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The Sexual Economy of Women and HIV in Uganda: A Critical Biocultural Analysis

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Abstract

A lens of biocultural medical anthropology is used to critically examine host-parasite coevolution in the sexual economies of Ugandan women. These women are often informed risk managers concerning sexual exchanges in relation to factors of political economy, women's status, male sexuality, and the epidemiology of the disease. Alternative landscapes of biocultural adaptation demonstrate that the longer term benefits of condom use in AIDS prevention can be substantially diminished by the shorter term morbidity associated with the unfavorable socioeconomic circumstances of Ugandan women. Unless health interventions are broadened to improve these circumstances, positive feedback between cultural and biological factors will favor increased transmission of the virus.

Introduction

In the last year, the total number of estimated AIDS cases has increased by over sixty percent worldwide. It is currently estimated that 16 million people have been infected with the human immunodeficiency virus (HIV), with the proportions of women and children increasing at an alarming rate (Global Programme on AIDS, 1994). More than two thirds of these infections are thought to have occurred in Sub-Saharan Africa (Quinn, 1994). In these regions, HIV infection exhibits a Pattern II epidemiology in which the virus is transmitted inter- and intragenerationally through heterosexual contact between adults, and inter-generationally from mother to child (Mann, 1988).

Uganda has the greatest number of reported AIDS cases of any African nation, and one of the highest rates of infection per capita (WHO, 1994). Here, urban prostitution has been targeted as a locus of high risk sexual behaviors which facilitate the transmission of the disease. A number of public health interventions have been aimed at providing information and condoms to commercial sex workers and women with multiple sexual partners. Yet despite a substantial fear of AIDS, accurate knowledge of HIV transmission and access to condoms, many of these women continue to engage in unprotected
intercourse (McGrath, 1993). This paper uses a lens of biocultural medical anthropology to critically examine the evolving host-parasite relationship between Ugandan women and HIV in the context of gender-based inequalities and increasing poverty. By taking a holistic approach to the biological and cultural context of sexually transmitted disease, it will be shown that Ugandan women act as informed risk managers in sexual exchange upon an adaptive landscape that is driven by men's sexual demands, women's socioeconomic status, and the life cycle of the virus.

Political Economy: Historical Relations

One cannot understand the epidemiology of AIDS in Uganda without considering the historical events that have shaped the social landscape upon which this disease has spread. During the Berlin Conference of 1884, the major European countries reached an agreement on how they would divide the African continent among themselves. Following the Buganda Agreement of 1900, the territories of the Ganda became an official British protectorate. The foundation for colonial domination, however, had been already well-laid by the ruling Kabakas of the Ganda, who had been controlling the flow of ivory, cotton, and slaves since the 16th century, and later became important agents in the British subversion of the Central Lakes regions (Gukiina, 1972). Uganda remained under British colonial rule until the 1960's. During this time, infrastructural investments were geared toward the interests of settlers and large companies who exploited agricultural and mineral resources such as coffee, cotton, and copper. Territories were divided into estate-based administrative districts, often without respect to traditional cultures. Townships were established for each of these districts as centers of trade and local government (Southall & Gutkind, 1957). These townships became urban colonial bases for the recruitment of seasonal industrial labor from outlying farming communities, who had become increasingly dependent on a cash economy, due increases in trade goods and taxation payable only in currency (Larson, 1989).

Since gaining its political independence in the 1960's, Uganda has maintained much the same economic relations with its former colonial masters. Multinational corporations have overseen the exportation of raw materials under disadvantageous exchange rates for further processing in more developed nations (Alubo,1990). Fluctuating commodities markets and a series of wars have had devastating effects on the country's economy. Although partly buffered by slightly more favorable rainfall patterns than its neighbors and major trade routes connecting the port of Mombassa to Central Africa, military conflict during the Idi Amin period in 1971-78 and the war of liberation in 1981-87 resulted in over 400,000 civilian deaths, reduced trade, and a collapse of commerce. Additionally, economic and political policies during Idi Amin's rule and those of his successor, Milton Obote, led to a series of wars that resulted in the deaths of 10% of the Ugandan population. These conflicts also led to a collapse of foreign aid and a dramatic reduction in investment by international corporations in the country.

Sexual Economy

The Uganda Debt Crisis of the 1980\textsuperscript{s} has been marked by a huge and growing external debt. The World Bank, which provided much of the credit, exerted a significant amount of pressure on the government of Uganda to cut back on public spending and raise taxes. These changes have led to an increase in poverty and food insecurity in the country. The government has also been forced to implement austerity measures, which have led to a decrease in social spending and health care services. This has had a significant impact on the spread of HIV, as many people have been unable to access basic health care services. Moreover, the war of liberation in 1981-87 resulted in over 400,000 civilian deaths, reduced trade, and a collapse of commerce. During this period, 44% of the national income was generated by the textile and clothing industries, which were dependent on the export of cotton and other textiles to Western European countries.

Neocolonial Relations

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trade, and a decline in agricultural production. During Obote's second reign, military and police expenditures comprised 44% of the national budget, and the estimated cost of war in the Sudan was a million dollars a day (Dodge, 1990).

Neocolonial reliance on cash crops has led to economic disaster following the collapse of commodities prices in the 1970's. Most nations of Sub-Saharan Africa have since tried to borrow themselves out of this situation, and then again through further loans in failed efforts to get out of increasing burdens of unpaid debts (Alubo, 1990). In 1991, Uganda's external debt was $US 1.9 billion, over 31% of its GDP and eleven times its export earnings (Central Intelligence Agency, 1992). Uganda's GDP and exports have since shown modest gains, and inflation has been reduced from over 60% to nearly zero (Sherper, 1994). However, these numerical gains have not been without a human cost. Much of these changes have been the result of austerity programs dictated by the IMF and World Bank, which have caused dramatic declines in living standards, especially for those already living in poverty (Alubo, 1990).

Sexual Economy: Agency vs. Inequality

The Ugandan woman's experience of poverty and disease has been far different from those of men. Women in Uganda have less access to education and job training than their male counterparts. Literacy of females over the age of 15 is 35% as compared with 62% for males. Ugandan females have lower school enrollments and completion rates. Vocational training is geared toward men, with women engaging in lower paying traditional occupations (UNICEF, 1991). Commenting on the educational status of women in Sub-Saharan Africa, DeBruyn (1992) notes that illiteracy may impede the dissemination of health information if distributed pamphlets cannot be read. However, surveys conducted by USAID have found that over 80% of the adult population in Uganda understands that AIDS is a sexually transmitted disease, but that less than 2.5% use any kind of contraception (Sherper, 1994). It is therefore unlikely that pamphlets will tell very many Ugandan women what they do not already know about AIDS.

The educational status of Ugandan women is more likely to have a greater influence on employability than access to information. Family disruption due to the economic migration of males in Uganda has resulted in an increase of female-headed households to over fifteen percent (UNICEF, 1992). In rural areas of Sub-Saharan Africa, however, these women possess diminished land holdings, lower assets, and less social support for agricultural production than men (Zwi, 1993). These conditions have led to increased migration of single women, with and without children, into cities in search of employment. Once there, however, they find a dearth of economic opportunities due to a lack of skills; housing and job discrimination; and sexual harassment.

Yet these constraints of poverty and social inequality have not precluded Ugandan women from exercising agency in their lives. Sexual exchanges with men have been a major source of power for Ugandan women since pre-colonial times. These exchanges, however, are having increasing economic importance for women faced with declining opportunities and family disruption. The result is a sexual economy, wherein western notions of "prostitution" and "commercial sex work" occupy arbitrary positions along a spectrum of exchanges ranging from bride-price to gift-giving; part-time sugar daddies to full-time pay-for-sex.

Precolonial marriage patterns have had a significant influence on sexual relations in neocolonial Uganda. Among the less-stable interlacustrine marriage patterns of the Ganda, generous gift-giving is a recognized way of showing affection between lovers (Larson, 1989). These days, if the gifts are generous enough, a woman can supplement her income as a mistress of one or more men (Southhall & Gutkind, 1980; Schoepf, 1988). This is by no means restricted to Ganda women. Multiple partner strategies of economically-based sexual exchange are common among urban women in Central Africa (McGrath, 1993; De Zaldundo, 1991).

Yet among the alternatively more stable Luo-type marriages, monogamy neither removes women from the sexual-economic spectrum nor frees them from the risk of AIDS. Orubuloye and others (1993) note the predominately male control over land resources as the combined product of patrilineal traditions and a colonial legacy of divorce laws. Citing Obbo (1989, 1990), they note that African women will often marry in part for land if they cannot own it, and would never refuse the sexual demands of their husbands under these circumstances. Thus, a woman's decision to marry, or remain married, can be greatly influenced by economic determinants, with sexual performance as an important part of the bargain. (Southhall & Gutkind, 1980).

The shorter-term, more economically-based transactions that characterize popular notions of commercial sex work emerged out of Uganda's colonial period. Townships were carefully designed for temporary single male workers and separate enclaves for a small colonial elite. Among the housing arrangements of the working class, a Ugandan family could only live with great difficulty, and at the risk of severing ties to extended social networks in their villages (Larson, 1989). Women were not allowed to work in the cities, and the cost of urban living was high in comparison to the low wages of most available jobs. It was therefore more often the case that married men would migrate into the cities for seasonal wage work while their wives stayed home to work the land. This resulted in 20:1 ratios of men to women in urban areas. Under these conditions, colonial prostitution became a thriving business (Southhall & Gutkind, 1980).

As a holdover from colonial days, "free women" branded as "outside wives" (Bakwasegha, 1993), women with a career make their livelihoods through seasonal migration to urban areas to make up for the demand. Yet it is now common for "outside wives" to find their communities.

Whether marriage offers women with a career moves up the social ladder in Uganda, how significant practices among young offer sex in exchange for school fees and clothes. The occasional referral network of male clients or outside of school makes their youthfulness unlikelyhood of transmitted diseases.

In addition, sugar daddies, and their incomes are regulated by the demand. Commercial sex maids are regulated by the social gender roles who have served
"free women" in the cities are automatically branded as prostitutes (Schoepf, 1988; Quinn, 1994). Economic and social pressure for urban women to engage in prostitution is high, and even professional women will sometimes supplement their careers through sexual exchange (Bakwasegha, 1982). As in colonial times, seasonal migration of rural males continues to make up a significant proportion of the demand. In addition to this, however, it is now common for urban men to take "outside wives" in rural areas (Zwi, 1993).

Whether through employment or marriage opportunities, education provides women with an important means for moving up the socio-economic ladder. In Uganda, however, education comes with a significant price tag. It is a common practice among young women and girls to offer sex in exchange for money to pay for school fees and purchase books and clothes. These exchanges can range from the occasional sugar daddy to organized referral networks using other students as go-betweens (Bakwasegha, 1982). Older male clients can often be seen waiting outside of schools, preferring students for their youthful attractiveness and perceived unlikelihood of having a sexually transmitted disease (Schoepf, 1988).

In addition to students, sugar daddies, and career women supplementing their incomes, Bakwasegha (1982, 1988) identifies five other forms of women's commercial sex work in Kampala. Bar maids are regular wage earning employees who have semi-emotional relations with a small group of selected clients whom they may sometimes marry. Volunteer bar maids, however, are usually migrant women who are brought in by the bar owners during busy times of the year. Their earnings are solely based upon pay-for-sex, and are not as selective of the available customers. Streetwalking prostitutes charge high prices and travel in affluent neighborhoods. Streetlight prostitutes frequent transport areas under the guise of needing a ride, allowing the drivers to set the terms. At the lowest end of the economic spectrum, indoor prostitutes are destitute women who work out of single room homes while their children often wait outside.

Along this spectrum of sexual and economic exchange, Ugandan women must make choices concerning the frequency and type of risk behaviors. Larson states that, "as long as women are offering sexual service out of economic desperation...they are potentially open to negotiating with their clients for a higher fee" (1988: 727). Kampala students will charge less for sex with a durex, and neither they nor the bar maids are likely to use a condom with a potential husband. Volunteer bar maids and indoor prostitutes are often too desperate to turn down a customer under most conditions (Bakwasegha, 1982). Yet even in the upper classes of commercial sex work, the price of sex may not be related to worker autonomy. Women who work under improved economic conditions may acquiesce to their customers desires under quota pressures and the possibility of violent
retribution (De Zalduondo citing Barrows, 1986).

Married women who suggest the use of condoms can be accused of adultery, suspected of having HIV, or thought to have accused their husbands of infidelity (De Bruyn, 1992). Seidel notes that African wives insisting on fidelity or the use of condoms with their husbands may lead to violence, divorce, and abandonment (1993). Within Uganda, some communities will accept a level of violence by husbands toward their wives for refusing their conjugal rights (Orubuloye et al citing Ssekiboobo, 1993). Interviewing 130 Baganda women in Kampala, McGrath (1993) found that almost all had heard of AIDS and knew of appropriate ways to protect themselves from HIV transmission, but were afraid that they would contract the disease anyway because of their partner's infidelity. Additionally, while they reported limiting their number of partners to reduce the risk of HIV infection, most felt that there were times when they might take additional partners for economic reasons. Commenting on these two dilemmas, McGrath states: "For women who employ multiple partner strategies out of economic need, advising them to reduce their sexual contacts, without recognizing the potential harm to them, is unlikely to result in behavior change. ...in a context in which males frequently have multiple partners, women can only control their exposure to infection to a limited extent" (1993:435).

Given these circumstances, it is not surprising that public health interventions aimed solely at AIDS education and condom promotion have had little effect on the sexual practices of women in Uganda and Central Africa. Condoms make poor magic bullets under conditions of poverty and gender-based inequality in which women lack the power to use them. The linkages between the more proximate determinants of HIV transmission, and distal determinants of the larger sexual economy, are far too intimate to be effectively addressed in isolation from one another.

Male Sexuality

Men are an important part of the heterosexual equation. In order to effectively analyze Ugandan sexual economy in relation to HIV, it is therefore necessary to have an understanding of the motives and attitudes behind the male contribution to these relationships. Unfortunately, there exists very little data on the sexuality of Ugandan men and their attitudes toward women. While stories have begun to circulate in the popular press, reliable and emic ethnographic studies have yet to be published.

What few studies exist on male sexual attitudes and behaviors toward women in Central Africa have been focused on interactions between truck drivers and commercial sex workers. A survey of long distance truckers in East Africa revealed that 99% had heard of AIDS, 87% knew that it was sexually transmitted, could prevent disease. Yet condoms, 61% ing prostitutes and girlfriends, and prostitutes in mobile brothels with customers, use decreased. While some 70% with prostitution, their lovers, only 22% of having had a contracted disease. Spending away from the range transmittable. Unfortunately, there exists very little data on the sexuality of Ugandan men and their attitudes toward women. While stories have begun to circulate in the popular press, reliable and emic ethnographic studies have yet to be published.

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transmitted, and 72% knew that condoms could prevent getting infected by the disease. Yet only 32% had ever used condoms. 61% of these men reported visiting prostitutes in addition to their wives and girlfriends (Bwayo, 1991). Interviews with customers (mostly truckers) of hotel prostitutes in Southwest Nigeria, Messersmith (1994) found that condom use decreased with increasing intimacy. While some male customers used condoms with prostitutes, they rarely did so with their lovers. It is interesting to note that only 22% of the sample reported ever having had an STD, yet all but one had contracted gonorrhea at least once.

Spending extended periods of time away from their families, and moving along major trade routes, the male truck driver could play a major role in the spread of HIV through Africa. However, if the studies of African women and AIDS are to be believed, then there are many more men who are engaging in unsafe sexual practices. Given the economic mobility of males in East and Central Africa (Larson, 1989), and the ongoing flux of foreign male visitors in cities such as Kampala (Bakwesegha, 1982), it is likely that long range transmission may be accounted for by men of many different occupations, ethnicities and socioeconomic backgrounds.

Reports of male sexual attitudes in East Africa reveal that many men consider condoms to be "unnatural," and that they may actually cause harm to the vagina and/or cause sterility. Informants state that semen is important for the health and fecundity of women, and that frequent intercourse "ripens" the pregnancy. Semen is also associated with virility, adult male status, and the essence of fatherhood (Schoepf, 1988). Some men prefer sex with a dry vagina, increasing the risk of transmission due to breaks and tears (Seidel, 1993). The contraceptive function of condoms often runs contrary to ideologies where having many children is desirable, and sterility is feared. These culturally mediated desires are often shared by both sex partners (Leke, 1993).

Taking into account specific cultural contexts and attitudes, it may be that many African men prefer sex without condoms simply because it feels better. Assuming that knowledge of AIDS and HIV transmission is not a limiting factor in these circumstances, these men would present a risk refractory attitude toward sexual behavior not unlike that of tobacco use. Utilizing mathematical models derived from game theory, Kaplan and Hill (1992) have put forth an optimal behavior theory of human decision making with a predictive bias toward human actors who are risk adverse. A life history model may better explain the differences between the reality of male sexual behaviors vs. the predicted difference curves of this theory by linking risk-prone motivation with age-specific tradeoffs between extrinsic adult mortality and reproductive function (Hill, 1993). Both of these latter issues are directly linked to the sexual transmission of HIV. But what are the relationships
between age, marital status and cultural group of males who are risk prone vs. risk refractory with regards to sexual behavior? What are their conceptions of purity and pollution, women, and mortality? More in-depth ethnographic research on male sexuality will have to be conducted before testing any of these models, or transforming them into effective interventions toward preventing the further spread of the disease.

**HIV: Virus As Biocultural Parasite**

Despite being a newcomer to the evolutionary scene, HIV is becoming well-adapted to the sexual economy of Uganda. Its arrival had been prepared along the infertility belt of Africa, where high incidences of pelvic inflammatory disease due to STD’s such as chlamydia, gonorrhea, and syphilis have existed long before AIDS was discovered (Leke, 1993). Genital ulcers facilitate the transmission of the disease by increasing contact with blood and body fluids (Piot, 1988). Once it has entered its host, the virus integrates its genome with those of monocytes and T cells in the very systems which are designed to fight off disease (Fauci, 1988).

Unlike the use of antibiotics with bacterial infections, antiviral therapies have yet to inhibit the life-cycle of HIV, and no vaccine is known to immunize potential human hosts against this pathogen (Benenson, 1990). In 1996, WHO is planning to conduct the first human HIV vaccine trials in five developing countries. But given the logistical costs of production and distribution, even a "cure" is not likely to impede the spread of the disease any time soon (Esparza, 1993). Judging from the historical effectiveness of vodung drugs as encapsulated cures, the lessons of syphilis should make us wise to any magic bullet approaches to AIDS. Biochemical solutions are not the panacea when it comes to sexually transmitted diseases (Brandt, 1988).

Noting the cross-reactivity of HIV surface receptors with those of SIV, a simian analog that does not cause symptoms in infected African green monkeys, Essex & Kanki discuss a precedent for disease-free coevolution in a closely related retrovirus (1988). There are, however, other successful strategies in parasite-host evolution which do not result in selection toward the direction of attenuation as long as the combination of virulence and transmissability is favorable to the reproductive fitness of the pathogen (Anderson, 1982). On the side of the host, the most optimistic model for human genetic adaptation to AIDS is the Mendelian inheritance of a single dominant gene conferring resistance to the disease. It is estimated that if such a gene were to mutate into existence today, it would take 960 years for it to reach a frequency of 50% in human populations worldwide assuming the most rapid scenario of a single mating pool, and extreme differences in the reproductive fitness of persons with and without the disease (Levine, 1992).
On the side of the virus, HIV possesses a highly dynamic RNA genome with a tolerant polymerase and no proteins for correcting mistakes in replication. Because of this, HIV is genetically capable of evolving at a million times the rate of DNA-based viruses (Holland et al., 1982). Given the situation in Uganda, it is possible that genetic adaptation of the virus toward maximizing its numbers may exceed the memetic adaptation of potential human hosts toward minimizing them.

Subacute diseases like Kuru have shown a remarkable adaptability to human decisionmaking by means of a long latency period (Alpers, 1992). Given the difficult long and short term decisions faced by Ugandan women, the preexisting tendency of HIV to have a long proviral stage, and the large mutational leap required in achieving improved alternatives to asymptomatic infection, this author predicts that the present form of sexual economy will provide cultural selection for strains with increasing latency. This will result in increasing the probability of sexual transmission by extending the long-term health consequences of risk decisions based upon the extended time from infection to the recognition of symptoms.

Analysis: Risk Management Along a Rugged Sexual Economic Landscape

This section introduces a framework for analyzing the decisions faced by Ugandan women regarding sexual risk behavior among factors of socioeconomic autonomy, male sexual demand, and the latency period of the virus. This framework is inspired by an adaptive landscape model first put forth in 1932 by Sewell Wright. This model topographically maps frequencies of multiple alleles on to an artificial landscape containing high frequency adaptive peaks and low frequency valleys. A given allele is plotted on this landscape, usually beginning at one of the peaks. Since selection moves toward increased fitness, it continually acts to increase the allele's frequency upon slopes with positive curves, and decrease its frequency upon slopes with negative curves (Province, 1986). An important implication arises when using this model: evolutionary changes may have to cross less adaptive valleys before reaching more adaptive peaks. The deeper the valley, the less likely
the probability for such a change to occur, albeit one that is beneficial (Ridley, 1993; Wittenberger, 1981) [See figure 1 above].

Figure 1. Three landscapes of adaptation. (a) Selection favors a single "global optimum" (the most adaptive character) for population x in a given environment. (b) The adaptive topography varies to include less-than-optimal alternative characters. Frequency changes between these characters continue to trend toward the global optimum. (c) Adaptive topography where population x is stranded at a less-than-optimal local peak because evolution to the global optimum would entail traversing a costly valley during intermediate changes (Modified from Ridley, 1993: 343).

These models are not restricted to biological analyses of genetic alleles. Lumsden & Wilson (1980) have used adaptive landscapes to examine how epigenetic rules of individual behavior might canalize larger scale social patterns in the testing of sociobiological hypotheses. More recently, a similar approach has been used to model the coadaptation of symbolic and agricultural systems in Balinese water temple networks (Lansing & Kremer, 1993). Likewise, a landscape model can be helpful in understanding the complex biocultural relationships between female sexual decisionmaking and the coevolution of HIV [See figure 2 above].

Figure 2. Landscape model of sexual decisionmaking among Ugandan women. The two peaks represent sexual behaviors in terms of higher or lower risk for HIV exposure with heights determined by perceived economic, health, and other costs of pr.

The model is meant to show the processes of individuative representation, how socio-ecological limits can be highly cost-effective. It is very useful in discussions of which Ugandan acting as individuals to explain the sexual experiences of women. For larger populations, the landscape model allows for a better understanding of health prec. It provides a framework for how landscapes might have evolved in different contexts. For example, it can be used to show changes in sexual decisionmaking in different social contexts.
economic, social, and health benefits. The valley between them represents perceived costs of protected sex during what would otherwise be a period of asymptomatic infection.

The landscape model above is not meant to show either the emic thought processes which underlie sexual decisions of individual Ugandan women, nor quantitative reports of sexual behaviors and socio-economic status. Such data would be highly suspect given the methodological limits involved. This model, however, is very useful in explaining the issues discussed in this paper as complex forces which Ugandan women must face when acting as informed risk managers during sexual exchange.

For example, the height of the larger peak in the previous landscape follows the assumption of most public health providers: namely, that Ugandan women will recognize the greater health benefit of safer sex once they are educated in the germ theory of AIDS transmission and proper use of condoms. Yet while this model might end at a single-optimum landscape such as that of figure 1a, the landscape in figure 2 expands the scenario to show the biocultural costs and benefits of sexual decisionmaking under the constraints of three important factors: 1) the height of the less-than-optimal peak of higher risk sexual behavior, which is strongly driven by the sexual demands of male partners; 2) the depth of the valley, which is driven by the relative socioeco-

nomics autonomy of women; and, 3) the width of the valley, which is driven by the latency of the virus between the time of transmission to the manifestation of recognized symptoms. Unless public health interventions are broadened to take these factors into account, the sexual economy of Uganda will continue to select for larger titers of better-adapted parasites, resulting in mutually potentiating increases in human mortality and poverty.

**Conclusion**

Kleinman (1994) states that the unique contribution of anthropologists to public health issues will come through theoretical insights within a multidisciplinary discourse. This makes sense given the holistic nature of health and suffering, and the position of anthropologists as interdisciplinary bridges to the mystery of the human equation. Within the subfield of medical anthropology, however, a number of criticisms have been raised regarding biomedical biases that are exclusive of social criticism - biases which either ignore or naturalize some of the macroparasitic conditions of inequality that often contribute more to human illness than microparasitic organisms (Singer, 1989; Scheper-Hughes, 1990; Turshen, 1984).

This paper attempts to demonstrate that biological insights can play a synergistic role in critical medical anthropology when integrated with other perspectives. The coevolution of humans and HIV in Uganda is a complex equation.
involving multiple interactive systems that are continually shaped by both biological and cultural forces. Discrete dichotomies of "safe vs. unsafe sex" and "monogamy/abstinence vs. prostitution/promiscuity" diffuse across the spectra of risk management decisions and sexual-economic exchange. By themselves, the epidemiological data do not speak to the historic relations of colonialism and neocolonialism which inform the sexual economy in which the virus is evolving. Likewise, the proximate determinants of HIV transmission do not lend themselves to neat "interventions" involving the dissemination of "biologically correct" information. Nor are the roles of Ugandan women as informed actors (and resisters) in the management of their insemination likely to find advocacy in unilinear models of male-dominated capitalist hegemony imposed upon them by the academic bourgeoisie.

An adequate understanding of the sexual-economic and epidemiological relations between women and HIV in Uganda is best achieved through a theoretical lens which is as holistic as the subject and object of inquiry: human health. Medical anthropologists are well-positioned to contribute such a lens, provided that we do not succumb to a false dichotomy of biomedical vs. critical analysis. A biocultural dialectic presents anthropologists with an opportunity to create theoretical bridges between disciplines of biomedicine, ethnomedicine, nursing, the social sciences, politics, and by all means, the informants themselves. It is at this level of collaboration that the improved welfare of human beings can be effectively advocated and achieved.

References Cited


Berkley, S. F., Widy-Wirski, R., Okware,


Sherper, K. W. (1994). "USAID Sustainable Development Goals and Mission Strategic Objectives (MSOs)." Congressional Presentation (Sustainable Development Program). Internet:


World Health Organization, (1994). "AIDS Cases reported to WHO by Continent/year Based on Reports Received through 30 June 1994." Internet: 00\aids\case\Sumrep.txt: W.H.O.

World Health Organization, (1994). "AIDS Cases Reported to WHO by Country/Area Based on Reports Received through 30 June 1994." Internet: 00\aids\case\Afro.txt: W.H.O.
