

HIV Transmission and
the Balance of Power
between Women and
Men: A Global View

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HIV transmission and the balance of power between women and men: a global view*



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Abstract

This paper presents a logical analysis of the paths by which gender inequality is likely to affect the heterosexual transmission of HIV. Non-use of condoms, the combination of a sexual double standard and frequent use of female prostitutes, and a high prevalence of curable sexually transmitted diseases are considered. The 'circulation' of women as sexual and reproductive gifts, which is a near-universal feature of human societies, explains men's use of prostitutes and promiscuity, and contributes to high STD prevalence. It may also contribute to the non-use of condoms, although a separate analysis suggests this is not always the case. The empowerment of women thus might help to slow the spread of HIV/AIDS. Even more effective in countries with large commercial sex sectors would be the empowerment of female sex workers.

Wherever women are culturally and economically subordinate to men, they cannot control or even readily negotiate safer sex, including condom use and lifelong mutual fidelity (Merson 1993:1267).

Sentiments like these, which are widely expressed in the rapidly growing literature on the social determinants of the AIDS pandemic, lie behind the supposition that the pandemic is partly a product of the socially enforced powerlessness of women. Were women as powerful as the men with whom they sleep, many argue, they would insist that these men use condoms or demonstrate their sexual exclusivity and HIV-negative status. Moreover, some authors argue that were women generally as powerful as men, there would be little or no prostitution, a factor that in some parts of the world is a major contributing cause of the pandemic. Thus, although women's powerlessness cannot be seen as the exclusive cause of HIV transmission, many believe it to be an important contributing factor (Schneider 1989; Holland et al. 1990; Seambler et al. 1990; Tuong 1990; Carovano 1991; de Bruyn 1992; Ramasutban 1992; Schoepf 1992; Awusabo-Asare, Anarfi and Agyeman 1993; Caldwell et al. 1993; Carael 1993; Seidel 1993).

The assertion that women's powerlessness contributes to the spread of AIDS seems plausible, at least in the case of heterosexual transmission. It is far from demonstrated, however. The argument that if women were powerful, they would insist on the use of condoms, assumes that women, but not men, are motivated to use condoms, something that is untrue in some parts of the world, for example, where women are highly motivated to bear children (Carovano 1991). Indeed, some authors even suggest that inequality between the

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sexes traditionally helped to preserve a 'closed' sexual network relatively protected from the spread of sexually transmitted diseases (STDs) (see Bassett and Mhloyi 1991; Joehelson, Mothibeli and Leger 1991; Bauni 1992; Orubuloye, Caldwell and Caldwell 1992; Renne 1993). In some of these settings, the attempts of colonial governments to improve the status of women may have contributed to the population's vulnerability to AIDS five decades later, or so some observers argue (e.g. Orubuloye et al. 1992). The contention that women's powerlessness contributes to the spread of HIV is thus far from proven.

In the discussion that follows, my aim is to scrutinize this assertion critically in order to clarify the conditions under which it is more or less plausible and to identify needed areas of research. I shall pursue this aim first by identifying major 'proximate' determinants of the heterosexual transmission of HIV, and then by discussing the likely contribution of gender inequality to each proximate determinant. Before turning to this task, I identify the assumptions that underlie the analysis, define the terms 'sex' and 'gender', and describe a basic theory of how gender inequality arises in human societies. The last is important for understanding the subsequent discussion of proximate determinants of heterosexual HIV transmission and the role that gender inequality may play in relation to these proximate determinants.

Three assumptions underlie this paper. First, I am concerned here only with how gender inequality influences the transmission of HIV, not with how AIDS and the AIDS pandemic affect gender inequality or the situation of women. The latter are undoubtedly important. For example, authors writing on East and Central Africa, where HIV infection is already widespread, have noted a growing tendency to take girls out of school at an early age in order to assist with the domestic burden caused by the illness or death of adult family members (de Bruyn 1992). Thus, in a region where female education is often a relatively recent and hard-won achievement, the advent of AIDS threatens to undermine the status of women.

Secondly, my analysis is concerned with the overall rate of heterosexual HIV transmission in the population, rather than with the transmission to women *per se*. Many papers on women and AIDS have focused exclusively on women's exposure to, or risks of HIV infection (e.g. Schneider 1989; de Bruyn 1992; Seidel 1993), in part as a counter to the widespread and sexist view that women are the transmitters of HIV and men their victims (Carovano 1991; Obbo 1993). In this paper, I try to lay aside issues of moral blame and instead emphasize the overall speed and extent of HIV spread in populations.

The paper's third basic assumption is that, if gender inequality influences the spread of HIV/AIDS, it does so primarily through heterosexual transmission. Thus, transmission through homosexual activity, the sharing of contaminated needles, transfusion of contaminated blood, or passage of the virus through the placental barrier or the mother's milk is ignored.

The social roots of gender inequality

In this section, I define the terms, 'sex' and 'gender', and describe a theory of the aetiology of gender inequality in human society. The terms 'sex' and 'gender' arise from the following observations. Most human beings are born with a single, unambiguous genital sex that is the same in all populations. What people's genitals imply for their lives, however, including their sexual lives, is by no means predetermined and varies considerably, although not infinitely, from one society to another. In most of the social sciences today, the term 'sex' is used to refer to the phenotypical categories into which members of the species are classified, or to sexual activity itself. The term 'gender', on the other hand, is used to describe the

socially defined and enforced 'scripts' for those born phenotypically male or female.¹ Gender scripts or gender ideologies typically assert that there are two mutually exclusive and dissimilar groups, 'males' and 'females'; they typically identify certain behavioural and emotional traits as characteristic of each group, i.e. as 'masculine' and 'feminine'; and they define a variety of social rights and obligations that stem from membership in one group rather than the other (Lévi-Strauss 1971; Rubin 1975). Thus, 'gender' is a shorthand for the complex (but variable) system of social differentiation between males and females found in every human society.

Because the socially enforced rights and obligations of males and females always differ, the access of women and men to power-bearing resources, both social and material, is never identical. In other words, the social division of labour between the sexes creates inequality between them. The extent and nature of this inequality varies considerably between societies, however. For example, in simple foraging societies where women make major contributions to the group's diet, inequality is typically muted, whereas in complex agrarian societies, women often lack adult rights and lead much of their lives secluded in a domestic compound (Draper 1975; Friedl 1975).

A form of inequality that appears to be common to nearly all societies is greater external control over women's sexuality than over men's (Rubin 1975); men have more sexual freedom than do women. Even where women enjoy considerable sexual freedom before marriage, they are often forced to marry, and their obligation to remain sexually faithful to their husband is strong. To be sure, there are societies that also oblige men to remain sexually faithful once married, but this obligation is typically less strongly enforced than for women. And there are many societies that completely bar women from sexual activity before marriage while permitting or expecting men to be sexually active in this period of their lives, and many more that permit men to have more than one wife or semi-permanent sexual liaison while restricting women to only one sexual partner, the husband.² Thus, a sexual double standard that gives men greater sexual freedom and rights of sexual self-determination than women enjoy is a near-universal feature of human societies.³

¹ These scripts may reinforce certain biologically-based proclivities of males and females, but their variation across groups, their symbolic representation in a variety of cultural contexts, and the observable social sanctions used to enforce them suggest that they are social creations, not an automatic outgrowth of 'biology'.

² Polyandrous societies (in which women have more than one husband) do exist, but there are only a handful of them, and even in these societies, the obligations of wives to remain sexually faithful to their husbands are often much stronger than are the obligations of husbands to remain faithful to the wife (e.g. Levine 1988). Thus, the gender asymmetry in sexual faithfulness is no different in polyandrous societies from that in the world's numerous polygynous societies. There, too, the penalties for sexual unfaithfulness are typically much harsher for wives than for husbands.

³ One of the few developing country social surveys to have asked direct questions about perceptions of sexual obligations, the Asian Marriage Surveys conducted during the 1980s in Indonesia, the Philippines, and Thailand, shows considerable cross-cultural variation in these obligations (unpublished tabulations). For example, in Thailand, almost three-quarters of the married women surveyed said that enjoyment of sexual intercourse was more important for men than for women, but in Indonesia and the Philippines, one-quarter or fewer of the women surveyed felt this way. In all three countries, a higher proportion felt that a wife was obliged to have sexual relations when her husband wanted than felt that a husband was similarly obliged *vis-à-vis* his wife, though the moral response was that both partners were equally obliged to satisfy the other's desires for sex. Thus, a strong double standard like that observed in Thailand is by no means universal, although the bias in most systems is toward regarding sex as more a male than female prerogative.

Why is this? There is not space to review all answers to this question that human creativity has devised, nor to present a critique of each answer. I shall therefore present one widely-accepted answer that provides a reasonable working basis for understanding gender inequality in relation to the heterosexual transmission of HIV. This answer argues that the 'circulation' of women as gifts is one important basis for the creation of society, that is, for forging and maintaining enduring social ties within and between groups of closely-related individuals. Four kinds of social 'glue' are capable of holding people together in a network of social obligation that persists over an extended period of time: the development of social identity through shared ritual activity; the creation of a system of mutual dependency through direct and continued exchange of valued goods and services; the creation of a sense of obligation through 'gift exchange', that is, the voluntary exchange of objects that are socially, even if not economically, valued, and for which no immediate exact return is normally given (in contrast to a purely economic exchange); and the creation of obedience and cohesion through the wielding of force or its threat by a central authority (Collins 1982).⁴ In societies without a central authority, rituals and exchange relationships are critical for maintaining social order. Even societies with a central authority do not function well without rituals and exchange relationships that bind together, emotionally, individual citizens.

One of the most important ideas in the social science literature of this century derives from the anthropologist Claude Lévi-Strauss's insight that the exchange of women was and is one of the most important forms of gift exchange used to create and maintain society. As Lévi-Strauss (1969) noted, although gifts of pigs, cowrie shells, food, or other objects may be highly valued and can create strong ties of obligation among men, women make the best gifts because they provide a wealth of labour and sexual services, and produce children. Thus, like land, they are gifts that keep on giving. Women are more valuable than land, however, because ultimately, land is worthless without people to exploit it, and it is women who produce people. In Lévi-Strauss's view, it is the 'circulation of women' among groups of men that creates human society.⁵

Although women are fundamentally valuable because they produce children, the anthropologist Gayle Rubin (1975) has argued that their value as gifts is further enhanced by gender scripts that define the normal sexual state as heterosexual, thereby making men and women dependent on each other for their sexual satisfaction, and that further define the temperaments and skills of the sexes in such a way that they are economically dependent on each other as well (also see Marwell 1975). In other words, women are valuable to men not only because they produce children, but also because men are reared to require them for their sexual satisfaction and economic survival. Thus, in the Lévi-Straussian view, the organization of simple societies rests on family groups that incorporate reproducing pairs of males and females and their offspring and that are linked together over time through the circulation of women.⁶

⁴ The wielding of force by several equally powerful individuals or groups tends to break societies apart: when conflict arises, there is nothing to prevent them from fighting each other. Only a more powerful individual or group can use force to prevent the breakdown of social order.

⁵ Lévi-Strauss (1969) suggested that the universality of the incest taboo and rules of exogamy demonstrates the universality of the principle of circulation of women. Incest taboos and rules of exogamy vary in their specific content but always bar certain categories of men from enjoying the sexual and hence reproductive capacities of closely-related women. Thus, men are forced to give up these women to other men.

⁶ The existence of dowry and other forms of marital exchange that run predominantly from the bride's family to the groom's does not negate the idea that women are sexually and reproductively

From this perspective, women's lack of control over their own sexuality reflects their status as sexual and reproductive gifts given by one kin group to another. As Rubin (1975) notes, gifts cannot control themselves; if they are to remain sexually and reproductively valuable, women cannot be allowed to 'squander' their sexual and reproductive capacities as they see fit. Rather, they must be sexually constrained, so that their kin group or husband determines how their sexuality and reproductive capacity is used. Although conditions in modern societies may mitigate some of the need for this ancient form of gender oppression, nevertheless it persists in most parts of the world.⁷

In sum, then, there is an enduring tradition in human societies that puts the control of female sexuality partly or entirely into the hands of male family members or their representatives, rather than into women's own hands. Although the strength of this control varies from society to society, it appears to exist in even the most 'modern' social contexts, where it is often transformed into a double standard that defines 'good girls' as resisting sexual intercourse before marriage and remaining faithful to husbands afterwards, while 'real men' seek extensive sexual experience, not necessarily with one woman (Carovano 1991). As we shall see later on, this double standard has implications for the spread of HIV.

Before turning to the proximate determinants of heterosexual HIV transmission, it should be noted that sexual inequality between women and men is typically elaborated in the non-sexual spheres of life as well. It is easy to see how this can arise if, basically, women are viewed by men as sexual and reproductive gifts to be given to or received from other men, and hence as persons with less than full rights of self-determination. In many societies, women's rights to hold property, to engage in remunerative activity, to receive training for non-domestic roles, and to act as legal adults are far more restricted than are men's. Thus, although sexual inequality between the gender groups is theoretically the most fundamental form of gender inequality and has obvious relevance for understanding the transmission of sexually transmitted diseases, other forms of gender inequality are widespread and may also affect HIV transmission.

Proximate determinants of heterosexual HIV transmission

In demography, a proximate determinant of an outcome such as fertility or mortality is defined as a variable that, when changed in value, is sufficient to produce a change in the outcome (assuming all other conditions remain unchanged; see Bongaarts and Potter 1983:1). As the literature on the proximate determinants of fertility illustrates, alternative proximate determinant schemes can often be defined for a single outcome (e.g. contrast Davis and Blake 1956, with Bongaarts 1978). In this paper, I have chosen the sexual transmission model developed by Roy Anderson and his colleagues as the basis for identifying the proximate

given as gifts by men to other men. Dowry occurs in agrarian societies as an investment in the new couple made by the bride's family to help compensate the groom's family for their eventual contribution to the couple of one of the scarcest and most valuable assets, land (Goody 1973). In most societies, material gifts are exchanged by both the bride's and groom's families in connection with a marriage. This exchange of material gifts may be either symmetrical or asymmetrical, but it occurs along with a distinctly asymmetrical exchange concerning the bride and groom themselves. The bride's family gives her to the groom or his family; his family does not give him to the bride or her family, at least not for sexual or reproductive purposes.

⁷ As Rubin (1975:175) notes,

It is certainly not difficult to find ethnographic and historical examples of trafficking in women. Women are given in marriage, taken in battle, exchanged for favors, sent as tributes, traded, bought, and sold. Far from being confined to the 'primitive' world, these practices seem only to become more pronounced and commercialised in more 'civilized' societies

determinants of HIV transmission (Anderson 1992). The scheme suggested by this model is not necessarily the best possible, but because the model has been widely explored, it serves as a convenient starting point for understanding the pathways through which gender inequality might influence the heterosexual transmission of HIV.

Anderson's epidemiological model has the form:

$$R_0 = BcD \tag{i}$$

where R_0 is the reproductive rate of the epidemic, that is, the number of new infections that result from each infected individual; B is the probability of the virus being transmitted per sexual partnership; c is the number of sexual partners or partner 'changes' and D is the duration of infectiousness of seropositive individuals. What this model indicates is that HIV will spread more rapidly in a population where the per-partner probability of transmission is high, where the number of sexual partners is large, and where the duration of infectiousness is lengthy. Thus, if gender inequality influences the value of any of these three variables, it will in turn influence the rate of HIV transmission.

The impact of the number of sexual partners on the total reproduction rate of the epidemic deserves further comment. As Anderson (1992) and others have demonstrated empirically, in nearly every population thus far scrutinized, the mean of c and its variance are positively correlated and the actual impact of c on the transmission rate is:

$$c = m + \sigma^2/m \tag{ii}$$

where m is the mean of c and σ^2 is its variance. Thus, the greater the variance in the number of sexual partners per individual in the population, the higher the rate of HIV transmission; and as the mean number of sexual partners rises, the variance tends to rise as well. This result thus tells us that in considering the number of sexual partners, it is important to take into account any patterning of this variable that influences its variance, not just its mean. In other words, the forms that sexual networks take, not just the average number of partners per individual in the network, are important for the rapidity with which HIV will be spread through sexual activity.

Although equation (i) identifies three fundamental determinants of transmission, each of these determinants is itself determined or influenced by one or more specific factors, which are outlined in Table I. Let us first consider B, the per-partner risk of transmission. Evidence about the factors influencing per-partner transmission is far from complete, but we know that two variables have a major influence here: condom use, and the presence of other STDs, especially the varieties that produce skin lesions.⁸

⁸ I ignore two additional variables potentially relevant here, frequency of sexual intercourse and sexual practices, especially whether anal intercourse occurs. Both affect the per-partner risk of HIV transmission. In the case of frequency of intercourse, however, there is no obvious connection to gender inequality. In the case of anal intercourse, any connection to gender inequality seems likely to involve the same processes that underlie the connection between gender inequality and condom use: as women become more powerful, they will have a greater say in any sexual practice, be it anal intercourse or the use of condoms, that is unequally pleasurable or costly to women and men.

Table 1 Proximate determinants of heterosexual HIV transmission

Basic transmission equation: $R_0 = BcD$, where $c = m + \sigma^2/m$.

I.	<i>Probability of per-partner transmission (B)</i>
A.	Condom use, especially as this is affected by <ol style="list-style-type: none"> 1. Sexual motives and the inherent costs of condom use associated with alternative motives; also other costs 2. External costs such as monetary costs, local supplies, and social acceptability
B.	STD prevalence/treatment
II.	<i>Number and type of sexual partners (c)</i>
A.	Sexual double standards and commercial sex
B.	Sexual migration
C.	Age-class mixing
III.	<i>Duration of infectiousness (D)</i>
A.	Nutritional and overall health status

The determinants of condom use are complex, but I suggest we can conceptualize them as falling into two main categories: the strength of women's and men's motivation to use or avoid using condoms, weighted by their relative power to put their motivation into practice; and the external 'costs' of condom use associated with their price, the availability of local supplies, social acceptability, the nuisance of using them, etc. The strength of a woman's or man's motivation to use condoms can in turn be conceptualized as follows:

$$CUM = [1/(\sum_i M_i C_i + O)]/[CNU] \tag{iii}$$

where M_i is the strength of motive i for having sex; C_i is the inherent 'cost' of condom use associated with sexual motive i (where 'costs' refers to social and psychological as well as monetary costs); O refers to other costs of using condoms not associated with a specific sexual motive; and CNU is the total cost of not using condoms: for example, that associated with exposure to STDs, including HIV. Later in the paper, I discuss specific motives for having sexual relations and the condom-use costs associated with them.

The determinants of how many sexual partners individuals in a population have are also complex; identifying specific factors here is consequently difficult. But several features of sexual networks are potentially important for HIV transmission because they affect the mean or variance of c . First, both the mean and variance of number of sexual partners can be strongly affected by a combination of the double sexual standard and extensive use of commercial or quasi-commercial sex workers, because this combination, which is common in many parts of the world, usually creates wide variation in the number of sexual partners in the female population, with prostitutes having huge numbers of partners and other women having relatively few (Crauel 1993).

Second, the degree of exposure of sexual networks to the introduction of HIV is also important for the spread of HIV through sexual activity, a factor that is determined by what I have termed 'sexual migration': spatial movement accompanied by a change in sexual partners. Closed sexual networks will not become infected until someone migrates and brings in the virus, a point that holds regardless of the mean number of sexual partners within the network.⁹ It is the combination of sexual migration and large numbers of sexual partners that produces sexually-generated epidemics.

⁹ This is closely related to a point recently emphasized by Smith (1993), that individuals with large numbers of sexual partners drawn from low HIV-prevalence segments of the population may

Third, modelling by Anderson (1992) and his colleagues has also demonstrated that age-class mixing (sexual contact across age groups) influences the speed of HIV transmission in the population. Generally, the greater the age-class mixing, the faster will be the spread of the virus.

The final proximate determinant of HIV transmission, the duration of infectiousness (D), is poorly understood. There is reason to think, however, that this factor may be influenced by nutritional and health conditions in a population, with poor nutrition and health increasing infectiousness.¹⁰ Thus, this too is a possible determinant through which gender inequality may influence HIV transmission.

Impact of gender inequality on the proximate determinants

Condom use

One of the most common ideas in the literature on gender inequality and HIV transmission is that women's powerlessness contributes to the non-use of condoms and hence to HIV spread. As was noted earlier, however, this idea is plausible only if there is reason to think that women are more motivated than men to use condoms, but are unable to enforce their use in the face of male opposition. Although there undoubtedly are settings in which this is the case — for example, in prostitute-client relationships in poor countries (e.g. Ramasubhan 1992) — there appear to be settings in which this is not the case, settings where women themselves do not want to use condoms.¹¹ Unfortunately, we have very little systematic information about women's versus men's motivations to use condoms. At this time, further understanding therefore can come only through analysing whether, or in what settings, a gender asymmetry in condom use motivations seems likely to occur.

As was noted earlier, the use of condoms in a heterosexual relationship logically will depend on the strength of women's versus men's motives to use them, their relative power to act on these motives, and the external costs involved with use. Gender inequality can thus influence condom use through three different routes: because it determines the strength of women's versus men's motives to use condoms; because it determines the ability of women versus men to put their motives into action; or because it affects the external costs of using condoms. The discussion that follows focuses on motivations for using condoms, largely because the impact of gender inequality on the relative ability of women and men to enforce condom use seems obvious; external costs will be considered briefly later on. The main point is that the determinants of condom-use motives are complicated and the impact of gender inequality on condom use is not necessarily negative in all cases. In many situations,

be at lower risk of HIV transmission than are individuals with smaller numbers of partners drawn from high-prevalence segments of the population. Introduction of HIV into a sexual network need not occur through sexual activity; it can occur and, in some settings has occurred, through needle sharing among intravenous drug users. For simplicity and because of its relevance to many developing-country populations, however, I have assumed that the virus is introduced sexually.

¹⁰ The placement of nutrition and health conditions under infectiousness is somewhat arbitrary, since both may influence per-partner transmission risks as well. The point is to include these factors, both of which are likely to reflect gender inequality and to affect heterosexual HIV transmission.

¹¹ The most frequently mentioned examples are from sub-Saharan Africa, where both men and women tend to have very high fertility goals and often do not want to foreclose the possibility of pregnancy in their sexual relationships.

men may indeed find the use of condoms more costly than women do, but in some settings, the costs may be perceived to be similar by both sexes or even greater by women than by men.

The model of the determinants of condom-use motivation presented earlier (equation iii) suggests that the strength of an individual's motivation to use condoms will depend on four factors: the reasons for having sexual relations; the inherent costs of condom use attached to these reasons; other costs associated with condom use not specific to a particular sexual motive; and each partner's perceptions of the risks or costs of not using condoms. Let us begin by considering reasons for engaging in heterosexual activity. The empirical literature on individuals' motives for sexual relations is sparse, but the following are commonly mentioned reasons for engaging in heterosexual activity across a variety of cultures: for erotic pleasure; to have children; to get money or material goods; for creature comfort, that is, to enjoy touching, hugging, or the sense of being physically close to someone or loved by them; to demonstrate loyalty, love, or sense of duty toward the sexual partner; to enjoy a sense of control or power over the sexual partner; and because one was forced or coerced.¹² More than one motive may be involved in any given sexual encounter or relationship, but each is a conceptually separable motive for engaging in sex. There are three questions that must be answered in order to understand whether gender inequality affects gender differences in the desire to use or avoid using condoms: do the 'costs' of condom use associated with different sexual motives differ? Do sexual motives themselves typically differ for women and men? Do other perceived costs of condom use differ for women and men?

Do the 'costs' of condom use associated with different sexual motives differ?

There is actually a double issue here: whether the inherent costs of condom use vary across sexual motives for either women or men, and if they do, whether they vary in the same manner for both. On the basis of logic as well as what little evidence is available in the literature, I conclude that condom-use costs are indeed higher for some sexual motives than for others, and in one case also are likely to be higher for men than for women (see summary in Table 2). The sexual motive that most Western writers probably have in mind when they assume that women are more interested in using condoms than are men is erotic pleasure. Because condoms interfere with men's physical sensation more than with women's, men who are having heterosexual sex to achieve orgasm may find the costs of condom use higher than do women having heterosexual sex to achieve orgasm (e.g. Ahmed and Kheir 1992). Even here, however, it is important to recognize that a gender difference may not exist if, for example, men are taught to value prolonged intercourse and the delay of orgasm. Thus, even when the issue is erotic pleasure, the costs of condom use may be no higher for men than for women.¹³

¹² In some settings, there are additional reasons for sexual activity not mentioned here, and there may be cultures where some of these motives do not exist, e.g. where no one has sex to get money or material goods. The seven motives considered here, however, form a fairly exhaustive list and occur in many parts of the world. They thus provide a reasonable starting point for a discussion of gender inequality and condom-use motivation.

¹³ It is possible, however, that the condom-use costs associated with achieving orgasm may be negative for women, i.e. prolongation of intercourse may enhance their achievement of orgasm. If this perception is widespread, it would bolster the argument that empowering women would increase condom use.

Table 2
Motives for having sex and the inherent costs to women versus men of using condoms likely to be associated with these motives (based on the model: $CUM = [1/(\sum_i M_i C_i + O)]/(CNU)$)

Motives for sex (M_i)	Inherent condom costs (C_i)	Male vs female prevalence of sexual motive i
1. Erotic pleasure	Low or negative for women, low-to-high for men	$M > F?$
2. Children	High for both genders	$F > M?$
3. Money	Low-to-moderate for both genders	$F > M?$
4. Creature comfort	Low-to-moderate for both genders	$F > M?$
5. Loyalty or love	High for both genders if condom use associated with 'casual' relationships, otherwise low for both genders	$F > M?$
6. Power	?? but no gender difference likely	$M > F$
7. Forced	?? but no gender difference likely	$F > M$

For the other sexual motives, gender differences in perceived condom use costs seem less likely to occur or to be more muted when they do occur, regardless of whether the costs associated with the particular sexual motive are high or low. When the motive for sex is childbearing, the costs of condom use should be high for both sexes, since condoms are contraceptives as well as prophylactics.¹⁴ For prostitutes, use of a condom by a male client is likely to increase the average time per act and thus reduce the average number of clients that can be serviced in a given time, which for prostitutes dependent on servicing large numbers of clients may prove costly (T. Brown, personal communication). But this cost is just as likely to occur for male sex workers (most of whom service male clients) as for female sex workers, and may be counterbalanced by the disease protection offered through condom use.¹⁵ Thus, whether the costs are high or low will depend on the work situation of the sex worker, not on his or her gender.

When the motive for sexual relations is to obtain 'creature comfort', the costs of using condoms are probably low, or perhaps moderate if there is a dislike of appliances or rubber during sex, but unlike the case of achieving orgasm, they seem likely to be comparable for both sexes. Similarly, when the motivation for sex is to demonstrate loyalty, love, or sense

¹⁴ P. Way (personal communication) has pointed out that couples wishing to have children can use condoms much of the time, ceasing their use only when they wish the woman to become pregnant. This assumes a high level of rationality about conception and fertility, however, and also leaves open the question of the extent to which HIV transmission would be reduced were couples to use condoms part but not all of the time. We do not currently know the answer to this question. In any case, in some settings, couples clearly like the idea of a relationship being open to the possibility of pregnancy at any time (or any time they are sexually active). In these settings, part-time use of condoms is unlikely to prove very popular.

¹⁵ P. Way (personal communication) has also pointed out that most studies of female prostitutes in developing countries show relatively low numbers of clients per night (five or less), even among the street walkers who charge the least and are most dependent on a high rate of turnover to achieve a reasonable level of earnings. Of course, many prostitutes may be earning less than they wish to and may consequently want to reduce the time that each act occupies, so that they can prolong their search for additional customers. For most settings, we do not have sufficient information to judge whether prostitutes are avoiding the use of condoms because of a desire to maximize the number of customers per night.

of duty, the costs of using condoms may be low, if condom use is viewed as consistent with a committed or 'love' relationship; as appears to be the case in Japan, where condoms have been the major form of contraception used by married couples since World War II. Alternatively the costs may be high if condom use is regarded as being inconsistent with such a relationship, as has been reported for such widely differing settings as urban Great Britain and rural sub-Saharan Africa.¹⁶ Whatever the perceived costs of condom use are in this case, however, they should again be similar for males and females. Condom use costs associated with gaining power or being forced into sex are difficult to assess in the abstract, partly because it is difficult to envisage women acting as rapists; but again, there is little obvious reason to think there would be a gender difference here in the perceived costs of using condoms.

In sum, then, for one sexual motive (erotic pleasure), condom use costs are probably higher for men than for women. Condom use costs for both sexes also are likely to vary by sexual motive. Because of this, the net level of condom use costs faced by women and men depends on the distribution of sexual motives for each gender.

Do sexual motives differ for women and men? The aim here is to understand whether sexual motives with higher condom use costs are more common among men than among women and, if not, whether this itself reflects gender inequality, because this would imply that empowering women might reduce the costs of condom use to them and thereby motivate them more strongly to use condoms. Cross-cultural generalizations about the distribution of sexual motives are hazardous, but two sexual motives — engaging in sex in order to get money or material goods, and because one was forced or coerced — appear to be more common among women than among men, and one motive — using sex to enjoy a sense of control or power over one's partner — is most commonly described as a male motive for sex.¹⁷ In some societies there may be other gender differences in the distribution of sexual motives as well, but the differences involving commercial sex and rape are found in many cultures. From the point of view of this analysis, what is important about these particular gender differences in sexual motives is that the condom use costs associated with the women's motives appear to be no lower than those associated with the men's motives.

In certain settings, gender inequality itself may create other gender differences in the distribution of sexual motives. For example, the highly patriarchal family systems found in parts of South Asia tend to make women heavily dependent on sons for their current and future welfare (Cain 1993), which leads them to want more children than their husbands typically want (Mason and Taj 1987). In these systems, procreation may therefore be a stronger motive among women than among men for having sexual relations. Note, however, that this motive generally conflicts with the use of condoms; hence, it does not imply that women are more motivated than men to use condoms, but rather the reverse.

¹⁶ The reasons for the non-use of condoms in committed relationships reported in these two settings are somewhat different, however. In the UK, it is men's desires to achieve greater orgasmic pleasure that motivates them to demand that any woman who 'loves' them should not insist on the use of condoms (Holland et al. 1990), whereas in sub-Saharan Africa, it is the barrier to reproduction or the aura of mistrust of one's partner that lies behind the perception that condoms belong only in 'commercial' or casual relationships (e.g. Schoepf 1992). Thus, the perception that condom use is costly in 'love' relationships appears to stem from gender inequality in a more obvious manner in the UK than in sub-Saharan Africa.

¹⁷ The sixth and seventh motives, gaining power and being forced, are argued by feminist scholars to constitute the essence of rape: men rape to gain power, not orgasms, and women who are raped engage in sex to avoid being harmed (e.g. Sheffield 1987).

Another example of gender inequality contributing to gender differences in sexual motives involves highly asymmetrical gender ideologies that teach men to have higher expectations of achieving orgasm through heterosexual sex than women have. Indeed, where genital mutilation in its more severe forms is practised, achieving orgasm becomes out of the question for women (Balk and Williams 1993). In this instance, condom use costs are indeed likely to be lower for women than for men. Thus, in some settings, gender inequality may contribute to the non-use of condoms not only by making women powerless vis-à-vis their sexual partners, but also by giving men motives for sex that involve higher condom use costs than do the motives women have. Another possible gender difference in sexual motives involves sex for loyalty, love or duty. Because the economic and social insecurity that women suffer in many countries makes them dependent on their husbands' goodwill, this insecurity may make them more motivated than men to have sex in order to garner loyalty or love or out of a sense of duty. Likewise, if gender inequality breeds a sense of insecurity in women, they may also be more motivated than men to have sex for 'creature comfort'. As was noted earlier, however, the costs of condom use associated with these motives for sex may be either low or high. Thus, where these become predominant motives for women to have sex, women may be more or less motivated than men to use condoms.

In sum, then, what appear to be men's versus women's motives for sex in all settings do not imply lower condom use costs for women than for men. And where gender inequality is strong, the sexual motives this creates for women versus men may or may not involve higher condom use costs for men than for women. Thus, in some settings, the distribution of sexual motives probably implies higher condom use costs for men than for women, but in other settings, this distribution may imply the opposite.

Do other perceived costs of condom use differ for women and men?

Because condoms are a 'male' method of contraception, it is often men who are responsible for purchasing or acquiring them, for having them ready when a sexual encounter occurs, for putting them on during the sexual act, and for disposing of them afterwards. All of these may constitute costs that are greater for men than for women. The empowerment of women might therefore contribute to the use of condoms if it helps to distribute the 'responsibility costs' of condom use between the genders more equally.

To summarize this discussion of condom use costs, we have identified one sexual motive where the costs of condom use are likely to be higher for men than for women (achieving orgasm), and have also noted that, where gender inequality is great, men are additionally likely to bear the costs of being responsible for acquiring, using, and disposing of condoms. Because erotic pleasure is probably one of the most common motives for engaging in heterosexual activity, at least among men, this may indeed imply that, generally, the costs of using condoms are higher for men than for women. Thus, the empowerment of women might indeed help to increase the use of condoms in heterosexual relationships. Our review of the condom use costs attached to other sexual motives does not suggest consistent gender differences, however, although some of the sexual motives that involve the highest condom use costs for women — for example, having children — may stem from women's lack of power. It is quite possible, however, that there are settings in which the net costs of using condoms are no lower for women than for men. Gender inequality involves sexual asymmetries, and these asymmetries may tend to make condom use more costly for men than for women, but this difference is by no means inevitable.

How about the perceived costs of *not* using condoms? Are these perceptions likely to differ for women and men in ways that reflect gender inequality? There are basically two plausible reasons for perceiving the non-use of condoms to be costly: to avoid pregnancy, and to avoid contracting an STD, including HIV/AIDS. Insofar as women are far more frequently the victims of forced sex than are men, they are more likely to perceive there to be

a high cost associated with the non-use of condoms, although one hopes that it is only in a minority of heterosexual acts that men force themselves on their partners. Also, if women recognize that the per-contact HIV transmission risk during vaginal intercourse is greater for women than for men, at least in populations where other STDs are uncommon, or if they recognize that STDs are potentially more dangerous for women's reproductive health than for men's, women's perceptions of the costs of condom non-use may be higher than men's. Whether uneducated women in poor countries indeed perceive there to be such risks associated with the non-use of condoms is generally unknown, although a study by Maticka-Tyndale and others, reported in this volume, suggests that married women in north-eastern Thailand generally do not perceive there to be personal risks associated with husbands' promiscuity and the non-use of condoms. But it seems plausible that women might perceive higher risks in not using condoms than do men, at least if they are made aware of the risks noted earlier.

The conclusion of this analysis, then, is that the assumption that powerful women would insist that their men use condoms, while tenable for many settings, is unlikely to hold across all populations. Thus, it is unclear whether the empowerment of women would increase the use of condoms. One possible exception is worth emphasizing, however, because it is central to the spread of HIV in many populations. This is the perception of condom use among prostitutes. Although I have suggested that the inherent costs of condom use may be perceived to be high by these persons, the costs of non-use may also be seen as high if they are aware of the risks of STD and HIV transmission. Thus, programmes designed specifically to heighten prostitutes' awareness of the STD and HIV risks of unprotected sexual intercourse, and further designed to empower them so that they can enforce condom use without hurting their financial status unduly, could be effective in slowing the HIV/AIDS epidemic, as some experiments suggest (e.g. Fox et al. 1993). If sex workers can be organized to maintain a local policy of 100 per cent use of condoms, and can charge prices high enough to offset any reduction in the number of customers that condom use may entail, then condom use can be expected to rise significantly in commercial sexual relationships. The effects on condom use of empowering women generally may be ambiguous, but the effects of empowering female sex workers should be positive and important for reducing HIV transmission where use of prostitutes plays a major role in the spread of the virus.

Thus far, this discussion has focused on the inherent costs of condom use. Are the external costs of condom use any more likely to be influenced by gender inequality than are the inherent costs? That is, where male control of females is especially strong, either in the sexual sphere or in other spheres of life, are condoms likely to be more costly, less readily available, of lower quality, or socially frowned upon? It is difficult to make any generalizations here about such possible effects. In some settings, such as India, a high degree of gender inequality in the sexual sphere is associated with strong norms against discussions of sex by women; this may make the use of condoms more difficult to achieve where it requires discussion between sexual partners (Ramasubban 1992). But there are other settings with a high degree of gender inequality in the sexual sphere where this is not true, such as Thailand and Japan. Condom availability, cost, quality, and social attitudes toward condom use are, indisputably, all highly variable, but this variability seems more likely to reflect development levels, the history of family planning efforts in the society, general attitudes toward sexuality, and the specific attitudes that have arisen around sexual relationships and condoms, rather than gender inequality *per se*. Thus, gender inequality seems unlikely to play a major role in determining the external costs of condom use in most social settings.

STD prevalence and treatment

It is fairly well established that STDs constitute a major co-factor in the per-contact risk of HIV transmission. Thus, gender inequality may influence the spread of HIV by influencing STD prevalence, diagnosis, and treatment. Is there any evidence that men's control of women contributes to STD prevalence?

As usual, the evidence is thin, but there are three ways in which gender inequality may increase STD prevalence. First, insofar as the fundamental asymmetry in the control of sexuality outlined earlier makes it difficult or impossible for women to question their husbands about their sexual activities or to exert any control over these activities, the transmission of STDs from husbands to wives may be greater than in more gender-egalitarian settings (Caldwell et al. 1993). Second, because the diagnosis of several major STDs is considerably more difficult when they occur in women than in men, the absence of health facilities specifically designed to diagnose and treat women's reproductive health problems may make the treatment of STDs among women difficult and thus contribute to their spread (Ramasubban 1992). It has also been suggested that in some cultures, women are taught to value themselves so little that, even when they are aware of their own reproductive ill-health, they regard such illnesses fatalistically, as an inevitable part of their suffering in life (Ramasubban 1992). The economic deprivation that many women face and restrictions on their freedom of movement may also hamper STD diagnosis and treatment. Because STDs, by definition, are sexually transmitted, all of these aspects of gender inequality, although specific to females, also affect the overall spread of STDs.

Finally, gender inequality is related to STD prevalence by encouraging prostitution. As modelling studies suggest, 'core groups' are especially important for maintaining a high prevalence of STDs in a population. Thus, STD treatment programmes that are oriented specifically to prostitutes may be especially effective in reducing STD prevalence in the population.

Although women's lack of power in heterosexual relationships does not always inhibit the use of condoms, their powerlessness is likely to increase the prevalence of STDs, especially in poor populations. Through this specific proximate determinant, then, gender inequality is indeed likely to contribute to HIV transmission. An important policy strategy for reducing the transmission of HIV/AIDS is therefore effective provision of reproductive health services to women, services that enable women, regardless of cultural prohibitions, to have STDs diagnosed and treated. Services for female prostitutes may be especially important where these women form the core of many sexual networks.

Number of sexual partners

As was previously noted, the combination of a double sexual standard that encourages or permits male promiscuity and a heavy use of female prostitutes by men raises the mean and variance in the number of sexual partners and hence, in the absence of widespread condom use, contributes to the rapid heterosexual spread of HIV infection. This combination reflects the circulation and control of women's sexuality, reviewed earlier. A gender system in which men circulate women teaches men that they are in control of the heterosexual act, and teaches women that they are not in control of it. It thus establishes a sharply differing relationship to sexual congress for women and men (Holland et al. 1990; Overall 1992). In many cultures this takes the form of sex being defined for men as something that they want and deserve to have, whereas for women it is defined as something that they must give to men, whether they want it or not (see Fordham 1993, for the case of northern Thailand). Furthermore, because women are circulated for their sexual and reproductive capacity, their sexuality

becomes a commodity. To be sure, this commodity is not always available commercially, and where it is, its sale (although not its purchase) tends to be morally scorned. This asymmetry in moral valuation of the sale versus the purchase of sex itself is a part of the gender asymmetry in sexuality. Nevertheless, that women's sexuality is treated as an object ultimately controlled by someone other than the woman herself establishes the conditions both for commercial sex and for rape, the acquisition or perpetration of which are predominantly male activities throughout the world. It also establishes the conditions for pornography, which, again, is consumed predominantly by men. If women's sexuality is something that can be given away, then it is also something that can be bought or stolen. This fundamental sexual asymmetry, more than gender inequality in control of material resources, may explain why men are the purchasers of most commercial sex.¹⁸ Thus, gender inequality is very much implicated in the existence of a sexual double standard and men's use of prostitutes.¹⁹

It is important to recognize that the combination of approved male promiscuity and heavy use of prostitutes does not occur in all societies, not even in all societies with a strong degree of gender inequality. It is also important not to turn moral attitudes about female prostitution into presumptions that commercial sex plays a major role in HIV transmission everywhere, since there are settings, such as the United States, where commercial sex appears to have played virtually no role in the AIDS epidemic, yet is nonetheless blamed in the popular press (King 1990; Scambler et al. 1990). Nevertheless, in some countries, it seems quite clear that a system of sexual inequality between women and men underlies a patterning of sex in which most women have very few sexual partners, most men have a moderate number, and a few women have very, very many. In these countries, as the case of Thailand makes clear, HIV can spread very rapidly (Brown and Sittitrai 1993).

Although inequality in the control of sexuality lies behind the combination of a sexual double standard and commercial sex, other forms of inequality between the sexes seem likely to contribute to this combination as well, especially to the phenomenon of commercial sex provided by women to men (Bassett and Mhloyi 1991; Muecke 1992; Awusabo-Asare et al. 1993; Schoepf 1992; Caldwell et al. 1993). In particular, where women's economic opportunities are highly restricted because they are unable to own land or other productive property, or are barred from entering a variety of occupations, the recruitment of women into prostitution may be common, especially if the pressures on them to earn income are strong, either because of their own or their children's needs, or because of pressures from parents or other close kin. Regarding the latter, see Muecke (1992), and Podhisita et al. in this volume, for the case of Thailand.²⁰ Thus, a system in which sexual inequality between the sexes is

¹⁸ There are many countries in which substantial numbers of young women control earnings, yet do not spend money to acquire sexual services as many of their male counterparts do. It thus seems unlikely that economic inequality between the sexes, alone, can account for the gender asymmetry in who buys sexual services.

¹⁹ A specific manifestation of this gender asymmetry in sexuality and its control is the prevalence of polygyny in the world, especially in sub-Saharan Africa where it is often the modal or expected form of marriage. As Caldwell et al. (1993) have argued, polygyny tends to increase the number of men's sexual partners by promoting the idea that men require more than one woman for their sexual satisfaction.

²⁰ Whether women who enter prostitution are forced to do so by dire economic circumstances has been a bone of contention. Although many writers argue that women are forced into prostitution by a lack of economic opportunity, some (e.g. Pickering and Wilkins 1993) argue that because prostitutes in some settings have more than one occupation available to them, and have average or high levels of education and earnings, becoming a prostitute is a matter of 'choice' rather than a

reinforced by economic inequality may be especially prone to the development of commercial sex.²¹ Other factors, such as the presence of a large migratory male population or the availability of a potential supply of affluent clients willing to engage in sex tourism, may also contribute.²² Gender inequality is thus only one of several possible contributory factors, but no doubt it is an important one.

Sexual migration

As suggested earlier, the 'sexual migration' of individuals across networks often plays an important role in heterosexual HIV transmission, at least during the early stages of the epidemic. Is this migration influenced by gender inequality? The answer appears to be both yes and no. While some forms of migration clearly are related to gender inequality, others appear more closely related to tourism development, economic crisis and inequality, the disruptive effects of colonialism, political oppression, structural adjustment, and several other factors not directly attributable to men's control of women (e.g. Tuong 1990; Bassett and Mhloyi 1991; Jochelson et al. 1991; Bauni 1992; Kaijage 1993). The forms of migration most closely related to gender inequality involve sex workers, many of whom are migrants and many of whose clients are also migrants (temporary, circular, or more permanent; see Tuong 1990; Jochelson et al. 1991; Anarfi 1992; Ntozi and Lubega 1992; Ramasubban 1992; Orubuloye, Caldwell and Caldwell 1993b). Especially in the case of sex tourism, men clearly travel in order to have commercial sex in a system that is based on the unequal control of women's and men's sexuality. So long as that system is intact, commercial sex tourism seems likely to continue.

matter of desperation. This may be accurate for these particular settings and it may be relevant that Pickering and Wilkins's study was done in The Gambia, where there is a highly unbalanced sex ratio and a large number of in-migrating women who come to work as prostitutes. But it is not true in all settings (e.g. Anarfi 1992), nor does it speak to the more fundamental issue of why there is a market for prostitution in the first place, and why the occupation of prostitute pays better than many other informal-sector occupations available to women in Third World countries. The latter reflect women's limited economic opportunities. The particular women who choose to enter prostitution may do so out of 'choice', but the point is that this choice is highly constrained by the opportunity structure. And in most countries of the world, women's economic opportunities are much poorer than men's.

²¹ Economic inequality between the sexes may also affect wives' ability to control their sexual relationships with their husbands, although within circumscribed boundaries. For example, in West Africa, Yoruba wives, who typically are quite independent economically from their husbands, appear to be more able to refuse sexual relations while their husbands are being treated for a STD than are wives in Ghana, whose economic dependence on their husbands is much greater (compare Orubuloye, Caldwell and Caldwell 1993a, with Awusabo-Asare et al. 1993; see also Caldwell et al. 1993). In no setting that I know of, however, are wives able to enforce a regime of permanent abstinence that would be needed if they were to avoid becoming infected by an HIV-positive husband.

²² Indeed, Tuong (1990) argues that the development of prostitution in Southeast Asia, especially in Thailand and the Philippines, resulted from the creation of an international tourism market by governments, airlines, hotels, and other capitalist interests, both during and especially after the Vietnam war when many 'rest and recreation' establishments in these countries faced an economic crisis. Although Tuong's argument is persuasive, it is important to recognize that in Thailand, at least, much commercial sexual activity is strictly local, that is, it exists for Thai male clients rather than for foreign clients. Nevertheless, the development of international sex tourism in Southeast Asia has probably contributed to the spread of HIV in this region as well as in the regions from which male clients come (primarily East Asia and Europe).

On the other hand, the forms of migration found in sub-Saharan Africa that have been implicated in the rapid spread of HIV in parts of that subcontinent, such as extensive labour migration in Central and South Africa (Bassett and Mhloyi 1991) and the long-distance truck drivers operating in both East and West Africa (Ntozi and Lubega 1992; Orubuloye et al. 1993b), appear to reflect other forms of inequality than that operating between the sexes. Men and women are forced to migrate from rural to urban areas or from one country to another because a combination of political, economic, social, and demographic factors has conspired to undermine traditional economies and the stable family systems that were supported by these economies. Because of their lengthy separations from their spouses, migrants tend to form sexual liaisons in the places to which they migrate. This appears to be true for female as well as for male migrants, although all WHO/GPA KAPB surveys conducted to date show higher numbers of partners among sexually active men than among sexually active women (see Caraël et al. 1992 and Caraël et al. in this volume). While these liaisons sometimes have commercial overtones, or involve women whose income derives from having several such relationships, the basic force behind the migratory pattern itself is not gender inequality, but rather economic necessity born of other forms of inequality. Thus, although gender inequality may play a role in some forms of sexual migration, especially the sex tourism found predominantly in Asia, it does not appear to play the determining role in many other forms of migration, especially those dominant on the African subcontinent.

Age-class mixing

There is considerable cross-cultural variation in the extent to which heterosexual partners diverge in age. In parts of Asia and sub-Saharan Africa, for example, husbands are often a decade or more older than their wives, on average, whereas in other parts of the world, the gap is more typically between two and four years (Cain 1993). These data pertain only to marriages, not to all sexual liaisons, but it seems likely that a similar variation would be found were the totality of heterosexual relationships considered. Epidemiological modelling has established that age-class mixing increases the speed with which a sexually transmitted disease spreads (Anderson 1992). Hence, the question to be answered here is whether age-class mixing is itself a product of gender inequality.

Although it is frequently assumed that a wide age gap between spouses reflects, or produces, a high degree of gender inequality (e.g. Cain 1993), the empirical evidence for this idea is meagre. While the family systems in which a wide age gap between spouses is typically found tend to be highly patriarchal, they are not necessarily more oppressive to women's sexuality, freedom of movement, or economic status than are the family systems that promote a smaller age gap between spouses. (It is incorporation of brides into the husband's parents' household in Asia and the practice of widespread polygyny in sub-Saharan Africa that tend to promote a wide age gap between husbands and wives.) Thus, although age-class mixing may partly reflect gender inequality, such mixing seems more likely to arise from particular types of family arrangements than from gender inequality *per se*. Nevertheless, where traditional family systems have tended to produce a wide age gap between marital or sexual partners, the empowerment of women might act to reduce that age gap, for example, because better educated women would be unwilling to marry before completing their schooling, and thus might reduce the heterosexual transmission of HIV.

Nutrition and health

The final proximate determinant to be considered here is overall nutritional and health status of the sexually active population. Poor nutrition and the activation of the immune system by other diseases are thought to contribute to HIV spread and to the degree or duration of infectiousness of infected individuals. In poor countries, gender inequality seems likely to exacerbate poor nutrition and health through discrimination against girls and women. Although it is not universally the case, relative nutritional deprivation of girls occurs in some settings where the value of sons far exceeds that of girls (specifically, parts of South Asia and China; see Miller 1981; Coale 1991; Muhuri and Preston 1991; Caldwell and Caldwell 1993). And in many low-income countries where health facilities are poor, the system for treating women's health problems is especially weak, a reflection in part of the lesser economic and political power of women than men. Practices such as female 'circumcision' (which, in many cases, involves major mutilation of the external genitalia) tend also to exacerbate women's reproductive health problems (Balk and Williams 1993); these practices represent a particularly harsh system of controlling female sexuality. Thus, although a history of colonial oppression, widespread poverty, lack of political will, the presence of wars and civil strife, and many other factors are the principal forces behind poor nutrition and health, gender inequality can contribute as well.

Of particular interest here may be the responses of government and the health establishment in many countries to the problem of HIV/AIDS among women. At least in some countries, such as the United States, the authorities responsible for the definition and treatment of HIV/AIDS have been slow to recognize the problem in women and to provide equal access to diagnosis and treatment (Schneider 1989; Corea 1992). In the United States, chronic vaginal yeast infections, which appear to be one symptom of AIDS, have yet to be included in the Centers for Disease Control and Prevention's lists of official symptoms. Thus, not only does discrimination against women in nutrition and medical care practised by individual family members exacerbate the spread of HIV; so, too, does discrimination practised by governments and non-government organizations.

Summary and conclusions

In this paper, I have attempted to identify the paths through which various forms of inequality between women and men may contribute to the heterosexual spread of HIV/AIDS in human populations. Table 3 presents a summary of this process, with a positive sign used to indicate cases in which gender inequality appears to increase the spread of HIV/AIDS, and a question mark to indicate the cases in which the effects of gender inequality are in doubt. Gender inequality is likely to exacerbate the spread of HIV in several ways: by increasing STD prevalence; by encouraging male promiscuity and the use of prostitutes, both of which increase the mean and variance in the number of sexual partners in the population; and in some settings, by undermining women's nutrition and health care. In addition, in some settings, gender inequality is also likely to undermine the use of condoms, and may also encourage greater age-class mixing in sexual networks. Thus, while the situation in each country is unique, the sexual and socio-economic empowerment of women could indeed help to slow the spread of HIV in many countries of the world.

Table 3
Summary of effects of gender inequality on the proximate determinants of HIV transmission.

Proximate determinant	Effect of gender inequality
<i>Probability of per-contact transmission (B)</i>	
1. Condom use	
a. Inherent costs	+?
b. External costs	?
2. STD prevalence/treatment	+
<i>Number and type of sexual partners (C)</i>	
3. Number of sexual partners	+
4. Openness of sexual networks	?
5. Age-class mixing	+
<i>Duration of infectiousness (D)</i>	
6. Nutrition, overall health status	+

The reader will notice that Table 3 does not contain any negative symbols, that is, cases in which gender inequality can be argued to prevent or reduce HIV transmission. This is because, in the context of most contemporary societies, it is easier to envisage how the empowerment of women might reduce the spread of HIV/AIDS than how it would increase it.²³ As was noted at the beginning of this paper, however, gender inequality may not produce the conditions for more rapid HIV transmission in all social contexts. Indeed, as Orubuloye, Caldwell and Caldwell (1992) have argued, the family systems dominant in sub-Saharan Africa in the past, many of which deprived women of significant rights enjoyed by men, may have provided far better protection against the transmission of STDs than do the family patterns that have replaced these traditional systems. Thus, whether gender inequality promotes HIV transmission depends on the historical context. In the current world context, however, there are more cases where it would appear that gender inequality contributes to HIV transmission than where it inhibits it.

One of the more surprising results of this analysis should be emphasized: the potentially ambiguous relationship of gender inequality to the use of condoms. It has been assumed all too glibly that the empowerment of women would automatically result in an increase in the use of condoms around the world. This assumption is questionable, perhaps even in the case of prostitutes, who might be expected to find the costs of not using condoms to be very high. Condom use might be increased by empowering particular groups of women, most notably prostitutes, especially if steps are taken to educate them about AIDS risks and to ensure the integrity of their income stream; but among women generally, especially those living in sub-Saharan Africa, the connection between female empowerment and condom use is by no means established.

What are the research and policy implications of this analysis? First, with regard to research, the need for information about women's and men's sexual and condom-use attitudes should be apparent. Although studies of these often sensitive and complex issues exist (e.g. Holland et al. 1990; Muecke 1992; Fordham 1993; Renne 1993; Podhisita et al. in this

²³ The argument that empowering women makes them sexually 'free' and thereby increases their number of sexual partners is suspect, because it applies a male standard of what sexual 'freedom' involves, the same standard that I have argued lies behind commercial sex. As others have argued before, the so-called 'sexual revolution' experienced in the West during the 1970s allowed men to increase their sexual activity outside of marriage, but did little to empower women, sexually.

volume), there have been relatively few of them and much remains to be learned. Thus far, internationally-oriented AIDS research and surveillance programmes, such as the WHO Global Programme on AIDS, have emphasized KAPB surveys rather than the small-scale qualitative studies that are needed to understand sexual and condom use attitudes. A greater emphasis on the latter would be very helpful for understanding cultural and attitudinal barriers to the use of condoms, and for designing more effective intervention programmes.

Also helpful would be KAPB surveys whose focus is on non-HIV STDs and reproductive health issues more generally among women. Recent critiques of population programmes by feminist groups have emphasized the lack of comprehensive reproductive health care for women in many developing countries of the world (e.g. International Women's Health Coalition 1993). In order to understand the kinds of reproductive health services that women might use, especially for the diagnosis and treatment of STDs, which for women are usually a highly stigmatized type of ailment, we need a better understanding of women's recognition of symptoms, ability to act on their own to acquire medical attention, willingness to use particular types of services, and the like.²⁴ Given the sensitivity of STDs and of sexual matters generally for women in many developing countries, an integrated approach to women's health care that covers maternal and child health, family planning, reproductive health, STDs, prenatal care, and nutritional programmes would probably offer the greatest hope of providing effective services to women. An effective strategy for ensuring that such programmes meet women's needs, moreover, is to involve the clients of such programmes in their design and implementation, a strategy that has been suggested with regard to family planning programmes. As a preliminary to this process, however, further research into women's health needs and attitudes would be worthwhile.

With regard to other possible policy approaches, organizing prostitutes to enable them to take control of their work situation, and to motivate and empower them to enforce the use of condoms in their relationships with clients, could have an important impact on STD/HIV transmission in some countries. In situations of high HIV prevalence where men are spreading the virus to their girlfriends and wives, training other women to take greater control of their sexual relationships could also prove effective in slowing the spread of the virus. For example, an experimental study conducted in a slum area of an American city that was designed to empower young unmarried women in their sexual relationships through the use of group support and role playing proved effective (Levine et al. 1993); a similar approach adapted to other cultural milieux could likewise prove effective. Because this type of programme is highly labour-intensive and requires the building of considerable trust between the women in the programme and the facilitators who organize their group meetings, the involvement of women themselves in design and execution would be essential. An added benefit of any policy that involves community women in its design and implementation is that it will help to empower the women involved, and by extension, the other women in the community who observe their involvement (see, e.g. Simmons, Mata and Koenig 1992, for evidence of such effects in the Bangladesh family planning programme). As this paper has suggested, empowering community women is likely to have

²⁴ The extent to which well-meaning provision of services can fail because of insensitivity to cultural norms is illustrated in a study conducted in a Delhi slum area by Basu (1992). In that community, women from a sheltered cultural tradition refused to use or permit their daughters to use the public bathing and toilet facilities, because they perceived these facilities to be too public for a woman or girl to use on her own. Because STDs are often asymptomatic in women, and are socially stigmatized as well, a full understanding of the constraints for women surrounding the diagnosis and treatment of these diseases is especially important.

important benefits in combating the AIDS epidemic, as well as in combating the oppression of women.

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