Viewpoint

## Will HIV/AIDS Levels in Asia Reach the Level of Sub-Saharan Africa?

Major reasons that Asia is unlikely to experience African-level HIV/AIDS epidemics is that there is an ancient concept of nationhood and class societies with elites willing to undertake national leadership in emergencies, together with a different sexual culture.

By John C. Caldwell\*

The short answer to the question posed by the paper's title is "no", although any disease that kills millions should be combated with all the means available. I first addressed this question in an editorial in Social Science and Medicine a decade

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<sup>\*</sup> Demography and Sociology Program, Research School of Social Sciences, HC Coombs Bldg 9, The Australian National University, Canberra ACT 0200, Australia. E-mail: jack.caldwell@anu.edu.au.

ago (Caldwell, 1995) and little has changed since then. That view is supported by the evidence found in major recent reports upon which this viewpoint is based (Stanecki, 2004; UNAIDS/WHO, 2004; USAID/US Census Bureau, 2004).

The Asian and Pacific region should not relax. Nevertheless, the comparison of the region's present or likely future with that in Eastern and Southern Africa is absurd and dangerous. It tells us less about the disease than it does about the psychology and politics of donor international agencies and recipient national Governments. The picture presented is of a disease sweeping forward from one area to another as "Spanish" Influenza did in 1918 or the Black Death did in Europe in the mid-fourteenth century. Certainly, this seemed a plausible scenario in the 1980s after AIDS was first identified in Los Angeles, United States of America in 1981. In the course of that decade we found that it existed in most parts of the world, much of the spread doubtless taking place during the 1970s, and the pattern established by the end of the 1980s has, with some intensification, remained in place. The strongest evidence for the "sweeping forward" thesis of the spread of AIDS is provided by the failure of high HIV levels to develop in Southern Africa until the 1990s when the region took over world leadership in the density of infection. Equivalent examples are hard to find.

One can understand the very different levels of HIV only if it is realized that the causative retrovirus is in most societies difficult to transmit. Outside the body it dies very quickly; indeed most of its transmission is from one person to another in body liquids, usually blood, semen or mother's milk. Different societies are characterized by very different chances of this happening. This depends on many factors, of which the nature of the family, the position of women and attitudes to sexuality are paramount. This is shown by a level of adult HIV prevalence in sub-Saharan Africa of 7.4 per cent compared with 0.2 per cent in adjacent North Africa. Adult prevalence in Southern Africa is over 20 per cent, a level which means that almost half of deaths are due to AIDS and that life expectancy may be halved. In comparison, the levels in Japan, China and India are of the order of 0.02 per cent, 0.1 per cent or higher and 0.5 per cent, respectively, not markedly different from Australia and the United States at 0.15 and 0.6 per cent. What shows how precise the conditions must be for major epidemic to take hold is the situation across sub-Saharan Africa itself. Although the societies of Southern and Western Africa are not very different, adult prevalence levels are over 20 per cent in every country of the former and below 3 per cent in the majority of countries in the latter.

National figures, however, often disguise the danger in which sections of the population are placed. HIV levels are above average in most urban populations and

far above average among most sexually active homosexuals, commercial sex workers and intravenous-drug users (IDUs). Typically in sub-Saharan Africa prostitutes are characterized by HIV levels five or more times greater than those of other women. In Kathmandu in Asia seropositive levels for pregnant women, prostitutes and intravenous-drug users are 0.2, 17 and 50 per cent, respectively. In Japan, as in many other parts of the industrialized world, strict use of condoms keeps HIV levels among commercial sex workers to near zero, but the level among homosexuals, some of whom are given to risk-taking, is 2.9 per cent.

How, then, is sub-Saharan Africa so prone to HIV infection? Part of the difference, as Goody (1976) has argued, is that communally owned land, in contrast to ancient de facto private property in Asia, meant than control of marriage and hence of female sexuality, even male sexuality, was less rigid than in Asia. This allowed for relative female freedom for aeons but left women (and men) at danger of sexually transmitted infections (STIs) in the nineteenth century as Europeans disrupted African society and to HIV/AIDS towards the end of the twentieth century. In sub-Saharan Africa, around 57 per cent of those infected with HIV are female, partly evidence that women are more susceptible to the virus, but also a sign that the virus is being transmitted in the general community and that levels are high. Its existence in the general community means that control is difficult. In Asia 72 per cent of those infected are males, evidence that much of the transmission is concentrated in brothels or among the IDU or homosexual populations. Thus there are focal points where the disease may be controlled.

The conditions for a high-level, African-type AIDS epidemic include the following: (a) a considerable level of sexual activity outside marriage with female involvement as well as male; (b) some of that activity involving parallel partners; (c) a significant level of male sexual activity involving female commercial sex workers; (d) a carelessness of risk among many participants, often as a result of alcohol consumption; (e) a low level of condom use, often associated with strong male resistance to use; (f) a low level of health services allowing ulcerating STIs, which catalyse HIV infection to persist; (g) a fatalism about death arising partly from earlier very high death rates; and (h) a scepticism about the cause of the disease owing something to the fact that it is almost a decade from infection to symptoms (with only a small proportion of the population being tested for HIV).

Even this concordance of events is often insufficient to set in progress a major HIV epidemic in the general population (i.e., levels of 10 per cent or more of the adult population infected, as in Southern Africa, Kenya, Uganda in the past and the Central African Republic). The additional factor, not in itself a sufficient cause

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but multiplying the other factors, is whole societies of uncircumcised males: right down the main AIDS belt from East to Southern Africa the uncircumcising societies evidence higher often much higher levels of HIV/AIDS.

The situation in sub-Saharan Africa is improved by there being a relatively low usage of intravenous drugs (which are expensive in a region which can easily resort to locally produced non-injecting drugs like Kola nuts and marijuana). It is aggravated by extraordinary inaction on the part of Governments (Caldwell, 2000). Most of the East and Southern African countries are facing proportional losses of their 1980 populations comparable with the losses of the former Union of Soviet Socialist Republics in the Second World War. In those circumstances one would expect the heads of State to act like wartime leaders and to forcefully lead their ministers and public services into the battle to prevent further spread of HIV/AIDS. Except in Uganda, that has not happened. The leaders regard the battle as hopeless, as something likely to make them speak of forbidden subjects like sex, as promoting action which might annoy powerful religious leaders and (in common with most of their citizenry) as being a lost battle against the biologically based male need to have more than one partner (a not surprising view in the part of the world with the highest levels of polygyny). In the new nations, with leaders coming from specific ethnic groups and being resented by other ethnic groups and in a situation without an ancient class system, there is often an uncertainty about giving long-term moral leadership rather than reaping the short-term benefits of office. The African situation is rendered more difficult by probably the world's strongest aversion to condom use and by the dispersal of commercial and semi-commercial sexual activity so that large easily targeted brothels are the exception. Certainly, much of female semi-commercial sexual activity arises from poverty and the need to secure food for the children and protection for oneself. This picture does not imply that sub-Saharan Africa is an unhappy place. Far from it, indeed there is an element of happy-go-luckiness that assists the spread of the disease. The degree of freedom of women is one reason why migrant Africans tend to fit better into British society than do Bangladeshis or Pakistanis.

That most of Asia is different and will remain so is suggested by relatively and persistently low HIV levels. Field research in South India and Bangladesh showed that young, single rural males periodically made journeys to cities for business reasons or to visit relatives, and infected no one else. In the rare cases where a girlfriend was infected, she in turn infected no one else (Caldwell and others, 1999). The necessary networks for infection in the general community were not established. There was almost certainly a markedly lower level of parallel sexual partners (except in the case of prostitutes) than in sub-Saharan Africa. In Asian Muslim communities the supervision of females and universal male circumcision means that HIV levels are everywhere below 0.5 per cent and in the Arab South-West below 0.1 per cent. Lack of male circumcision among the majority population of India is probably the main reason its HIV levels are several times those of neighbouring Pakistan or Bangladesh, although high levels exist among tribals in two north-eastern hill states.

Major reasons that Asia is unlikely to experience African-level HIV/AIDS epidemics is that there is an ancient concept of nationhood and class societies with elites willing to undertake national leadership in emergencies, together with a different sexual culture. This is true not only of Brahmin or Confucian leaderships but of their successors in the form of democratic, communist or military leaders. They are helped by two facts: first, a significant level of commercial sexual activity taking place in identifiable brothels; second, a lower level among men of opposition to condom use. Thus the Government of Thailand was able to frighten many men from going to brothels and frighten most brothel owners into insisting on condom use. The national seropositive level was stopped from rising above 2 per cent, and there was not a real epidemic in the general population. Even in Cambodia, where the State has taken a battering and the identity of elites was savagely attacked, HIV levels appear to have been held to 4 per cent. If any other Asian State reached half the Cambodian peak level they probably would put into action programmes similar to the Thai ones.

This is not necessarily true of the whole Asian and Pacific region because Melanesia differs socially and historically from Asia. Socially and in terms of sexual activity it is closer to Africa than Asia. The Governments are new and nations are still being formed. An African-style epidemic could be developing in Papua New Guinea but an inadequate HIV-testing programme obscures the situation. Port Moresby and other urban areas may not be large enough to provide the reservoir of new infections to duplicate the role of African cities in keeping the epidemic going.

It would be unwise to underestimate the health threat that AIDS (and some other diseases like tuberculosis and malaria) poses to Asia. There were over a million new infections in 2004 (compared with over 3 million in sub-Saharan Africa with less than one fifth of Asia's population). The projected HIV/AIDS figures in many mission reports have later had to be scaled down rather than upward. The frequently proclaimed generalization that there are now more infected women than men in the world glosses over the fact that this is explained solely by the predominence of infected women in sub-Saharan Africa (and possibly Melanesia) and that it has probably always been the case. There is a problem of crying wolf too often and disheartening those involved in the battle against AIDS. The Southern African situation is catastrophic but it does not provide a possible future scenario for Asia. Asia needs not panic programmes but solidly based long-term public health programmes to minimize permanently disease levels.

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