers when AIDS strikes a family in developing countries.

African parents have large families partly to insure support by their adult children in their old age (Ainsworth & Dayton 2003). According to one study, large families also mitigate the effects of the epidemic on the majority of elders in Thailand, for example (Wachter et al. 2002). In their study of the Body Mass Index (BMI) measuring effects of “prime-aged adult deaths on surviving household members” in the Kagera region of northwestern Tanzania – which they characterize as “the epicenter of the Africa AIDS epidemic,” Ainsworth & Dayton note that those with 10 living children had a one-point higher BMI than those with no living children, “pointing to the benefits of large family size in terms of old age security and well-being in SSA” (2003: 135,141). Nevertheless, it was also noted that BMI declined when there was an increase in children living in the household between ages seven and fourteen, “suggesting a diversion of resources to invest in the young” (ibid: 143). The authors point out that other emotional (grief and depression) and epidemiological (such as TB) factors could also account for declines in BMI of the elderly (ibid: 144).

Moreover, as mentioned, life expectancies that were slowly climbing, in part due to improved health services and decreased infant mortality, are now dropping in many areas (also cf. Khan 2002). But the population of elders will increase due to declining infant mortality and continued high birth rates, “resulting in higher proportions of middle-aged adults.” It is projected that by 2030 there will be 25 million people in the 60-64 year age group in Africa, almost two and a half times the present population of 11 million (HelpAge 2002). HelpAge (ibid.) put the number of AIDS orphans in SSA at 2.1 (of 13.2 million AIDS orphans worldwide), the majority being cared for by elder women. (However, a USAID African Bureau Brief [2003] claims there are now 34 million orphans worldwide, of which 11 million live in sub-Saharan Africa.) Particular contexts and socioeconomic implications of the epidemic for aging populations are addressed in Section IV below.

II. Determinants of the Epidemic in SSA

The ‘real reasons’ behind the epidemic according to Webb (1997: xiii) are poverty, fatalism, uncertainty, violence and lack of access to critical services. Drimie characterizes underlying reasons for high prevalence, rapid spread, and uneven distribution to include “poverty and economic marginalisation, poor nutrition, opportunistic infection, migration, sexual networking and patterns of sexual contact, armed conflict and gender inequality” (Drimie 2002:7).

According to recent publications of the Southern African Migration Project, fundamental reasons for the variations in the epidemic are not clear, since southern African countries with the highest prevalence rates do not all have uniformly similar histories and economic pictures:

Botswana, with the *highest* rate of infection, has experienced stable, democratic government and a strong economy since independence in 1966. Mozambique, with the *lowest* rate of infection [in southern Africa], experienced sixteen years of devastating civil war [until] 1992. While South Africa [also with extremely high prevalence] and Botswana are the two *richest* countries in SSA (as measured in per capita gross domestic product), Mozambique is the *poorest* (Williams et al. 2002,

emphases added).

How to account for these seeming anomalies is a problem for empirical investigation.

Economic Determinants

Complex links to poverty appear to be key determinants for HIV/AIDS, as in all communicable diseases (Drimie 2002:7). Although this statement could be disputed in light of the [heretofore] developed economies in Botswana, Zimbabwe, and South Africa prior to the onset of the epidemic, poverty does, nevertheless, predispose people who are malnourished, in poor general health, and with relatively low access to health care and services to become sick and die faster (ibid.). It should also be noted that the skewed distribution of income (wealth gap) affects the extent to which the general population in any given country (majority) could be considered 'developed' economically. In many places, including the United States and most SSA nations, for example, the richest 10 percent of society controls over 30 percent of the nation's wealth (Garrett 2000: 729-32).

In short, according to Drimie, poverty creates an environment of risk in several ways: structural poverty rooted in imbalances in gender, land ownership, access to health, and ethnic isolation; developmental impoverishment linked to rapid population growth; environmental degradation; rural-to-urban migration and slums; and poverty and destabilization caused by civil unrest, war/conflict and refugees (including high levels of rape and breakdown of sexual mores). The ultimate effects of such conditions, in turn, increase vulnerability, reduce the ability to handle risks, and ultimately, exacerbate marginalization and intensify the conditions of poverty (ibid.). Decades of development advances are being destroyed.

Citing World Bank studies (1999, 1993), Ainsworth & Dayton (2003:140) note that risk of HIV in SSA is positively correlated with socioeconomic status; that is, adults who died from AIDS were younger and more educated than those who died from other causes, "a reversal of the normal relation between income and health." Moreover, in areas with improved road infrastructure mobility is increased, and therefore implicated in increasing risk of HIV. The reverse situation, however, that poor infrastructure deters "economic opportunities, better access to social services, and improved health outcomes" is the paradox (ibid: 141).

Labor Migration

Williams et al. (2002) argue that migration is "a key neglected factor" in the spread and prevalence of HIV/AIDS in South Africa; this could be said for other places as well. Poverty, economic recession, and the widening rural/urban gap in income and social services have generated large movements to cities in Africa (May 2002, 2003: 3; Cohen and Trussell 1996: 128; cf. May and McCabe 2003). Although the extent is unknown, poverty drives migration, and migrant households are at high risk for AIDS (cf. May 2003; May and McCabe 2003; Williams et al. 2002). Often elders and children are the only people left at the homestead when Maasai pastoralists migrate to towns (May 2002). A Senegalese study establishes an irrefutable link wherein 27 percent of migrants, and

11.3 percent of migrants' spouses had HIV, compared with only a one percent rate in men from neighboring villages who did not migrate, and this has been the case also in Mexico, Ecuador, Ghana, and Nigeria (Collins and Rau 2000). Strong links between short-term residence labor migration and elevated HIV sero-prevalence have been recognized by many studies, especially when migrants move for a time to more concentrated areas of population such as cities and trading centers (Williams et al. 2002; cf. May 2003).

Munthali (2002) notes that according to Government of Malawi and the World Bank, high rates of urbanization and labor migration are the most important contributing factors to the high rates of HIV in the southern region of Malawi (18 percent); the rate is estimated at 26 percent in urban areas. Sexual networking and "circular migration remains a way of life for several million black South Africans" (Lurie et al. 1997). However, a surprising finding in this last study in KwaZulu/Natal is that in some cases the spread of HIV was found to be from rural partners to their returning migrant husbands (ibid: 25).

Large-scale movements have increased high-risk sexual behavior and sexually transmitted disease (STD) infection rates (Drimie 2002:9). The migration factor may be the strongest common link between the countries of southern Africa with a long history of economic migration, especially from Lesotho, Botswana, Zambia, Swaziland, Mozambique, Malawi, Zambia, and Zimbabwe to the gold and diamond mines of South Africa (ibid; also cf. Williams et al. 2002).

Social Determinants

Societies are complex, and complexity calls for caution.

-- M. Susser, 1987:171 (quoted in Decosas 2002)

Along with conditions of poverty, HIV and other STDs spread fastest in an environment of powerlessness and social instability, such as in refugee and internally displaced populations (RHRC n.d.). However, youth between 15 and 24 years are the hardest hit segment in SSA, with 7.9 million testing HIV-positive, according to UNICEF and UNAIDS, mainly girls who are infected by older men, and at earlier ages than boys (*The Economist* July 20, 2000). (This is in contrast to the higher proportions of boys in Europe and the Americas, who are victims of homosexual transmission and drug injection.) Surveys in Tanzania and evidence from Zimbabwe show that ignorance about the disease is partly to blame, leading to the conclusion that education about AIDS is crucial to prevent its further spread (ibid.).

In addition, social contexts of sexual behavior – such practices as polygyny and widow inheritance, for example – are strong influences on risk. In a recent paper, Ernestina Coast (2003) discusses the cultural context of condom use among the Maasai of northern Tanzania. Coast noted low levels of condom knowledge and their use associated with "others" (non-Maasai); the belief that condoms are "unsuitable" for penises that have undergone the highly ritualized Maasai circumcision. Similar findings were reported in May 2003; both Coast and May find that such beliefs – and there

are many comparable examples from other societies and groups – support a rationale for culturally specific HIV/AIDS programs (cf. May 2003). This is particularly relevant in the case of impoverished minority populations such as Maasai, who are recently (and increasingly) migrating to cities looking for wage labor in Tanzania (May 2002; May and McCabe 2003).⁶

Decosas (2002), elaborating on this theme, writes: “Clearly the disease strikes hardest where poverty is extensive, gender inequality is pervasive and public services are weak.” Writing for UNRISD’s HIV/AIDS and Development project, Decosas argues:

If we are really serious about recognizing the social dimension of AIDS, then we have to recognize that the way communities feed themselves, the way they earn their living, the way they pray together, the way they look after their children and their elderly, the way they care for their sick, the way they govern themselves... all determinants of how they experience HIV and how they cope with AIDS.

In an article in *The Economist* entitled “Fighting Back” (05/09/2002), the very different situations relative to AIDS in Botswana, Mozambique, and South Africa were compared. The pattern of life in Botswana, with many having three or four homes (urban, town, village, cattle post, farms), and good roads to travel between them, is partly the cause of high AIDS incidence in such a relatively economically stable country (cf. Ainsworth & Dayton 2003). The early history of mining migration also has contributed to the foothold of the disease in Botswana, with families separated and men living in male-only hostels while working South Africa’s gold mines.

The situation in Mozambique, to the east, “is infinitely bleaker,” however. There is little political will or commitment to fighting the disease, the AIDS program understaffed and underfunded, and government ministers reluctant to admit to ever having been tested – not to mention any who may have tested positive (*The Economist* 05/09/2002). The legacy of separation of families and emasculation of men under apartheid in South Africa and the spread of AIDS from its mines has contributed to a “breakdown of family structure” and loss of human capital. Men “persist” in having several sexual partners, and not using condoms. The non-governmental organization Children First has claimed that more than 680 teachers – over 55 a month – died in KwaZulu Natal in 2000, at the average age of 36 years (Pambazuka Newsletter, n.d.). Many young girls are victims of their teachers’ sexual aggression, forced to have sex under duress, and many are raped, explaining why the rate among girls is so high, four times that of boys in Mozambique 15-29 years (*The Economist: ibid.*).

Biology & Gender

Societal and cultural pressures on women and young girls, especially, put them at risk. In a study of the correlation of sexually transmitted infections (STIs) and HIV in Nigeria, Kenya, Ghana

⁶ May also found Maasai urban migrants and their rural families to have quite low levels of knowledge about HIV/AIDS and condoms, and usage of condoms among this population was nil (2002, 2003; May and McCabe 2003).

and Kwazulu-Natal (South Africa), it was found that prevalence rates among women were higher than for men (ICASA AF-AIDS 2003). According to references cited by Drimie (2002), women contract new HIV infections at twice the rate of men; SSA is the only region where women are more affected than men. Other sources claim that 55 percent of new infections in SSA occur in women (Balyamujura et al. 2000; Collins and Rau 2000; Walker 2002).

Moreover, African women are generally in lower socio-economic levels as compared with men (AIDS Infothek 2000:17). Because of their subordinate status in SSA, women's property rights may be violated, and often this is accompanied by sexual and physical violence (HRW 2003). High prevalence of STIs in the region, and the inadequacy of health services, also increase risk (AIDS Infothek 2000:10).

Mother-to-child transmission of the virus is possible through childbirth, resulting in pediatric AIDS (Webb 1997), the leading cause of AIDS among children (*The Economist* 9/25/1997). The rate of transmission of HIV-1 infection in this manner was between 18 and 40 percent in developing countries in the first half of the 1990s (Kalichman 1995:26). Use of interventions such as ARVs by women during pregnancy can reduce the risk of perinatal infection. The virus is also present in breast milk, making breast feeding by HIV-infected mothers risky for their babies (ibid:26-27).

Other gender-based determinants in SSA include issues of unequal power and inability to negotiate sexual encounters, age, and prostitution (AIDS Infothek 2000:24). Less than a quarter of Zambian married women believe they can refuse sex with their husbands; only 11 percent said they could ask him to use condoms (UNAIDS 2000). Luke & Kurz (2002) review the literature to assess extents of sexual encounters in SSA between older men and adolescent girls; over 45 studies reviewed find that this is the norm, including a "widespread transactional component." The greater the age difference between them, the greater the girls' risk of infection, due to the power imbalance, and increase in unsafe behaviors, such as non-use of condoms and multiple partners for both the men and the girls (ibid.). (Also cf. Letamo & Bainame 1997, as to prevalent multi-partnered sexual activity among the Botswana migrant worker population.)

The great majority of HIV cases worldwide are through penile-vaginal intercourse, and infection may be bi-directional between men and women (Kalichman 1995:22). Physiologically, women are more prone to HIV and other STIs. The "greater mucosal surface area of the female genital tract" increases the risk for women, as does the fact that sexual acts may result in micro-tears of the vaginal wall, making infection much more likely (ibid.). And older women are more vulnerable to infection biologically, and also due to the sexual behavior of their partners who may practice widow inheritance, polygyny, or otherwise have multiple partners (AIDS Infothek 2000: 24; ELDIS n.d.). Women who use sex in exchange for gifts, money or services also have difficulty negotiating safer sex, as well as obtaining adequate health services (AIDS Infothek ibid.).

III. Impacts of HIV/AIDS in sub-Saharan Africa

Social Impacts

Costs associated with the AIDS epidemic are lives lost, suffering of families, extreme social, economic, and emotional burdens on caregivers and orphans left behind, loss of productivity and food security, and the staggering costs and overwhelming demands on health systems. One of the most critical effects is that it robs the family of their only “social security” system; productive members are taken out of the equation when they become ill and die, leaving children and the elderly to fend for themselves (cf. Munthali 2002). Some of the strategies adopted in Malawi, for example, in light of this situation, are: children marry earlier, drop out of school to help support the family, and take on informal labor schemes (ibid.). Research in Uganda showed that adding a foster child to a household (more frequent these days due to parents’ having succumbed to AIDS) significantly reduces per capita consumption, income, investment in the household, and possibly also access to health services (Deininger et al. 2002).

Dr. Peter Piot has predicted that reaching the top of the bell, for some African societies, means national bankruptcy, “pushing households into poverty and starvation, people ending up in the streets. And then we’ll be giving food aid, instead of investing in [HIV] prevention” (Garrett 2000:573). The compound effects of the AIDS crisis encompass “both national development and household economies [and] a whole range of challenges surrounding poverty and inequality” (Drimie 2002:2). Because most efforts and responses have been targeted toward prevention and care, the “broader picture of implications for development and poverty reduction” has been slighted (ibid.; cf. Collins and Rau 2001; Louwenson and Whiteside 2001). Unlike in the West, AIDS is devastating an entire young and productive generation of Africans. And since the epidemic’s effects are bi-directional:

worsening conditions in turn make people and households even more at risk of, or vulnerable to, the epidemic, and sabotage global and national efforts to improve access to treatment and care (Louwenson and Whiteside 2001:4, cited in Drimie ibid.).

Reactions to the continual need to watch family members sicken and die of AIDS and then to bury them tend to be fatalistic among some groups. Along these lines, Collins and Rau (2000) cite Tanzanian social scientist, Gabriel Rugalema’s (1999) investigation, in which he notes the weariness of his subjects: “In general, they did not think of AIDS as something terribly new,” rather, just one more in a long series of shocks and crises including war, famine, droughts, structural adjustment schemes, and colonial and post-independence mismanagement.

Douglas Webb (1997: xi-xii) observes in Lusaka – the capital of Zambia, where he lives and works – that worker absenteeism for funerals is so commonplace and regular now “as to be expected.” The cemetery is growing and the only “booming industry” is production of plain slate headstones and plastic wreaths; “Death is an industry in Lusaka and emotional immunity to the death

toll is necessary to continue working...” (ibid.).⁷ *The Economist* (8/12/1999) noted that in Zambia, the disease is so prevalent “that it has lost its social stigma.” The health minister predicts “half the country’s population will eventually die” of AIDS; and 13 to 50 percent of Zambian children under 15 have lost one or both parents, usually to AIDS.

All too typical is the story of a grandmother in Zambia who had been supported by her daughter, but when the daughter and her husband both died of AIDS, lost her only source of income and inherited her five grandchildren to care for, is (ibid; cf. Wachter et al. 2002). Elderly and frail, she must grow vegetables in a small household plot, and market them. Without the charity she receives (clothes, school fees, and 25 kilos of maize meal per month), “the family would starve” (*The Economist* 08/12/1999). But State welfare payments reach less than two percent of Zambians, and other charities only reach a tenth. Half of Zambian children are suffering from malnourishment to the point of hindering their mental development, further exacerbated by the fact that they are missing out on their education as well. HIV-positive babies usually die within a year, and those whose mothers die are often viewed as doomed and so families “do not waste scarce food delaying the inevitable.” However, extended families have “adapted impressively,” by accepting the burden, with 72 percent of households in Zambia caring for one or more orphans (ibid.).

In another social adaptation, Cote d’Ivoire, Burkina Faso, and Togo, have made some progress integrating PWHA (people with HIV or AIDS) into counseling positions within local and national associations, and implementing income-generating activities. The countries most affected bear the consequences of the HIV/AIDS epidemic with progressively increasing needs for counseling, and “support at all levels: medical, psychological, social, legal and nutritional.” In Benin, Burkina Faso, Côte d’Ivoire, Cameroon, Mali, Togo, PWHA have contributed to national HIV/AIDS programs, by developing and implementing counseling centers and home care support initiatives (ICASA 2003).

The GIPA (Greater Involvement of People with AIDS) concept, through such initiatives, has proven to the international community that “it is possible to live with HIV and to contribute to the global response” (ICASA 2003). However, Badini (a GIPA activist writing from ICASA 2003) notes the irony that some community and national level efforts to incorporate PWHA into programs have served to reinforce the stigmatization toward those affected. She writes, “among all actors from civil society involved in the response through NGOs and other associations, the people living with HIV/AIDS in particular have committed themselves to changing mentalities within communities. Their efforts have been a valuable contribution to...the epidemic.”

Operating on the dictum that prevention is cheaper than treatment, Senegal, in one of the most successful anti-AIDS campaigns, sought the support of religious leaders (primarily Islamic and Catholic) from the start in 1986, before the disease got a firm grip, “to head off potential

⁷ May (personal communication, 2003) has also observed this phenomenon among middle-class people in Dar es Salaam, Tanzania. One family lost six relatives in a year to AIDS. But they appeared numb, taking each death as inevitable, and some Maasai interviewed about rural urban migration believed it was “brought by God” (cf. May and McCabe, unpublished, 2003).

opposition... to the sometimes sexually explicit messages” that such a campaign must necessarily broadcast (*The Economist* 07/02/1998). Social marketing of condoms at lowered prices, universal sex education in schools, and high-risk groups such as prostitutes and men in the army (over which the government had complete authority) were targets of the intervention. The outcome is changed behavior; not less sex, but more condom use (as tracked by sales). As a result, the rate of infection in Senegal has remained below two percent, compared with neighboring Cote d’Ivoire’s at 13 percent.

Programs aimed at prostitutes (100 percent condom use) and drug addicts in Thailand, Switzerland, and the United States have yielded similar positive results, without increasing either drug injection or sexually promiscuous behavior (*ibid.*), contrary to common arguments by religious leaders and others. In Mwanza, Tanzania, a combination of counseling and treatment of STIs in a clinical trial reduced HIV infection by 40 percent. In other studies in Kenya, Tanzania and Trinidad, it was concluded that risky behaviors can be reduced by up to 50 percent with ‘active intervention’ programs that combine condoms with counseling (*ibid.*).⁸

Currently, mines developed in Botswana have reversed former conditions, doing away with the all-male hostel system and encouraging families to live together. Nevertheless, it is a mystery that AIDS is still an enormous problem, with 38 percent of those between 30 and 34 testing positive in 1999; and even higher rates among those living near mines. But political will and the strength of government leadership in Botswana, with the highest incidence of AIDS in the world (35.8 percent), have convinced the Bill and Melinda Gates Foundation and the Merck Company Foundation to contribute \$50 million each to the country’s anti-AIDS over five years, as well as ARVs (*The Economist* 05/09/2002).

Economic Impacts

Because more young, productive-age people are ill and will continue to die, the demographics of SSA are changing, further increasing the socio-economic impacts of the disease. Predictions by IFAD (2001, in Drimie) of future changes include: alterations in the age structure of the poor (mostly elderly and children); more orphaned children forced to forego education; survival strategies leading to erosion of the household economic base, due to sale of land and other irreplaceable assets; increasing discrimination and marginalization of people living with HIV/AIDS; rising numbers of female-headed households (young widows and elderly grandmothers); and intensification of economic labor migration (Drimie 2002:8).

Several studies note that the AIDS epidemic has led “a significant proportion” of sufferers to return to their parents’ home just before they die (Pambazuka/Population Council); has led [urban] migrants in some countries to return to their rural villages (Toupousis and du Guerny 1999); that the costs of AIDS are borne by households and the public sector (Muwanga 2002); and that there is

⁸ Ann May and others have noticed a host of current beliefs and rumors which seem prevalent in SSA currently, partially born of ignorance, fear and desperation, which include fear of condoms, belief that they are infected, or have holes in them; and other beliefs that sex with babies/young girls and/or use of condoms can “cure” an HIV-positive person, etc. (May & McCabe 2003; cf. Talle 1995:29).

“huge impact at the level of individuals and households” and their communities (AIDS Infothek 2000: 5). This was echoed in *The Economist* (11/6/97), which also stated, however, that in spite of the fact that most victims of AIDS are in the prime of their working lives, there has been little impact on the overall economy, speculating that plentiful labor means “one family’s misfortune is another’s opportunity.”

But other writers noting significant drops in national income and gross domestic product contradict this. The effect on GDP would be modest in countries with a less than five percent infection rate among adults; or could result in GDP losses of up to two percent per year, where prevalence is 20 percent or more (Avert 2002). Another study estimates a decline of between 48 and 78 percent income “when a household member dies from HIV/AIDS, excluding the costs of funerals” (cf. Walker 2002:7, in Drimie 2002). This burden in turn impacts the macro-economy and national development of individual countries (Drimie 2002: 11). Others show that the AIDS crisis impacts not only child mortality but also the working-age population (Drimie 2002: 6; cf. Haacker 2002: 5). The International Labour Organisation (ILO) found “excessive numbers of juveniles” from 10 to 19 filling jobs in the Tanzanian labor force as productive-age adults die; and project that the number of workers not earning at least a dollar a day is falling to 1998 levels (Menda 2003).

Another indicator is the fact that the wealth gap between the world’s richest and poorest nations widened between 1961 and 1997,

from about a twelvefold difference to a thirtyfold one. The sharpest widening took place between 1994 and 2000 – at the same time as the inequalities in life expectancies and infant mortality rates grew most disparate (Garrett 2000:548).

An on-line publication for a September 2003 ECOWAS (Economic Community of Western African States) conference on AIDS and the workforce reports an ILO estimate: “[O]f the 42 million people worldwide living with HIV/AIDS, over 26 million are workers and by the year 2020 heavily infected countries will have a workforce 10 to 30 percent smaller” (a5coalition.org). As more workers in countries having already high unemployment rates fall ill and are unable to work, such “labor losses have the potential to impact aggregate output, tax revenue and overall economic activity.” For example, the South African economy is predicted to drop by 17 percent, and in Tanzania, the GDP could fall by as much as 15 - 25 percent, due to the epidemic (ibid.).

Loss of human capital is also the focus of an article by Cohen (2002) writing for the ILO about the negative impacts of AIDS in Malawi and Botswana, measuring impacts especially on education and health. Haacker (2002) also observes effects on labor supply, pension funds, public education, particularly the increased demands on the health sector in southern Africa, noting that HIV/AIDS’ impact on human capital affects mainly per capita incomes.

Impacts are felt in the health, agricultural and markets sectors, increased numbers of street children, interruptions in electricity supply, and increasing government inefficiency (AIDS Infothek

2000: 6-7). Costs to companies through losses of human capital due to AIDS include absenteeism, loss of production, need to train replacements and/or increase the size of the work force, according to the World Bank (ibid.). Some American firms operating in Africa (Anglo American, AngloGold, De Beers, Coca-Cola) are finding the necessity for “strategic caring” policies in South Africa – to put corporate anti-AIDS programs in place, due to the impact of the disease and the increased costs related to so many deaths from AIDS of workers between 20 and 40 (*The Economist* 10/03/2002).⁹ Especially given President Thabo Mbeki’s anomalous and well-publicized position on HIV and AIDS, the article notes, however, that such policies of education, treatments, and sick-leave payments carry the danger “that politicians will simply try to shift the burden of tackling AIDS on to the corporate sector” (ibid.).

Many reports have decried the loss of so many teachers to AIDS, impacting the education sector (Avert 2002). But a new study by Bennell (ELDIS 2003), contradicts such findings, saying that specific data are missing, due to lack of voluntary testing and counseling programs, but concludes that there is evidence that teacher mortality rates are actually declining due to increased ARV treatments and changing sexual behavior.

III. The Elderly and AIDS: Socio-Economic Contexts

The impact of the worldwide AIDS epidemic on persons age 50 and over has received little consideration except in the US...

- Knodel et al. (2002)

Although most African populations are aging, a fuller understanding of the details of this change is impeded by the dearth of national-level data. This issue has been addressed by several studies in South Africa, according to an international brief by Kinsella and Ferreira (1997). Older people are a vulnerable group; a case study in Zimbabwe by WHO (2002) notes the roles and responsibilities shouldered by older people in HIV/AIDS-related care. The health of older persons, already under multiple stresses of poverty, malnutrition, susceptibility to chronic diseases, and now the added burden of AIDS, is a neglected issue. Just as they reach an age where they might expect and require support, they are instead taking on the role of caregivers of their adult children.¹⁰

Caregivers: Patients and Orphans

The weight of responsibility on older people, to whom it is left to care for their sick and dying adult children with AIDS (Baiya and Peachey 2002), and the orphaned children they leave behind, is multiple and overwhelming, affecting all generations in a family (cf. Ainsworth and

⁹ Debswana, a Botswana government/De Beers diamond mining joint venture, is also fighting AIDS on every front, in hopes they will not have to train four workers for every position, as in Zambia, in the knowledge that three will die (*The Economist* 05/09/2002).

¹⁰ Mullan (1998) has written on the stressors involved in aging and informal care giving primarily with respect to gay populations in the United States, reviewing a large body of literature on these topics.

Dayton 2003; Barnett and Blaikie 1992; Hunter and Williamson 1998; World Bank 2000). A recent WHO study (2002) concludes that older persons are left largely on their own in this important role; their contributions are critical but generally ignored: They support terminally ill adult children and their orphaned offspring “in poverty, without recognition, and often in poor health.”

In a leaflet entitled “HIV/AIDS and Older People,” HelpAge International (2002) summarizes the African situation. In addition to the frailties of old age, the strenuous combination of the physical and emotional strains of providing care further puts their health at risk, as they become fatigued and are exposed to opportunistic infections and the bodily fluids of their patients. Elder women especially, who traditionally own little property in Africa, are at greater peril, with even fewer resources than elder men. Their grandchildren drop out of school for want of money to pay the fees.

Along with financial and physical considerations and the emotional stresses of burying their adult children and caring for grandchildren are also added the stigma and cultural taboo attached to the disease. As mentioned earlier, the silence and shame due to links of HIV/AIDS with immoral behavior are often fostered and perpetuated by government and church pronouncements. Sometimes isolated and shunned by their peers when it becomes known that they are caring for an AIDS patient, they are commonly accused of witchcraft linked to the deaths, and may be chased away from their community (ibid.).

Further, according to a World Health Organization study, although the *health* of elder care givers is arguably their “most precious asset not only to them, but also to their families and communities,” they are finding it difficult to access needed health services for themselves and the patients and orphans they care for due to high cost, distance, and the often-negative attitudes of health workers toward AIDS patients and primary care givers (WHO 2002).

Poverty exacerbates this complex situation, providing reduced food security and inability to spare the necessary time away from their dependent patients to engage in income-generating projects or farming (HelpAge 2002). In a Tanzanian study for the Population Council in the early 1990s, Dayton and Ainsworth (2002) indicated that although more time was spent in household tasks *following* the death of a prime-aged AIDS patient, there was no evidence of increased farm work by the elderly caregivers (also cf. Beegle 1998). It was also found that the physical well being of the elderly caregiver was at the highest level of stress during the illness, but recovered somewhat after the patient died. Not surprisingly, that study showed increased adverse impact on elderly care givers was more likely in poorer households than in better off households (ibid.).

In their interesting study of changes in the body mass index (BMI) of elder caregivers, Ainsworth and Dayton (2003) found that prior to the death of a prime-aged adult (67 percent of which were AIDS-related), “older persons in better-off households suffer a decline in BMI,” but this is not the case in poorer households. The reason may be that the poorest families receive public or private (NGO) transfers that in some cases help mitigate the loss (ibid: 133). Even following the death of a spouse (which was examined as a control group), the impact of a decline in BMI was greater in non-poor households, presumably for the same reason.

Zimmer and Dayton (2003) analyzed Demographic and Health Surveys across 16 SSA countries for persons 60 years and over to examine determinants and distributions of elders living with children. Men were found more likely to live in a nuclear household, and women in extended household arrangements. Often women were also more dependent and likely to assume childcare and other household tasks. The authors point out, however, when analyzing living situations of older people, that poverty, migration of adult children seeking wage labor, and other factors may, in fact, affect the living arrangements of the older generation to a greater degree than the AIDS epidemic.

Sexuality

As already mentioned, in countries with moderate to severe prevalence, including those in SSA, heterosexual relations are the predominant mode of HIV transmission (Knodel et al. 2002). Although older persons are often still sexually active, especially older men in polygynous groups, and therefore at risk of contracting HIV and spreading it, this issue has been skirted by most researchers, support agencies, and intervention and education programs (cf. HelpAge 2002). Indeed, the bulk of such programs and information is focused on health-based approaches and/or treatment regimes (Muwanga 2002), and are targeted almost exclusively at the young as the most vulnerable group (UNESCO 2002).

UN (2002) studies find that worldwide the dominant mode of transmission for people over 50 years is heterosexual sex. Additional risk factors include unprotected sex, multiple partners, the presence of other sexually transmitted diseases, and substance abuse, conditions that exacerbate risk. Older people view condoms as primarily contraceptive, and feel no need for them since they no longer fear pregnancy. In the past five years, prevalence has grown 40 percent among older women (over 50 years), “due to the sexual behaviour of their partners” and biological changes during menopause (UNAIDS 2002). A greater degree of risk for HIV exists due to physiological conditions present in elder populations: thinning of the vaginal wall, reduced lubrication, and osteoporosis all lend complicating factors for this group (ibid.).

IV. Discussion and Research Needed: Breaking the Silence

Despite the socio-cultural, economic, biological and gender-based circumstances reviewed here, at a Geneva meeting in preparation for the UN summit on AIDS, the United States delegation rejected a “rights-based approach” preferring to consider AIDS as “a health-

policy problem” or, barring that, as an issue of “national security” (*The Economist* 07/11/02).

The majority of agencies (e.g. HelpAge, Population Council, WHO, UNAIDS) and other writers whose studies are reviewed here agree that much more research is needed in all areas relating to older persons and HIV/AIDS. Orphan-hood and children’s plights receive considerable focus, but less attention is paid to effects “at the other end of the generational continuum,” elders whose adult children die (Wachter et al. 2002). There are few reliable age profiles for HIV-infected or AIDS populations. Negative interactions between health care systems and elder caregivers, as well as the largely unexplored potential of older persons to function as intermediaries and contributors to prevention and treatment programs, also need attention (Knodel et al. 2002).

Judging from publications coming out of the ICASA conference in Kenya in September 2003, perhaps the greatest underlying challenges in the epidemic at a very basic level are silence, stigmatization, and prejudice or discrimination – often due to lack of correct information. In some cases, reactions toward PWHA take the form of subtle social behaviors such as abandonment, rejection, and frustration; in others, physical violence. Efforts of GIPA groups still lack financial backing and visibility at international levels. Badini is clear that negative attitudes in society itself must change in order to make any progress against these hurdles, and stresses the importance of the roles that traditional and religious leaders might play here. They could wield considerable influence at community levels to bring greater awareness, understanding, and acceptance, first steps in the war on the epidemic. However, the dearth of regional, national and global level campaigns to increase awareness of GIPA, and the often negative social, cultural and political environment characterized by “denial, fear, stigmatisation and discrimination... as well as economic problems... and inadequate training and capacity building programmes” hamper participation by PWHA (ICASA 2003).

With a significant stake in encouraging safe behavior among younger adults, older family members often possess the emotional (and sometimes material) leverage to affect such behavior. Elders in Africa are traditional educators, teachers and purveyors of cultural values, ideals, and rituals; younger people are accustomed to viewing them as repositories of wisdom, guidance, and advice (May 2002, 2003; May and McCabe 2003). These assets could be utilized in developing effective interventions, as could their potential to provide peer counseling and emotional support to other older people in caregiver situations (Knodel et al. 2002).

A HelpAge (2003) briefing paper points out the importance of increasing the capacity of older people’s organizations to understand the implications of the epidemic, and develop a base of evidence concerning their roles and needs, as well as potential for inclusion of elder groups in HIV/AIDS interventions. Intergenerational approaches could be effective in mainstreaming aging into policy and rights practice and development (HelpAge 2003). The UN (2002) notes that in policy and program development, there has been little focus on the added burden of care that falls to elders.

The sexual behavior of older people needs more study as well: “almost no systematic

research has been done on the sexual activity and practices of older adults” in countries with moderate to severe prevalence. It is especially important to focus attention on marital and extramarital behavior, and older men’s involvement in transactional or commercial sex patronage (Knodel et al. 2002). Further, more study is needed on migration, since some writers have found that infection may be originating not from the migrant but from the rural partner, in some cases (cf. Lurie et al. 1997).

While it was found that 61 percent of older adults in SSA live with a child, and 43 percent live with a grandchild, much more study is needed in order to disaggregate the “complex set of associations between fostering as normative behavior in SSA culture, rates of HIV/AIDS, and living arrangement patterns” (Zimmer and Dayton 2003; cf. Khan 2002).

Wachter, Knodel and VanLandingham (2002) call for more research on the demographic magnitude of the consequences of HIV/AIDS. In Thailand, they conclude, the chance that an older family member will lose “one or more adult children during one’s lifetime will be 70 percent higher” than without AIDS. HelpAge (2002) points out that there is still considerable need for informative research on the risk for care givers, especially on economic and health impacts, issues of rights violations for those accused of witchcraft, and attitudes of health workers towards older care givers. Prevalence data needs to include older people and be disaggregated by age. Culturally appropriate HIV/AIDS information and education should be disseminated and targeted toward older persons (ibid.). Baylies and Bujra (2000) urge that both men and women must be brought into the struggle through a re-examination of the inequalities of power.

Although the “ultimate answer of prevention is yet to be found,” Webb (1997:xiii) argues that “awkward political questions” must be raised about resources, empowerment and human rights, and incorporated into a long-term intervention approach.

My additional suggestions/ideas for further research:

- Much of known information on impact of AIDS on older persons is anecdotal (Ainsworth & Dayton 2003: 132). What is the risk and frequency, for example, that elder caregivers become ill also (from TB, other opportunistic infections due to under-nutrition, extreme work/fatigue, or HIV) as a result of their ministrations to their relatives with AIDS?

- What is the long-term magnitude of impacts of their impoverishment, lack of support, reduced physical status, extra care burden (of orphaned children and the sick, and maintaining farms or income generation) on their own productivity and longevity? Ainsworth & Dayton deal with the BMI of elder caregivers, but what about other indicators, and impacts of being left childless?

- Investigate reasons why miners are still being infected despite Botswana’s ‘civilised mines’ that encourage families to live together and do away with the hostel system, ostensibly

lessening sexual interaction with prostitutes? Account for anomalies between countries' socio-economic situations and their prevalence rates; e.g. southern Africa (see page 10).

- National surveys needed of welfare of elderly, including number of living (productive and supportive) children, economic circumstances, access to adequate health services, real effects of stigma and prejudice, etc.

- Research needed into potential interventions targeted toward mobile populations such as Maasai and other marginalized groups; delve into patterns/local regimes of migration and sexuality; effects on elderly left behind.

- Track sexual behavior and practice changes with AIDS among individual countries or groups. (Some changes are beneficial, some not – such as sex with younger girls, children, or Maasai women, for example, in belief that they are 'safe,' or sex with them can cure HIV.)

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