

C H A P T E R

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*Reducing HIV
Infection in
Women and
Providing
Family
Planning
Services to
Women at Risk*

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INTRODUCTION

In the last few years, the proportion of women among people living with HIV/AIDS (PLHA) has risen dramatically—and the number of infants who acquired HIV from their infected mothers has steadily increased. The first part of this chapter reviews a number of issues related to the primary prevention of HIV among women, with particular relevance to mother-to-child transmission (MTCT). The second part discusses the design and delivery of family planning services to women at risk and HIV-infected women. Information is also provided to guide contraceptive choice in these women.

PRIMARY PREVENTION AMONG WOMEN OF CHILDBEARING AGE

Women are more vulnerable than men to HIV infection because of biological, social and economic factors. Interventions directed at women at high risk of HIV can lead to substantial increases in condom use and corresponding decreases in HIV risk. However, evidence suggests that HIV prevention programs for women must move beyond providing information. Programs must help alter individual behavior by addressing broader gender-based barriers to change and developing necessary support systems.

MOVING BEYOND HIGH-RISK GROUPS

Targeted interventions for high-risk groups, such as female sex workers, may have the greatest impact on the rate of HIV spread, at least in the early phases of an epidemic. But women in a wide variety of situations and partnerships are at risk of HIV infection, and should be included in prevention programs.

REACHING ADOLESCENTS

High rates of teenage pregnancy and STDs indicate the extent of unprotected sexual activity among young people, and therefore their vulnerability to HIV/AIDS. An intensified effort is needed to reach adolescents with relevant services.

ADDRESSING THE NEEDS OF PREGNANT AND LACTATING WOMEN

Primary HIV infection during pregnancy and breastfeeding poses an increased threat of MTCT. HIV prevention interventions directed at pregnant and lactating women could make an important contribution to reducing MTCT.

EXPANDING ACCESS TO HIV COUNSELING AND TESTING

Expanded access to HIV counseling and testing could help seronegative persons accurately assess their own risk and develop an appropriate risk-reduction plan. Counseling and testing can also give seropositive persons the knowledge and support to prevent transmission to others—including infants—even before pregnancy is initiated.

EMPOWERING WOMEN

Widespread and sustained HIV-risk reduction among women will be realized only through action that addresses the gender-power imbalances and the social and economic factors that constrain behavior change.

FAMILY PLANNING FOR WOMEN AT RISK

Women at risk and HIV-infected women also need support and resources to prevent unintended pregnancies. In recent years, efforts have been made worldwide to expand and strengthen family planning services and deliver a broader range of services within a reproductive health approach. Some of the proposed changes should help reduce unintended pregnancies, thereby reducing the frequency of MTCT of HIV.

INCREASING ACCESS TO FAMILY PLANNING SERVICES

The large numbers of HIV-infected infants in Africa are a consequence of high fertility rates combined with high infection rates and low rates of contraception use. Family planning services must be rapidly expanded, with special attention to quality of care, contraceptive choice, equal access and relevance to women and young people in need.

DUAL PROTECTION

Decisions about contraceptives should reflect both the need to prevent STDs and the need to prevent unwanted pregnancies. To date, the methods most effective at preventing STDs—barrier methods—may not be the most effective contraceptives. Combining a barrier method with a more effective contraceptive can maximize the dual protective effect.

CONTRACEPTIVE SAFETY

Some contraceptive methods may even facilitate the acquisition, progression or transmission of STDs, including HIV. IUDs and hormonal contraceptives, for example, do not protect against STDs and may carry other risks.

THE SPECIAL NEEDS OF HIV-INFECTED WOMEN

Most HIV-infected women in the developing world are unaware of their serostatus. Increased availability of voluntary HIV counseling and testing would help them obtain essential care and support services and plan their futures. HIV-positive women should have access to appropriate family planning and reproductive health care counseling and services, so they can make—and act on—informed decisions concerning contraception, continuation or termination of pregnancy and prenatal practices to reduce perinatal transmission of HIV.

POTENTIAL IMPACT ON FERTILITY AMONG WOMEN AT RISK

Experience in Rwanda indicates that family planning services can significantly decrease the rate of unintended pregnancy among women at high risk of HIV. The effect of such services in reducing fertility among HIV-infected women is often limited, however. Many HIV-infected women desire more children, and few are willing to inform their partners about their status.

LESSONS LEARNED AND RECOMMENDATIONS

- Widening the choice for reducing the risk of MTCT of HIV will ensure that interventions consider the needs and rights of women for basic information and services.
- HIV prevention programs should be directed at a broader range of women at risk.
- HIV counseling and testing services can help women make more informed reproductive choices.
- More effort is needed to deal with the social and economic factors that increase women's vulnerability to HIV and address men's responsibility for both infection protection and contraception.
- The strengthening and convergence of health services that serve women of reproductive age may be a necessary foundation for interventions to prevent HIV among women and infants.
- The focus of family planning programs should be broadened to include other reproductive health concerns and other populations.
- Family-planning providers should more systematically consider the risk of STD, including HIV, in counseling women about their contraceptive choices.

- HIV-infected women should have access to appropriate family planning and reproductive health-care counseling and services.
- Operations research is required to develop and test modalities for dual protection in different settings.
- More research is needed to develop new or modified contraceptive and infection protection technologies that can expand the range of options for safer sex.
- More basic and epidemiological research is required to elucidate the association between contraception and acquisition or transmission of STD, including HIV.

CASE STUDIES

An innovative project in rural northeast Thailand demonstrates how community action can lessen cultural forces that put women at risk of HIV. In Tanzania, a school-based program was developed to protect schoolgirls from sexual exploitation by older boys and men, including teachers.

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I N T R O D U C T I O N

In the last few years, there have been marked changes in the pattern of HIV spread. The proportion of women among people living with HIV/AIDS (PLHA) has risen dramatically: In 1998, women accounted for 43 percent of all infected people. As these numbers grew, so did the number of infants who acquired HIV from their infected mothers. In 2000, an estimated 600,000 children under age 15 were newly infected with HIV.¹ These children most commonly acquired HIV from infected mothers during pregnancy, childbirth or breastfeeding.

There have been important advances in the development of approaches to reduce MTCT of HIV. The most effective interventions, however—including antiretroviral therapy and the provision of breast-milk substitutes—are not widely available in resource-poor settings where HIV infection is most prevalent and the risk of MTCT of greatest concern. Here, prevention of HIV infection among women of childbearing age and avoidance of unintended pregnancy among women at risk and HIV-infected women could greatly reduce HIV infection among infants.

The first part of this chapter reviews a number of issues related to the primary prevention of HIV among women, with particular relevance to MTCT. The second part discusses the design and delivery of family-planning services to women at risk and HIV-infected women. In addition, information is provided to guide these women's contraceptive choices.

PRIMARY PREVENTION AMONG WOMEN OF CHILDBEARING AGE

Women are more vulnerable than men are to HIV infection for many reasons.² In particular, women are biologically more susceptible to infection if exposed to HIV and other STDs. Women also are often socially, economically and sexually subordinate to men, increasing the likelihood of their exposure to risky practices such as coerced sex and restricting their ability to adopt HIV-preventive strategies. Thus, HIV prevention interventions should be gender specific.

Most interventions directed at women have been conducted among those at high risk of HIV, such as sex workers. Available data indicate that these programs can lead to substantial increases in condom use in commercial and casual sexual encounters and corresponding decreases in the risk of HIV infection.^{3,4} There is less experience with HIV prevention among women who are at risk for other reasons. But encouraging results have been found in peer-led small-group interventions that include training in social and sexual communication and assertiveness skills for disadvantaged women.^{5,6}

Mixed-sex group interventions bring women and men together, and can be an opportunity to open a dialogue and enhance communication skills.⁷ Community development projects that build upon women's capacity for informal organization and existing support networks also show promise. (See Case Studies.) These projects indicate that women can be mobilized around the issue of HIV prevention and provided with the skills and support they need to negotiate safer sex with their partners. Evidence strongly suggests that HIV prevention programs for women must move beyond providing information if they are to have the greatest impact on MTCT. Programs also must assist in individual behavior change by addressing broader gender-based barriers to change and developing necessary support systems.⁷

MOVING BEYOND HIGH-RISK GROUPS

Targeted interventions for high-risk groups, such as female sex workers, may have the greatest impact on the spread of HIV, especially in the early phases of an epidemic. Nevertheless, women in a wide variety of situations and partnerships are at risk of HIV infection and should be included in prevention programs. For example, many women in stable relationships are exposed to HIV infection not because of their own behavior, but because of their partners' behavior.⁸ In most settings, infected infants are born to women who do not belong to identified high-risk groups.

Women in stable relationships need to develop communication skills and strategies to protect themselves from infection. But for those interventions to be effective, they should involve the male sexual partners as well.

REACHING ADOLESCENTS

High rates of teenage pregnancy and STDs indicate the extent of unprotected sexual activity among young people, and therefore of their vulnerability to HIV/AIDS. More than half of all new HIV infections past infancy currently affect people under 25.⁹ But young people face many obstacles in accessing HIV prevention information and resources. An intensified effort is needed to reach adolescents with relevant services. The goal is to enable them to manage their sexual and reproductive lives in a responsible and informed way, and to protect themselves from sexual violence, unwanted pregnancies and STDs, including HIV.

Young people must be reached early, through programs for adolescents who are not yet sexually active. These should include school-based sexual health education programs (see Case Studies) as well as special programs for out-of-school adolescents to build their self-confidence, train them in communication skills and help them make informed and responsible choices regarding abstinence, delayed sexual initiation and consistent use of condoms. A major effort is required

to modify or reorganize reproductive health services so that young people can obtain STD and contraceptive services easily and in confidence. We must also change the policy environment to enhance the acceptability of adolescent HIV interventions.

ADDRESSING THE NEEDS OF PREGNANT AND LACTATING WOMEN

Primary HIV infection during pregnancy and breastfeeding poses an increased threat of MTCT. Since it is widely assumed that women who are pregnant or lactating are at lower risk of HIV infection because of prevalent cultural norms about sexual abstinence during pregnancy and in the first months after delivery, few purposive efforts have focused on preventing HIV during this period. In most settings, however, sexual intercourse is rarely interrupted for long around the period of childbirth, and women may be more susceptible if sexually exposed to HIV during pregnancy, though this has not been studied in any detail. The infant may also be at higher risk of HIV acquired by the mother during pregnancy or during breastfeeding.

HIV prevention interventions directed at pregnant and lactating women could make an important contribution to reducing MTCT. For many women, antenatal and obstetric services provide a rare opportunity for contact with a trained health worker who can provide advice and support regarding STD/HIV risk assessment and risk reduction, reproductive tract infection (RTI)/STD case finding and management and—if desired—HIV counseling and testing. Women and their partners may be more receptive to messages about safer sex at this time. Health workers also should pay particular attention to blood safety and the rational use of transfusions in the management of anemia and complications of pregnancy and delivery.

EXPANDING ACCESS TO HIV COUNSELING AND TESTING

The purpose of HIV counseling and testing in programs to reduce MTCT is often narrowly defined as the identification of infected women in antenatal settings. But greater access to HIV counseling and testing could also help in other ways: Knowledge of serostatus can help seronegative persons assess personal risk and develop an appropriate risk-reduction plan. It can also provide seropositive persons with the knowledge and support to prevent transmission to others, including infants, even before pregnancy is initiated. HIV counseling and testing may be particularly helpful to persons who are in stable relationships. Some evidence suggests that HIV counseling and testing directed at couples (as opposed to individuals) can lead to significant behavior change, especially in high-prevalence areas. Encouraging results have been found in serodiscordant couples,¹⁰ who are at greatest risk of producing HIV-infected infants. But since an important aim of HIV counseling and testing is to encourage informed decision making and behavior change, individuals must have ready access to resources and services that allow choices for action and support and maintain behavior change. These include access to condom supplies, family planning and other reproductive health services, RTI/STD treatment services and care and support services for HIV-affected persons. Linkages between these diverse but mutually supportive services should be considered. Expanded voluntary and counseling services (as they become available) will also improve access to care or support services for women.

FAMILY PLANNING FOR WOMEN AT RISK

EMPOWERING WOMEN

Prevention efforts for women are hampered because available methods for reducing HIV transmission remain under the control of men. Repeatedly, male resistance to condom use emerges as a major obstacle to interventions that seek to protect women. More study is needed to understand and reconcile the contrasting perspectives of men and women and to increase male responsibility in sexual issues, including HIV prevention. There have been few real attempts to involve men in this way.

At the same time, the increasing availability of female-initiated methods of protection—such as the female condom—shows some promise in strengthening women's ability to negotiate condom use. The development and evaluation of other methods of protection—such as vaginal microbicides, which ideally can be used without men's consent—is urgently needed.

Widespread and sustained HIV-risk reduction among women will ultimately be realized only through action that addresses the gender-power imbalances and the social and economic factors that restrict behavior change. Eventually, structural-level interventions—such as changes in laws and policies related to education, employment and marriage—will be required to change social norms regarding sexual behavior and create a supportive environment for more equitable decision making among men and women.

Women at risk and HIV-infected women also need support and resources to prevent unintended pregnancies. Efforts have been made in recent years to expand and strengthen family planning services to deliver a broader range of services within a reproductive health approach. Some of the proposed changes should help reduce the frequency of MTCT of HIV.

INCREASING ACCESS TO FAMILY PLANNING SERVICES

Contraceptive use remains low in much of the developing world, and may be especially low in settings where prevalence of HIV infection is high. The large numbers of HIV-infected infants in Africa are a consequence of high fertility rates combined with high infection rates. In such settings, many women want to delay or limit childbearing, and yet do not use contraception. There is an urgent need to address this unmet demand for family planning services. Rapid expansion of services with special attention to quality of care, contraceptive choice, equal access and relevance to women and young people is needed.

Particular attention should be paid to developing services that can reach groups such as adolescent girls and single women, who are especially vulnerable to both unintended pregnancy and HIV and other STDs, and yet remain underserved by traditional family planning programs and other reproductive and sexual health services. A strong case can also be made for increased male participation in family planning programs, in view of the major role of men in contraceptive decision making and the use of condoms.^{11,12}

The convergence and eventual integration of family planning services and other reproductive health services—including maternal and child health services and services for the prevention and treatment of RTI/STD—at the primary health-care level is receiving increasing attention. Evaluations of integrated services indicate, however, that many problems can arise in practice.¹³ A major effort is needed to train and support multipurpose health-care workers in delivering expanded services in AIDS-affected areas, assist them in discussing family planning and sexual health issues and dealing with the painful dilemmas that HIV infection raises for some of their clients.

Table 1

EFFECTS OF CONTRACEPTIVES ON BACTERIAL AND VIRAL RTI

Contraceptive methods	Bacterial RTI	Viral RTI
Condoms	Protective	Protective
Spermicides	Modestly protective against cervical gonorrhea and chlamydia	No evidence of protection In vivo
Diaphragms	Protective against cervical infection Associated with vaginal anaerobic overgrowth	Protective against cervical neoplasia
Hormonal	Associated with increased cervical chlamydia Protective against symptomatic PID, but not unrecognized endometritis	Not protective
IUD	Associated with PID in first month after insertion	Not protective
Fertility awareness	Not protective	Not protective

Source: Cates²⁰

DUAL PROTECTION

Family-planning providers have a special role to play in counseling people on responsible sexuality and providing them with the means to prevent HIV and other STDs, as well as unintended pregnancy. Providers should be able to discuss the connection between STD/HIV and contraceptive use, since the risk of infection is an important consideration in choosing a contraceptive (Table 1). Greater emphasis must be placed on barrier methods within the contraceptive choices offered in family planning programs. This will serve to encourage simultaneous contraceptive and disease protection (dual protection), and is particularly important in settings where HIV prevalence is high. Male and female condoms—if used consistently and correctly—can effectively prevent pregnancy^{14,15} and reduce transmission of STDs, including HIV.^{16,17} Other barrier methods (such as diaphragms, caps and vaginal sponges) may provide some protection against cervical infections when used with currently available spermicides, and are similar to male condoms in reducing typical pregnancy rates. However, they are less effective in preventing HIV transmission, since they cover the cervix, but not the vaginal wall.^{18,15} Recent

studies suggest that the use of nonoxynol-9 may actually increase the risk of HIV acquisition.¹⁹

Many family-planning providers downplay barrier methods, because they are less effective in typical situations of inconsistent use than other contraceptive options. On the other hand, contraceptives that are most effective in preventing pregnancy provide little, if any, protection against STDs. This leads providers to recommend a “dual method” approach, in which a highly effective contraceptive is used to prevent pregnancy, and condoms are also used during any act of intercourse with a risk of STD transmission. This places a greater

burden on both women and men, however, and is only sustainable among couples with a high level of motivation. Studies indicate that, in general, the more effective the primary contraceptive is in preventing pregnancy, the lower the level of consistent condom use.²¹ Other possible approaches to dual protection include the provision of emergency contraception as a back-up to condom use—in case of breakage, for example.

CONTRACEPTIVE SAFETY

Concerns about STD and HIV also demand greater attention to ensuring quality of care and safety in the delivery of family-planning services. Some contraceptive methods may actually facilitate the acquisition, progression or transmission of STDs, including HIV. For example, even though IUDs are considered to be among the most safe and effective contraceptives, they are associated with an increased risk of pelvic inflammatory disease (PID).²² Although the risk of PID among IUD users remains low, this method is not

Box 1

WHEN SHOULD WOMEN OR COUPLES BE ADVISED TO USE DUAL METHODS FOR PROTECTION AGAINST STDs AND PREGNANCY?

Decisions about contraceptives should reflect both the need to prevent STDs and the need to prevent unwanted pregnancies. To date, the methods most effective at preventing STDs—barrier methods—may not be the most effective contraceptives. Combining a barrier method with a more effective contraceptive can maximize the dual protective effect. But dual method use is relatively new, and is not appropriate for all clients. Deciding when to promote dual method use can be difficult, especially since it requires more counseling and places greater demands on each client. Providers have a responsibility to help clients choose which method or methods to use in light of this dilemma between pregnancy prevention and disease prevention. Providers will have to evaluate the dual needs of each client to assist him/her in making a safe and appropriate decision.

- A needs assessment can identify populations at risk and STD/HIV prevalence rates for a geo-

Source: Adapted from Cates²⁵

graphical area, thus helping providers understand STD/HIV risk their clients generally face.

- Clients who consider themselves or their partners at high risk of HIV and other STDs are good candidates for dual method use.
- Some clients may be able to achieve protection against both STDs and pregnancy using a barrier method alone. Motivated clients might safely use male condoms alone, because condoms are very effective at both disease and pregnancy prevention when used correctly and consistently.
- For women at risk of STDs who cannot persuade their male partners to use a male condom, the female condom or the diaphragm with spermicide can be used for both STD protection and contraception.
- Regardless of her history, a woman should always be informed if the contraceptive method she is using does NOT protect her against STDs. If she is ever in a situation where she suspects she may be at risk (for example, her partner has other sexual partners), she should immediately start using additional protection.

generally recommended to women who are at high risk of STD, since it does not protect against infection. Candidates for IUD insertions should be carefully screened for the presence of current genital infection and assessed for STD risk. IUDs should be inserted only when procedures for infection prevention and client follow-up are adequate. This requires that family-planning providers receive further training in screening, counseling and insertion techniques.

It remains unclear whether oral or injectable hormonal contraceptives increase a woman's susceptibility to STD—including HIV—or her infectivity to her partner if she is already infected. Some studies have found greater risk of cervical infections with chlamydia trachomatis among users of oral contracep-

tives than among non-users, though the risk of symptomatic PID may paradoxically be reduced.²⁰ The research conducted to date on the influence of hormonal contraceptives on HIV acquisition or transmission is inconclusive.^{23,24} Such methods are otherwise safe, effective and convenient and women should continue to use them. However, because hormonal contraception does not protect against STDs, women who are uncertain about their partners' infection status should also encourage them to use condoms for "dual method" protection against both unintended pregnancy and infection.

Table 2
CONTRACEPTION FOR THE HIV-INFECTED WOMAN

Method	Possible benefits	Possible drawbacks
Oral contraceptives	Good effectiveness with consistent use. Less blood loss and anemia risk.	Unclear interaction of steroids and immune function. Interaction with certain antibiotics, antiretrovirals, other drugs. Possible increased shedding of virus from cervix. No STD protection. No HIV protection for partner.
Norplant, Depo-Provera	Good low-maintenance effectiveness.	Unclear interaction of steroids and immune function. Possible increased shedding of virus from cervix. No STD protection. No HIV protection for partner.
IUD	Good low-maintenance effectiveness.	Risk of uterine infection secondary to insertion. No STD protection. No HIV protection for partner. Increased days of bleeding, possible anemia.
Diaphragm, cap, spermicides	Some STD protection.	Vulvovaginal irritation increases vulnerability to RTIs for some users. Requires good technique.
Male, female condom	Good STD protection HIV protection for partner.	Male condom requires partner cooperation; partner cooperation helpful with female condom. Requires good technique.
Surgical sterilization	Good low-maintenance efficacy for women who desire no more children.	No STD protection. No HIV protection for partner.

Source: Adapted from Guest³⁰

THE SPECIAL NEEDS OF HIV-INFECTED WOMEN

Most HIV-infected women in the developing world are unaware of their serostatus. Increased availability of voluntary HIV counseling and testing would correct this, and help them obtain essential care and

support services and plan their futures. This implies training and supporting more health workers at the primary health-care level in risk assessment and counseling techniques, and establishing linkages with HIV counseling and testing services. The use of rapid, simple and low-cost testing methods may help expand availability of such services soon.

Improving the standard of care for HIV-infected women and reducing widespread stigmatization and discrimination in health-care settings may help increase demand for HIV counseling and testing services. At the very least, women who are known to be HIV-positive should have access to appropriate family planning and reproductive health care so they can make and enact informed reproductive decisions concerning contraception, continuation of a pregnancy and prenatal practices to reduce perinatal transmission of HIV. Thorough and sensitive counseling regarding their reproductive choices is critical. The risk of HIV transmission to a partner or unborn baby should be discussed: Dual protection should be encouraged and information about available contraceptive methods provided. Such counseling should take into

consideration the complexities of the decision making process and support women's rights to determine their own reproductive future.

Limited and conflicting data are available to guide the choice of a contraceptive method for HIV-infected women. The goal is high contraceptive efficacy and low risk of HIV transmission. Method selection must also take into consideration potential risks associated with local genital irritation, interference with

menstrual bleeding patterns and drug interactions (Table 2). For example, antituberculosis drugs such as rifampin have been shown to increase metabolism of oral contraceptives and may decrease contraceptive efficacy.²⁶ IUD use by HIV-infected women has been discouraged by a WHO expert group and the International Planned Parenthood Federation, on the basis of theoretical concerns about pelvic infection and blood loss.^{27,28} But the risk of short-term IUD-related complications among HIV-infected women is similar to that among uninfected women in Kenya.²⁹ An IUD may be a safe method for appropriately selected HIV-infected women with continuing access to medical services. As mentioned above, some recent studies have raised concern that hormonal contraceptives may increase a woman's infectivity, perhaps through increased cervical viral shedding. More research is required to resolve this issue. Until further data are available, HIV-infected women who desire contraception should consider a combination of barrier and hormonal methods, tubal ligation or the IUD.

POTENTIAL IMPACT ON FERTILITY AMONG WOMEN AT RISK

In Rwanda, counseling and provision of contraceptives proved effective in preventing MTCT.³¹ At the time of the study, seroprevalence of HIV was 30 percent among urban women; contraceptive use was low (three percent to four percent), and there was great concern about the risk of perinatal HIV transmission. An intervention that increased access to and information about hormonal contraceptive methods led to increased contraceptive use and decreased fertility among a cohort of women with high levels of HIV infection. These women had previously received HIV counseling and testing, which had led to high rate of condom use but a continued high rate of pregnancy.

Overall, the enhanced family-planning services led to greater use of hormonal contraception (from 16 percent to 24 percent), a shift to longer-lasting hormonal methods and a decrease in attrition among users. The increase in the rate of contraceptive use was observed equally among HIV-positive and HIV-negative women. Nine percent of HIV-positive women became pregnant in the year after the intervention was initiated, compared to 22 percent in a prior 12-month period when contraceptives were not provided at the study site. The corresponding proportions for HIV-negative women were 20 percent after the intervention compared with 30 percent before the intervention.

The greater reduction in incident pregnancy among HIV-positive women compared with HIV-negative women—despite similar contraceptive use rates—suggests that other factors (such as progression of HIV infection) may have influenced the fertility outcome. This experience nevertheless indicates that the provision of family planning services can significantly decrease the rate of unintended pregnancy among HIV-positive women. In general, however, such services do little to reduce fertility among HIV-infected women. Many HIV-infected women desire more children and few are willing to inform their partners about their status.^{32,33}

LESSONS LEARNED AND RECOMMENDATIONS

- Widening the choice for reducing the risk of MTCT of HIV requires more attention to preventing HIV infection among women in the first place and providing better reproductive health services, including family planning, to women at risk. This will ensure that interventions to prevent MTCT consider the needs and rights of women for basic information and services.
- HIV prevention programs should be directed at a broader range of women at risk, including adolescent girls and young women, women in stable relationships and pregnant and lactating women.
- HIV counseling and testing services can help women make more informed reproductive choices. Couples counseling seems to be particularly effective. Linkages should be established between HIV counseling and testing services and family planning and other reproductive health services to enable and support behaviors that can reduce MTCT.
- More effort is needed to deal with the social and economic factors that increase women's vulnerability to HIV, and to increase male responsibility for both infection protection and contraception.
- Strengthening and convergence of health services that serve women of reproductive age may be a necessary beginning for interventions to prevent HIV among women and infants. Such efforts should integrate maternal and child health, family planning, and RTI/STD services at the primary health-care level.
- Family planning programs must be broadened to include other reproductive health concerns—including STDs and HIV/AIDS—and reach other populations, such as adolescents and young women.
- In particular, family-planning providers should more systematically consider the risk of STD, including HIV, in counseling women about their contraceptive choices.
- HIV-infected women should have access to appropriate family-planning and reproductive health-care services, including sensitive counseling about reproductive choices.
- Operations research is required to develop and test modalities for dual protection in different settings. This should include studies of user perspectives to better understand the priorities that people attach to preventing pregnancy and infection, how these priorities change over time and over relationships and how people perceive and apply messages about dual protection.
- More research is needed to develop new or modified contraceptive and infection protection technologies that can expand the range of options for safer sex. Additional female-controlled methods, such as vaginal microbicides (which are effective against STD/HIV and do not require male cooperation or consent) are of highest priority.
- More basic and epidemiological research is required to elucidate the association between contraception and acquisition or transmission of STD, including HIV.

CASE STUDIES

TOWARDS REDUCING THE SPREAD OF HIV IN NORTHEASTERN THAI VILLAGES: EVALUATION OF A VILLAGE-BASED INTERVENTION³⁴

This innovative project in rural northeast Thailand demonstrated how cultural forces that put women at risk of HIV can be lessened through community action. Project activities included village-level meetings to mobilize and involve community leaders and change agents, an audio-drama and other participatory communications activities at village level. This intervention aimed to change prevailing community norms about sexual behavior and HIV/AIDS risk. The program increased communications between men and women about condom use and HIV/AIDS. In particular, married, monogamous women were able to tell their husbands not to visit sex workers or to encourage them to use condoms in commercial sex encounters and discuss ways to ensure that HIV is not transmitted between them, thus breaking the “norm of discretion and silence.” Condom use in marriage did not increase, however, and continued to be reported predominantly for contraceptive purposes.

PROTECTING SCHOOL GIRLS AGAINST SEXUAL EXPLOITATION: A GUARDIAN PROGRAM IN MWANZA, TANZANIA³⁵

A school-based program was developed in Tanzania following reports of sexual exploitation of girls by older boys and men, including teachers. Female teachers were trained to serve as guardians in all primary schools in two districts of Mwanza region. Their role was to help children in cases of sexual violence and harassment and to act as counselors on sexual health problems. An assessment of the implementation of the program found that about half of the girls in the highest three classes of the primary schools had had sex. The median age at first intercourse was 15 years. Sexual exploitation of schoolgirls by schoolboys, young men and teachers was common, and cases of sexual violence and harassment were reported from all 62 schools in the study.

The guardian program was well accepted, and generated considerable public debate on the issue of sexual violence. This has served to bring the problem into the open and make sexual abuse by teachers more difficult than in the past. But most guardians were opposed to any sexual activity by schoolgirls, a belief in keeping with social norms of the region. Nearly all guardians said that should a schoolgirl approach her with questions about sex, pregnancy or condoms, the guardian would not answer the question other than to encourage the girl to remain abstinent.

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