Chapter 2



AIDS education for community health volunteers in Calcutta.

PREVENTION

Recommendation: Ensure that adolescent girls and women have the knowledge and means to prevent HIV infection

he need for prevention strategies that reach girls and women is urgent. This is especially the case for adolescent girls, who face infection rates in some countries that are five to six times higher than those of boys the same age. Even though girls and women are highly vulnerable to HIV infection, they know less than males about HIV/AIDS and how it is transmitted.¹

The rising rates of HIV infection among girls and women require approaches to prevention that address their specific needs and realities and that are linked with other reinforcing elements along a broad continuum of prevention, treatment and care. Effective prevention is composed of many facets—including education, health services, media campaigns, behaviour change, life skills-building and job training. All these components must address the critical role that gender plays in sexual and reproductive life, and how it affects HIV prevention.

Knowledge

Many girls and women know very little about their bodies, their sexual and reproductive health or HIV/AIDS.

In many societies both the discussion of and education about sexual matters is frowned upon. As a result, millions of people, especially girls and women, remain ignorant about HIV/AIDS, with potentially deadly

consequences.

A 1999 nationwide reproductive health survey among 30,556 Chinese women of childbearing age in 32 counties found that 72 per cent overall had heard about HIV/AIDS but half the illiterate or semi-literate women in the study had not. The most common sources of information were radio, TV and friends. Very few had received information about HIV/AIDS in a health-care setting. When asked, "Is it possible for you to become HIV infected?" most women (86 to 92 per cent) of all ages, both rural and urban, and of different levels of education answered, "impossible".

Source: UNAIDS 2001, HIV/AIDS: China's Titanic Peril, 2001 Update of the AIDS Situation and Needs Assessment Report, The UN Theme Group on HIV/AIDS in China Although many adults in both the industrialized and developing world disapprove of sexual and reproductive health education for young people because they believe it encourages promiscuity, research and long experience show that just the opposite is true. A review of 50 sexual health education programmes in different parts of the world found that young people were more likely to delay sexual activity when they had the correct information to make informed decisions.²

Although HIV prevention programmes are expanding, they are not keeping pace

PREVENTION: THE MILLENNIUM DEVELOPMENT GOAL (MDG) INDICATORS ON KNOWLEDGE AND BEHAVIOUR

One of the eight goals of the United Nations Millennium Declaration is to combat HIV/AIDS, malaria and other diseases. To monitor the success of national programmes to prevent the spread of HIV/AIDS, data are now being collected by a number of developing countries and compiled by UNICEF on knowledge about HIV/AIDS and the use of condoms among young people. The data reported below refer to young women and young men aged 15 to 24 and were collected between 1998 and 2003.

According to data from the surveys, globally, more than 80 per cent of the young women did not have 'sufficient' knowledge about HIV/AIDS. Many had no idea how HIV/AIDS is transmitted and little or no information on protection methods.

In South-East Asia only 13 per cent of young women were able to correctly identify two prevention methods (using condoms and limiting sex to one faithful, uninfected partner) and three common misconceptions about HIV/AIDS.

- In Viet Nam almost half of all young women believed they could get HIV from a mosquito bite.
- In Cambodia and Viet Nam 30 per cent of young women believed that HIV could be contracted by supernatural means and nearly 35 per cent believed a healthy-looking person could not be infected.

In sub-Saharan Africa only 20 per cent of women aged 15 to 24 were able to identify the two prevention methods and the common misconceptions about HIV.

 In Somalia only 26 per cent of young women had heard of AIDS and only 2 per cent knew how to avoid infection.

Many young women did not know that a healthy-looking person can be infected with HIV and that a condom can prevent HIV transmission. The percentages of young women who did not know these facts:

- 50 per cent in South-East Asia;
- 50 per cent in sub-Saharan Africa;
- 43 per cent in the CEE/CIS countries and the Baltic States; and
- 25 per cent in Latin America and the Caribbean.

Young women's more limited knowledge is evident in nearly every country surveyed with sex-disaggregated data for both sexes. In some regions and countries, the gap is substantial.

In sub-Saharan Africa 53 per cent of young women know that a healthy-looking person can be infected, compared to 64 per cent of young men.

- In Burkina Faso the differences are 42 per cent of young women, compared to 64 per cent of young men.
- In Ethiopia 39 per cent of young women know that a healthy person may have HIV, compared to 54 per cent of young men.

Too few young people report condom use at last sexual encounter with a non-cohabiting partner, with young women reporting condom use less than young men.*

- In sub-Saharan Africa 23 per cent of young women reported using a condom at last sexual encounter with a non-cohabiting partner, in contrast to 41 per cent of young men.
- In India 51 per cent of young women used a condom at last sexual encounter with a non-cohabiting partner, compared to 59 per cent of young men.

*Relatively few countries collect data on condom use at last sexual encounter with a non-cohabiting partner, although this is used as an indicator for the MDG. From a gender perspective, there are problems with an indicator that is based only on 'high-risk' sex, since many women are infected by a husband or other stable partner who has had multiple partners, and these women do not know they are in a high-risk relationship.

Source: Data prepared by UNICEF for the United Nations Statistics Division; Millennium Indicators Database accessed at http://millenniumindicators.un.org/; UNIFEM/UNAIDS, March 2004, Women in Mekong Region Faced with Higher Rates of HIV Infection Than Men, Mekong Leaders Consultative Meeting on Women and AIDS

with the epidemic. Greater efforts are needed to ensure that initiatives promote female empowerment, gender equality and male responsibility. Breaking the silence on these sensitive issues builds awareness and effective action. Greater dialogue and partnerships are needed that can result in gender-responsive policies and programmes.

In Eastern Europe, a public service campaign, 'What's Your Excuse?' uses posters, T-shirts, condom packaging and print, TV and radio advertisements to confront sexually active teens on their failure to use condoms. Reasons range from a tough-looking hipster who admits, "I'm embarrassed," to young lovers who insist, "We trust one another." The answer to all of them: "There is no excuse. Wear condoms."

In Nicaragua, *Puntos de Encuentro*, a youthoriented NGO, offers a weekly TV soap opera on topics such as AIDS and domestic violence that had not been discussed in the popular media before. The programme—which has become one of the most

popular series on Nicaraguan TV—is followed up with local discussion groups, sometimes with actors from the programme on hand.

These programmes make several critical points:

- Talking about sexuality and health is important;
- Coercion, force and sexual violence are not acceptable;
- Protecting oneself from HIV is a necessity and the means to do so are available.

With young women facing some of the highest risks, the message needs to be emphasized in as many ways as possible. For adolescent girls, it is important that programmes reflect their realities and build self-confidence and life skills, including decision-making and negotiation skills. For girls who are not yet sexually active, abstaining from or delaying their first sexual experience are important options. Experience shows that young people themselves, including those who are HIV-positive, are effective communicators, advocates and educators and need to be involved in prevention campaigns. It is also important for policy makers to consider the context in which decisions about sexuality take place. Above all, young women need alternatives, including economic opportunities. They stand a better chance of living healthy and satisfying lives in societies that value their productive as well as reproductive roles.

The Power to Use Knowledge

For many girls and women, knowledge is not enough. They need to learn not only how HIV is transmitted but also how to negotiate abstinence,

GIRL POWER

In Nigeria, Girls' Power Initiative, a non-governmental organization (NGO), equips adolescent girls between the ages of 10 and 18 with information on sexuality, human rights and reproductive health. Meeting once a week, girls learn new skills in leadership and economic management to help them cope with growing up. Parents, teachers and health workers meet with the girls to improve communication and increase understanding and support. The programme also offers counselling and health service referrals. To bring about wider change throughout society, Girls' Power Initiative has started a Gender Development Institute to conduct research and foster greater awareness and policy changes for social equality.

Source: International Women's Health Coalition, www.iwhc.org

"If you want me to have sex with a condom, I won't give you any money for food."

The response a South African woman received when she asked her husband to use a condom.³

unwanted sex or safer sexual relations. And they need to find safe ways to financially support themselves. Because women have unequal access to resources, they are more vulnerable to coercion, more likely to be economically dependent on men and less likely to be able to negotiate methods of protection.

In Zimbabwe, one project works with 200 women to reduce poverty and economic dependence on men, increasing their bargaining power for safer sexual relations. The women have received grants and training to start income-generating projects such as grinding mills, horticulture, poultry farming, soap making, juice making, butchery and tailoring. The interest repaid on the loans goes into a revolving fund that is used to make

Living For Tomorrow: In 1997, few people would have identified Estonia as a nation on the verge of a serious HIV/AIDS problem. But increasing poverty, a collapsed social infrastructure, a fragile economy and soaring drug use created a conducive environment for new infections. That year, Jill Lewis, a professor of literature and gender studies at Hampshire College in the United States, began an educational project on gender and HIV awareness for young people, sponsored by the Nordic Institute for Women's Studies and Gender Research.

Lewis hoped that sexual safety would be more compelling if it was attached to a series of discussions about gender and personal relations. She wanted to push participants to question the 'naturalness' of existing gender relations and help them feel more comfortable practicing safer sex. "These gender beliefs are central to the HIV risk behaviours young people engage in, yet they are rarely discussed in HIV prevention education," wrote Lewis.

As part of the project, questionnaires were distributed to young people in the capital, Tallinn. The results were predictable in many ways—both young women and men considered submissiveness a trait that women were valued for—with one exception. Young women were three times more likely than young men to say a condom ruined men's pleasure.

"There were a lot of arguments and hot discussions," said Anna Bykova, who was 15 when she joined the programme. "We would talk about stereotypes, sexual issues, intercultural relations." At the end of the programme, Bykova was eager to share her knowledge with others but was shocked by how little other students knew about HIV/AIDS. "When we went to a local school to conduct a workshop, they asked us incredible questions: 'Can you get it from a handshake?' How could they not know?"

Participants of the original workshop have created their own group, Living for Tomorrow, which continues to work with young people in Estonia to confront gender norms, encourage safer behaviour and reduce HIV transmission.

Source: Jill Lewis and Stephen Clift, 2001, Challenging Gender Issues: Report on findings from the Living for Tomorrow project about young people's attitudes to men, women and sex, The Nordic Institute for Women's Studies and Gender Research (NIKK), www.nikk.vio.no

loans to other women. During the entire process, women also receive technical support and education on their human rights, reproductive and sexual health and on how to deal with domestic violence. They are given personal empowerment lessons on assertiveness, communications and

negotiation. The project also involves men and the community at large, including traditional leaders, to encourage sensitivity to women's concerns and responsibility for preventing both domestic violence and HIV/AIDS. The campaign is led by women and other trained community resource persons.⁴

Poverty and economic dependence are not the only reasons it is difficult for many girls and women to insist on using protection. In some cases, they are not comfortable speaking about sexual issues. In other cases, women—especially girls-may acquiesce to unsafe sexual practices in order to preserve a relationship. In Brazil, nearly half the respondents in a study of adolescent sexuality admitted they did not use condoms regularly. "Besides having less bargaining power to convince their partners to use condoms, girls tend to stop insisting on condom use once the relationship evolves into a more stable one based on ties of affection," said Alexandre Granjeiro, the head of the Brazilian Health Ministry's division on Sexually Transmitted Diseases and AIDS. The failure to use condoms has had devastating consequences for Brazilian girls, many of whom have older men as partners. HIV prevalence rates for girls in the 13- to 19-year-old range are now six times that of boys in the same age group, with teenage girls' rates rising rapidly while boys' are going down.5

Ultimately, much of the discrepancy between what girls and women know they should do and what they actually have the power to do is rooted in gender inequality. As one recent study noted, "deeply entrenched beliefs about female and male sexuality mean that women generally have less power than men to decide with whom, how and when they have sex. These beliefs are reinforced by a number of factors, including poverty, age or disability, but may still affect women who are financially independent, or middle or upper class."

It's Not as Simple as 'ABC'

With less ability to control sexual encounters, and increased physiological susceptibility to HIV, many women are finding that commonly accepted methods of prevention are insufficient. While the ABCs—Abstain, Be faithful and use Condoms—have been successful in some countries, such

DEALING WITH 'SUGAR DADDIES'

She is an AIDS orphan trying to support her family. In one case, she becomes involved with a rich older man to pay for her expenses, but soon finds herself pregnant and gives birth to a child who is HIV-positive. In another instance, she joins a local support group that offers sex education, access to condoms and job training. She finds a job and is able to help support her family.

The two stories are alternative endings to a play produced for a new programme, Shaping the Health of Adolescents in Zimbabwe (SHAZ). It is one among many projects that are trying to empower girls and women to protect themselves. It offers young women, many orphaned by AIDS and now heads of household, what project directors call a 'financial prophylactic'.

Researchers from the University of California in San Francisco are focusing on young girls who are involved with older men known as 'sugar daddies', or 'dharas' in the Shona language. Although up to a third of dharas in Zimbabwe may already carry HIV, many of the girls involved with them say they do not use condoms.

SHAZ offers reproductive health services and classes on HIV prevention and how to use condoms. In a departure from traditional prevention programmes, SHAZ is attempting to strike at the root cause of these girls' dependence on sugar daddies by offering vocational training, classes in entrepreneurship and help in developing a business plan. Each girl is mentored by a local businesswoman.

Source: Marilyn Chase, 25 February 2004, "Saying No to 'Sugar Daddies': Can a Financial Prophylactic Shield Girls From Liaisons That Spread AIDS in Africa?" Wall Street Journal

In one study in Zambia, fewer than 25 per cent of the women surveyed believed a wife could refuse sex with her husband (even if she knew he had had multiple partners) and only 11 per cent believed she had a right to ask him to use a condom.

as Uganda,⁷ there is mounting evidence that the approach needs to be expanded to meet the needs of women and girls. According to Noerine Kaleeba, founder of The AIDS Support Organization (TASO) in Uganda and now with UNAIDS, the approach "simply misses the point for the majority of women and girls in many cultures and situations".⁸

For example, abstinence is meaningless to girls and women who are coerced or forced into sexual activity. Faithfulness offers little protection to wives whose husbands have several partners or were infected before they were married. Condoms require the cooperation of men, who may refuse to use them. Furthermore, married couples frequently do not use condoms either because they want to have children or because condoms would indicate a lack of trust.

In many countries, including several with high rates of HIV infection, girls are married in their teens as a poverty reduction strategy. However, recent studies in Africa indicate that young married women are at higher risk of HIV infection than their unmarried counterparts. A study in Kisumu, Kenya, found that 33 per cent of married girls were HIV-positive, compared to 22 per cent of sexually-active unmarried girls of the same age. In Ndola, Zambia, 27 per cent of married girls were HIV-positive, compared to 16 per cent of unmarried girls. The Kisumu study also found that adolescent girls who were married to much older men—a common occurrence—were more likely to be HIV-positive. Half of the married women whose husbands were 10 or more years older were infected with HIV, compared to none of the women whose husbands were up to three years older. Researchers have posited that the increased risk is linked to older men's increased sexual experience and exposure to HIV, young wives' inability to make demands on older husbands, increased sexual relations and less use of means of protection.9

Older married women also appear to be at high risk for HIV/AIDS. In sub-Saharan Africa, 60 to 80 per cent of HIV-positive women report having had sexual relations only with their husbands. On Colombia's Atlantic Coast, 25 per cent of all HIV cases are among women, nearly 50 per cent of whom are either married or in a stable relationship.¹⁰

In India, "marriage is actually women's primary risk factor," according to Suneeta Krishnan, an epidemiologist studying HIV and gender issues in Bangalore. A UNIFEM community-based research project in India pointed to some of the reasons for the increased vulnerability of married women: condom use was extremely rare, adult women had little negotiating power about sexual matters within marriage and men who suggested using protection were suspected of infidelity. Another study, at a health clinic in Pune, India, found that of 400 women—93 per cent of whom were married—25 per cent had sexually transmitted infections (STIs) and 14 per cent were HIV-positive. Ninety-one per cent had never had sex with anyone but their husbands.

Some of the reasons for the high rates of HIV infection among married women are linked to the very reasons that some people marry: they want to have children. But with no way to conceive and protect themselves from HIV at the same time, they frequently put themselves at risk of HIV infection. Often couples assume their marriage will be monogamous—even in communities where men's promiscuity is encouraged—and stop using condoms as a sign of faithfulness. In many cases, gender roles make it dif-

ficult for women to discuss sex with their husbands and for men to admit they are worried about STIs.

Given unequal power within a relationship, it is frequently difficult for women, especially young women with older husbands, to refuse sexual relations. They may fear violence, rejection and abandonment, or they may simply believe that they are required by marriage to be sexually available.

The ABC approach will present viable options for girls and women only if it is implemented as part of a multi-faceted package of interventions that take into consideration the specific problems of girls and women. These interventions should aim to empower girls and women through assertiveness and self-esteem building and inter-personal communication and leadership skills development. They must be accompanied by changes in laws and efforts to transform social expectations that would allow women to live independent lives both socially and economically.

Encouraging dialogue between young men and young women will help ensure that young men are sensitized about respect and appropriate and inappropriate sexual behaviour, and that young women are able to articulate what they want as well as what makes them comfortable. Children should be socialized from an early age to respect the human rights of girls and women and to reject gender discrimination and violence.

Access to Prevention Services

Preventing HIV infection in girls and women requires a combination of interventions that offer tools to block the various routes of infection and provide information to enable those at risk to use these tools. Since the HIV/AIDS epidemic takes radically different forms in different communities, countries and regions, local responses must be guided by local conditions.

Globally, only one fifth of those who need prevention services have access to them, yet adequate levels of these services could prevent 29 million of the 45 million new infections projected to occur this decade. In parts of the world where HIV infection rates are threatening to explode, many people, especially in rural areas, have little or no access to health care in general, which is a primary source of prevention services. This is especially true for young people, who have few entry points to the existing health-care system.

Centres with comprehensive services could help adolescents and adults learn about modes of transmission and how to protect themselves. They could also provide testing and treatment for STIs, which can increase susceptibility to HIV infection by at least two to five times. Building these services need not require the expense of starting from the ground up. Existing health-care facilities, including reproductive health centres and antenatal clinics, can be strengthened. This will involve eliminating fees that prevent the poorest from accessing health care, integrating some services, adding and strengthening others, expanding outreach to new population groups, such as adolescent girls, and creating referral systems that function effectively.

Voluntary Counselling and Testing

Voluntary counselling and testing (VCT), which is currently available to only 12 per cent of the people who want to be tested, 15 can facilitate behav-

iour change that contributes to a reduction in HIV transmission. Studies show that VCT can contribute to a decrease in unprotected sexual relations, a reduction in multiple partners, an increase in condom use and more people choosing abstinence. Research in Kenya, Trinidad and Tobago and Tanzania found that VCT was more effective in reducing reported risk behaviours than just providing information on HIV transmission. Pilot projects in Côte d'Ivoire and India indicate that integrating VCT into sexual and reproductive health services also reduces the stigma associated with HIV/AIDS and increases utilization of other health services. ¹⁶

A refugee looks at an HIV/AIDS prevention campaign poster at a refugee camp in northern Thailand.

VCT is also critical for reducing the numbers of infants born with HIV. Mother-to-child transmission (MTCT) is the primary cause of all HIV infections in children under 15¹⁷, yet in 2003, only 1 per cent of pregnant women in countries heavily affected by AIDS had access to testing and



treatment. That same year, more than 700,000 children were newly infected, mostly through mother-to-child transmission. ¹⁸ Ideally, VCT should not only allow women who are HIV-positive to receive treatment that would prevent their children from becoming infected—known by the acronym PMTCT, preventing mother-to-child transmission—but also receive treatment for themselves (see Chapter 3 for more on treatment for HIV-positive pregnant women and mothers).

Once a woman has given birth, prevention concerns extend to infant feeding. A major risk of MTCT involves infants who are born free of HIV, only to be infected through breastfeeding. Public health facilities must seek to support optimal breastfeeding that helps prevent death and illness from diarrhoea and respiratory infections while avoiding the risk of HIV transmission. Given the importance of both these needs, WHO guidelines state that "when replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected mothers is recommended. Otherwise, exclusive breastfeeding is recommended during the first months of life." 19

Based on the importance of linking HIV prevention with reproductive health services, the International Planned Parenthood Federation and UNFPA have jointly issued guidelines outlining methods for integrating VCT services into reproductive health care settings that are applicable in developing countries in every region.²⁰

One project in Haiti—where there is an HIV prevalence rate of approximately 4.5 per cent—has already merged these services. Working with the Haitian Ministry of Health, UNFPA is supporting a series of reproductive health centres—the Gheskio centres—that merge VCT services with efforts to prevent MTCT. The centres, located countrywide, provide a package of integrated services for HIV/AIDS and other STIs, including information on transmission and prevention, and also offer individual and group counselling and psychological and social support. Some centres have also been able to use supplemental funding to provide ART to HIV-positive pregnant women. Over the course of several years, from 1996 to 2003, the Gheskio centres have been able to show that:

- 90 per cent of the women identified as HIV-positive returned for follow-up;
- 70 per cent of women chose a family planning method to prevent a new pregnancy;
- The MTCT rate was reduced from 30 to 8 per cent; and
- The contraceptive prevalence rate increased from 3 to 21 per cent.21

Both Zambia and Zimbabwe, among others, are also experimenting with expanding reproductive health centres and PMTCT sites to offer HIV counselling to male partners of pregnant women. In Zambia, male peer educators reach out to men at sports events or other public gathering spots to talk about the availability of anti-HIV services, including the possibility of visiting clinics on weekends and holidays when the men are off work.²²

"More money needs to be invested in marketing female condoms and making them affordable and accessible. Women and girls need prevention methods they can control. A lot of times, the girls will say they are abstaining but then you see many girls who are pregnant, and infected with HIV. It is easy to say you are abstaining, but it is harder to do."

Margaret Muganwa, International President of the Society for Women and AIDS in Africa (SWAA)

Methods of Prevention

With no cure in sight, access to condoms and female-controlled methods of prevention, as well as information on how to use these methods, are an essential means of reducing the spread of HIV/AIDS.

Condoms: A recent analysis of 25 published studies found condoms to be about 90 per cent effective, with a high range of about 96 per cent effectiveness.²³ Yet condoms are still not readily available in many regions—less than half of all people at risk of HIV infection are able to obtain them, often simply because not enough are being produced.²⁴ According to the UN Population Division, only 4.9 per cent of married women of reproductive age use condoms. In poor regions, this ranges from 1.3 per cent in Africa to 10.5 per cent in Eastern Europe.²⁵ More

condoms need to be made available, along with skills-building courses that can help men and women feel comfortable discussing how and when to use them.

Along with male condoms, female controlled methods of prevention have to be made available on a much larger scale. These methods—the female condom, which is available, and microbicides, which are being tested—have the potential to provide women with greater control over sexual relations.

Female Condoms: The female condom, which is even less available than the male condom and unless subsidized, costs more, has nevertheless proved to be a successful alternative for many women.

Sixty-four million female condoms have been distributed in over 100 countries. The largest and most successful programme is in Brazil, which has made female condoms a central component of its sexual and reproductive health programme. Service providers promote its use, and women's and men's reactions to the female condom are analysed for clues on making it more 'user friendly'. Studies in over 40 countries in Africa, Asia, Latin America,

Europe and North Africa show acceptance rates ranging from 41 to 95 per cent.²⁷

In a small, UNIFEM-sponsored pilot study in Senegal involving 50 women factory workers, 73 per cent said they used the female condom successfully with their partners. Of these, 80 per cent found it easy to use and nine out of 10 said they derived sexual pleasure while using it. Among the 27 per cent who were unsuccessful in negotiating the female condom, three primary reasons were cited: low economic status, women in polygamous marriages fearing loss of their husband's affection or attention, and fear of social rejection because of religious strictures against condom use.²⁸

Calculations by The Female Health Company, the sole manufacturer of the female condom, indicate that with correct and consistent use, female condoms are 97 per cent effective. With a new, less expensive version expected in 2005, many more women may be able to take advantage of this method.

THE HIV VACCINE

Researchers have been working for several years to develop a vaccine against HIV. As part of the effort, various groups are working to ensure that both vaccine trials and innoculation programmes have a gendersensitive approach. The International AIDS Vaccine Initiative (IAVI) is engaged in developing a framework to identify and address critical issues related to women's and men's participation in HIV vaccine trials and their future use. In India, where trials are already underway, IAVI consulted with numerous groups and individuals, including women's and reproductive rights advocates, people living with HIV/AIDS, NGOs, scientists and trial administrators to help set up an advisory group that will develop gender-sensitive trial protocols and create accountability mechanisms to review and monitor all aspects of the trial.

Source: IAVI

Microbicides: These products, which are undergoing research as a gel, film, sponge, lubricant or suppository, are among the most promising prevention options on the horizon because they are undetectable and can be inserted with relative ease several hours before sexual relations. Two types of microbicides are needed. One would be able to prevent pregnancy as well as HIV transmission. The other would act against the virus only and thereby offer the hope of conceiving while minimizing the risk of HIV transmission between partners and to an unborn child.

The desire or pressure to conceive has stopped many women and men from using condoms even though they know that they or their unborn child might become infected. In a study of Thai women who were HIV-positive, 17 per cent became pregnant after learning their status. "If we do not have children, the family will not be fully complete," one woman told researchers. "If our child does not get HIV, he will carry on our name and bloodline."

Microbicides are undergoing human trials in several sites, including Brazil, India and Zimbabwe. Researchers predict that a microbicide that is only 60 per cent effective could prevent more than 2.5 million infections within three years of its introduction. Promising microbicides are also being evaluated for use with diaphragms and cervical caps to offer additional protection against HIV infection. The Global Campaign for Microbicides estimates that \$775 million is needed to test existing products and move them through the development pipeline to be available by 2007. Although only \$230 million has been committed so far, many advocates are optimistic that more money will be raised in the near future. While microbicides may initially be more expensive than condoms, efforts must be made to ensure that cost does not become a barrier to their accessibility and utilization.³⁰

Prevention, whether in the form of behavioural and attitudinal change, public services or barrier methods that provide physical protection, is an important part of reversing the epidemic. While treatment, particularly universal access to antiretrovirals, will make a huge difference to the lives of people living with HIV/AIDS, prevention methods that promote gender equality and women's human rights can stop the epidemic in its tracks, and steadily reverse the rate of infection.