

Rethinking the African AIDS Epidemic

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Abstract

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Half the AIDS victims in the world are in East and Southern Africa where adult seroprevalence was 11.4 percent by the end of 1997 and reached over 25 percent in two countries of Southern Africa. HIV/AIDS infection is not the result of ignorance as nearly everyone has sufficient knowledge about AIDS and how it is transmitted. The high levels of AIDS arise from the failure of African political and religious leaders to recognize social and sexual reality. The means for containing and conquering the epidemic are already known, and could prove effective if the leadership could be induced to adopt them. The lack of individual behavioral change and of the implementation of effective government policy has roots in attitudes to death, and a silence about the epidemic arising from beliefs about its nature and the timing of death. International responsibility may have to be taken before the needed effective policies are put in place.

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The African AIDS epidemic is a contemporary health crisis of staggering proportions and one with which both African society and governments, as well as the international health system, have signally failed to cope. This need not have been so, and need not be so. We now know enough about the social context of the epidemic and the interventions which would probably succeed, to begin to limit the epidemic's impact without waiting for the development of vaccines or depending on antiretroviral drugs for prolonging life.

On a global scale HIV/AIDS is one of many problems. UNAIDS and WHO (1999) estimates up to the end of 1999 show a total of 50 million people either having died of AIDS, or infected and probably ultimately doomed to die of the disease. This number compares with estimated mortality from the Black Death in fourteenth-century Europe of 20 million and a similar number of deaths globally in the Spanish influenza epidemic in the second decade of the twentieth century. There is as yet no guarantee that eventual AIDS mortality will not double or rise even higher. It is not a classical epidemic which burns itself out. Both the Black Death and influenza stayed in individual localities no longer than two to three months, while AIDS has been in parts of Africa for nearly two decades. This difference may be related to the fact that the latency period from infection to symptoms is only a matter of days in the case of bubonic plague and influenza, while with AIDS it is closer to a decade. AIDS has probably reduced the world's current annual population growth rate from 1.5 to 1.4 percent.

But there are parts of the world where the situation is comparable with the Black Death which killed around one-third of Europe's population. Almost 70 percent of persons with HIV/AIDS and over 80 percent of those who have died of the disease are found in sub-Saharan Africa, and over 50 percent of those now infected are located in mainland East and Southern Africa which has a population of about 265 million or less than five percent of the *et al.* 1999: 2452-2454). There, at the end of 1997, the adult (15-49 years) HIV prevalence rate was 11.4 percent which rose to over 25 percent in Zimbabwe and Botswana (UNAIDS and WHO 1998: 64-65). Because the average duration

from HIV infection to death in Africa is only about 8.5 years, these seroprevalence levels translate to lifetime chances of dying from AIDS of around 40 percent in Eastern and Southern Africa as a whole, and 70 percent in Zimbabwe and Botswana (Blacker and Zaba 1997). Since 1997 the prevalence rate for the region has risen, especially rapidly in Southern Africa.

Behavioral change has limited the AIDS epidemic elsewhere, but the approaches employed have been tried nowhere in Africa on a national scale and in only a few places on a smaller scale. Some of the most striking examples come from the homosexual epidemic in Western countries. The example used here is the Australian epidemic because it is well documented, and early success in controlling the epidemic was achieved through cooperation between the government and the gay community (Dowsett 1990, 1993, 1999; Ballard 1998). The gay community had earlier moved towards recognizing themselves as a group with specific sex preferences about which they could talk unashamedly, and increasingly took the attitude that they were at particular danger of HIV infection and that only gay solidarity in confronting the epidemic could ward off disaster. The government helped with a sympathetic publicity campaign and with such practical steps as implementing intravenous needle exchanges. Efforts intensified after 1984, with HIV incidence subsequently falling by 70 percent over the next four years and by 86 percent over nine years (National Centre in HIV Epidemiology and Clinical Research 1998: 8). At first it was believed that the major mechanisms for such a rapid decline must have been a very substantial reduction in relationships with high-risk partners and a greater resort to monogamous pairing. Later research has shown that control of the epidemic was achieved mainly through a high level of compliance with condom use and strong gay community support in emphasizing the necessity for such compliance. Peer group education was essential. There was an emphasis on different **sexual cultures** and on a **safe sex culture** (Dowsett 1999).

Effective programs have also been carried out in developing countries, the most pertinent and noteworthy probably being that in Thailand. There, HIV transmission was predominantly heterosexual and much of the transmission took place in brothels. Health inspectors achieved a very high level of condom use by threatening brothel owners that the police would close the premises if it was shown that prostitution was taking place without condom use. Both

government-planned and spontaneous publicity given by the media to the epidemic led both to clients at the brothels being readier to use condoms and to fewer men going to brothels. In the next two years the sexually transmitted disease (STD) levels fell steeply among prostitutes and HIV prevalence among army recruits declined by two-thirds (Hanenberg *et al.* 1994).

This article examines why such approaches are not being used in Africa, how they might be used, and whether they would be likely to be effective. Just how different is Africa?

The evidence has been derived from ongoing collaborative social and behavioral research over the last twelve years in the region, beginning in West Africa, subsequently involving parallel research in Uganda, Nigeria and Ghana, and including other groups in conferences and workshops¹. The project first looked at the nature of sexual activity and its levels and causes (Caldwell *et al.* 1989, 1991a, 1991b, 1992b; Orubuloye *et al.* 1991, 1992, 1993a). Some work was done on the geographical spread of the epidemic (Caldwell and Caldwell 1993). In total, this research described a society where land had not been owned or inherited by individual families and where a high level of disease always threatened premature death. The result was that traditional religion, unlike the major religions of Asia and Europe from which the society was long insulated, placed its greatest emphasis on fertility rather than on restricting female sexual activity to marriage (Caldwell and Caldwell 1987; Caldwell *et al.* 1989). This meant that women were in less danger from relatives or society than in the Old World agrarian societies if they practiced premarital or extramarital sexual activity or if they resorted to prostitution either full-time or occasionally (Orubuloye *et al.* 1994a, b). There was a high level of demand by men for sexual relations other than with their wives for two reasons. The first reason is that the world's highest levels of polygyny² can be sustained only if husbands are much older than their wives (Caldwell 1963; Goldman and Pebley 1989). This means that most men still cannot marry until their late twenties, and, until one hundred years ago, possibly could not until their late thirties (Peel 1983:119). Society has always allowed single men discreet access to sex, usually with relatives before colonization (Caldwell *et al.* 1991a), rather than face the social instability that its denial would almost certainly cause. The second reason is that over large parts of the region wives are not available for sexual relations for much of marriage because of long periods of postpartum sexual abstinence occurring frequently because of high levels of fertility (Caldwell and Caldwell

1977; Page and Lesthaeghe 1981; Schoenmaeckers *et al.* 1981). Later research in the project focused on women's limited control over their sexual activity (Orubuloye *et al.* 1993b), and men's perceived need for sexual relations with more than one woman (Orubuloye *et al.* 1997). The latter is implied by the centrality of polygyny as a social institution, and most men and women believe that men are biologically programmed to need sexual relations with a variety of women. A recent study of men in hotels and bars who suddenly decide to have sex with prostitutes revealed that most of them talked of uncontrollable needs rather than pleasure (Caldwell *et al.* 1996b: 117).

Both behavioral research and the parity between males and females in infection increasingly showed the sub-Saharan epidemic, uniquely in the world, to be almost exclusively heterosexual. The existence of even one epidemic of this type is surprising because the HIV transmission rate during one act of vaginal intercourse between otherwise healthy persons is so low: perhaps one per thousand acts from the female to the male partner and one in 300 from male to female. This epidemic has been made possible by a number of factors: (1) a higher level of sex outside marriage than occurs in Old World agrarian societies; (2) a high level of prostitution, caused partly by the lack of wives or sexually accessible wives and partly by the mobility of the population and an excess of males in many urban areas; (3) a resulting high level of STDs – the world's highest level according to a WHO study (1987: 967) – which act as cofactors for infection, thus removing the qualification above about the partners being “otherwise healthy”; (4) the persistence of ulcerating untreated and uncured STDs because of poverty and the world's poorest health facilities; and (5) a low level of condom use, even in commercial sex. On their own, even this range of conditions is not sufficient to sustain a major AIDS epidemic: the majority of West African countries exhibit adult HIV levels below 2.5 percent (UNAIDS and WHO 1998). There is probably at least one additional factor operating in East and Southern Africa, whole ethnic groups not practicing male circumcision (Bongaarts *et al.* 1989; Moses *et al.* 1990; Caldwell and Caldwell 1993).

The failure to control the African epidemic

The reasons given to explain how a major heterosexually driven AIDS epidemic came about in sub-Saharan Africa are insufficient to explain why it has persisted. All the conditions listed

above are susceptible to change by either individual or government initiative. There has in fact been no change recorded at a national level except in Uganda where HIV infection rates appear to have fallen among the population under 25 years of age (Konde-Lule 1995). This lack of change has for some years now been the focus of our program and its conclusion is that this situation should not have been allowed to persist and is reversible. It is not an insoluble African problem.

Our first attempt to draw together our findings and thinking on the matter was in an article, “Underreaction to AIDS in sub-Saharan Africa” (Caldwell *et al.* 1992a). This guided later research and was supplemented in the mid-1990s by an attempt to identify attitudes to men’s sexual behavior (Orubuloye *et al.* 1997). The present article is largely informed by two further experiences. The first was the move to focus our research and that of others, mostly in Africa but with some research for comparison in Asia, on resistances to behavioral change to reduce HIV/AIDS infection in predominantly heterosexual epidemics in developing countries, which resulted in the research reports being presented to a conference in Canberra in April 1999 and subsequently being collected in a book (Caldwell *et al.* 1999a). The second was my participation in the 11th International Conference on AIDS and STDs in Africa in September 1999 in Lusaka, Zambia, in following Track 2, “HIV/AIDS and socio-economic consequences”, which included statements on policies and plans by governments and international organizations, and then summarizing the presentations in a report to the conference’s final session.

The gist of the “Underreaction” article was that people preferred not to talk about AIDS partly because it was an unusual disease with mysterious symptoms, perhaps related to the occult, and partly because it was associated with sexual behavior in a society that found it hard to talk about sex publicly or across generational or gender boundaries. There was a great deal of denial in the society, and people who had attended many funerals of AIDS victims were not certain that they had attended any because none of the victim’s relatives gave AIDS as the cause of death and none of the mourners discussed AIDS. There was a strange bravery or carelessness about the risk of death, partly because many believed that the timing of their death was preordained and others felt that pathogens alone, without the assistance of witchcraft, could not bring it about.

The article noted that no one blamed governments for inaction. Nowhere had there been riots or even demonstrations, and this is still the case even in countries where over one-quarter of adults are currently seropositive and where most of the population will die of AIDS. This is one of the reasons why governments are not keen to take effective action. They fear creating for themselves more trouble than the AIDS epidemic causes them. Heads of state do not wish to be associated with the epidemic, and, in spite of much protest from the Lusaka conference, not a single president or prime minister attended it, even for the opening and closing ceremonies. The other reason for not taking action is that many of the politicians regard the disease much as their electorate does. Much of the action that has been taken has been by foreign-funded NGOs or as part of programs partly planned and largely funded by international donors.

The problems that African governments have in communicating with their citizens, with outsiders and among themselves was clear at the Lusaka meeting. After 20 years of the AIDS epidemic policy discussions are still full of abstract planning language, and with promises to organize, decentralize and base their work on the community. There was no desire to discuss just what would work in the field situation and why. This was jarringly different from the down-to-earth language and examples of family planning conferences and immunization workshops. There is a fear of alienating their followers by intruding into sexual matters and by speaking aloud on such subjects. There is a fear of failure. Above all there is a fear of confronting those who regard the only solution to be confining sexual activity within marriage, either because it is the law of God or because it will Westernize the family and modernize society. Three-quarters of Christian leaders in Nigeria believe that AIDS is a divine punishment (Orubuloye *et al.* 1993a: 99-100), and the proportion is unlikely to be lower in East or Southern Africa or among the laity of the congregations. The Catholic Church holds that the use – and hence the distribution – of condoms is forbidden. Most adults regard it as immoral to provide adolescents with condoms, and are reluctant to admit that the great majority are sexually active. Either these views are held by the politicians themselves or else the leaders are daunted by the opposition. Even though AIDS has already killed well over 10 million Africans and there are at least 25 million more moving towards death

(UNAIDS and WHO 1998) there is little political kudos to win by helping to stop those numbers multiplying.

However, we now know things that were not clear a decade ago. The first is that the unrestricted continuation of the epidemic is not a failure of the AIDS educational program. The Demographic and Health Survey program has shown that among men 98 percent knew of AIDS in 1991-92 in Tanzania, 99 percent in 1992 in Zambia and in 1998 in Kenya. For women at those dates the proportions were 93 percent in Tanzania and 99 percent in Zambia and Kenya. A more anthropological approach can show an inadequate knowledge of some methods of transmission or of the nature of the pathogen but almost all Africans know that there is a sinister new disease, AIDS, that it is sexually transmitted, that it is more likely to be caught if one has multiple partners or participates in commercial sex, and that the disease kills most people it infects. A decade ago it was believed that such knowledge should be sufficient to contain the epidemic. In this sense the education approach has failed, although massive education will still be needed, partly to show that the message has not been reconsidered, and partly because it might achieve other ends such as strengthening the fear of death.

We also know that the tide can probably be turned against the epidemic by the same means – or at least variations of them – used to contain it elsewhere. Two international firms in the Ivory Coast have provided for their workers and their families good health services and have made condoms readily available to any individuals in these families (Chevalier 1999). STD levels and apparently HIV incidence has fallen as steeply as in Thailand. The same approach has been taken in the villages of the Niger River Delta in Nigeria from which the oil companies draw their workers, with the result that STD prevalence fell by 40 percent in one year (Feleyimu 1999).

Efforts to ensure a higher level of condom use in sex with prostitutes might well succeed in Africa even though the circumstances are less propitious than in Thailand. In Africa there is the problem of different degrees of commercialism in sexual relations, but even the restriction of efforts to the most commercial of relations, where sex is paid for on the spot and where the young women work in bars and hotels where prostitution is allowed or encouraged, would be worthwhile. These are the women with the highest number of different partners and

consequently usually the highest seroprevalence, and a successful condom intervention here would have a disproportionate impact on the epidemic. In Africa prostitutes are usually not employees but separately rent their own rooms to provide sexual services. Nevertheless, these rooms are usually in a limited number of premises whose owners are susceptible to argument even from individual research teams as in Ado-Ekiti and Shagamu in Nigeria (Orubuloye and Oguntimehin 1999a; Dada 1999), and would be much more likely to conform to well organized pressure from government. Police and other officials can cooperate even in programs organized by private researchers (Esu-Williams 1995). Admittedly many of the prostitutes' clients complain that condoms rob them of a feeling of intimacy, but these sensitivities may be blunted by the facts that commercial sex is often said to be an urgent need (Caldwell *et al.* 1999: 117-118), that it is often an adventure for the young, or that is often undertaken with a degree of drunkenness. Research in South Africa has shown that this reduction in intimacy is a major reason why prostitutes prefer the use of condoms and may well cooperate in their use being made almost mandatory. They want to feel less intimate with their customers than with their husbands or other regular partners (Varga 1997: 81).

Research has shown that the level of sexual relations is high among single people and that their average number of different partners is greater than among the older and married (Orubuloye *et al.* 1991; Meekers 1994). HIV incidence levels are highest among the young, much being explained by adolescent sex. It is becoming increasingly clear from both family planning and AIDS research that, irrespective of the official policies of governments or NGOs, the unmarried, especially adolescents, find it almost impossible to get condoms (or other contraceptives) from health services or family planning clinics (Arkutu 1995; Stanback *et al.* 1997; Olowu 1998; Konje *et al.* 1998; Mturi and Hinde 1998).

It is postulated here that seroprevalence would now be falling rather than rising in East and Southern Africa if governments provided strong positive leadership in identifying the AIDS epidemic as needing the government involvement and social mobilization of total war (the mortality figures are similar); in exerting effective pressure to raise the level of condom use in completely commercial sexual relationships to 90 or 95 percent; and in ensuring that sexually active adolescents have easy access to condoms and are encouraged to use them. The reasons

why neither society as a whole nor governments are moving in this direction are interrelated and are the subject of the rest of this article.

Relevant aspects of the society

Caldwell *et al.* (1992a: 1178-1179) reported that one element in the failure to control the AIDS epidemic was an extraordinarily stoical attitude to death. Subsequent research, especially that focused on this point in the research leading up to the 1999 Canberra conference, supported this interpretation (Orubuloye and Oguntimehin 1999b; Caldwell *et al.* 1999b; Awusabo-Asare *et al.* 1999; Amuyunzu-Nyamongo *et al.* 1999).

One reason for the bravery about death relates to **health transition** (Simons 1989; Caldwell 1993). With the transition from an agrarian society based on family production and usually characterized by high mortality, to a more urbanized, non-farming or market-oriented farming characterized by employment by non-relatives and usually low mortality, individuals become more sensitive to the risk of death and this in itself is a powerful force in reducing mortality further. The earlier society was insensitive to death partly because it was less avoidable and so common that individuals and society just had to accept it. In agrarian joint families daughters-in-law had to show their prime loyalties to assisting the whole family productive effort and had to defer to the patriarch and matriarch of the family. The unacceptable daughter-in-law was one who placed a major stress on caring for her children's health, or that of herself or even her husband (Caldwell and Caldwell 1992). Where we worked in rural South India an illiterate daughter-in-law was in danger if she drew attention to her child's illness before her mother-in-law did so (Caldwell *et al.* 1983: 196). Over time in the West death came to be regarded as absolutely the worst outcome, and qualitatively different from all other outcomes. Individuals felt ever more strongly the duty to intervene to reduce the risk of death to their children, their spouses, themselves and others (Simons 1989). Modern education contains a strong message that this should be so. Sub-Saharan Africa has consistently exhibited the highest mortality in the world, with a life expectancy of 37 years in the early 1950s and perhaps 49 years now (United Nations 1999a; Population Reference Bureau 1999), and the lowest educational level (World Bank 1997: 226-227). Much of the recent research suggests that this is still an important reason for a distinctly careless attitude to life in Kenya, Zambia, Ghana and Zimbabwe (Höjer 1999; Anarfi 1999; Awusabo-Asare *et*

al. 1999; Mupemba 1999). Some men practicing high-risk sex say that, if the latency period is a decade, they are not worried because they are likely to die of something else in such a long time.

There are, however, other forces. There is a widespread belief that at least some role is played by predestination, that one's time to die was determined long ago, an attitude perhaps strongest in West Africa (Fortes 1983: 7). Recent research findings in this regard were summarized by Awusabo-Asare *et al.* (1999) in the Ghanaian proverb, "All die be die", by Orubuloye and Oguntimehin (1999b) by the Nigerian attitude that "Death ...will come when it is due...", and for East Africa by Amuyunzu-Nyamongo (1999) in the philosophy that "Everyone will die anyway". In southern Nigeria only one-fifth of respondents said that they were afraid of death, even premature death, and half linked this to a philosophy of predestination (Caldwell *et al.* 1999b: 120). They knew it was not their time to die because of their robust spirits, often as displayed by their sexuality. There is also a pervasive belief that the underlying cause of premature death is witchcraft, performed by an enemy or by an expert at the behest of an enemy, and even many who recognize the role of infection and pathogens believe they are merely the intermediary mechanisms. In these circumstances there is little point in avoiding one type of infection only to find that the malevolent forces settle for another mechanism. In the more urbanized, educated, Christianized and Moslemized areas these beliefs are waning but two-fifths of Southern Nigerian respondents thought it possible that these forces played a role and half thought so in rural areas (Caldwell *et al.* 1999b: 118). The great majority thought AIDS was different from other diseases, not merely in its near-universal mortality, but in that it was caused by malevolent forces or was a divine punishment. This largely explains the extraordinary silence about the disease, a matter to which we shall return because the silence is a basic cause of individual and government inaction.

Two further points should be made, one about males and the other about adolescents.

The first is that most Africans believe that males are biologically programmed to need more than one woman (Orubuloye *et al.* 1997). It could hardly be otherwise in a society where polygyny is a central institution. In most of West and Middle Africa over 40 percent of

currently married women are in polygynous marriages (Lesthaeghe *et al.* 1989: 276-277), and a much higher proportion will be in such marriages in the course of a lifetime. In East Africa the most common proportion is now 20-39 percent but it probably was higher. Many men feel that high-risk sex is unavoidable, as was clear from research in Ado-Ekiti, Nigeria on men in bars and hotels that offered sex (Caldwell *et al.* 1999b; Orubuloye and Oguntimehin 1999b). The high age of men at marriage – a product of the polygynous system - and the large numbers of wives sexually inaccessible at any specific time aggravate the situation. In much of West Africa, Middle Africa and East Africa the male singulate mean age at first marriage is over 25 years and in Southern Africa over 27 years (Lesthaeghe *et al.* 1989: 272-273).

The second point is the situation of adolescents. In Ghana, Awusabo-Asare *et al.* (1999) argue that risk-taking, especially sexual risk-taking, almost defines adolescence. Anarfi (1999) found that sex among Accra street children was necessary for support, companionship and binding the group together. Across sub-Saharan Africa it has been found that there are almost irresistible peer-group pressures on both male and female adolescents to have sexual relations, and on girls by their boyfriends to demonstrate their love or to maintain the relationship by giving in to the boys' sexual advances (Caldwell and Caldwell 1987: 239-241; Varga 1999: 22-25; Preston-Whyte 1999: 146-148). A situation was found in Ibadan City, Nigeria, which is probably common in urban areas of the region, where fathers were distant and frequently absent and mothers busy, so that girls depend on their boyfriends for affection and adolescents of both sexes needed peer groups to at least partly substitute for families (P. Caldwell and J.C. Caldwell 1987). There is a need for policies that are realistic about adolescent culture, lifestyle and sexuality (Dowsett *et al.* 1998).

The current policy situation

Africans have been educated by AIDS programs to know that AIDS is deadly and largely spread among them by high-risk sexual activities. The epidemic cannot be defeated by more education. Both the educated and the religious leaders find it hard to accept that Africans have chosen to maintain their sexual system and to accept the risk of AIDS if the only method of avoiding it is to restrict sex to marriage. Most Africans feel that this is no choice at all, but few publicly put it into words. We reported that research in Nigeria on sexual activity in the

late 1980s could proceed only when we assured people that we were linked neither with the churches nor governments, institutions which were felt to take a jaundiced view of sexual activity and to be ready to use the AIDS epidemic to limit it (Orubuloye *et al.* 1991: 63).

The situation is misunderstood and the problems aggravated because of the silence surrounding the AIDS epidemic. This silence is extraordinary and had not been predicted. It goes far toward explaining the passivity of the people in the face of the ravages of the epidemic, the failure of governments to speak out, and the fact that governments have not faced great protest against their inactivity. There is less public or media discussion of AIDS in Zimbabwe, with an adult seroprevalence level approaching 30 percent, than there is in Thailand with a level of 2 percent.

The situation is still much the same as it was seven years ago when summarized in Caldwell *et al.* (1992). There is little public and even less private discussion of AIDS. People go repeatedly to funerals of AIDS victims without discussing the probability that the cause of death was AIDS and without challenging the statements of the deceased's family that the cause was something not only different but improbable in view of the timing and nature of the death. In Nigeria, where the adult seroprevalence level was already over 4 percent at the end of 1997 (UNAIDS and WHO 1998) and where many people go to funerals, partly because the death rate is still fairly high and partly because great numbers attend each funeral, research shows that hardly any of the respondents were certain that they had attended an AIDS funeral. Most could name only one person who they were certain had died of the disease and that was Fela, the famous Lagos-based musician (Caldwell *et al.* 1999b: 116-117). This was because his brother, a prominent medical figure, had announced the cause of death to the press, but it should be noted that the rest of the family denied this diagnosis as had Fela himself during his period of sickness, at least partly because he claimed the disease did not exist. The silence is similar in the press. It mentions AIDS deaths but does not bring immediacy to the situation with stories of the affliction or death of known people with the disease. The situation is similar with known contacts: at a time when the seroprevalence level among Lagos prostitutes was said to be 20 percent (Ransome-Kuti 1992), no prostitute in a large-scale survey knew anyone infected, probably because sick girls silently left for home (Orubuloye *et al.* 1994b: 114-115).

The silence is partly because the population have been taught that AIDS is a sexually transmitted disease and is associated with sexual activity outside marriage. The churches have taught that this is a shameful thing and many believe the infection was a punishment for sin, and are reluctant to disclose that any of their relatives bear such witness. The silence should, however, be seen in a broader context. Sex outside marriage is widely practiced in the region but it is rarely the subject of *macho* boasting and usually not talked about at all. One reason is that men feel that they must seek extramarital sexual relations when their wives are practicing postpartum abstinence but that family stability is maintained by never saying so (P. Caldwell and J. Caldwell 1987: 243-244). Wives are not supposed to recognize their husbands' extramarital sexual activities and the pretense is well maintained. In a study of the Ondo Town area of Nigeria, only 10 percent of the extramaritally sexually active husbands said it was likely that their wives knew of their activities (Orubuloye *et al.* 1992: 349). Such a small percentage of knowledgeable wives is an absurd assessment. There is an inability to discuss sexual activity across generational or gender lines, especially within marriage. Fathers find it almost impossible to discuss their sons' sexual activities, possibly because they are not supposed to discuss within the marriage their own extramarital sexual activity. In South Africa mothers bring their sexually active daughters to family planning clinics without having discussed with the daughters why they need to go, and without being able to tell the clinic staff why they have brought their daughters. In these circumstances most parents do not wish the government to admit the existence of adolescent sex, let alone facilitate it, or reduce the risks by providing condoms. Many church leaders concur. This attitude has presented both AIDS and family planning programs with great difficulties.

Families are also silent about members suffering from HIV/AIDS because they fear isolation or ostracism from neighbors or, in a few reported cases, violence. But the main reason for the silence about AIDS is almost certainly the apprehension about treating in a cavalier and open way such an unusual disease, in which witchcraft or divine punishment may be an element. It would be asking for trouble. Witchcraft or other occult manifestations are either whispered about or not mentioned at all. Only two out of five Nigerian respondents were certain that AIDS was just another disease with no other-worldly component (Caldwell *et al.* 1999b: 118) but even they are likely to adopt the attitude that the West used to take about cancer –

something that really should not be discussed. The silence, in turn, makes AIDS seem even more unusual.

The silence is also made possible by the long latency period of the disease. It almost takes an act of faith to relate the appearance of AIDS symptoms to sexual behavior a decade ago; given that at least 95 percent of seropositive Africans do not know of their infection. This has allowed some Africans³ to deny the link or even the existence of AIDS. Here again, it is their being accustomed to a high level of mortality that is the critical issue.

Condom use is still a long way from defeating the sub-Saharan African AIDS epidemic. Sub-Saharan Africans were probably more hostile to the use of condoms than people in any other major region of the world. The Demographic and Health Surveys show rapid increase in condom use, but the figures are usually for ever-use and are never for constant use, and the rises begin from a very low base. For 1998, the United Nations (1999b) estimates current condom use (by women of reproductive age) to be 14 percent in developed regions, rising to 46 percent in Japan; 4 percent in Latin America; 3 percent in Asia; and only 1 percent in Africa and Oceania, the latter dominated by Melanesia. African males typically complain of the loss of sensual enjoyment, and women have feared injury or ill-health, often citing stories of women who died of infection after condoms were sucked into their wombs.

Nevertheless, use of condoms is increasing because of worry about AIDS, and, with greater use, the fear of them is diminishing. Indeed, in Nigeria, first when more emphasis was being given to AIDS than family planning, and increasingly when it was partly isolated in political and technical aid terms during the Abacha regime (1993-98), so that most contraceptives arrived from overseas in smaller quantities while condoms for the prevention of AIDS were provided in greater numbers, Nigerians increasingly used condoms also as contraceptives (*cf.* on the first period Caldwell *et al.* 1992b). Many adolescents everywhere are ready to use them if they can be obtained, because nothing else meets the need when sex is suddenly decided upon and the girl has not been contracepting. Some non-governmental organizations (NGOs), most with foreign connections and funding, have been successful in the social marketing of condoms and have shown there is a demand, probably greater than they can meet. However, there is opposition to condom use and there are misinformation campaigns,

often associated with Christian, particularly Catholic groups, and often, too, with foreign connections. The charges against condoms range from exaggerated accounts of the likelihood of the HIV retrovirus passing through them to claims of the deliberate puncturing of some of them and the charge that their use is mainly responsible for the epidemic, sometimes by their being covered by tiny spikes which inject the pathogens. It is surprising just how many people have read or heard of these charges and how many have been at least partly convinced of their truth.

Given the magnitude of the epidemic, one of its most bizarre aspects is the reliance placed on NGOs. Governments, unwilling to be very active themselves, are happy to have issues of sexual activities and AIDS tackled by these organizations, or at the very least they are susceptible to pressure by foreign donors to allow the NGOs to operate. International donors trust the NGOs to have a realistic attitude to the epidemic, and are therefore anxious that they should continue their work even if national governments succumb to external pressure to mount major government programs. At the 1999 Lusaka African Regional AIDS Conference the code word for this, understood by both the international donors and the African officials, was “multisectoral”, and it was repeatedly argued by donors that future programs should remain multisectoral.

Defeating the AIDS epidemic

The African AIDS epidemic can be defeated by means already known and easily implemented. Its defeat should be an international priority justifying international pressure on, and inducements offered to, the African governments involved. At the end of 1997 almost ten million sub-Saharan Africans had died of AIDS and another 20 million were infected and waiting to die (UNAIDS and WHO 1998). If the present level of government inaction continues, it is likely that 50 million will die before there is an effective vaccine, and numbers could go much higher still.

To begin to contain the epidemic, it will not be necessary to stop all HIV transmission. What is necessary, as with all epidemics, is to ensure that the average number of people infected by each person already infected falls below one, hopefully well below one. This can be achieved by reducing transmission where it is at the highest levels, by ensuring that a very high

proportion of the most commercial of sexual relations was accompanied by the use of condoms, and a high proportion of premarital adolescent sexual activity involved the use of condoms. Both would require much highly motivated activity on the part of national governments. These activities would be most likely to succeed if they were accompanied by (a) a continuing education program focusing as now on the danger of HIV infection, but stressing more the necessity of using condoms and the horror of unnecessary death; (b) an efficient system for distributing condoms by different routes, some allowing the recipients to preserve their anonymity; and (c) a much greater provision for STD treatment so as to reduce the role of cofactors in HIV transmission.

Governments have not moved to a kind of wartime footing and carried out these steps for a number of reasons. First, there is a lack of reality in the society and in governments about the enormous scale of deaths and impending deaths. Second, there is an astonishing reluctance by governments and many church leaders to recognize the African sexual system. This was the case a decade ago among many African academics, researchers and intellectuals when we published “The social context of AIDS in sub-Saharan Africa” (Caldwell *et al.* 1989) and “The family and sexual networking in sub-Saharan Africa: Historical regional differences and present-day implications” (Caldwell *et al.* 1992c), but most seem to have changed their views. In contrast governments, and some outside agencies, misinterpret the failure of the educational effort to curb the epidemic as a sign that it was not good enough or was not understood, rather than that it met with deliberate resistance from people satisfied with their sexual system and unprepared to change it although not capable of expressing themselves loudly enough. They fail to find their voices partly because many are illiterate and poor but also because even the educated, being mostly Christian, find themselves incapable of defense except by quietly ignoring their religious leaders: a situation not very different from that found during the late nineteenth century fertility transition in the West, and with some parallels in that the main AIDS belt of East and Southern Africa is 20 percent Catholic, 36 percent other Christian, both Protestant and African fundamentalist groups, the latter often hostile to contraceptives, 12 percent Muslim, and 32 percent traditional religion. Third, there is still no real recognition by government or many religious leaders of the rights of **civil society**, where people deserve help in avoiding death even if their sexual behavior is at odds with the preached orthodoxy.

This summary captures the essence of the situation, and is the one on which action should be based, but it still needs some modification. The first point is that there has apparently been a decline in HIV levels in one African country, Uganda, and note should be taken of its experience. As yet the evidence for that decline comes from a very small number of urban antenatal clinics and no evaluation has been published of possible changes in the composition of the clients. A recent analysis of the situation concluded that there must be behavioral change, but only because this was the residual category after other changes had been excluded (Kilian *et al.* 1999). Assuming that there has been a decline in seroprevalence, the reason is almost certainly the strong leadership of President Yoweri Museveni since 1986 and his insistence that AIDS should be discussed and identified as a national crisis needing action. On the other hand there is little evidence of unusually high levels of condom use among adolescents or in commercial sex. It might be noted that Uganda was one of the first two or three countries to suffer from a major AIDS epidemic and effective behavioral change took a further dozen years to occur. The longer experience of AIDS deaths may have had an impact, and AIDS mortality, selective in terms of high-risk sexual behavior, may also have played a role. Before the change came Uganda had lost almost 10 percent of its population to AIDS deaths, with another 5 percent currently infected, probably the world's greatest losses and together similar to the Soviet Union's proportional losses in World War I (UNAIDS and WHO 1998). This is not, then, such a success story as suggested by those putting all their hopes in behavioral change.

The second point is that there is not the homogeneity of risk that there is among homosexual partners in the West. Most women do not lead as high-risk sex lives as their husbands (Orubuloye *et al.* 1991: 21). Probably about half of those with the disease were infected by their husbands. Therefore, they need support in persuading their husbands to lead less risky sex lives. They also need to be able to reject husbands suspected of high-risk sexual behavior (*cf.* Orubuloye *et al.* 1993b). But their even more immediate need is the reduction of the likelihood of their husbands being infected, utilizing all the means suggested here.

The central plank in the victory over AIDS is the recognition by African governments of social and sexual reality. Millions of people are being allowed to die on the grounds that the

only way they can be saved is by adopting a more “moral” way of life, indeed a way of life that is not their morality. An unreal view of society still stalks African regional AIDS meetings.

Working within a framework of reality will be difficult. In the case of sexually active adolescents, if they are to recognize themselves as a sexual community with special needs in the way Australia’s gay community did, then they will have to be induced to provide their own organizations and leadership (in East and Southern Africa age grade organizations may provide a basis). Such organizations may prove to be the best way of channeling condoms to them. Something similar may be part of the solution in the case of prostitutes, except that the government will have to exert its strength to protect them by forcing the cooperation of landlords, bar and hotel owners, and ultimately the clients. The vigor will have to come from the heads of state and their more powerful ministers, and the encouragement may have to come from donors. At present, reality is slipping away, as the Lusaka Conference demonstrated, toward placing hope in millions of villagers successfully living on courses of antiretrovirals or turning toward indigenous herbal medicine. Finally, there must still be strong informational programs pointing out the reduction in the risk of AIDS from changed sexual behavior, but this should not be presented as the only option and vigorous efforts will be needed to make the other options as AIDS-risk free as possible.

Notes:

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1. The principal investigators have been I.O. Orubuloye, State University, Ado-Ekiti, Nigeria; John Anarfi, University of Ghana, and Kofi Awusabo-Asare, University of Cape Coast, Ghana; James Ntozi, Makerere University, Uganda; and John and Pat Caldwell, Australian National University. The SIDA/SAREC Adviser has been Per Bolme. The

conferences on research findings have been recorded in Caldwell *et al.* 1993; Orubuloye *et al.* 1994a; Orubuloye *et al.* 1995; Ntozi *et al.* 1997; Setel *et al.* 1997; Orubuloye *et al.* 1999; and Caldwell *et al.* 1999a.

2. In West and Middle Africa over 40 percent of married women are still in such marriages; see Lesthaeghe 1989: 276-277.
3. 2-4 percent in Nigeria, see Orubuloye and Oguntimehin 1999b:108.

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