Gender and HIV/AIDS: Taking stock of research and programmes

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Executive summary

Gender norms ascribe distinct roles–both productive and reproductive–to women and men. By doing so, gender norms also influence women's and men's access to key resources. In this way, gender norms affect both individual risk and societal vulnerability to HIV/AIDS.

Individual risk of HIV/AIDS is influenced by cognitive, attitudinal and behavioural factors - what people know and how they understand it, what people feel about situations and about others, and what people do. Societal vulnerability to HIV/AIDS stems from sociocultural, economic and political factors that limit individuals' options to reduce their risk.

In most societies, gender determines how and what men and women are expected to know about sexual matters and sexual behaviour. As a result, girls and women are often poorly informed about reproduction and sex, while men are often expected to know much more.

Gender norms that interfere with women's and men's knowledge about sexual risk and HIV/STD prevention are linked to attitudes and behaviours that contribute to individual risk of HIV. For example, the high value place on virginity in some cultures may encourage older men to pursue younger women, or it may encourage unmarried women to indulge in high-risk behaviours such as anal sex. High-risk behaviours may also be more likely in situations where women are socialized to please men and defer to male authority. In addition, nonconsensual sex and violence against women are growing gender-related concerns that have consequences for HIV prevention.

Most efforts to understand individual risk of HIV from a gender perspective have focused on women. Fewer data are available on how gender roles and societal pressure put men at risk. Men generally have higher reported rates of partner change than women do, and the condoning of this often begins during adolescence. The use of drugs and alcohol has been identified as contributing substantially to men's vulnerability to HIV, as has injecting drug use.

Social and economic factors foster conditions for risky behaviour

The migration of men to find employment, for instance, adds to their vulnerability. It may disrupt marital and family ties and lead to risky sexual behaviour. In addition, as more women enter manufacturing sectors of the economy without the protective features of their families and home communities, young women are becoming sexually active at an earlier age and are often unaware of the risk of HIV and sexually transmitted diseases. Migration fostered by economic conditions has also contributed to an increase in the number of female-headed households, while economic necessity is often linked to migration for the sex trade in south-east Asia.

Sociocultural norms often prevent women from participating fully in, and benefiting from, the productive economy, thus keeping them dependent on a male partner.

Many women in monogamous relationships who are vulnerable to HIV through their partner perceive the negative economic consequences of leaving the high-risk relationship to be far more serious than the health risks of staying. Low-income girls may face an added risk of HIV because of vulnerability to the enticements of older men.

Women are likely to be disproportionately affected by HIV/AIDS when a male head of household falls ill. The burden of caring for children orphaned as a result of the pandemic is borne chiefly by women. Loss of income from a male income-earner may compel women and children to seek other sources of income, putting them at risk of sexual exploitation.

Gender-related discrimination is often supported by laws and policies that prevent women from owning land, property and other productive resources. This promotes women's economic vulnerability to HIV infection, limiting their ability to seek and receive care and support.

Prevention programmes have tended to aim at reducing individual risk in three ways: sexual abstinence or reduction in the number of sexual partners; non-penetrative sex or the use of male condoms; and the diagnosis and treatment of sexually transmitted diseases. However, two specific programmatic and policy recommendations to reduce individual risk have emerged from the research on gender and HIV/AIDS — firstly to improve access to information, education and skills regarding HIV/AIDS, sexuality and reproduction, and secondly to provide appropriate services and technologies to reduce women's individual risk and to improve women's access to them.

Gender is not an abstract concept.

Nor should it be seen as an insurmountable barrier to reducing individual risk of HIV. However, many risk reduction efforts have been tested only on a small scale. As they are expanded, it is essential to complement them with efforts to reduce societal vulnerability too.

Only a limited number of programmes have so far addressed gender and societal vulnerability but the number is growing. There have been targeted interventions, for instance, aimed at reducing the vulnerability of female sex workers by providing them with other income-generating skills and opportunities. Some programmes have aimed to improve women's social and economic status, while others have aimed to develop education and services so that women can share knowledge, responsibility and decision-making about reproductive health and even help design health policies and projects. Yet other programmes have aimed to improve women's access to economic resources, though not necessarily with the primary purpose of reducing the spread of HIV or alleviating the impact of AIDS. Many programmes around the world provide various kinds of care and support. Some of the most successful have adopted a gender-sensitive approach, recognizing the burdens women bear as a result of economic and social influences.

We know more about what needs to be done than we know about how to do it. Hence the next generation of HIV/AIDS researchers and programmers face a number of challenges. One such challenge is to improve our understanding of how gender influences men's knowledge, attitudes and sexual behaviour. This is needed in order to design prevention programmes that more effectively address gender-related factors that influence personal and societal vulnerability to HIV. Another challenge is to advocate for and provide more resources for gender-sensitive care and support. A third challenge is to develop indicators that will enable interventions to measure reduction in gender inequalities relating to vulnerability to HIV/AIDS.

There is no one solution to the question of gender and HIV/AIDS. However, the empowerment of women is essential to eliminating present gender imbalances.

A broader understanding of gender is also needed within institutions. There must be a public commitment to gender, a participatory approach to developing mechanisms for addressing gender, and the incorporation of gender across programmes. Front-line workers also need to be provided the tools to undertake gender analysis.

I. Introduction

Since the development of a global response to the HIV/AIDS pandemic began more than a decade ago, remarkable strides have been made in our understanding of the nature, scope and impact of HIV/AIDS on individuals, communities and societies around the world. The most striking development is the recognition of the role that gender plays in fuelling the pandemic and influencing its impact. "Gender" is defined as the widely shared expectations and norms within a society about appropriate male and female behaviour, characteristics and roles, which ascribe to men and women differential access to power, including productive resources and decision-making authority. Gender roles vary over time and by class, caste, religion, ethnicity and age [1]*. This review examines research on gender as it relates to women's and men's different vulnerabilities to HIV infection, and their different abilities to access resources for care and support in order to cope with the impact of the epidemic. The paper also reviews programmatic responses that have sought to address gender-specific concerns and constraints in an attempt to contain the pandemic and alleviate its impact.

There are also biological differences between men and women, which have an impact on their vulnerability and access to care. For example, young women are particularly vulnerable to HIV due to fragile vaginal and anal epithelia. HIV-positive women face a particular set of problems associated with pregnancy, delivery and breast-feeding. They may suffer undue discrimination through being counselled not to proceed with their pregnancy, or because their HIV status is diagnosed through a sick child. These are some of the biological factors that do not affect men and adversely impact women. Although they are not explicitly the subject of this paper, some of them may be addressed implicitly in discussion of the vulnerabilities caused by gender differences.

**–For this review, care is defined as a comprehensive, integrated process which recognizes the range of needs for well-being; it includes services and activities, providing counselling and psychosocial support, nursing and medical care, and legal, financial and practical services. Support refers to the resources men and women need to alleviate the economic and social consequences of the impact, including the interacting structures, of social relations that promote or prevent men and women from accessing those resources.*

Historical perspective

Since the early years of the HIV/AIDS epidemic, the public health model of disease prevention has remained central to efforts to reduce the spread of infection. Epidemiological models have identified routes of transmission (sexual, perinatal, parenteral) and patterns of spread. By and large, the public health response to epidemiological data has relied on individual behaviour change interventions to control the transmission of HIV, given the lack of a vaccine or cure. From the mid-1980s until the early 1990s, the risk reduction model became central to these efforts, as evidenced by the creation of a three-tiered approach within national AIDS programmes supported through the Global Programme

on AIDS of the World Health Organization (WHO/GPA). This approach involved the provision of information and education; programmes to deliver services (HIV testing and counselling, needle exchanges, condoms, drug treatment, provision of safe blood and blood products); and promotion of non-discrimination regarding people with HIV/AIDS. This last feature was new to public health, but there was sufficient evidence to prove that HIV/AIDS-related stigmatization and discrimination were instrumental in thwarting efforts to reduce risk through education and service delivery. Throughout this period, prevention of HIV/AIDS and provision of care/treatment for those already infected were treated as separate goals [2].

Since the early 1990s, HIV prevention has been concerned with two main objectives: implementation of the risk reduction model to ever-wider sectors of society and improvement of the delivery of services to those at risk; and the development of more strategic approaches to HIV/AIDS through consideration of the contextual factors that foster vulnerability, including integrating care and support with prevention. The first of these objectives focuses primarily on the individual and on promotion of changes in behaviour to reduce risk of HIV transmission. The second stems from the development of the concept of vulnerability to HIV/AIDS, which is influenced by sociocultural, economic and political factors that constitute the context of individual behaviour. These contextual factors also create barriers or otherwise constrain a person's ability to protect him/herself from HIV infection and to cope with the consequences of HIV/AIDS.

Individual risk and societal vulnerability

The concepts of individual risk and societal vulnerability are inextricably intertwined. The societal context of vulnerability includes the individual—whose behaviours, experience, knowledge and attitudes have often been the primary concern of HIV/AIDS programmes—since groups of individuals make up societies and define their norms regarding gender. In order to facilitate a clear presentation and discussion of the body of research and programmatic activity on gender and HIV/AIDS, this paper discusses individual and societal aspects of risk and vulnerability—the first referring to individual characteristics, and the second to the societal context.

At least three types of factors influence individual risk: cognitive, attitudinal and behavioural. Cognitive factors are those that relate to how and what individuals know about sex and sexuality, and their ability to identify risk and understand information vital to risk reduction. Attitudinal factors include people's feelings about situations, others and themselves. Behavioural factors are those that emerge from the cognitive and attitudinal-how people act and what they do in light of what they know and feel. The behavioural aspect of individual risk also includes the skills of individuals regarding HIV risk and risk reduction, such as the ability to use condoms consistently and correctly and/or to negotiate their use with a sexual partner.

Societal vulnerability stems from the confluence of sociocultural, economic and political factors and realities that compound individual risk by significantly limiting individuals' choices and options

for risk reduction. These include discrimination and marginalization of certain groups of people, illiteracy and lack of educational opportunity, poverty and income disparity, lack of work or economic opportunities, law and the legal environment, political will to mount effective responses to the epidemic, and the state's willingness to protect and promote the full range of political, economic and social human rights.

Gender norms significantly affect an individual's risk and societal vulnerability to HIV/AIDS because they ascribe distinct productive and reproductive roles to women and men, and because they differentially influence women's and men's access to such key resources as information, education, employment, income, land, property and credit. Insofar as gender permeates all aspects of society and social relations, any accurate analysis of personal and societal vulnerability to HIV/AIDS must examine these factors from a gender perspective.

Purpose and scope of this review

Using the vulnerability framework described above, this paper has two sections. The first describes public health and social science research on personal and societal vulnerability to HIV/AIDS in terms of prevention, care and support as they relate to gender. The second reviews programme efforts within public health and development initiatives to address gender issues and concerns as a key component of reducing personal and societal vulnerability to HIV/AIDS and its impact.

This review is based on more than 200 published and unpublished documents, personal interviews with over 40 individuals, and more than 20 programme content questionnaires completed by programme managers and other key personnel working in HIV/AIDS and other areas of economic and social development. Nevertheless, the review of research is not meant to be exhaustive. It highlights key trends, themes and issues that have emerged from the recent literature on the relationship between gender and the HIV/AIDS epidemic. Similarly, the review of interventions provides a snapshot of the types of programmes that have begun to address gender and vulnerability in a more systematic manner, rather than a full descriptive analysis of every programme undertaken. The review of both research and programmatic responses highlights the gaps that exist and the challenges that need to be met for programmes to adequately address gender as this critical process of discovery and response continues.

II. Taking stock of research on gender and HIV/AIDS

Individual risk

As described earlier, three key factors influence individual risk of contracting HIV. Cognitive factors include men's and women's knowledge and beliefs regarding sex and sexuality, HIV risk and risk-taking, and HIV/AIDS-related care. They include women's and men's ability to understand HIV risk and the information that would allow them to reduce their risk. Attitudinal factors are those linked more closely to people's evaluation of situations, themselves and others. They include feelings about HIV and AIDS, attitudes towards those infected, and views about the culpability (or otherwise) of social groups. They also include attitudes regarding gender roles and relations, including the role and function of virginity, motherhood, and power over sexual interactions. They can trigger support, companionship and understanding or lead to discrimination, stigmatization and denial. The behavioural component of individual risk is defined by the practices, behaviours and skills that are related to HIV risk and risk reduction, care and support. These include sexual behaviours and practices and skills to use preventative options or negotiate their use, and behaviours and practices in the realm of care and of alleviating the impact of the epidemic.

Research has shown that gender defines the differences between women and men in terms of what they know, what they believe, how they feel, and how they behave. Gender determinants are deeply rooted in social norms that ascribe to women and men a distinct set of productive and reproductive roles and responsibilities. Gender, therefore, influences how women and men seek out and understand information about reproduction, sexuality and HIV risk; the sexual behaviours and practices that foster HIV risk; and how men and women cope with HIV/AIDS-related illness once infected or affected.

Cognitive factors

In most societies, gender determines how and what men and women are expected to know about sexual matters, including behaviours, pregnancy and sexually transmitted diseases (STDs). Research has revealed that societal constructions of ideal feminine attributes and roles typically emphasize sexual innocence, virginity and motherhood, and that many cultures consider female ignorance of sexual matters a sign of purity and, conversely, knowledge of sexual matters and reproductive physiology a sign of easy virtue [3-5]. Data also show that a remarkably different set of cultural definitions are applied to men, who are often expected to be more knowledgeable and experienced and therefore take the lead as sexual decision-makers [6-12]. Research has also shown how these gender ideals are part and parcel of children's socialization process, and how pervasively entrenched these expectations about sexual knowledge are among adolescent boys and girls [13]. For example, young women's ability to seek information or talk about sex is greatly constrained by strong cultural norms that

emphasize the value of virginity [9]. Data from Brazil, Mauritius and Thailand reveal that young women fear that seeking information on sex or condoms will label them as sexually active regardless of the true extent of their sexual activity [14-16]. Low income young people from Recife, Brazil, for example, feared that if their families should find out that they sought sexual health services, their virginity would come into question [14].

As a result of these gender norms, girls and women are poorly informed about reproduction and sex. For example, recent studies carried out in Brazil, India, Mauritius and Thailand found that young women knew little about their bodies, pregnancy, contraception and STDs [14-18]. Poor married women from Bombay, India, said they had received no information about sex prior to their own experience [19]. This lack of information limits women's ability to protect themselves from HIV, contributing, for example, to fears among women about condom use. In studies conducted in Brazil, India, Jamaica and South Africa, some women reported not liking condoms because they feared that if the condom fell off inside the vagina it could get lost or travel to the throat, or that a woman's reproductive organs would come out when the condom was removed [6, 19-21]. Other studies show that lack of information about their bodies limits women's ability to identify abnormal gynaecological symptoms that could signify an STD [19, 22, 23].

On the other hand, gender norms dictate that males should know more about sex than females. For example, studies in Latin America among youth who had not undergone formal sex education showed that adolescent boys were more likely than adolescent girls to know how to use a condom properly, and to recognize the symptoms of STDs [7, 24-26]. However, despite these expectations, other research shows that many men are ill-informed. Because ignorance is construed as a sign of weakness, male gender norms often prevent men from admitting their lack of knowledge and seeking out correct information regarding HIV/STD prevention [8, 10, 12].

Although there are no data on how gender influences differences in men's and women's knowledge of HIV/AIDS care and treatment, there are data that suggest gender differences in attitudes toward ill-health in general. For example, a study in India demonstrated that many women accept the itching, burning, discharge, discomfort, and abdominal and back pain associated with STDs as an inevitable part of their womanhood [19]. Research also shows a generalized gender-based attitude toward health care that seems to favour boys over girls. For example, a recent review of the literature on gender differences in health and nutrition among children under five years of age revealed that girls tend not to be taken for health care as often or as early in their illness as boys [26].

Attitudinal and behavioural factors

In order to facilitate a more comprehensive understanding of how gender influences women's and men's risk of HIV, this section departs from traditional analyses which treat attitudes and behaviours separately. It is precisely an analysis of gender-related attitudes about a wide range of issues—including virginity, sexuality, STDs, motherhood and power—that brings the issue of risk-related behaviours into much clearer focus in terms of interventions necessary to reduce individual risk. The following section is based on the premise that

behaviour change cannot be achieved without a concerted effort to change women's and men's attitudes about gender roles as they relate to sexuality and sexual risk of HIV.

Gender norms and expectations that interfere with women's and men's knowledge about sexual risk and HIV/STD prevention are inextricably linked to attitudes and behaviours that contribute to their individual risk to HIV and interfere with their ability to alleviate the impact of the disease. For example, in cultures where virginity is highly valued, research has shown that some young women practice alternative sexual behaviours in order to preserve their virginity, although these behaviours may place them at risk for HIV. Anecdotal reports from Latin America suggest that anal sex is practised among unmarried couples to prevent pregnancy and safeguard virginity [7, 14, 27]. In another study, young, unmarried women working in export processing zones in Mauritius report a practice referred to as "light sex", which is not construed as being sexual intercourse. However, in-depth questioning revealed that "light sex" involved rubbing the penis against the vagina and penetration up to the point of pain. Women who practised "light sex" felt they were protecting their virginity, and did not perceive themselves to be at risk for pregnancy nor HIV infection [18].

The literature also suggests that some young girls who are virgins are placed at high risk due to the notion that female virginity symbolizes an innocence and passivity that some men find erotic [6]. In the age of HIV/AIDS, virginity also signifies cleanliness and purity, and thus freedom from disease. In areas of high seroprevalence, it has been reported that older men are seeking out ever younger girls in the belief that, as virgins, they are free from HIV, and may offer them money or gifts in exchange for sex. For example, one study in the Democratic Republic of Congo (formerly Zaire) reported that men choose young and/or plump girls for sex, assuming they are HIV-negative [28]. Other studies have shown that some men believe that they can rid themselves of HIV or STDs by having sex with a virgin [7, 27, 29].

The phenomenon of older men's pursuit of younger women is borne out in epidemiological evidence on HIV infection, when disaggregated for age. Currently, seroprevalence among women is highest in the 15-25 age group, whereas most men are infected 10 years later, between the ages of 25 and 35 [30]. In many societies urban young women begin sexual intercourse before they are 14 years of age [13], and marriages at a young age are common in rural areas [31, 32].

In cultures where women are socialized to please men and defer to male authority—particularlyin sexual interactions—research has shown that women sometimes engage in high-risk sexual behaviour which they believe is pleasurable for their male partners [12]. For example, in parts of west, central and southern Africa, many women insert external agents into the vagina to tighten their vaginal passages, which is seen to enhance male pleasure during intercourse. These agents include herbs and roots as well as scouring powders which may cause inflammation, lacerations and abrasions that could significantly increase the efficiency of HIV transmission [20, 33, 34]. In South Africa, women reportedly used such external agents not only to increase their partners' pleasure, but to dry out their vaginal secretions that they believed could be construed by their partners as a sign of an STD, which would indicate previous infidelity [20].

Anal sex is another example of a sexual behaviour in which women are placed at risk of infection in an effort to please their male partners [9]. Survey data indicate that anal sex is practised to varying degrees on women around the world [27]. Once again, women often engage in this practice not for their own pleasure but to satisfy their male sexual partners or, in the case of unmarried couples, to protect the virginity of the woman. In individual interviews with female factory workers in Rio de Janeiro and São Paulo, women reported that their partners pressure them to engage in anal sex despite their reluctance [6]. The same study showed that, for some Brazilian men, anal sex implies the conquering of a second virginity and symbolizes their power and control over women [6].

Another manifestation of male power and control is nonconsensual sex, which research has shown to be a pervasive reality of adolescent girls' and women's lives and which is increasingly being recognized as a barrier to reducing their risk of HIV infection. Elias and Heise highlight the growing body of evidence which shows that many woman are frequently denied the freedom to control their sexual behaviour and are forced to have intercourse against their will both within and outside of consensual unions [35]. In these circumstances, partner reduction and condom use are unrealistic preventive options for women. For adolescent women, sexual coercion is highly correlated with teen pregnancy. For adult women, it is associated in general with chronic pelvic pain and unspecific gynaecological and psychological problems. In a study of female youth in South Africa, it was found that 30% of girls' first intercourse was forced, 71% had experienced sex against their will, and 11% had been raped [36].

In recent years, a concerted focus on the incidence and consequences of violence against women has emerged as a gender-related concern in women's health [37]. Research on this topic has revealed that, in some cultures, violence against women is central to maintaining political relations at home, at work and in public spheres [38]. Analyses of the determinants of gender-related violence have concluded that the situational factors that provoke violence against women are vast. They include: male dominance and histories of family violence; male control of family wealth; divorce restrictions on women; verbal marital conflict; heavy alcohol consumption; economic stress and unemployment; isolation of women and the family from community support; delinquent peer associations; notions of masculinity linked to toughness and honour; rigid gender roles; a sense of male entitlement and ownership of women; approval of physical chastisement of women; and a cultural ethos that violence is a valid means of solving interpersonal disputes [39, 40].

The pervasiveness of violence has consequences for HIV prevention. Research conducted in countries as diverse as Guatemala, India, Jamaica and Papua New Guinea yielded similar findings: women often avoid bringing up condom use for fear of triggering a violent male response [7, 19, 21, 41]. Furthermore, threats or fears of violence control women's minds as much as do acts of violence, "making women their own jailers" [37]. Violence is also a reality of women living with HIV/AIDS. In one study among women drug users living with HIV/AIDS, 96% had experienced violent contacts [42].

In many cultures, motherhood, like virginity, is considered to be a feminine ideal. Data from around the world point to the economic realities and social pres-

sures which reinforce the value of motherhood for women and contribute to high fertility rates [5,43]. Children are viewed as sources of labour for the family and of security for the parents in their old age. In polygamous societies, they maintain the balance among co-wives, bring in status via schooling and employment, build stable ties to men and maintain a resource network of money, clothes and medical expenses. For men, there is an accumulation of resource networks in the number of children they father [44]. Other studies have shown that children represent a definition of self-worth and social identity for many women around the world [5, 43].

It is in this context that behavioural options to prevent HIV infection, such as non-penetrative sex and use of barrier methods, present difficult and often insurmountable challenges for women and men in balancing fertility against HIV prevention. Research has shown how the value of fertility can contribute to women's vulnerability to HIV in two ways. First, although condoms may be effective in preventing STD/HIV infection, they also prevent conception which, for many, interferes with familial sources of economic security and support, and women's social value [45]. Second, infertility in many societies is sanctioned as a reason for a man to divorce his wife, or to acquire a subsequent wife. If she is not remarried, she may be compelled to engage in high-risk sexual transactions for economic security or protection [23, 46, 47].

Although gender analyses have been employed in the past to describe women's vulnerability to HIV, gender norms also contribute substantially to men's vulnerability. Results from sexual behaviour studies around the world indicate that heterosexual men, both single and married, as well as homosexual and bisexual men, have higher reported rates of partner change than women [41, 48, 49]. Multiple sexual partnerships for men are condoned implicitly or explicitly in perhaps the majority of societies [42, 43, 48, 50]. This finding is supported by research that reveals how both men and women believe that variety in sexual partners and sexual variation is essential to men's nature, and that "real men take risks" [6, 7, 23, 43, 48]. For example, men from rural and peri-urban communities in South Africa felt they needed to maintain the tradition of their fathers and grandfathers by having more than one sexual partner; for young men in particular, having many relationships was equated with being popular and important in the community [20].

Recognition and condoning of multiple partner relationships for men but not for women begin during adolescence. This is illustrated by the observations of male Zimbabwean high school students in focus group discussions; they pointed out that boys can have many girlfriends but girls should stick to one boy [51]. In such cultures, therefore, expecting women to discuss mutual monogamy with their partners directly conflicts with the very definition of masculinity. Focus group discussions with Jamaican working women revealed that they were very concerned about infidelity on the part of their male partners, but felt that the notion of male monogamy was "pie in the sky" [21].

Another gender-related factor that contributes to men's vulnerability to HIV is the stigma associated with men who have sex with men. A recent review of programmes addressing sexual behaviour and sexuality in developing countries concludes that sex between men occurs in all countries and societies but that social and cultural norms and epidemiological categorizations of sexuality can hide

the true extent to which it occurs [52]. As a gender issue, the fact that sex between men is socially stigmatizing (and, in many cases, illegal) contributes to inability to reach those men with information and services to reduce their individual risk of infection. Furthermore, research shows that in many societies many men who have sex with men also have sex with women, and that many bisexual behaviours are often accompanied by a wide range of sexual identities, homosexuality being one of them [53]. For example, a study in India revealed that 90% of male clients of male sex workers reportedly were married [52]. Sexual behaviours that are not recognized as a valid form of sexuality, therefore, contribute to both men's and women's vulnerability to HIV.

The use of drugs and alcohol have been identified as contributing substantially to men's vulnerability to HIV, insofar as they impair judgement and can lead to high-risk behaviour and unprotected sex. Although research shows that substance use is typically a male problem, the gender determinants have only recently begun to be explored. Nevertheless, men are often expected to use alcohol more than women, and even to excess. The role of alcohol has often been cited in reference to violence against women, although recent research into the role of alcohol in domestic violence points out that alcohol is a contributing factor and not the actual cause of violence [54, 55].

Beyond the well-documented risk to women and men who are injecting drug users (IDUs), gender factors further increase female IDUs' risk of infection, including unprotected sex with male sexual partners who also inject drugs and general sexual networking within IDU circles. One study carried out in New York, USA, among 326 women in a methadone maintenance programme revealed that 35% had had unprotected vaginal sex within the preceding 30 days, and the data suggest that most of those sexual acts were with male IDUs. Furthermore, 28% of those women had had sex with more than one partner, and 18% had sex with a partner who was HIV-positive [56]. Further evidence comes from a study in Canada among women IDUs, where 56% of the women enrolled in the study reported never using condoms with their regular sex partner, 81% of whom were reported to be male IDUs. Furthermore, the study revealed that 31% of the women shared needles, and 70% obtained those needles from their regular sex partner [57]. In addition, both female and male substance users may resort to selling sex in order to finance their habit.

These data show how men's and women's knowledge, attitudes and related sexual behaviour are highly influenced by gender norms and expectations, and how gender roles contribute to an individual's risk of HIV infection. Despite efforts to understand individual risk of HIV from a gender perspective, most of the focus has been on women. There are far fewer data available on how gender roles and societal pressure foster behaviours that place men at risk, and thwart their ability to seek information, services and technologies to protect themselves from HIV. According to Mane, even though sexuality education for women in many societies is generally ignored, they often receive at least some information in order to prepare them for their reproductive role. For men, however, there is an almost total absence of reliable information on sex [58]. These are among the many gender-related gaps that will need to be filled as the next generation of HIV prevention programmes is designed and implemented.

Societal vulnerability

In recent years, social science research has sought to enrich the literature on gender and sexual behaviour by exploring the context in which sexual behaviour take place. Social, economic and political factors foster the conditions that facilitate risk behaviour and further create obstacles to women's and men's ability to protect themselves from HIV and effectively cope with the impact of the epidemic. Many of the sociocultural norms and expectations that define gender roles and relations have been examined in terms of influencing individual risk. The following section reviews and analyses broader economic and political realities as part and parcel of an analysis of vulnerability to HIV and the impact of AIDS.

Economic factors, gender and vulnerability to HIV

Research has shown that economic factors contribute to vulnerability to HIV in two ways: first, macroeconomic pressures can contribute to men's and women's vulnerability to infection by disrupting stable social relationships, thus increasing the likelihood that unprotected sexual behaviour will take place. Second, gender-related sociocultural norms create barriers to women's full participation in, and ability to benefit from, the productive economy, thereby increasing the likelihood that women will be dependent on a male partner. In an economically and socially dependent relationship, a woman's ability to leave a high-risk sexual relationship is limited, as is her ability to successfully negotiate safer sex with a non-monogamous sexual partner. In both instances, economic factors contextualize the gender-related factors that contribute to individual risk that have been previously discussed.

Migration

Research has shown how rural-to-urban labour migration of men contributes to their vulnerability. It appears to disrupt marital and familial ties and leads to sexual networks in urban areas where there is an unequal ratio of men to women and seroprevalence is likely to be high [51, 59-61]. Women's vulnerability is also influenced by male labour migration as a result of men returning to their rural households where they re-establish sexual relationships and increase the possibility that HIV/AIDS will be transmitted to rural women [31, 51, 62-65].

As for women who seek employment, a growing body of data on labour market segmentation shows that women are entering manufacturing sectors of the economy due to macroeconomic policies that drive export promotion in developing countries [66, 67]. For example, in Bangladesh, Mauritius and Thailand, where women now make up a large majority of workers in the manufacturing sector [67], migration is pervasive and village families rely on the remittances sent back by adolescent daughters [68]. Here new peer networks, including sexual networks, are formed. Research among these populations has shown that without the protective features of their families and villages, young women are becoming sexually active at an earlier age and are often unaware of the risk of HIV and STDs [15, 16].

Patterns of migration fostered by economic conditions have also contributed to a dramatic increase in the number of female-headed households throughout the world. Research has shown that, in up to one-third of these households, women are the sole income earners [27, 69]. Female heads of households must

balance the twin demands of family and economic survival in a context where they have less access to agricultural support, have smaller land holdings, lower income, fewer assets and less access to training and support for agricultural work than do men [69-73]. For many of these women, transactional sex* has become a rational means of making ends meet [19, 64, 74]. For example, in order to meet immediate economic needs, women in the Democratic Republic of Congo seek occasional sexual partners known as pneus de réchange or "spare tyres" [75-77].

**Transactional sex is defined as the exchange of sex for comfort, goods or money, not necessarily on a professional basis.*

Forced migration

Another form of migration that has been well documented is the sex trade in south-east Asia. A report issued by Human Rights Watch-Asia revealed how economic necessity compels Burmese families to send daughters to work in Thailand through a broker or agent, often not realizing they are essentially being "sold" into sexual slavery. Furthermore, though Thailand has laws and is a signatory to several international and regional treaties which outlaw the practice, the report described in great detail how public officials at many levels are involved in the practice by accepting money and favours in return for their non-interference [78]. Women and girls are trafficked for the sex trade not only through abductions and false promises of good jobs or marriages but also through the argument that women can earn more through prostitution [79]. Nowadays there is also an increasing demand for younger sex workers due to clients' fear of HIV infection [80].

Economic dependency

Women who are not otherwise affected by economically-motivated migration are also vulnerable to HIV, but in a different way. Despite the fact that women are productively engaged in both the formal and informal sectors of the economy, research from around the world shows that there are gender-related differentials in women's and men's access to productive resources, such as land, property, credit, employment, training and education. This is a consequence not only of laws and policies that, for example, prohibit women from owning land or inheriting property, but also of the reality that these laws and policies fail to provide women with the opportunities to realize the full benefits of economic and social development.

Evidence reveals that different income-levels of families do not seem to reduce women's vulnerability to HIV. Research from Uganda, for example, revealed that seroprevalence among women with high-income partners was almost twice that among women with low-income partners [81]. Although this data may seem to be incongruent with other research which has highlighted the relationship between poverty and vulnerability to HIV, the research from Uganda reinforces the overall conclusion that women's vulnerability is associated with factors that are not necessarily within their control.

Given the fact that sociocultural norms condone multiple sexual partnerships for men and place an emphasis on male pleasure and control in sexual interactions-both of which have been shown to influence men's and women's individual risk of HIV-many monogamous, married women find themselves vulnerable to HIV despite the seemingly protective features of marriage or a steady sexual relationship. One study in Senegal, for example, revealed that 50% of women living with HIV/AIDS had no risk factors other than being in a monogamous union [82].

Furthermore, young girls may face an added risk of being vulnerable to HIV

because of economic factors. In Uganda, it is has been reported that girls from low-income families are particularly vulnerable to the enticements of older men or "sugar daddies" who offer money or gifts in exchange for sex [44, 83]. In a study conducted in Zimbabwe, high school girls acknowledged the "sugar daddy" phenomenon in their communities and reported that having sex with these men was largely motivated by economic factors, including paying for school fees and books [44, 84].

Research has also explored the circumstances under which some women are able to reduce their individual risk in a variety of ways. An analysis of research conducted by Elias and Heise found that in instances where women are financially independent, they are more like to be in a position to reduce their risk of infection [35]. For example, Orubuloye et al. found that Yoruba women from south-west Nigeria were able to refuse sex without violent consequences if their partner had a sexually transmitted infection [48]. A study of African-American and Hispanic women from New Jersey (USA) reported that the women were able to exert considerable power by withholding sex if their partner did not agree to use a condom [85].

For most other women in monogamous relationships who are vulnerable to HIV, research shows that they perceive the negative economic consequences of leaving high-risk relationships to be far more serious than the health risks of staying in the relationship [19,24,74,86]. For example, despite the fact that 97% of female respondents in an STD study in Zimbabwe cited their husband as the source of their infection, only 7% considered divorce or separation as an option [87].

For women who lack economic independence and therefore are not able to leave or avoid situations in which they are at risk, the only other option available is to attempt to negotiate changes in the behaviour of their male partners. However, data from research projects conducted in Brazil, Guatemala, India, Papua New Guinea and South Africa reveal that many women who are aware of their partner's sexual behaviour feel helpless about their inability to change it, and have cited their fear that trying to do so could result in disruption of the partnership and even jeopardize the physical safety of the woman [6, 7, 19, 20, 41]. Other research has demonstrated that women who raise the issue of condom use run the risk of conflict, loss of support, and violence [75, 84, 88]. Studies conducted in Rio de Janeiro and São Paulo, Brazil, found that women from low-income communities perceived that they would incriminate themselves as unfaithful and have to suffer the consequences of a male partner's anger and violence if they were to ask their partners to use a condom [6]. Additionally, research has shown that, in many instances, sex takes place under conditions of poverty and overcrowding which make it difficult for women to communicate freely with their partners, let alone negotiate [19]. Moreover, low-income women from situations as diverse as Bombay, Guatemala City and the highlands of Papua New Guinea report that men often demand sex under the influence of alcohol, making negotiation an unrealistic option [7, 19, 41]. In addition, for many couples negotiation is not the usual style of communication. In many instances women are not able to determine when or whether to have sex.

Economic impact

Gender also plays a significant role in determining how men and women are

able to cope with the impact of the epidemic in terms of economic effects, access to care and support, and as a result of gender-related discrimination. The term "impact" refers to both the macroeconomic and microeconomic effects of lost productivity and income (such as selling off assets), as well as household-level impact in terms of household labour distribution, family and social structures, and support systems. In a 1992 study of the economic impact of AIDS, Ainsworth and Over concluded that "at the microeconomic level, researchers have done a much better job of characterizing the nature of the impact of AIDS rather than of measuring it" [89]. Whereas data collected on the impact of HIV/AIDS at the household level has improved to meet this need, few studies have examined gender as a variable in measuring the household and community-level effects of the epidemic. For example, a recent review of socioeconomic impact studies from Zambia exemplifies the extent to which gender analysis of the impact of HIV/AIDS is lacking. Although the review examined the macroeconomic impact of HIV/AIDS vis-à-vis the agriculture, education, health, public and informal sectors, and the microeconomic impact at the level of the household, the only specific references to gender-related impact data in this analysis are passing references to girls and women resorting to sex work, and widows who find it difficult to remarry and establish new family networks for the care of their paternally orphaned children [90].

Similarly, a study of the household-level economic impact of HIV/AIDS-related mortality in the Rakai District of Uganda—undoubtedly one of the most affected areas in the world in terms of HIV/AIDS—concludes that households that have experienced an adult death due to HIV/AIDS cope by altering in size and composition, and incur economic losses through a depletion of durable goods [91]. The data were not analysed from a gender perspective to determine the extent to which the effects of these coping strategies differently affect men and women. Household coping studies in Kagera, Tanzania, reveal that households are likely to spend more on funeral expenses than medical expenses for both men and women whether the cause is AIDS-related or not, though for men who had AIDS the funeral expenses were overshadowed by medical expenses. In general, the households tended to spend more on both medical and funeral expenses for men than for women [92].

Despite the lack of solid, gender-disaggregated data on impact, there is ample evidence from research conducted in the field of development to suggest that women are likely to be affected disproportionately by HIV/AIDS. For example, if a woman living in an agricultural community where women are responsible for subsistence farming becomes infected and falls ill, the cultivation of subsistence crops will fall, resulting in an overall reduction in food availability in the household [93,94]. Given the available evidence from the field of education which shows that girls are often pulled out of school before boys to fulfil household duties when the need arises [95], girl children are likely to be pulled out of school to fill the gaps in food production in instances where outside workers cannot be hired due to the depletion of household economic resources [94].

Women are also likely to be disproportionately affected by the impact of HIV/AIDS when a male head of household falls ill. As a result of the loss of income from a male income-earner, women and children may be required to seek other sources of income. Research has shown

that adolescent girls may be particularly vulnerable as a result of bartering sex for cash or other resources [84, 96]. Other evidence suggests that the epidemic is contributing to a downward trend in the age of marriage for young women as men seek younger wives to protect themselves from infection, and families seek the economic security of marrying off their daughters to economically stable adult men [97]. This phenomenon has far-reaching consequences in terms of young women's education, the health consequences of early childbearing, diminished access to productive resources, and economic dependency on a male partner-all of which have been identified as factors contributing to vulnerability to HIV [97].

Since traditional gender norms support the primary role of women in child welfare, the burden of caring for children orphaned as a result of the epidemic is borne disproportionately by women in many parts of the world. UNAIDS/WHO estimates show that at the end of 1997 the cumulative number of children under 15 years of age orphaned by AIDS since the beginning of the pandemic was 8.2 million [98]. In high-prevalence settings, research has shown that if relatives take in orphans this creates stresses on household economic and food security, especially for families that are already caring for more than one ill or dying family member [94]. Moreover, as the number of persons with HIV/AIDS within a household grows, women are required to spend ever-increasing amounts of time on care-giving. The combined physical and emotional burdens of caring for sick family members (including orphans and members of extended families who have been affected by the disease), ensuring an adequate food supply, and replacing lost income inevitably forces women to neglect their own health and well-being [93].

Research has begun to document how gender-related discrimination, coupled with coping with the burdens of the impact of the epidemic, have conspired to further contribute to women's and adolescent girls' overall vulnerability to HIV and the consequences of AIDS. In instances where a male head of household has died, studies show how some women face a tragic set of circumstances in terms of loss of social support from family members, ostracism by the community, and lack of legal protection to inherit land and property [93, 95, 99]. Furthermore, in many areas of Africa a woman is inherited by the husband's brother when the husband dies. Instances have been cited where a husband's family may blame a widow for the death, and refuse to accept her or her children into their family support system [94]. In regions such as Africa, where orphaned children go to the paternal family, one study revealed that the paternal family typically maintains control over the inherited property of the orphaned children. In societies where children lack property rights, ostracism within the family can lead to exploitation, deprivation of their rights, abuse and neglect [94, 100]. Furthermore, girl children who are orphans of the epidemic are often less welcomed into the extended family than boys, especially if no dowry has been provided for a future marriage. As a result, they may be used by the family as economic objects, and may be coerced into sex work [94].

Finally, in interaction with broader economic conditions, gender plays a significant role in determining women's and men's relative access to care and social support, often exacerbating the already desperate and dire consequences of HIV/AIDS. Research has shown that women face proportionally more barriers than men in seeking and accessing care and

support due to: overall economic constraints in accessing formal health care services [101], lack of infrastructure such as roads and transportation, lack of money to pay for treatment, religious and cultural norms, and the perception by women that the care they receive is inappropriate [102]. Another constraint that has been identified is the vertical arrangement of care services, whereby women are exposed to stigmatization in seeking out treatment and care at separate facilities [102]. Additionally, women who cannot afford to seek care at private facilities resort to public services which often have poorly trained staff and lack treatment regimes [103]. Men may also face barriers in seeking care if they perceive the services to be directed at women only.

Political factors

Since the early years of the HIV/AIDS pandemic, researchers (and especially activists and proponents of human rights) have pointed out the political and governmental factors that play a role in perpetuating the pandemic, including political and policy responses (or non-responses) directly dealing with the pandemic, those indirectly related to the pandemic, and broader policy areas not typically associated with the pandemic but which play a role in creating a context of societal vulnerability to HIV/AIDS.

The broadest set of analyses are those examining fear-driven policy responses to the epidemic itself, such as mandatory and compulsory testing, quarantine, discrimination in the areas of employment, housing, and health care, and limitations on the mobility of people living with HIV/AIDS, including immigration and other travel-related restrictions [104]. Not only have such policies been criticized for their ineffectiveness in slowing the epidemic, but they have also been examined as potential violations of international human rights standards and law [104]. As a result of gender roles and social norms, the impact of these political factors is borne unequally by men and women. For example, men and women who are HIV-positive often face severe discrimination in the household and the community, yet women living with HIV/AIDS face "double jeopardy" as a result of gender- and health-related discrimination. Instances have been cited where family members encourage a husband who is asymptomatically HIV-positive to leave his wife with AIDS and find another one. Often her children are forced out of the home as well [82]. This is the first step in a cycle of abandonment by family members, friends and neighbours that is compounded by economic powerlessness and lack of legal rights to property and other productive resources. The result is poverty in addition to lack of access to care and treatment [93]. In communities that have been particularly devastated by HIV/AIDS, such as those in Tanzania, there is anecdotal evidence that stigma leading to abandonment of women living with HIV/AIDS is on the decline [102]. In other situations where the impact of HIV/AIDS has not yet been felt, the opposite may be the case. In India, Mane suggests that women with HIV are likely to be viewed as vectors of infection and therefore "guilty" of having transgressed "goodness" and deserving of their fate [105].

Although they are fewer in number, other analyses have examined policies indirectly related to the epidemic, including the criminalization of certain behaviours and activities (such as homosexuality, injecting drug use, and sex work), legal restrictions and other barriers to the free flow of information about

sexuality, and restrictions on the provision of services, such as access to clinics and the provision of condoms [106]. The most obvious area where women can be disproportionately affected by these policies is in the area of sex work, where its illegality may make information and service provision to women sex workers difficult. Similarly, women and adolescents are disproportionately affected by governments' efforts to curb information and services relating to sexuality and HIV prevention for reasons of protecting "social mores" and public morality. For example, many countries do not allow the distribution of condoms to adolescents. In those instances, there is a critical breakdown in prevention efforts, given that a critical option for HIV prevention has been eliminated from the choices that sexually active adolescents have [106].

A newer body of research and analysis has begun to examine even broader political and policy realities that create a context of societal vulnerability to HIV/AIDS. These include gender- and age-related discrimination and the role that state-sanctioned violence plays in fuelling the epidemic. Gender-related discrimination is often supported by laws and policies that prevent women from owning land, property and other productive resources; research has shown that this contributes to the feminization of poverty, promotes women's economic vulnerability to HIV infection, and creates particularly significant barriers to women's ability to seek and receive care and support when they themselves are infected [107]. Gender-based sexual violence in often condoned through light sentences or the absence of prosecution. Other forms of discrimination in the areas of employment, education and access to health care services and information further exacerbate women's vulnerability [108].

Research has also demonstrated the impact of war on women and young girls. For example, research carried out in Bosnia, Croatia and Rwanda revealed the horror that many women faced as a result of policies whereby rape and other forms of sexual abuse were utilized as weapons of war. There were brutal reports of gang rapes and of subsequent establishment of brothel networks for women who had suffered this atrocity. Although seroprevalence data are limited (especially in the former Yugoslavia), it is likely that many women were exposed to HIV as a result of rape and their subsequent exile into what has been called sexual slavery [109, 110].

III. Taking stock of programmatic responses to address gender, vulnerability and impact alleviation

Efforts to reduce individual risk

Reducing individual risk to HIV infection has been the central focus of most HIV/AIDS programmes the world over. As was highlighted in the previous section on research, efforts to reduce the impact of the epidemic have typically been separate from prevention efforts, which have remained the dominant focus given limited resources to address the epidemic. Most prevention programmes have delivered messages and services to reduce individual risk in three ways: sexual abstinence or sexual partner reduction; non-penetrative sex or the use of male condoms; and the diagnosis and treatment of STDs. There is ample evidence to demonstrate how individual risk reduction initiatives have indeed been successful in reducing the incidence of HIV infection. The majority of these success stories come from programmes that have focused their efforts on reaching populations considered to be most at risk, such as IDUs, sex workers, men who have sex with men, and clients of STD clinics. Given limited resources and the alarming rapidity with which HIV often spreads among these most vulnerable groups, priority typically has been given to designing individual risk reduction programmes for these groups. Yet research shows that wider segments of society that are not epidemiologically identified as high risk have become increasingly vulnerable, and risk reduction messages should be designed for them as well.

Where those messages have reached broader segments of the population, research has shown that the materials and methods often support misconceptions about who is at risk and thus create a false sense of security for those who are unaware of their own risk [62, 111]. In terms of gender, for many years the term "women and AIDS" was often and is still in some parts of the world used in reference to female sex workers. As the research described in the previous section suggests, many behaviour change programmes that were specifically designed for female sex workers failed to meet the needs of other women in consensual sexual relationships [11, 12, 59, 60, 64, 112, 113].

Broadly speaking, in addition to the broader framework of improving gender equality there are two specific programmatic and policy recommendations to reduce individual risk that have emerged from the research on gender and HIV/AIDS. The first is to improve access to information, education and skills regarding HIV/AIDS, sexuality, and reproduction for women and girls, and for men and boys; the second is to provide appropriate services and technologies to

reduce women's individual risk, and to improve women's access to them.

Information, education and skills for prevention

Improving access to information, education and skills for prevention takes into account the gender-related barriers to information and knowledge, and to the avoidance of sexual risk behaviours between men and women. It also recognizes the need to provide a comprehensive basis of knowledge about sexuality and reproduction in concert with information on HIV and STDs. Finally, it acknowledges that women and girls have need for different gender-related information and skills than men and boys, but that addressing gender roles and relationships and building skills for improved partner communication must also be addressed in order to improve individual risk reduction programmes.

Programmes have responded by acknowledging that face-to-face communication is the most effective means of influencing individual behaviour. Furthermore, many programmes have adopted peer education as a method of face-to-face communication, insofar as this method has been shown to challenge normative beliefs and behaviour through dialogue and personal interactions [114]. Those peer education programmes that have addressed gender-related variables, such as lack of information, services, and technologies for risk reduction, have most often been programmes for female sex workers. Evaluation data indicate that many peer education programmes with sex workers worldwide have improved the sex workers' knowledge of HIV/AIDS and that they have also adopted risk reduction behaviour [113]. Despite these successes, peer education remains an underutilized method of community-wide HIV prevention among women and men in the general population.

Nevertheless, there are lessons to be learned from those peer education programmes that have sought to promote vulnerability reduction among women who are not sex workers. For example, projects conducted among migratory factory workers in Mauritius and Thailand have demonstrated that, given targeted materials and small group dialogue among peers, young women's awareness of HIV/AIDS and competencies to negotiate and communicate safe sex with a partner, family and friends will improve [15, 16]. As with interventions among sex workers, peer education interventions in factories demonstrate that risk reduction programmes for hard-to-reach populations (e.g. migrant women and youth) need an institutional base to promote sustained and consistent small group interaction and support. Furthermore, project design and materials used must be creative enough to allow young women to overcome the barriers they face in discussing sexuality and condom use [16].

Recent intervention studies that have expanded the content of information and education programmes to include the building of skills and discussions about gender roles and relationships have yielded useful results. A project in Thailand among never-married adolescent factory workers showed that an emphasis on partner communication, negotiation and relational aspects of HIV/AIDS prevention can be successful if the sessions are supported by appropriate educational materials that recognize the fact that the workers are out-of-school youth with few years of schooling, yet who are increasingly exposed to new lifestyles and values [115]. Another recent study suggests that school-based programmes can success-

fully address broader, gender-related issues by going beyond a didactic, information-only approach to HIV prevention [116].

Additionally, a recent peer intervention study among low-income adolescent girls in Brazil focused on six broad gender-related issue areas in addition to traditional information on HIV/STD prevention, namely: communication and sexuality, virginity, self-esteem, autonomy, fidelity, and adolescent sexuality. Among the key results from the study was the conclusion that including STD/HIV prevention in a broader discussion of sexuality and local social norms had a significant impact on the target group. Furthermore, the programme contributed to a greater understanding of the need to become involved in community mobilization efforts to challenge wider social inequalities and problems [117].

As a sub-set of these efforts, programmes to address partner communication have emerged as a result of a more gender-sensitive approach to HIV prevention [118]. One study among adult women and men demonstrated how belief in one's vulnerability to HIV or STDs was not significantly associated with frequency of condom use, whereas verbal interactions with a sexual partner about safer sex and sexual history were [119]. Similarly, a study with Thai migratory youth emphasized how gender-related communication increased couples' ability to practice "negotiated safety" [120]. Another study found that training women and men in partner communication via role-plays and interactive methods led to women feeling more comfortable with discussing their partner's sexual history, and men were more comfortable requesting condom use [120]. Similar interventions in Brazil, Indonesia and Tanzania demonstrated how an emphasis on female-initiated and mediated communication with one's husband can result in reduced risk of STDs and HIV for women, and showed that women are likely to express less fear of a husband's refusal and anger [121].

Another programme that has tested communication skills-building approaches for adult women is in family planning clinics operated by the Sociedade Civil Bem-estar Familiar do Brasil (BEMFAM) in Brazil. In that programme, more than 3000 women have participated in group discussions that allowed them to share concerns with other women about sexual issues such as STD history, risk and condom use, and to "practise" conversation with their partners. BEMFAM staff say that these sessions have had positive results [122, 123].

Appropriate services and technologies

Some innovative condom social marketing programmes have addressed the barriers women face in accessing male condoms and insisting on their use with male partners. For example, women in Cameroon and Côte d'Ivoire can purchase condoms in self-service shops, where anonymity is preferred over direct interaction with salespeople. In Burkina Faso and Haiti, organized groups of women are involved in the delivery of HIV prevention information and condom distribution to other women. Peer education programmes in Bangladesh, Burkina Faso, Haiti and India also provide women with effective responses to common male objections to condom use [124, 125].

Another response to the need to provide women with more prevention options is the female condom. A recent review of over 40 acceptability studies conducted around the world concluded

that, by and large, women and men have had favourable reactions to the introduction of the female condom as a method of STD/HIV prevention [11]. Furthermore, research suggests that when women are given an expanded range of prevention options, including the female condom, it is likely that the number of unprotected sexual episodes will decrease [126, 127]. For example, a UNAIDS study carried out in Thailand in 1995 measured consistent condom use and STD incidence between two groups of sex workers: one that used only the male condom, and one that used the female condom when male condoms were not available. The sex workers that had access to both male and female condoms reported fewer acts of unprotected sex and one-third fewer STDs that those who had access to the male condom only [128].

Nevertheless, the literature has pointed out that, in the absence of a supportive intervention, the simple introduction of the female condom is unlikely to change the balance of power between men and women in sexual relationships. A recent study initially supported by WHO/GPA sought to investigate the nuances of how the female condom influences sexual relations between men and women and the circumstances under which the female condom can be considered not only a tool for prevention but also a vehicle to challenge other relational factors that contribute to women's vulnerability to HIV infection, such as improving sexual communication and fostering women's empowerment. According to the study, these benefits were realized to a greater extent by sex workers who already had some negotiation skills, among couples where men were already supportive of family planning, where community and peer acceptance of the female condom was high, in instances where the female condom was considered a welcome alternative to the male condom, and where the female condom was able to be eroticized [129].

Finally, research data on women's vulnerability to HIV infection has been the impetus for the development of a vaginal microbicide [126, 130]. Currently, there are seven products in early clinical evaluation, but only one in advanced efficacy testing [131]. These products can potentially be used in several ways, such as a barrier to HIV/STD infection during intercourse, a vaginal wash during delivery (to reduce perinatal transmission), a postcoital prophylaxis, or a protection from secondary HIV infection for women already living with HIV [132]. Although a clinical study on the effectiveness of nonoxynol-9 as an agent to reduce the transmission of HIV among women met with disappointing results [133], other efforts are under way. For example, UNAIDS launched a multisite study in 1996 to test the effectiveness of a microbicidal compound among female sex workers in Benin, Côte d'Ivoire, South Africa and Thailand. The results of this study are forthcoming. UNAIDS is also sponsoring a study in Mombasa, Kenya, by the University of Washington with some products. Finally, many sites sponsored by UNAIDS for vaccine research have recently expressed interest in evaluating microbicides [131]. As for the future of microbicides, advocates maintain that the most challenging barriers to the development of an effective microbicidal agent or agents is financial and political rather than scientific [132]. The key issue is still to identify a safe compound and to find a pharmaceutical company that is prepared to manufacture it for retail at low cost. Other issues relate to whether the microbicide is only virucidal (i.e. it will protect against HIV and other sexually transmitted infections) or is also able to protect against pregnancy.

These examples show that gender is neither an abstract concept nor an insurmountable barrier to the creation of effective programmes to reduce individual risk of HIV. However, many of these efforts have been tested only on a small scale. In order for them to be expanded, evaluations need to allow programme impacts to be disaggregated by gender. Nevertheless, even the best designed gender-sensitive individual risk reduction programme will not be enough to fully address vulnerability to HIV and AIDS without complementary efforts to reduce societal vulnerability to HIV and the impact of AIDS.

Efforts to reduce societal vulnerability

An expanded response to the epidemic in terms of prevention and impact alleviation must include the recognition that other sectors of society outside the field of health need to be actively engaged in reducing the barriers people face in effectively protecting themselves and alleviating the impact of HIV/AIDS-related morbidity and mortality. Given that public health is ill-equipped to address wider contextual determinants of vulnerability and impact, those working in the field (most of whom are health researchers and practitioners), must look elsewhere for solutions to reduce gender-related economic and social vulnerability.

Although the body of evidence that has revealed broader gender-related determinants of vulnerability has grown substantially since the late 1980s, programmatic responses to those factors have evolved slowly. First, the process through which research is transformed into an intervention is a slow one. Research must be conducted, then a pilot intervention must be designed, implemented and evaluated. Unfortunately, many research findings never get to the pilot phase due to lack of resources or changing donor priorities. For those projects that do make it to the pilot phase, there is a severe lack of useful evaluation data on outcomes that would allow most pilot interventions to be expanded. Even those that are found to be successful are rarely expanded or scaled up to serve larger populations.

Second, public health, with its primary focus on epidemiology and disease control models, lacks the tools to mount social and economic interventions to address the contextual issues that research has shown contribute to vulnerability to HIV/AIDS. Similarly, the vertical nature of most economic and social development programmes has made evaluation of their outcomes in terms of reducing societal vulnerability to HIV and the impact of AIDS particularly difficult. As a result, the creation of programmes to address HIV/AIDS within a comprehensive and expanded response framework has remained largely within the realm of theory.

Finally, a lack of understanding of the complexities and challenges of gender as a variable in vulnerability to HIV and AIDS limits the extent to which programmes have been able to address gender within their interventions to reduce vulnerability.

Addressing gender-related determinants of vulnerability to HIV infection

Although only a limited number of programmes have so far addressed gender and societal vulnerability, their numbers are growing along with a wider recognition of the link between the sociocultural and economic contexts of men's and women' differential vulnerability to HIV and the impact of AIDS. There have been targeted interventions, for example, that have sought to reduce the vulnerability of female sex workers by providing them with alternate income-generating skills and opportunities [52, 134, 135, 136].

A few programmes have sought to improve women's social and economic status, and thereby improve the sexual health of communities. Two such programmes in Bolivia are Casa de la Mujer and CIDEM/Kumar Warmi Clinic. Casa de la Mujer approaches women's reproductive health from a holistic perspective; its work is guided by the philosophy that women's health is not merely a medical issue but is affected and often determined by the wider context of home, relationships, politics, economics and culture [137]. Besides offering reproductive health services, Casa de la Mujer tries to respond to the other needs of the community with legal services (dealing mostly with domestic violence and child support cases), psychological care, education (including basic literacy training and educating women about their legal rights and the meaning of citizenship), potable water, nutrition, preventive health, healthy environment, citizenship training, and labour training [137]. Although Casa de la Mujer was conceived as a woman's place with activities involving only women, the programmes now seek to involve husbands and partners of their clients wherever possible, and to direct special efforts at youth of both sexes.

Similarly, the Centro de Información y Desarrollo de la Mujer (CIDEM)/Kumar Warmi Clinic provides education and services that allow women to share knowledge, responsibility and decision-making about reproductive health and also participate in the design of health policies and projects. CIDEM's approach is based on a gender perspective that permeates the project's concepts, goals, methods and the doctor-patient relationships. Kumar Warmi provides not only accessible services in terms of low-cost and free services for very poor families, but also has a family-friendly atmosphere as well as humane and respectful treatment of poor and indigenous women. Its emphasis on continued patient/client education and growth, based on respect for differences, allows patients/clients to become active participants in their own health care and maintenance. This represents a shift away from the more common situation where medical knowledge is the monopoly of the doctor. The clinic offers integrated services addressing biological, legal, psychological and sociocultural aspects of women's health, with a complementary focus on traditional medicine, designed to recognize and reinforce the positive practices of women participants [137].

Among the many programmes designed to improve women's status, few have been evaluated. One exception is the Paripurna Mahila (A Complete Woman) course designed by the New Delhi-based Asian Centre for Organization Research and Development (ACORD) in collaboration with local nongovernmental organizations. The nine-month, nine-module training course is designed to sensitize both men and women working with grassroots organizations in low-income

rural and urban areas to the significant contributions made by women in the development process [138]. It aims to raise gender awareness among the participants and to provide educational inputs for women so as to raise their self-esteem, increase their self-confidence and make them aware of the factors responsible for women's low status in society. The modules include topics such as "women and family", "the woman as a person", "women's contribution to the economy", and "women and the law" [138].

An evaluation of the first 500 participants to enrol in the course quantitatively measured changes in perceptions relating to prevalent myths, social expectations (gender roles), factual information and legal awareness, some of which were found to be statistically significant. The quantitative data was supplemented by qualitative data which revealed significant gains in knowledge, as well as improved confidence and self-esteem. The participants reported that of the nine modules, the one on legal rights had the most impact in bringing about changes in perceptions and attitudes [138].

These examples provide a glimpse into the overarching relationships that exist between contextual realities and health. They share features such as mobilizing women for community health, a respect for women's autonomy and dignity, and a respect for women's basic human rights. Furthermore, they recognize the importance of bringing women into the process of programme development. For many programme planners, however, the link between improving women's social and economic status as a way to reduce their vulnerability is not evident and, as a result, such projects have not been evaluated specifically in terms of vulnerability reduction. This reality poses a challenge to HIV/AIDS programmers to assist those working in development to harness such projects and further demonstrate that improving women's social and economic status can have a significant impact in reducing vulnerability to HIV and the impact of AIDS.

Many other interventions and programmes have sought to improve women's access to economic resources but have fallen outside the purview of HIV/AIDS prevention due in part to the fact that such programmes do not seek to reduce the spread of HIV or alleviate the impact of AIDS as established goals and objectives. In this category are various micro-finance projects for women (i.e. credit schemes and economic cooperatives), initiatives to provide women with training to improve their skills and access to other economic resources, and legal reform efforts to improve women's access to the legal and justice systems or to promote their economic and social rights [102, 139]. It also includes empowerment and leadership projects that seek to improve women's self-esteem, confidence and political participation; projects to address the incidence and causes of domestic violence; and programmes to improve women's literacy and promote women's access to formal and nonformal education. Even though the objectives of these programmes and initiatives neither include HIV risk reduction nor seek necessarily to improve women's sexual and reproductive health and rights, it is possible that they may actually do so. The lack of evaluation indicators designed to measure HIV-related outcomes makes such a determination difficult.

There are exceptions, however. Recent evaluations of the Grameen Bank and the Bangladesh Rural Advancement Committee (BRAC) credit programmes for women indicate that these programmes' income generation activities can lead to

contraceptive acceptance and use among poor families. This suggests that women who control money and participate in family decisions have more control over reproductive health decisions [140-143]. Furthermore, these programmes have been shown to contribute to a decrease in the incidence of domestic violence, although the programme evaluators suggest that expanding employment and income generation to women is only one strategy for alleviating domestic violence [39].

Similarly, a recent study conducted in Nigeria explored correlates of women's participation in household decision-making in the areas of their children's education, reproductive and child health, and the household economy. The study revealed that women whose preferences were achieved in these areas typically had more economic power, considerable mobility, better access to information, and independent social and economic activities outside the household [144]. The findings of the studies in both Bangladesh and Nigeria suggest that interventions to improve women's social and economic status can have a significant effect on reducing some of the key gender-related barriers they face in protecting themselves from HIV infection.

These examples of how programmes have sought to address sociocultural and economic determinants of gender-related vulnerability to HIV infection reveal the need for expanded evaluations of existing interventions that include HIV-related outcomes, as well as a need for more HIV/AIDS programmes that seek to address gender-related sociocultural and economic inequalities as part of an expanded response to the epidemic.

Addressing gender-related determinants of the impact of HIV/AIDS

In regions of the world where the epidemic is well established, there are many programmes that provide care and support in a variety of ways. Some of the most successful programmes are those that have adopted a gender-sensitive approach and recognize the burdens placed on women as a result of the economic and social impact of the epidemic. Additionally, literature on impact alleviation shows that many local organizations that provide support are, in fact, run by women [145].

Communities have responded to the impact of HIV/AIDS in their lives by developing ad-hoc mechanisms that have become more formalized in recent years, such as The AIDS Support Organization (TASO) which provides counselling and care to the extended family and better ways to serve the extended family that is overburdened with care and support of the infected [146, 147]. This approach supports prevention in that the goal is to lessen the burden of care for households, many of which are headed by women. The Society for Women and AIDS in Africa (SWAA), which has branches in 26 countries, works with governments, nongovernmental organizations and other groups from the international to the grass-roots level in order to reduce economic and sociocultural conditions that increase women's vulnerability. SWAA also provides care and support services for women living with HIV/AIDS, their children and families, and provides training and research on women and AIDS [146, 147]. In Zimbabwe, members of the Women and AIDS Support Network (WASN) work with women's groups in various sectors to support HIV-positive women and each other in prevention ac-

tivities for women. WASN has also focused on risk reduction for women caregivers of family members living with HIV/AIDS, and has research in three communities in Zimbabwe to improve its ability to support and empower women to respond effectively to the epidemic. Results from WASN's study were used to support community-based counterparts in their efforts to raise awareness among women about prevention, care and support [148].

Recognizing the increasing burdens and responsibilities placed on women to provide for their HIV/AIDS-affected families, a number of community-based organizations are implementing programmes that incorporate both economic development and HIV/AIDS-focused activities. For example, in Uganda, ACORD runs an integrated rural development programme focusing on income-generating activities. In 1988, ACORD added an HIV/AIDS programme which offers counselling, support for people living with HIV/AIDS, education and training, and makes referrals to TASO for HIV testing. ACORD has specifically addressed gender-related problems confronting women whose partners or family members die from AIDS, such as the issue of inheritance and land rights, by working with the Uganda Women Lawyers Association. This collaboration has resulted in an increasing number of women being able to retain property after the death of their spouse [149].

These programme examples reveal that the success of community-based interventions designed to address gender-related impact depends on the involvement of women and communities, and that the process of community mobilization often supersedes the content of the programmes they develop [150, 151]. In each case, the process of engaging participants, listening to their stories, facilitating the diagnosis of their problems and working through potential solutions takes precedence over the simple dissemination of HIV/AIDS-related information. Unfortunately, the impact of the process of community mobilization exemplified in many of these programmes has not been evaluated.

Furthermore, although many gender-sensitive initiatives have begun to address women's vulnerability to HIV and the impact of AIDS, gender-sensitive approaches to male vulnerability are still lacking. Campbell argues that only by targeting both women and men can we more comprehensively address gender relations in an effort to reduce risk and vulnerability to HIV/AIDS [9]. Projects such as those supported through the Women's Initiative of the AIDSCAP project found that a "dialogue" approach to communication between men and women holds great promise for stimulating and supporting sustained behaviour change to reduce women's and men's risk and vulnerability to HIV. These assumptions have been tested through an operations research project conducted with truck drivers and their spouses in Jaipur, India, in 1997. The results have since facilitated the funding of a two-year pilot intervention that will expand the project to more sites in India [152].

IV. Conclusions and challenges for the future

Three main conclusions can be drawn from this review of research and programmatic activities to address gender and vulnerability to HIV and the impact of AIDS. First, there remains a substantial gap in our understanding of male sexuality and the social and economic forces that sustain forms of male sexuality that foster risky sexual behaviour. Second, much more research and programmatic is effort devoted strictly to HIV prevention than to care, support and impact alleviation, especially as they relate to gender. Thirdly, while research clearly suggests a need for contextual interventions, there are very few examples from which to draw conclusions regarding the appropriate structure and content of programmes to address gender within an expanded response to HIV and the impact of AIDS. In short, our understanding of what needs to be done is substantially more evolved than our understanding of how to do it. The challenges for the next generation of HIV/AIDS research and programming closely match these conclusions.

From a research standpoint, one key challenge is to improve our understanding of how gender influences men's knowledge, attitudes and sexual behaviour in order to fill critical gaps in the design of prevention programmes that can more effectively address gender-related factors that influence personal and societal vulnerability to HIV [50, 153]. As with the examination of women's vulnerability to HIV, male sexuality also needs to be examined within its social context and not just in terms of individual risk reduction [9, 36]. Equally as important for research is to gain a clearer understanding of how gender influences men's roles in alleviating the impact of AIDS and of how providing care and support will promote the development of responses in which men and women share the burdens of the epidemic more equitably.

A second key challenge is for HIV/AIDS and development programmes to advocate for and provide more resources for gender-sensitive care and support initiatives, particularly now that many countries have experienced the epidemic for more than a decade. The modelling of expanded interventions that recognize the importance of a prevention-care-support continuum will be critical as other regions begin to experience widespread HIV/AIDS-related morbidity and mortality in the coming decade.

A third key challenge for the future is the development of very specific indicators that will enable interventions to measure reduction in gender inequalities as they relate to vulnerability to HIV/AIDS. In an age of proliferating indicators, however, there is a need for "process solutions" that respond to local circumstances in a more meaningful manner. There can be no ready-made formula for measuring the overall effectiveness of a wide range of programmes, especially those designed to reduce economic and social vulnerability to HIV/AIDS [154]. Intervention research supported through new initiatives (such as HORIZONS, a five-

year operations research programme supported by USAID) can provide appropriate and cost-effective strategies to test and evaluate the potential effectiveness of interventions and document international best practices in HIV/AIDS prevention, care, support, and alleviation of impact.

Furthermore, there is a need for a much broader understanding of gender within institutions. The institutionalization of gender has long been problematic, although programme experience suggests that it can be successfully accomplished over time. A review of evaluation results from a number of international agencies, such as the Canadian International Development Agency (CIDA), the International Labour Organisation (ILO), the United Nations Development Programme (UNDP) and the World Bank have yielded valuable lessons on successful models of gender institutionalization [155]. First, there must be a political commitment to gender, publicly stated by the organization's leadership. Second, a participatory approach to developing institutional mechanisms for addressing gender has been found to be most effective in promoting ownership at different levels within institutions. Third, gender must be incorporated across programmes, rather than placed within a separate unit or individual, if marginalization of gender issues is to be avoided. At the same time, the successful institutionalization of gender must include accountability and must rely on programme efficiency rationales, rather than simply on changing the attitudes of individuals within an institution, if successful integration is to be achieved [156].

Other gender institutionalization examples include the government of South Africa, where an institutional framework on gender has been created, including an Office of State for Women, located in the President's office. Gender units have been established in various sector ministries (e.g. Trade and Industry, Finance, Land Affairs) and gender policies instituted. In addition, an independent gender commission has been set up to monitor how well the national gender framework is working [157]. Similar institutionalization of gender has been central to the multisectoral approach of the Uganda AIDS Commission since the early 1990s [158, 159]. More recently, the UN Gender Working Group issued a UN Joint Gender Policy Statement for Malawi, in response to that government's call for donor organizations to support the National Policy Framework for Poverty Alleviation programme. The policy statement is an effort to ensure coordination among the various UN agencies working towards "the empowerment and advancement of women, which are necessary in the process of eliminating the existing gender imbalances" [160].

Finally, programme experiences support the need to continue providing frontline workers with the tools to undertake gender analysis, whether this be through resource kits, training programmes, workshops, seminars or technical support. Within communities, some of the respondents provided examples of how community capacity-building is being approached. The general feeling was that there is no one solution, thus supporting the need for process-oriented solutions that are informed by experiences at the grass roots [154, 161-163].

V. References

1. de Bruyn M. A gender-based approach to advancing women's social status and position. In: *Advancing women's status: gender, society and development. Women and men together.* Amsterdam, Royal Tropical Institute, 1995, pp. 11-20.
2. Mann J, Tarantola D. The history of discovery and response. In: Mann J, Tarantola D, eds. *AIDS in the world II.* London, Oxford University Press, 1996, pp. 429-440.
3. Ankomah A. Premarital sexual relationships in Ghana in the era of AIDS. *Health Policy and Planning,* 1992, **7**:135-143.
4. Caldwell JC, Caldwell P, Quiggin P. The social context of AIDS in sub-Saharan Africa. *Population and Development Review*, 1989, **15**:185-234.
5. Carovano K. More than mothers and whores: redefining the AIDS prevention needs of women. *International Journal of Health Services*, 1992, **21**:131-142.
6. Goldstein D. *The cultural, class, and gender politics of a modern disease: women and AIDS in Brazil.* Washington, DC, International Center for Research on Women, 1995 (Women and AIDS Programme Research Report Series, No. 6).
7. Bezmalinovic B, Skidmore W, Duflon AH, Lundgren R. *Guatemala City women: empowering a hidden risk group to prevent HIV transmission* (Women and AIDS Research Programme, unpublished draft, 1994).
8. Gordon G, Charnock D. Negotiating safer sex. *IPPF Journal*, 1990, **10**:4-5.
9. Campbell C. Male gender roles and sexuality: implications for women's AIDS risk and prevention. *Soc. Sci. Med*., 1995, **41(2)**:197-210.
10. Narula S. *Population and development issues: the linkage to HIV/AIDS in women.* New York, United Nations Development Programme, 1993 (background paper for the International Conference on Population and Development).
11. *The female condom: a review.* Geneva, UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development, and Research Training in Human Reproduction, 1997.
12. Ravindran S. *Gender issues in health projects and programmes: report from the AGRA East Meeting, November 15-19, 1993, the Philippines.* Oxford, Oxfam, 1995 (Oxfam Discussion Paper, No. 5).
13. Weiss E, Whelan D, Rao Gupta G. V*ulnerability and opportunity: adolescents and HIV/AIDS in the developing world.* Washington, DC, International Center for Research on Women, 1996.
14. Vasconcelos A, Neto A, Valença, Braga C, Pacheco M, Dantas S, Simonetti V, Garcia V. *Sexuality and AIDS prevention among adolescents from low-income communities in Recife, Brazil.* Washington, DC, International Center for Research on Women, 1995 (Women and AIDS Programme Research Report Series, No. 11).
15. Cash K, Anasuchatkul B. *Experimental educational interventions for AIDS prevention among northern Thai single migratory female factory workers.* Washington, DC, International Center for Research on Women, 1995 (Women and AIDS Programme Research Report Series, No. 9).
16. Schensul S, Schensul J, Oodit G et al. Sexual intimacy and changing lifestyles in an era of AIDS: young women workers in Mauritius. *Reproductive Health Matters*, 1994, **3**:83-93.

17. Bhende A. *Evolving a model for AIDS prevention education among underprivileged adolescent girls in urban India.* Washington, DC, International Center for Research on Women, 1995 (Women and AIDS Programme Research Report Series, No. 5).

18. Schensul SL, Oodit G, Schensul J, Bhowan U, Ragobar S. *Young women, work, and AIDS-related risk behaviour in Mauritius.* Washington, DC, International Center for Research on Women, 1994 (Women and AIDS Programme Research Report Series, No. 2).

19. George A, Jaswal S. *Understanding sexuality: An ethnographic study of poor women in Bombay.* Washington, DC, International Center for Research on Women, 1995 (Women and AIDS Programme Research Report Series, No. 12).

20. Karim QA,. Morar N. *Women and AIDS in Natal/KwaZulu, South Africa: determinants to the adoption of HIV protective behavior.* Washington, DC, International Center for Research on Women, 1994 (Women and AIDS Programme Research Report Series, No. 7).

21. Wyatt GE, Tucker MB, Eldemire D, Bain, B, LeFranc E, Chambers, C. *Female low income workers and AIDS in Jamaica.* Washington, DC, International Center for Research on Women, 1995 (Women and AIDS Programme Research Report Series, No. 14).

22. Spicehandler J. Background document for the UNFPA expert consultation on operationalizing reproductive health. 1996 (unpublished draft).

23. Gogna M, Ramos S. *Lay beliefs, sexual norms and gender stereotypes: unacknowledged "risks" for STDs. Proceedings of Reconceiving Sexuality: International Perspectives on Gender, Sexuality and Sexual Health, Rio de Janeiro, Brazil, 14-17 April 1996.*

24. Morris L, Bailey P, Nunez L. *Young adult reproductive health survey in two delegations of Mexico City. English language report.* Mexico City, Centro de Orientación para Adultos Jovenes, 1987.

25. Castellanos G, Conde A, Monterroso E. *Encuesta sobre salud y educación sexual de jovenes, departamento de Guatemala, areas urbanas, reporte final.* Guatemala City, Asociación Guatemalteca de Educación Sexual [AGES], 1989.

26. Kurz K. Johnson-Welch C. *Gender bias in health care among children 0-5 years: opportunities for child survival programmes.* Arlington, VA, BASICS, 1997.

27. de Bruyn M. Women and AIDS in developing countries. *Soc. Sci. Med.*, 1992, **34(3)**:249-262.

28. Schoepf BG. AIDS, sex and condoms: African healers and the reinvention of tradition in Zaire. *Medical Anthropology*, 1992, **14**:225-242.

29. Dixon-Mueller R, Wasserheit J. *Culture of silence: reproductive tract infections among women in the Third World.* New York, International Women's Health Coalition, 1991.

30. U.S. Bureau of the Census, Center for International Programmes. *HIV/AIDS surveillance data base.* June 1997 release.

31. Makinwa-Adebusoye P. Sexual behavior, reproductive knowledge and contraceptive use among young urban Nigerians. *International Family Planning Perspectives*, 1992, **18(2)**:66-70.

32. McCawley, AD, Salter C. Meeting the needs of young adults. *Population Reports*, 1995, **23(3)**:3-38.

33. Niang CI. *Sociocultural factors favoring HIV infection, and integration of traditional women's associations in AIDS prevention strategies in Kolda, Senegal.* Washington, DC, International Center for Research on Women, 1995 (Women and AIDS Programme Research Report Series, No.8).

34. Runganga A, Pitts M, McMaster J. The use of herbal and other agents to enhance sexual experience. *Social Science and Medicine*, 1992, **35**:1037-1042.

35. Elias C, Heise L. *Development of microbicides: a new method of HIV prevention for women*. New York, Population Council, 1993 (Population Council Working Paper, No. 6).

36. Heise L. Sexual coercion and women's reproductive health. *Seminario Internacional sobre Avances en Salud Reproductiva y Sexualidad*. Mexico, 18-21 November 1996.

37. Heise L, Pitanguy J, Germain A. V*iolence against women: the hidden health burden*. Washington, DC, World Bank, 1994 (World Bank Discussion Papers, No. 255).

38. *Violence against women as bias motivated hate crime: defining the issues*. Washington, DC, Center for Women Policy Studies, 1991.

39. Schuler S, Hashemi S, Riley A, Akhter S. Credit programmes, patriarchy and men's violence against women in rural Bangladesh. *Soc. Sci. Med*., 1996, **43(12)**: 1729-1742.

40. Heise L. Violence against women. An integrated, ecological model. In: *Violence against women* (forthcoming).

41. Jenkins C *et al.* Women and the risk of AIDS: study of sexual and reproductive knowledge and behavior in Papua New Guinea. Washington, DC, International Center for Research on Women, 1995 (Women and AIDS Programme Research Report Series, No. 10).

42. Krauss B, Goldsamt L, Bula E. *Partner violence in the joint HIV-substance abuse epidemic*. Paper presented at the National Conference on Women and HIV, Los Angeles, CA, 4-7 May 1997.

43. Mane P, Maitra SAA. *AIDS prevention: the sociocultural context in India*. Bombay, Tata Institute of Social Sciences, 1992.

44. Bledsoe C. The politics of AIDS, condoms and hetereosexual relations in Africa: recent evidence from the local print media. In: Handwerker PW, ed. *Births and power: the politics of reproduction*. Colorado, Westview Press, 1990, pp. 197-224.

45. Taylor CC. Condoms and cosmology: the 'fractal' person and sexual risk in Rwanda. *Soc. Sci. Med.*, 1990, **31(9)**:1023-1028.

46. Rwabukwali C, Schumann D, McGrath J, Carroll-Pankhurst, Mukasa R, Nakayiwa S *et. al.* Culture, sexual behavior, and attitudes toward condom use among Baganda women. In: Feldman DA, ed. *Global AIDS policy*. Connecticut, Bergin & Garvey, 1994, pp. 70-89.

47. Over M, Piot P. HIV infection and sexually transmitted diseases. *Health Sector Priorities Review*, June 1991 (Washington, DC, World Bank).

48. Orubuloye IO, Caldwell JC, Caldwell P. African women's control over their sexuality in an era of AIDS: a study of the Yoruba of Nigeria. *Social Science and Medicine*, 1993, **37**:859-872.

49. Sittitrai W *et al. The survey of partner relations and risk of HIV infection in Thailand*. VII International Conference on AIDS. Florence, Italy, June 1991 (Abstract MD 4113).

50. McGrath JW *et al.* Anthropology and AIDS: the cultural context of sexual risk behavior among urban Baganda women in Kampala, Uganda. *Social Science and Medicine, 1993*, **36**:429-439.

51. Bassett M, Mhloyi M. Women and AIDS in Zimbabwe: the making of an epidemic. *International Journal of Health Services*, 1991, **21(1)**:143-156.

52. Gordon P, Sleightholme C. *Review of 'best practice' for intervention in sexual health.* New Delhi, British Overseas Development Administration Health and Population Office (undated).

53. Aggleton P *et al. Bisexualities and AIDS. International perspective.* Social Aspects of AIDS series, 1996, pp. 1-2.

54. Holtz H, Furniss K. *The health care provider's role in domestic violence. Trends in Health Care, Law & Ethics*, 1993, 8(2):48, 1982, pp. 191-205.

55. Stark E, Flitcraft A. Violence among intimates: an epidemiological review. In: von Haselt E. *et al.*, eds. *Handbook of family violence.* New York, Plenum Press, 1988, pp. 309.

56. Catan V, Schilling F, El-Bassell M, Altarac D, Bidassie B, Wada T. *AIDS behavior among women in methadone treatment.* Paper presented at XI International Conference on AIDS, Vancouver, Canada, 7-12 July 1996 (Abstract Th.D 456).

57. Leonard L, Baskerville B, Hotz S. *Risk factors for needle sharing in women who inject drugs.* Paper presented at XI International Conference on AIDS, Vancouver, Canada, 7-12 July 1996 (Abstract Tu.C. 2503).

58. Mane P. *Women to gender: from rhetoric to action in HIV/AIDS prevention, care, support and impact-alleviation.* Paper presented at the Third International Conference on Biopsychosocial Aspects of HIV Infection, Melbourne, Australia, 22-25 June 1997.

59. Hunt CW. Migrant labor and sexually transmitted disease: AIDS in Africa. *Journal of Health and Social Behavior*, 1989, **30**:353-373.

60. Sanders D, Sambo A. AIDS in Africa: the implications of economic recession and structural adjustment. *Health Policy and Planning*, 1991, **6(2)**:157-165.

61. Nyamathi A, Bennett C, Leake B, Lewis C, Flaskerud J. AIDS-related knowledge, perceptions, and behaviors among impoverished minority women. *American Journal of Public Health*, 1993, **83(1)**:65-71.

62. *Women and AIDS: agenda for action.* Geneva, World Health Organization, 1994.

63. Tlou S, Norr K, McElmurry B. *AIDS prevention for women: a community-based approach in Botswana.* Proceedings of the WHO Global Programme on AIDS meeting on effective approaches for the prevention of HIV/AIDS in women, Geneva, Switzerland, 8-11February 1995.

64. Reassessing priorities: identifying the determinants of HIV transmission [editorial]. *Soc. Sci. Med.*, 1993, **36(5)**:iii-viii.

65. Ahlburg D, Jensen E. *The economics of the commercial sex industry and its implications for HIV/AIDS prevention policies.* Paper presented at the symposium on AIDS and Development: The Role of Government, Limelette, Belgium, 17-19 June 1996 (forthcoming).

66. Mehra R, Gammage S. *Trends, countertrends, and gaps in women's employment.* Paper presented at the forum on Employment and Women: Emphasizing Strategies for the Poor, The Hague, Netherlands, 18-19 September 1996.

67. *Women's Indicators and Statistics (WISTAT) Database, 1995.* New York, United Nations, 1995.

68. Palloni A, Ju Lee Y. *The social context of HIV and its effect on families, women and children.* Paper presented at the Expert Group Meeting on Women and HIV/AIDS and the Role of National Machinery for the Advancement of Women, Vienna, Austria, 24-28 September 1990.

69. Buvinic M, Yudelman S. *Women, poverty and progress in the Third World.* New York, Foreign Policy Association, 1989.

70. Lycette M. *Improving women's access to credit in the Third World: policy and programme recommendations.* Washington, DC, International Center for Research on Women, 1989.

71. Fortmann L. Women's work in a communal setting: the Tanzanian policy Ujamaa, In: Bay E, ed. *Women and work in Africa.* Boulder, CO, Westview Press.

72. Staudt K. Bureaucratic resistance to women's programmes: the case of women in development. In: Bonepart E, ed. *Women, poverty and politics.* New York, Pergamon Press, 1982, pp. 263-279.

73. Knudson B, Yates BA. *Economic role of women in small scale agriculture in the Eastern Caribbean - St. Lucia.* Barbados, University of the West Indies, 1981.

74. Heise L, Elias C. Transforming AIDS prevention to meet women's needs: a focus on developing countries. *Social Science and Medicine,* 1995, **40**:931-943.

75. Schoepf BG *et al.* Gender, power and risk of AIDS in Zaire. In: Turshen M, ed. *Women and health in Africa.* Trenton, Africa World Press, 1991.

76. Schoepf BG. AIDS action-research with women in Kinshasa, Zaire. *Social Science and Medicine,* 1993, **37**:1401-1413.

77. Schoepf BG, wa Nkera R, Ntsomo P *et al.* AIDS, women and society in Central Africa. In: Kulstad R, ed. *AIDS 1988: proceedings of the AAAS Symposium*, Washington, DC, 1988. Philadelphia, Current Science, 1988.

78. Women's Rights Project, Asia Watch Division, Human Rights Watch. *A modern form of slavery: the trafficking of Burmese women and girls into brothels in Thailand.* New York, Human Rights Watch, 1993.

79. Paret TO, Dios A, Hofman C, Calalang C, Arpa T. *Trafficking in women and prostitution in the Asia Pacific.* Coalition Against Trafficking in Women - Asia Pacific, World Wide Web site: http://www.uri.edu/artsci/wms/hughes/catw/

80. *Beyond Mumbai: a coalition to prevent sexual exploitation and trafficking.* Proceedings from a meeting organized by CEDPA in collaboration with NCIH/ Global AIDS Programme and PATH/NCIH Women's Reproductive Health Initiative, Mumbai, India, 8-10 December 1997.

81. Ainsworth M, Over M. AIDS and African development. *The World Bank Research Observer*, 1994, **9(2)**:203-240.

82. Hamblin J, Reid E. *Women, the HIV epidemic and human rights: a tragic imperative.* New York, UNDP (HIV and Development Programme), 1995.

83. *AIDS and children: a family disease.* London, Panos Institute, 1989.

84. Bassett M, Sherman J *et al.* Female sexual behavior and the risk of HIV infection: an ethnographic study in Harare, Zimbabwe. Washington, DC, International Center for Research on Women, 1994 (Women and AIDS Programme Research Report Series).

85. Kline A, Kline E, Oken E. Minority women and sexual choice in the age of AIDS. *Soc. Sci. Med.*, 1992, **34(4)**:447-457.

86. Yu-Isenberg K. *Why all the talk about women and AIDS? Information sheet on gender issues in sub-Saharan Africa.* Washington, DC, World Bank, 1996.

87. Pitts M, Bowman M, McMaster J. Reactions to repeated STD infections: psychosocial aspects and gender issues in Zimbabwe. *Soc. Sci. Med.*, 1995, **40(9)**:1299-1304.

88. Richardson D. *Women and AIDS.* New York, Methuen, 1988.

89. Ainsworth M, Over M. The economic impact of AIDS: shocks, responses and outcomes. Washington, DC, World Bank (Technical Working Paper, No.1).

90. Webb D. The socio-economic impact of HIV/AIDS in Zambia. *SafAIDS News*, 1996, **3(4)**.

91 Menon *et al. The economic impact of adult mortality on households in Rakai District, Uganda.* Unpublished paper, September 1996.

92. World Bank. *Confronting AIDS. Public priorities in a global epidemic. A World Bank Policy Research Report.* New York, Oxford University Press, 1997, pp. 206-211.

93. Danziger R. Social impact of HIV/AIDS in developing countries. *Soc. Sci. Med.*, 1944, **39(7)**:905-917.

94. Levine C, Michaels D, Back SD. Orphans of the HIV/AIDS pandemic. In: Mann J, Tarantola D, eds. *AIDS in the World II*. New York, Oxford University Press, 1996:278-286.

95. King EM, Hill MA. Women's education in developing countries: an overview. In: King EM, Hill MA, eds. *Women's education in developing countries: barriers, benefits, and policies.* Baltimore, MD, Johns Hopkins University Press, 1993, pp. 1-50.

96. Watson C. Ugandan schoolgirls resist sweet talk for sex. *World AIDS*, 1989, **6**.

97. United Nations. *Effect of AIDS on the advancement of women*. Report to the United Nations Economic and Social Council Commission on the Status of Women, 33rd Session, 1989 (E/CN.6/1989/6/Add.1).

98. Report on the global HIV/AIDS epidemic. Geneva, UNAIDS/WHO, 1997.

99. Barnett T, Blakie P. *AIDS in Africa: its present and future impact*. London, Belhaven Press, 1992.

100. Foster G. Vancouver conference review: orphans. *AIDS Care*, 1997, **9(1)**:35-125.

101. Moses S *et al.* Impact of user fees on attendance at a referral centre for sexually transmitted diseases. *Lancet*, 1992, **22**:340.

102. Outwater A. Socio-economic impact of AIDS on women in Tanzania. In: Ankrah EM, Long LD, eds. *Women's experiences with HIV/AIDS: an international perspective*. New York, Columbia University Press, 1996, pp. 112-122.

103. Fransen L, Emmerman M. *Major shortcomings in programmes to control STD/ HIV among women in developing countries*. Brussels, European Economic Community, 1993.

104. Gruskin S, Tomasevski K, Hendriks A. Human rights and responses to HIV/ AIDS. In: Mann J, Tarantola D, eds. *AIDS in the World II*. New York, Oxford University Press, 1996:326-340.

105. Mane P. Evolving impact of HIV/AIDS on India. In: Mann J, Tarantola D, eds. *AIDS in the World II*. New York, Oxford University Press, 1996, pp. 124.

106. Mann J, Tarantola D. Societal vulnerability: contextual analysis In: Mann J, Tarantola D, eds. *AIDS in the World II*. New York, Oxford University Press, 1996, pp. 453-462.

107. Ankrah EM, Schwartz M, Miller J. Care and support systems. In: Ankrah EM, Long LD, eds. *Women's experiences with HIV/AIDS*: an international perspective. New York, Columbia University Press, 1996, pp. 264-293.

108. Whelan D. *The promotion and protection of women's human rights and critical measures for the success of national and international responses to the HIV/AIDS epidemic*. Background paper for the Roundtable of Human Rights Treaty Bodies on Human Rights Approaches to Women's Health with a Special Focus on Sexual and Reproductive Health Rights, Glen Cove, New York, 9-11 December1996.

109. *Shattered lives: sexual violence during the Rwandan genocide and its aftermath*. New York, Human Rights Watch, 1996.

110. Long LD. *The impact of violence on HIV-positive and at-risk populations.* Panel presentation at the NCIH HIV/AIDS Workshop on International Perspectives on Legal Issues and Human Rights. Washington, DC, NCIH, 1995.

111. Schoepf BG. Women, AIDS, and economic crisis in Central Africa. *Canadian Journal of African Studies*, 1988, **11(3)**:625-644.

112. Seidel G. The competing discourses of HIV/AIDS in sub-Saharan Africa: discourses of rights and empowerment vs discourses of control and exclusion. *Soc. Sci. Med.*, 1993, **36(3)**:175-194.

113. Norr K, Tlou S, Norr J. The threat of AIDS for women in developing countries. In: Cohen F, Durham JD, eds. *Women, children and HIV.* New York, Springer Publishing Company, 1993, pp. 263-283.

114. Lonher SH, Clarke R. *Proposed methodology for combating women's subordination as a means towards improved AIDS prevention and control.* Expert Group Meeting on Women and HIV/AIDS and the Role of National Machinery for the Advancement of Women, Vienna, Austria, 24-28 September 1990.

115. Cash K, Busayawong W. *AIDS prevention through peer education for northern Thai single female and male migratory factory workers.* Washington, DC, International Center for Research on Women, 1997 (Women and AIDS Research Programme, Phase II Research Report Series).

116. Woelk G, Tromp M, Mataure P. *Training teachers to lead discussion groups on HIV/AIDS prevention with adolescents in Zimbabwe.* Washington, DC, International Center for Research on Women, 1997 (Women and AIDS Research Programme, Phase II Research Report Series).

117. Vasconcelos A, Garcia V, Mendoça MC, Pacheco M *et al.* Sexuality and AIDS prevention among adolescents in Recife, Brazil. Washington, DC, International Center for Research on Women, 1997 (Women and AIDS Research Programme, Phase II Research Report Series).

118. Mane P, Rao Gupta G, Weiss E. Effective communication between partners: AIDS and risk reduction for women. *AIDS*, 1994, **8(suppl. 1)**:S325-S331.

119. Amaro H. Love, sex, and power: considering women's realities in HIV prevention. *American Psychologist*, June 1995.

120. Franzini L, Sideman L, Dexter K, Elder J. Promoting AIDS risk reduction via behavioral training. *AIDS Education and Prevention*, 1990, **2(4)**:313-321.

121. Guimaraes C. Can we talk? Designing strategies to help women influence men. *Proceedings of the AIDS Prevention Conference, United States Agency for International Development, 4-5 November 1991.*

122. Becker J. Personal communication. July 1997.

123. Badiani R, Becker J. Group dialogue empowers Brazilian women. AIDSCaptions, 1995, 2(3):19-20.

124. PSI World Wide Web Site (http://www.psiwash.org/empower.htm). July 1997.

125. Dadian M. Condom sales boom and Rwanda and Haiti struggle to rebuild. *AIDS Captions*, 1997, **4(1)**:4-9.

126. Elias C, Coggins C. Female controlled methods to prevent sexual transmission of HIV. *AIDS*, 1996, **10(suppl.)**:S43-S51.

127. Gollub E. *The women's safer sex heirarchy: interim data. Initial responses to counseling on women's methods of STD/HIV prevention at an STD clinic.* Paper presented at the XI International Conference on AIDS, Vancouver, Canada. 7-21 July 1997.

128. Fontanet AL, Saba J, Chandeying V, Sakondhavat C *et. al. Increased protection against sexually transmitted diseases by granting sex workers in Thailand the choice of using the male or female condom: a randomized controlled trial.* Geneva, UNAIDS, 1996.

129. Aggleton P, Rivers K, Scott S. *A comparative analysis of findings from multi-site studies of gender relations, sexual negotiation, and the female condom*. Geneva, UNAIDS (forthcoming).

130. *Report of a meeting on the development of vaginal microbicides for the prevention of heterosexual transmission of HIV, 11-13 November 1994*. Geneva, World Health Organization Global Programme on AIDS, 1994.

131. Perriens J. Personal communication, 20 November 1997.

132. National Council for International Health. Female controlled microbicides, *AIDSLink*, 1997, 46 (July/August).

133. Roddy RE, Zekeng L, Ryan KA, Weir SS, Tamouofé U, Wong E. *A randomized controlled trial of N-9 film use on male-to-female transmission of HIV-1*. Paper presented at the International Congress of Sexually Transmitted Diseases, Seville, Spain, 19-22 October 1997 (Abstract S51).

134. Esu-Williams E. Women of courage: commercial sex workers mobilize for HIV/AIDS prevention in Nigeria. *AIDSCaptions*, 1994, **2(2)**:19-22.

135. Muriuki J, Mai N, Murithi C, Momanyi M. *Economic empowerment and safer sex practices.* XI International Conference on AIDS, Vancouver, Canada, 7-12 July 1996 (Poster abstract, No. We.D.3706)

136. Network of Sex Work Projects. *Making sex work safe: a practical guide for programme managers, policy makers and field workers.* 1977.

137. Paulson S, Gisbert ME, Quiton M. Case studies of two women's health projects in Bolivia - La Casa de la Mujer, Santa Cruz; CIDEM/Kumar Warmi, El Alto. Family Health International, Women's Studies Project, December 1996.

138. Dighee A, Paripurna M. *An assessment report.* New Delhi, Asian Centre for Organization Research and Development (ACORD), 1994.

139. Barnett T. *Executive report of the effects of HIV/AIDS on farming systems and rural livelihoods in Uganda, Tanzania and Zambia: a summary analysis of case studies from research carried out in the period July-September 1993. Final report, Project TSS/1 RAF/92/TO/A*. Rome, Food and Agriculture Organization of the United Nations, 1994.

140. Schuler S, Hashemi S. Credit programmes, women's empowerment, and contraceptive use in rural Bangladesh. *Studies in Family Planning*, 1994, **25(2)**:65-76.

141. Schuler S, Hashemi S, Riley A. The influence of women's changing roles and status in Bangladesh's fertility transition: evidence from a study of credit programmes and contraceptive use. *World Development*, 1997, **25(4)**:563-575

142. Schuler S, Sidney S, Hashemi S, Syed M *et al.* Bangladesh's family planning success story: a gender perspective. *International Family Planning Perspectives*, 1995, **21**:132-137 & 166.

143. Hashemi S, Syed M, Schuler S, Sidney R *et al.* Rural credit programmes and women's empowerment in Bangladesh. *World Development*, 1996, **24(4)**:635-653.

144. Gammage S. *Women's role in household decision-making: a case study in Nigeria.* Washington, DC, International Center for Research on Women, 1997.

145. Winsbury R. How the community copes-and how not to help the community. *AIDS Analysis Africa*, 1996, **6(1)**:4-5.

146. Ankrah M. AIDS and the social side of health. *Social Science and Medicine*, 1991, **32(9)**:967-980.

147. Seidel G. The competing discourses of HIV/AIDS in sub-Saharan Africa: discourses of rights and empowerment vs discourses of control and exclusion. *Soc. Sci. Med.*, 1993, **36(3)**:175-194.

148. Misihairabwi P, McCharen N, Ray S, Weiss E. *Fostering collaboration between researchers and NGOs on women and AIDS in Zimbabwe.* Washington, DC, International Center for Research on Women, 1994.

149. UK NGO AIDS Consortium. *Effective HIV/AIDS activities: NGO work in developing countries.* Report of the collaborative study. 1996.

150. Seeley J, Kengeya-Kayondo J, Mulder D. Community-based HIV/AIDS research-wither community participation? Unsolved problems in a research programme in rural Uganda. *Soc. Sci. Med.*, 1992, **34(10)**:1089-1095.

151. Niang C. The Dimba of Senegal: a support group for women. *Reproductive Health Matters*, 1994, **4**:39-45.

152. AIDSCAP. *Making prevention work: global lessons learned from the AIDS Control and Prevention (AIDSCAP) Project, 1991-1997.* Arlington, VA, AIDSCAP/FHI.

153. Ezeh AC. *The influence of spouses over each other's contraceptive attitudes in Ghana. Studies in Family Planning*, 1993, **24**:163-174.

154. Parnell B, Lie G, Hernandez JJ, Robins C. *Development and the HIV epidemic: a forward-looking evaluation of the approach of the UNDP HIV and Development Programme.* New York, UNDP, 1996.

155. Rao Gupta G. *Integrating a gender perspective in UNAIDS policies and programmes: a proposed strategy.* 1995 (unpublished draft).

156. Canadian International Development Agency (CIDA). *Gender as a cross-cutting theme in CIDA's development assistance: an evaluation of CIDA's WID policy and activities, 1984-1992. Final report, July 1993.*

157. Githuku A. Personal communication, 18 March 1997.

158. Uganda AIDS Commission. *AIDS control in Uganda: the multi-sectoral approach.* Kampala, Uganda AIDS Commission, 1993.

159. Uganda AIDS Commission. *Uganda national operational plan for HIV/AIDS/STD prevention, care and support, 1994-1998.* Kampala, Uganda AIDS Commission, 1993.

160. Tadria HMK with the UN Gender Working Group. *UN Joint Gender Policy Statement, 1996.* Malawi, UN Agencies, 1996.

161. Asian Centre for Organization Research and Development (ACORD). *ACORD's networking model of development: a report on the community project.* New Delhi, ACORD, 1994.

162. Heise L. Personal communication, 5 March 1997.

163. Massiah E. Personal communication, 20 March 1997.

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