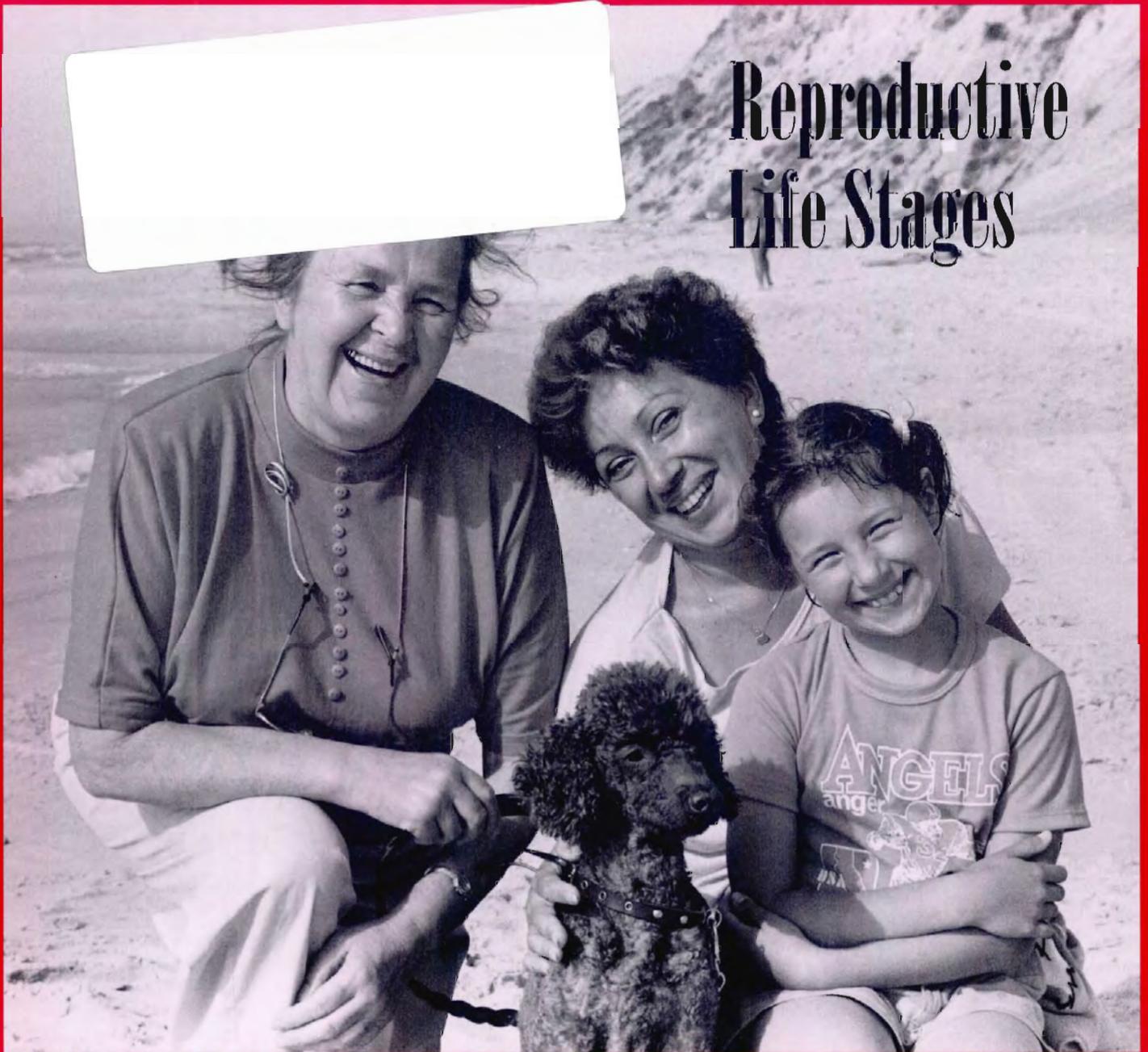


Network

FAMILY HEALTH INTERNATIONAL, VOLUME 22 NUMBER 1, 2002

Reproductive Life Stages



News Briefs

HPV RISK HIGH AT FIRST SEX

A woman's risk of acquiring human papillomavirus (HPV) infection during her first sexual relationship is high, according to a study conducted among 242 women 15 to 19 years old attending a family planning clinic in Birmingham, England.

During the first three years after first sexual intercourse, the cumulative risk of cervical HPV infection among the 242 British study participants — all of whom reported having only one sexual partner — was 46 percent. The study also found that many women were infected shortly after beginning their first sexual relationship, with a median time from first intercourse to HPV detection of only three months.

Most sexually active people who acquire HPV do not need medical attention to combat the infection. Their immune systems effectively eliminate it. Without medical treatment, however, the infection persists in a small proportion of people and infection by certain HPV strains is strongly associated with precancerous and cancerous lesions of the cervix. Cervical cancer, the second most common cancer among women worldwide, is a leading cause of cancer deaths among women in developing countries.

Various studies indicate that HPV infection prevalence among women rises as numbers of their sexual partners increase, implying that HPV acquisition is a result of high-risk sexual behavior. But the findings of this study, reported in the January 2002 issue of the *British Journal of Obstetrics and Gynaecology*, underscore the likelihood that even women reporting low-risk sexual behaviors will be infected.

Meanwhile, recently reported findings from studies in five countries suggest that male circumcision may reduce both the risk of penile HPV infection in men and the risk of cervical cancer in monogamous women whose male partners are at high risk of HPV infection. The research, conducted by the International Agency for Research on Cancer and published in the April 11, 2002 issue of the *New England*

Journal of Medicine, involved couples enrolled in seven case-control studies of cervical cancer from 1985 to 1993 in Spain, Colombia, Thailand, the Philippines, and Brazil. Nearly 20 percent of 847 uncircumcised men were infected with penile HPV, compared with only 6 percent of 292 circumcised men. Overall, male circumcision was associated with a moderate — but statistically insignificant — decrease in the risk of cervical cancer in men's female partners. However, monogamous women with circumcised male partners at high risk for HPV infection had a significantly lower risk of cervical cancer than women with uncircumcised partners at high risk. Among sexual practices considered to increase the risk of exposure to HPV were: having had intercourse before the age of 17 years, having had six or more lifetime sexual partners, and having had sex with sex workers.

In an editorial accompanying the report, physicians from the Karolinska Institute in Sweden and the Harvard School of Medicine in the United States emphasized that “circumcision itself does not protect against cervical cancer. Rather, circumcision should be considered as a modifying factor in that it protects against cervical cancer by reducing the prevalence of the principal cause, HPV infection.”

BREASTFEEDING AND HIV THERAPY

Breastfeeding HIV-infected women and their infants with antiretroviral drugs for a short time can produce levels of mother-to-child HIV transmission as low as 6 percent. But about 20 percent of children are eventually infected if breastfed by their HIV-infected mothers for a prolonged time, a recent study indicates.

In a randomized trial conducted among 1,797 pregnant HIV-infected women in Tanzania, South Africa, and Uganda, three oral drug regimens using zidovudine and lamivudine to prevent mother-to-child HIV transmission were compared. One group of women received the two common antiretroviral drugs before, during, and after delivery. The second group received the regimen during and after delivery. (Infants of mothers in these

first two groups also received the drugs.) A third group of women received the drugs only after delivery, and a fourth group was given a placebo.

At six weeks after birth, only 6 percent and 9 percent, respectively, of babies in the first two groups were HIV-infected, representing reductions in HIV transmission of 63 percent and 42 percent, respectively. (Fourteen percent of infants in the third group, and 15 percent of infants in the placebo group, were infected.)

However, at 18 months after birth, HIV infection rates had dramatically increased among infants in all four groups to 15 percent, 18 percent, 20 percent, and 22 percent, respectively.

These increases reflect continuing transmission of the virus through breastmilk, researchers concluded in a report published in the April 6, 2002 issue of *Lancet*. “Ways must be found to minimize this risk,” the researchers noted. “The issue at stake is how to maintain the early treatment effect.”

LEA'S SHIELD APPROVED

The U.S. Food and Drug Administration has approved the Lea's Shield[®] Barrier Contraceptive, a cup-shaped vaginal barrier method made of silicone rubber, based largely on collaborative research between the U.S.-based Contraceptive Research and Development (CONRAD) Program and FHI.

The device, used with spermicide, has a typical-use pregnancy rate of 9 percent after six months, although the rate could range from 1 percent to 17 percent. (A precise rate is difficult to determine because only a small number of women were involved in testing of the device.) Its projected typical-use pregnancy rate after a year is 15 percent, although this rate could range from 2 percent to 28 percent. These rates compare favorably with those reported in studies of other barrier contraceptive methods, including the cervical cap and diaphragm.

Although the device is available only by prescription, it comes in one size and does not require special fitting by a doctor.

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Russian women at three distinct stages of life enjoy the beach in Asqelon, Israel, in the cover photograph by Nancy Durrell McKenna/Panos Pictures.



Abstinence: An Option for Adolescents

Counseling of adolescents should include both abstinence and the use of contraceptive methods.

Evidence that sexual abstinence may have played an important role in reducing HIV infection in Uganda¹ has renewed interest in promoting this method of protection against unplanned pregnancy, HIV, and other sexually transmitted infections (STIs).

Abstinence offers adolescents, in particular, a number of advantages. Young people are vulnerable to unplanned pregnancy, but they often find it difficult to

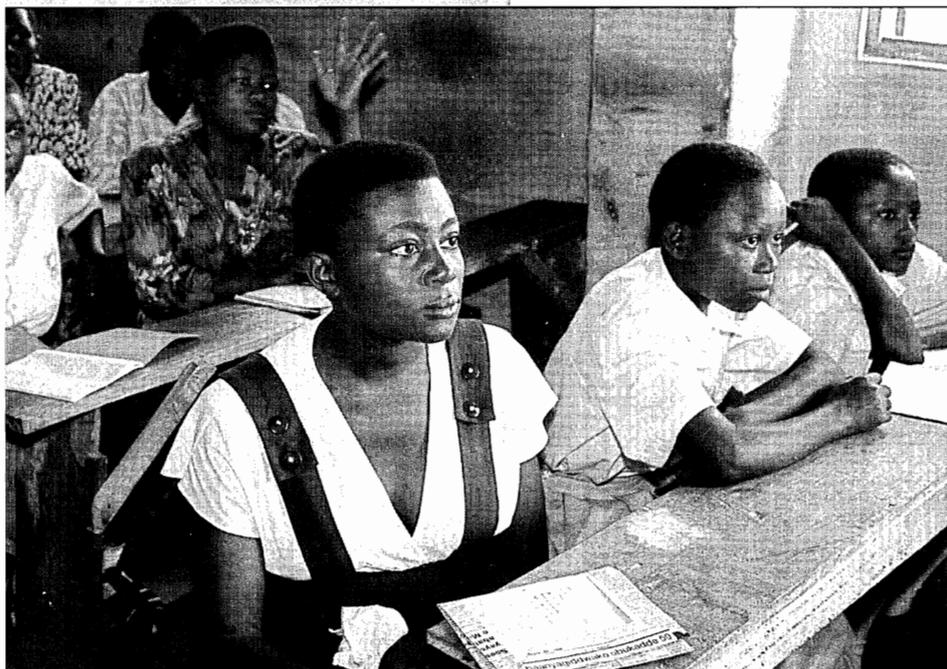
obtain contraceptives. Sexual abstinence requires no supplies or clinic visits. And complete abstinence is the most effective means of protecting against both pregnancy and STIs.

In practice, however, abstaining from sex tends to be less effective than many contraceptive methods because complete abstinence requires strong motivation, self-control, and commitment. (See chart, page 8.) Also, many questions about sexual abstinence remain unanswered. How can it be encouraged? How should it even be defined? Controversy surrounds programs that promote abstinence as the only means of protection against unplanned pregnancy and STIs, and the effectiveness of such programs is still unknown.

Meanwhile, evidence from many countries suggests that comprehensive sexual health programs that encourage abstinence while providing medically accurate information about contraception and condom use can reduce sexual activity among young people. Such programs can also increase condom and other contraceptive use among sexually active youth.²

“Counseling of adolescents should include information about both abstinence and the use of contraceptive methods,” says Dr. Roberto Rivera, director of FHI’s Office of International Research Ethics and principal author of a World Health Organization (WHO) special communication on adolescent contraception.³ “The World Health Organization states that age

HELDUR NETOCNY/PANOS PICTURES



STUDENTS IN CLASS IN MITYANA, UGANDA.

alone is not a medical reason to deny any available contraceptive method to an adolescent. Many adolescents — married and unmarried — are sexually active and have the right to information that will enable them to protect themselves from unplanned pregnancy and STIs. Providers should be aware of adolescents' special needs to help them make well-informed choices about contraception."

ENCOURAGING ABSTINENCE AND FIDELITY IN UGANDA

Uganda's dramatic decline in HIV prevalence during the past decade has coincided with marked increases in sexual abstinence and greater fidelity in relationships, according to an analysis of data from the 1995 and 2000 Demographic and Health Surveys (DHS) and from Ugandan Ministry of Health (MOH) behavioral surveys conducted in 1997, 2000, and 2001.⁴

In 1996, Uganda became the first African country to report a substantial decline in national HIV rates.⁵ During the 1990s, the proportion of women testing positive for HIV in antenatal clinics (a population considered fairly representative of the adult population) dropped from 21 percent to 6 percent.⁶

Meanwhile, in the DHS and MOH surveys, a higher proportion of respondents reported being faithful to their partners, having fewer sex partners, abstaining from sex, or delaying sexual debut than reported using or beginning to use condoms. About one out of every five Ugandan men and women said they had ever used a condom, while only 5 percent to 9 percent reported having "non-regular" partners — a measure of fidelity to a regular partner or partners. Twenty-five percent to 35 percent said they abstained from sex.⁷

This high rate of sexual abstinence is mainly a result of the increasing number of young Ugandans postponing their first sexual activity. Nationally, the proportion of 15- to 19-year-olds reporting that they had "never had sex" rose from 31 percent to 56 percent among young men and from 26 percent to 46 percent among young women from 1989 to 1995.⁸ A study in the major urban districts of Kampala and Jinja, Uganda, found a two-year delay in sexual debut among 15- to 24-year-olds between

1989 and 1995.⁹ The increasingly high rate of sexual abstinence was even more striking among younger adolescents surveyed in Soroti District, Uganda. The proportion of 14- and 15-year-old students there reporting that they had "never had sex" rose from 39 percent to 95 percent among boys and from 66 percent to 98 percent among girls from 1994 to 2001.¹⁰ (See graph below.)

Uganda's unprecedented success in controlling HIV has been attributed to strong government leadership and its "ABC" approach to HIV prevention. Since the late 1980s, governmental and non-governmental HIV prevention programs have urged Ugandans to: abstain from sex, be faithful to one partner, or — if they cannot do "A" or "B" — use condoms.

To gain a better understanding of the impact of each of these prevention strategies in Uganda, Zambia, and other countries, the U.S. Agency for International Development (USAID) is funding a two-phase "ABC Study." Conducted by the Harvard School of Public Health, MEASURE Evaluation, Population Services International, and the U.S. Bureau of the Census, the study will begin with a thorough review of data to assess "ABC" behavior change and its effect on HIV prevalence in countries where infec-

tion rates have declined and in countries where they have not.

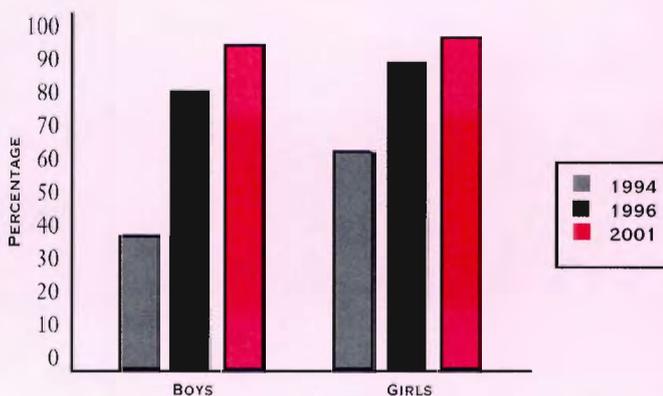
The study will also analyze the effect of "ABC" behavior change on fertility. In Uganda, where the average number of children per family is seven,¹¹ reduced sexual risk behavior does not appear to have affected fertility.

THE ABSTINENCE-ONLY DEBATE

Many experts endorse a comprehensive strategy, such as Uganda's "ABC" approach, as the most effective way to prevent HIV and other STIs or unplanned pregnancy among youth. Others support promoting abstinence only, saying that teaching young people about both abstinence and condom or other contraceptive use sends a mixed message and encourages them to become sexually active.

Abstinence promotion has become the main approach of the federal government to preventing adolescent pregnancy and HIV infection in the United States, where the government provides \$100 million a year for abstinence-only education. Schools, youth programs, and media campaigns that receive this funding are required to teach that sexual activity outside of marriage is likely to have "harmful psychological and physical effects." They

INCREASE IN DELAY OF SEXUAL DEBUT
PRIMARY 7 SCHOOL, SOROTI DISTRICT, UGANDA, 1994-2001



Source: Green E. What are the lessons from Uganda for AIDS prevention? *What Happened in Uganda?* [panel discussion]. U.S. Agency for International Development, Washington, February 5, 2002.

are also prohibited from providing information about contraception, except method failure rates.¹² In a recent review of U.S. programs to reduce teen pregnancy, Dr. Douglas Kirby of California-based ETR Associates identified three studies with experimental or quasi-experimental designs evaluating the impact of abstinence-only programs. None of these studies found any effect on sexual behavior, but Dr. Kirby warns that the programs evaluated do not reflect the diversity of such programs.¹³

A conclusive answer to whether the abstinence-only approach is effective will require larger, more rigorous studies than have been conducted to date.¹⁴ One such study, which is being conducted for the U.S. Department of Health and Human Services, is a five-year evaluation of 11 abstinence-only programs. Findings on the short-term effects of the programs are due in 2003.¹⁵

Meanwhile, two major reviews have looked at the behavioral impact of comprehensive sexual health and HIV education. One analyzed 67 experimental and quasi-experimental studies conducted in the United States. The other reviewed 47

published studies from more than eight countries, including 11 controlled intervention studies. Both reviews found that comprehensive sex education did not lead to increased sexual activity among adolescents. In fact, some studies found that it had raised the age of sexual initiation, reduced the frequency of sex, and convinced young people to have fewer sexual partners.¹⁶

WHAT IS ABSTINENCE?

The U.S. law that created abstinence-only education programs defines these programs but does not define abstinence itself.¹⁷ Some abstinence-only programs have developed their own definitions of the kinds of sexual activity that should be avoided until marriage. Others do not define the term, believing that identifying the behaviors to abstain from would violate children's innocence and provide them with a "how-to" manual of sexual activity.¹⁸

But studies from a number of countries suggest that without such information, young people may conclude that vaginal intercourse is the only sexual behavior that is risky. They may then engage in other sexual activities that can put them at

some — if not heightened — risk of contracting HIV and other STIs.

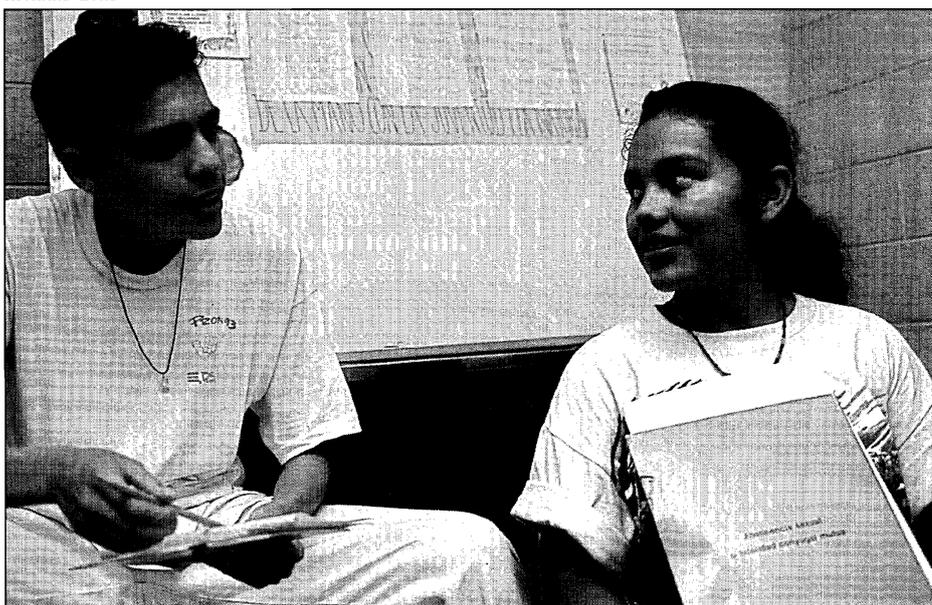
Young women interviewed for a study in Mauritius described a practice known as *dans bords* (light sex), which involves rubbing the penis against the vagina and some penetration, but is not considered sexual intercourse because it does not cause bleeding or pain. In focus group discussions and interviews conducted in Brazil and Guatemala, young people reported that some of their peers practice anal sex to protect a girl's virginity and prevent conception.¹⁹ A number of surveys have found high rates of heterosexual anal sex among young people, from 9 percent to 38 percent among female adolescents in low-income, urban areas in the United States, to 12 percent among female college students in Togo, to 44 percent among sexually active, male college students in Puerto Rico. Studies of heterosexual HIV transmission have identified anal sex as the most predictive risk factor for becoming infected with HIV.²⁰

Unlike anal or vaginal sex, oral sex presents very little risk for HIV transmission.²¹ However, other STIs, including human papillomavirus, herpes simplex B, gonorrhea, syphilis, and chlamydial infection, can be transmitted orally.²² Data on oral sex among youth are scarce. The only nationally representative study to look at this question found no increase in reported experience with oral sex among U.S. adolescent males ages 15 to 19 years from 1988 to 1995.²³ But largely anecdotal reports suggest that U.S. adolescents are engaging in oral sex at earlier ages.²⁴

FROM CONTROVERSY TO CONSENSUS

Talking to young people about non-vaginal sexual intercourse can be controversial worldwide. In Jamaica, for example, opposition to the definition of sexual intercourse used in the facilitator's manual for a curriculum developed by the Ashe Caribbean Performing Foundation and FHI threatened a promising family life education program in the schools. Some religious and community leaders feared that including anal intercourse in this definition of sexual intercourse promoted homosexuality.

RICHARD LORD



COMPLETE SEXUAL ABSTINENCE IS THE MOST EFFECTIVE MEANS OF PROTECTING AGAINST BOTH PREGNANCY AND SEXUALLY TRANSMITTED INFECTIONS. HERE, YOUTH LEARN ABOUT ABSTINENCE IN A YOUNG MEN'S CHRISTIAN ASSOCIATION (YMCA) WORKSHOP IN SAN SALVADOR, EL SALVADOR.

In response, the Ministry of Education brought together political and religious leaders, educators, child development specialists, and representatives of nongovernmental organizations to review and revise the facilitator's manual. After many discussions, the group agreed on a definition that still included anal sex but was also sensitive to local concerns, emphasizing that many people define sex as vaginal intercourse.

This consensus-building process had positive consequences for youth reproductive health programs in Jamaica, says FHI's Hally Mahler, who edited the manual and participated in the review meetings. Mahler is the youth involvement and behavior change communi-

cation coordinator for YouthNet, a program supported by USAID and coordinated by FHI to improve reproductive health and prevent HIV/AIDS among youth.

"In hindsight, it was the best thing that ever happened to the program," she says. "A multisectoral coalition of influential people confronted the risks facing young people in Jamaica and came to consensus that with HIV in the world, and with young people defining sex in many different ways, you cannot ignore anal sex."

OFFERING OPTIONS

The word "abstinence" sometimes has negative connotations, in part because many of those who advocate abstinence before marriage also oppose any discussion of contraception, condom use, or alternatives to intercourse, such as masturbation. However, abstinence can be an important, empowering concept when framed in the context of several options for protecting reproductive health in an intimate relationship.

The Jamaican manual helps facilitators guide discussions about ways of showing affection in a relationship, from holding hands and kissing to sexual intercourse. Urging young people to wait until they are physically and emotionally prepared to be

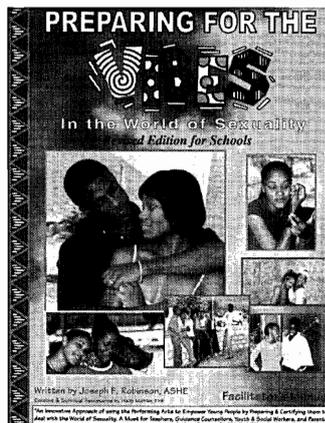
sexually active, it describes three options: abstinence, protected sexual activity, and "reclaiming" one's virginity.²⁵

"Some people think that once they start having sex, they cannot stop," explains Ashe Director Joseph Robinson, who wrote the facilitator's manual. "We tell them, 'Yes, you can stop.'"

Dr. Cynthia Waszak, a researcher with the YouthNet Project, says that "abstinence is a very important message, particularly for girls. Girls need to understand that abstinence is their choice if they do not feel comfortable having sex. And that message should be just as applicable to boys and to all young people who are already sexually active."

On the other hand, programs need to recognize that abstinence is not always an option for youth. "Many girls are caught in situations where they are physically coerced to have sex or have no choice but to do so because of economic pressures," Dr. Waszak notes.

— Kathleen Henry Shears



FACILITATOR'S MANUAL FOR A CURRICULUM ABOUT YOUTH'S REPRODUCTIVE HEALTH, PRODUCED BY JAMAICA'S ASHE CARIBBEAN PERFORMING FOUNDATION AND FHI.

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CONTRACEPTIVE CONSIDERATIONS FOR ADOLESCENTS

METHOD	ADVANTAGES	DISADVANTAGES	CONCERNS/ COUNSELING ISSUES
LESS EFFECTIVE*			
Abstinence (complete)	<ul style="list-style-type: none"> Protects against HIV and other sexually transmitted infections (STIs) Available at any time 	<ul style="list-style-type: none"> Requires high degree of motivation, self-control, and commitment from both partners 	<ul style="list-style-type: none"> Emphasize need to use condoms or other contraception if penetrative sex is initiated
Abstinence (periodic)	<ul style="list-style-type: none"> Can alternate use with other contraceptives (such as condoms) during fertile days 	<ul style="list-style-type: none"> Requires high degree of motivation, self-control, and commitment from both partners No HIV/STI protection 	<ul style="list-style-type: none"> Determining fertile days requires training; may be difficult if menses are irregular Counsel condom use if client is at risk of HIV/STIs
Withdrawal	<ul style="list-style-type: none"> Can be used by a man at any age if he can predict ejaculation and ensure ejaculate will not touch his partner's genital area 	<ul style="list-style-type: none"> Requires high degree of motivation, self-control, and commitment from both partners No HIV/STI protection 	<ul style="list-style-type: none"> Important to discuss with sexually active youth because may be only method available Counsel condom use if client is at risk of HIV/STIs
Condoms (male or female)	<ul style="list-style-type: none"> Protect against HIV/STIs Male condom typically affordable, accessible, and available Women can initiate use of the female condom 	<ul style="list-style-type: none"> Must be used correctly with each act of intercourse Female condoms may not be available or affordable 	<ul style="list-style-type: none"> Explain, demonstrate, and help client practice correct use with a model
Diaphragms, caps	<ul style="list-style-type: none"> Women can initiate use Do not require a daily regimen 	<ul style="list-style-type: none"> Must be used correctly with each act of intercourse Protection against HIV/STIs unknown 	<ul style="list-style-type: none"> Counsel condom use if client is at risk of HIV/STIs
Spermicides	<ul style="list-style-type: none"> Women can initiate use Do not require a daily regimen 	<ul style="list-style-type: none"> Must be used correctly with each act of intercourse No HIV/STI protection 	<ul style="list-style-type: none"> Use of spermicides alone and frequent use are not recommended Counsel condom use if client is at risk of HIV/STIs
EFFECTIVE*			
Lactational Amenorrhea Method (LAM)	<ul style="list-style-type: none"> Important option for breastfeeding women Does not require a daily regimen 	<ul style="list-style-type: none"> Effective, but only if a woman meets three LAM criteria: less than six months postpartum, fully or near-fully breastfeeding, and amenorrheic No HIV/STI protection 	<ul style="list-style-type: none"> Discuss other contraceptive options and provide chosen method before LAM criteria expire Counsel condom use if client is at risk of HIV/STIs
Combined oral contraceptive pills (COCs)	<ul style="list-style-type: none"> Regular, less painful menses Protect against ovarian cancer, endometrial cancer, and pelvic inflammatory disease 	<ul style="list-style-type: none"> Must be taken daily May require a clinic visit Need for supplies may compromise privacy No HIV/STI protection 	<ul style="list-style-type: none"> Tell client what to do if pills are missed Counsel condom use if client is at risk of HIV/STIs

*Effectiveness is defined here as: "less effective" for most users (becoming "effective" when used consistently and correctly), "effective" for most users (becoming "more effective" when used consistently and correctly), and "more effective" for all users. Definition of effectiveness adapted from Trussell J. Contraceptive efficacy. In Hatcher RA, Trussell J, Stewart F, et al., eds. *Contraceptive Technology, Seventeenth Revised Edition*. New York: Ardent Media, 1998.

METHOD	ADVANTAGES	DISADVANTAGES	CONCERNS/ COUNSELING ISSUES
EFFECTIVE (continued)²²			
Progestin-only pills (POPs)	<ul style="list-style-type: none"> • Good estrogen-free choice for breastfeeding women 	<ul style="list-style-type: none"> • Must be taken daily, and regimen requires stricter compliance than for COCs • Need for supplies may compromise privacy • No HIV/STI protection 	<ul style="list-style-type: none"> • Tell client what to do if pills are missed • Counsel condom use if client is at risk of HIV/STIs
Emergency contraceptive pills (ECPs): COCs or POPs	<ul style="list-style-type: none"> • Can be used after unplanned intercourse, coercive sex, failure to use a method, or after a condom slips or breaks 	<ul style="list-style-type: none"> • Often require a clinic visit • No HIV/STI protection 	<ul style="list-style-type: none"> • Counsel that effectiveness greatest when method started early • Not meant for repeated use
MORE EFFECTIVE²³			
Combined injectable contraceptives (CICs)	<ul style="list-style-type: none"> • Effective for a month 	<ul style="list-style-type: none"> • Require a provider visit every month for reinjection • No HIV/STI protection 	<ul style="list-style-type: none"> • Clients must remember to return for monthly reinjection • Counsel condom use if client is at risk of HIV/STIs
DMPA: progestin-only injectable	<ul style="list-style-type: none"> • Effective for 3 months • May protect against endometrial cancer 	<ul style="list-style-type: none"> • Requires a provider visit every 3 months for reinjection • May make bleeding patterns unpredictable; often causes amenorrhea • Delays return to fertility • No HIV/STI protection 	<ul style="list-style-type: none"> • Not a first choice for women younger than 18 due to theoretical concerns about effects on bone development • Counsel condom use if client is at risk of HIV/STIs
Subdermal implants	<ul style="list-style-type: none"> • Effective for 5 to 7 years 	<ul style="list-style-type: none"> • Require a clinic visit for insertion and removal • May make bleeding patterns unpredictable • No HIV/STI protection 	<ul style="list-style-type: none"> • Counsel condom use if client is at risk of HIV/STIs
Intrauterine device (IUD): Copper T 380A	<ul style="list-style-type: none"> • Effective for at least 12 years • May protect against endometrial cancer 	<ul style="list-style-type: none"> • Requires a clinic visit for insertion and removal • No HIV/STI protection 	<ul style="list-style-type: none"> • Nulliparous women may be at greater risk for expulsions • Counsel condom use if client is at risk of HIV/STIs
Levonorgestrel intrauterine system (LNg-IUS)	<ul style="list-style-type: none"> • Effective for at least 7 years 	<ul style="list-style-type: none"> • Requires a clinic visit for insertion and removal • No HIV/STI protection 	<ul style="list-style-type: none"> • Nulliparous women may be at greater risk for expulsions • Counsel condom use if client is at risk of HIV/STIs
Sterilization (male or female)		<ul style="list-style-type: none"> • Irreversible • Not recommended for adolescents: young age and low parity associated with high levels of regret • No HIV/STI protection 	<ul style="list-style-type: none"> • Counsel about permanency of sterilization and option of long-term, reversible methods • Counsel condom use if client is at risk of HIV/STIs

Source: Rivera R, Cabral de Mello M, Johnson SL, et al. Contraception for adolescents: social, clinical and service-delivery considerations. *Int J Gynaecol Obstet* 2001;75(2):149-63.

Exposure to Risk Often Longer Now

As girls begin to initiate sexual activity earlier and marry later in many countries, they are exposed longer than ever to the risk of unplanned pregnancy and sexually transmitted infections (STIs).¹ Given the public health consequences of this increasing vulnerability, many experts say reproductive health programs should make adolescents' needs a priority.

Data on 10- to 19-year-olds in developing countries are not reliable enough to draw firm conclusions about trends in their sexual behavior before marriage.² But

Demographic and Health Survey results show an increasing gap between age at first sexual intercourse and age at first marriage in 32 of 37 countries surveyed in every region of the developing world, suggesting that premarital sex is rising throughout sub-Saharan Africa and in most countries of other regions.³ In the United States, the gap between sexual initiation and marriage widened by almost 30 percent during the 1980s.⁴ Women in the United States now typically begin sexual activity about seven years before marriage and are sexually active for almost one quarter of their reproductive lives before giving birth.⁵

Beginning sex at earlier ages increases the risk of STIs for young women and men because the longer a person is sexually active before marriage, the more partners he or she is likely to have.⁶ Marrying later can open educational and vocational opportunities to young women,⁷ but later marriage combined with increasing premarital sex among adolescents puts them at greater risk of unplanned pregnancies, unsafe abortions, and STIs, including HIV.⁸

Sexually active adolescents' risk of pregnancy and STIs is already high. They are less likely than adults to use condoms and other contraceptives and more likely

to experience contraceptive failures.⁹ (They are also more likely to resort to unsafe abortion if they decide to terminate unplanned pregnancies.¹⁰) Adolescent girls are at greater risk for STIs than older women because of specific biological char-

Most people worldwide have their first sexual experiences — which can have lifelong effects on their sexual and reproductive health — before reaching age 20.

acteristics that make them more susceptible to such infections and because they are less likely to be able to refuse unwanted or coercive sex or to negotiate condom use.¹¹

SERVING ADOLESCENTS WITH DIFFERING NEEDS

Most people worldwide have their first sexual experiences — which can have lifelong effects on their sexual and reproductive health — before reaching age 20.¹² Dr. Malcolm Potts, FHI president emeritus and Bixby Professor at the University of California, Berkeley, USA, and his colleagues write that the earliest stages of men's and women's reproductive lives are so important for public health that countries with scarce medical resources should devote most of those resources to protecting young people's sexual and reproductive health. They propose that public reproductive health programs focus on providing education, counseling, and other services to adolescents and young adults at two distinct stages of their reproductive lives:

PETER ARMENIA



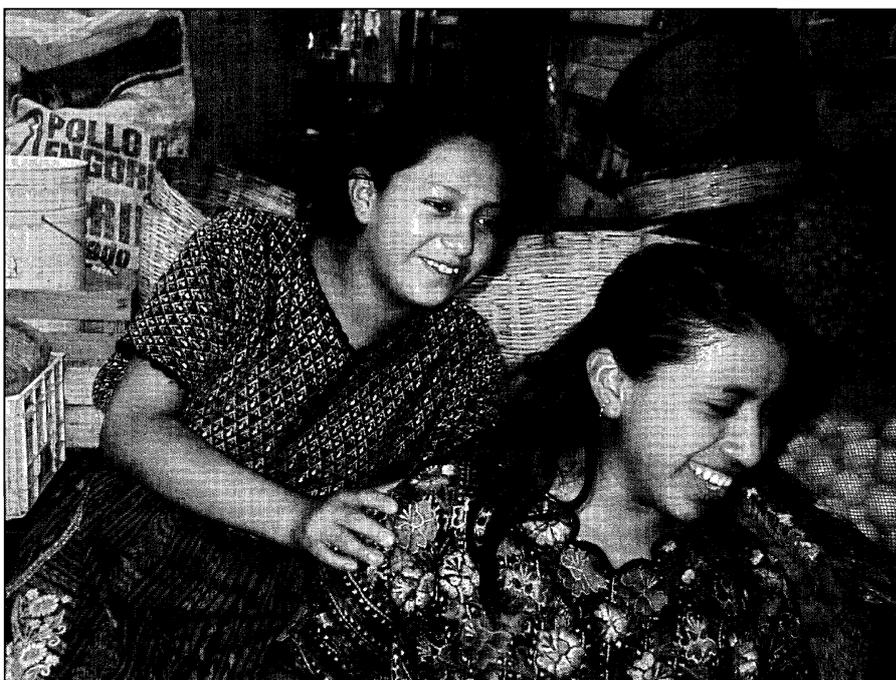
LIKE THEIR PEERS THROUGHOUT THE WORLD, THESE YOUNG WOMEN AND MEN FROM LAMBOK, INDONESIA, FIND THEIR REPRODUCTIVE HEALTH NEEDS CHANGING AS THEY MOVE THROUGH ADOLESCENCE.

when they are not yet sexually active, and when they are sexually active but do not yet wish to have children. Meanwhile, social marketing programs and private providers would be expected to meet the needs of most women at two other stages of their reproductive lives: when they plan to have a child or more children, and while they are fertile but do not want more children.¹³

Just as adults' priorities for contraception and STI protection change over the course of their reproductive lives, young people's reproductive health needs differ as they move through adolescence. Ten-year-olds need information about the changes they will face with the onset of puberty, while older adolescents may need protection against unplanned pregnancy and STIs.

Recognizing that adolescents are not a homogeneous group, Jane Hughes of the New-York based Population Council and Dr. Anne McCauley of the Washington-based International Center for Research on Women have suggested tailoring programs to meet the needs of young people with three different kinds of experiences: those who are not yet sexually active, those who are sexually active and have experienced no unhealthy consequences of their sexual activity, and those whose sexual experiences have resulted in unhealthy consequences, such as abortion complications or STIs. Noting that most providers primarily serve young people in the latter group, Hughes and Dr. McCauley point to the need to put more emphasis on reproductive health education, counseling, and services for adolescents in the first two groups.¹⁴ This approach is supported by research that shows that family life education and other programs to prevent teenage pregnancy and STIs are most effective when they reach young people before they are sexually active.¹⁵

— Kathleen Henry Shears



ADOLESCENTS ARE NOT A HOMOGENEOUS GROUP. THUS, EXPERTS SUGGEST TAILORING EDUCATION, COUNSELING, AND OTHER REPRODUCTIVE HEALTH SERVICES TO ADDRESS THE NEEDS OF YOUNG PEOPLE WITH DIFFERENT KINDS OF EXPERIENCES. TWO YOUNG WOMEN IN A MARKET IN GUATEMALA CITY, GUATEMALA.

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HIV COUNSELING, TESTING EXPANDING FOR YOUTH

Many young people in countries where HIV prevalence is high want to know their HIV status, recent studies indicate, and experts see voluntary counseling and testing (VCT) services for youth as a useful way to address their HIV prevention and care needs. However, such services are limited and more research is needed to determine their impact.

With as many as one of every two new HIV infections occurring in some countries among young people,¹ it is important to focus on youth, says Deborah Boswell, an FHI expert on HIV/AIDS care and support services who helped develop VCT services in Zambia. "Some countries are trying to implement and expand VCT services for youth. To ensure quality, counselors and other staff must be trained to work with young people and to be discreet, confidential, and nonjudgmental. Also, care and support services must be available, including direct referral to supportive clinicians and options after testing for those who test either positive or negative."

Working on behalf of the United Nations Children's Fund, Boswell and colleagues at FHI recently compiled a reference guide on VCT and the needs of young people, children, pregnant women, and their partners.² Among key issues involving young people are the level of their demand for VCT services, the impact of VCT on their behavior, and programmatic challenges that include legal and ethical concerns, adequate counseling, and ongoing support.

DEMAND FOR SERVICES

In Demographic and Health Surveys in Kenya and Zimbabwe, more than 60 percent of some 6,000 males and females ages 15 to 19 years who had not undergone VCT reported that they would like to be tested.³

In another survey of males and females ages 14 to 21 years, about 90 percent of 210 Ugandans and 75 percent of 122 Kenyans who said they had not received VCT services reported that they

wanted to be tested.⁴ However, in these and other studies, some young people feared testing. Some worried that their test results would be positive. Others were concerned that their test results would not remain confidential, that they might lose their partners, and that the services would be costly or be provided in inconvenient locations.

In a Ugandan study of 369 young people ages 14 to 21 years who had sought VCT, young women who decided to get tested tended to do so if they were about to be married, enjoyed their partners' support, and knew their partners were willing to pay for the service. Nearly two of every three girls said their partners encouraged them to be tested. In contrast, boys were more likely to decide on their own to be tested and to pay for testing themselves. A third of boys said their decision to seek VCT testing was influenced by partners; a third, by friends; and another third, by no one.⁵

IMPACT OF VCT

It appears that VCT can help young people adopt safer sexual practices and even reduce their rates of sexually transmitted infections (STIs), but more research is needed. In a randomized trial involving some 4,000 adults in Kenya, Tanzania, and Trinidad, reduction of unprotected intercourse with non-primary partners was significantly greater among individuals who received VCT than among individuals who received only basic HIV prevention information.⁶ The impact of VCT on behavior by age was not reported. But in an analysis of a subgroup of study participants, a third were 22 years or younger and nearly half were 25 years or younger.⁷

In the survey conducted in Uganda and Kenya, most of the 240 who had been tested said they intended to adopt safer sexual behaviors such as sexual abstinence, monogamy, use of condoms, and reduction in number of sexual partners.⁸ This study did not measure the impact of VCT on HIV infection rates, but a study in the United States involving more than 4,000 males and females ages 15 to 25 years

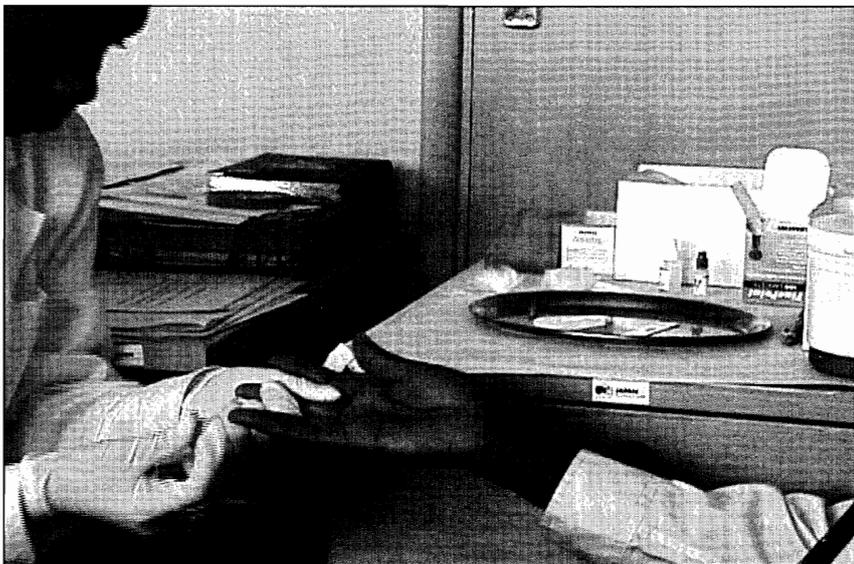
found that incidence of STIs decreased for those testing negative for HIV. (It did not change for those testing positive.)⁹

REACHING OUT TO YOUTH

Over the last 10 years, a growing number of VCT programs for adults have been established and have dealt with such challenges as recruitment, confidentiality, stigma associated with testing positive, testing procedures, and the importance of pre- and post-test counseling. Some of these programs have also begun to focus on youth.

One example is the AIDS Information Center (AIC) in Uganda, which originally offered VCT services with adults in mind. It now has a clinic area specifically designated for young people and has developed a curriculum for youth counseling. The change came after the center analyzed its client data and found that many young people were seeking VCT services. "We began asking questions about how to be more responsive to the challenges that youth face," says Jane Harriet Namwebya, VCT technical officer at FHI, who directed the AIC project in Uganda before moving to FHI's Kenya office. "Do we need to train youth counselors? What are the challenges youth have in accessing the services? How can we support them after they have been tested?"

Similarly, in Kenya, the International Centre for Reproductive Health (ICRH), in collaboration with the Kenyan Ministry of Health and FHI, originally set up nine VCT centers in Mombasa, offering a quick, confidential HIV test. (A finger prick is used to obtain blood, and a rapid assay test yields results in 15 minutes.) Realizing that they needed to do more to reach youth, project managers established three other counseling centers where trained community peer educators provide youth with HIV information. Trained counselors then work with the young people for referral to VCT testing centers, if appropriate, says Dr. Mark Hawken, ICRH project coordinator.



ROBERT RITZENTHALER/FHI

HIV TESTING CAN BE QUICK, WITH A FINGER PRICK PROVIDING BLOOD THAT IS ANALYZED IN 15 MINUTES.

Existing youth-oriented projects are also beginning to offer VCT services. In Uganda, for example, the Naguru Teenage Information and Health Center, which runs a large outreach effort through radio, expanded its existing youth reproductive health services by adding the laboratory equipment and training needed to offer VCT as well.

PROGRAMMATIC CHALLENGES

In these expanded efforts to provide VCT services to young people, key programmatic challenges are confidentiality, parental consent, adequate counseling, and ongoing support. Unless VCT is strictly confidential, young people (especially women) run the risk — as do adults — of being stigmatized, suffering violence, and being disowned by family members or partners.

One of the key challenges for programs is deciding whether to involve a youth's parents in the VCT process, gaining approval for testing and reporting of results. Ideally, each country would determine informed consent procedures for using VCT. In Kenya, national VCT guidelines issued in 2001 advise that "mature minors" do not need parental consent. "Mature minors" include those individuals younger than 18 years who are "married, pregnant, parents, engaged in behavior that puts them at risk, or are child sex workers."¹⁰

In countries where such formal guidelines do not exist, agency policies and individual counselors use various approaches to determine whether parental permission is needed. "Before HIV testing is done, it is important for counselors to establish the degree of maturity of the youth in terms of ability to handle the HIV test results," says Namwebya. "A lot is left to the counselor's judgment." Effective pre-test counseling would explore such issues as youths' support systems, whom they have told they might get tested, and with whom they would share the results. Youth deemed to have the maturity to accept test results are given the opportunity to learn their HIV status and obtain support and counseling without having to tell their parents and risking negative consequences.

Counseling young people, in general, requires special skills. And counseling youth about HIV testing is even more challenging. It is important to be nonjudgmental, establish rapport, and instill hope in young people, particularly those testing positive. "Counselors have to be trained to handle young people's needs, which differ from those of adults," says Namwebya. "Young people who are HIV positive still have their dreams and many years ahead. What will happen to their dreams? How long can they sustain behavior change? We should be able to help them cope."

— William Finger

William Finger works on information dissemination for YouthNet, a five-year program coordinated by FHI and funded by the U.S. Agency for International Development to improve reproductive health and prevent HIV/AIDS among young people. YouthLens is an activity of YouthNet.

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Protecting Fertility

Contraceptives pose no threat, but STIs do.

Becoming a mother is a woman's passport to adulthood in many settings throughout the world. Motherhood brings pride in continuing the family lineage, the comradery of sharing child-rearing experiences with other adult females in the community, and often better prospects for long-term marital stability and economic security.

"In some cultures, a woman does not achieve full adult status until she is a mother," says Dr. Priscilla Ulin, an FHI senior staff consultant who served as deputy director of the FHI's Women's Studies Project, a multinational effort from 1993 to 1998 to study the impact of family planning on women's lives.¹ "Findings from the Women's Studies Project show us clearly that, throughout much of the world, there is strong desire among women to prove their fertility and to protect their ability to have children."

But a woman's health and well-being, and those of her family, may depend on her being able to delay the birth of her first child or space the births of her children. "And while women are often aware of the benefits of family planning, mistaken fears that contraceptives — particularly hormonal methods and intrauterine devices (IUDs) — could cause infertility sometimes inhibit them from adopting a highly effective contraceptive method or result in them abandoning it," says Dr. Ulin.

Providers working with clients in their peak childbearing years should keep such fears in mind, taking care to dispel myths about an association between contraceptive use and infertility. They should counsel women who highly value their fertility about how to protect themselves against sexually transmitted infections

(STIs), some of which can lead to pelvic inflammatory disease (PID), a common cause of infertility (see article, page 16). Meanwhile, providers should be aware that women's fertility goals, sexual behaviors, and needs for contraception and STI protection change throughout their reproductive lives.

REPRODUCTIVE LIFE STAGES

A woman's reproductive years, which typically span almost four decades, can be divided into stages, according to Dr. Jacqueline Darroch of the U.S.-based Alan Guttmacher Institute, who has outlined five such stages:²

1. Menarche to intercourse
2. Intercourse to marriage
3. Marriage to first birth
4. First birth to attainment of desired family size
5. Attainment of desired family size to menopause

(Women do not necessarily pass through these stages in sequential order. They may also omit stages or return to earlier stages.)

Each stage is characterized by different priorities for contraception and STI protection. For example, in the second stage — from the time of her first sexual intercourse until marriage — a single woman may have multiple sexual partners. She may want to postpone childbearing while protecting her fertility, but may be at higher risk than women in other stages for both unplanned pregnancy and STI infection. This is largely because her sexual encounters are more likely to be unpredictable and her use of condoms and other contraceptives inconsistent. A nationally

representative survey of 2,465 Zimbabwean women ages 15 to 49 years suggests that contraceptive use during the second reproductive stage tends to be low. Only 15 percent of survey respondents ages 30 years or younger reported using contraception during their first sexual encounter, which usually occurred prior to marriage, according to Women's Studies Project research conducted by FHI and the University of Zimbabwe. For this group, the rate of contraceptive use continued to be low — only 11 percent — at the time of marriage.³

During the third reproductive life stage, a recently married woman may wish to delay the birth of a first child while preserving her fertility. An increasing number of women in Morocco, for example, are delaying childbearing after marriage, according to a 2001 study based on a 1995 national survey of 4,753 women. Researchers suggested that these delays in childbearing may be related to rising housing costs: Moroccan couples are increasingly beginning married life in their parents' homes rather than establishing their own households.⁴

In the fourth stage, a woman may wish to space the birth of her children while preserving her fertility. Concern about STIs would be expected to be low during a woman's peak childbearing years, but only if partners are monogamous. From first intercourse to attainment of desired family size, providers should consider whether a woman needs protection against STIs because an STI contracted in one stage can affect a woman's fertility during later stages of her reproductive life.

"Throughout Africa, much of providers' time is spent dealing with infertility problems," says Dr. Samuel Sinei, professor of obstetrics and gynecology at the University of Nairobi in Kenya. "Women who are infertile have more unstable marriages and often end up divorced. When this happens, they often have no economic ability to survive on their own. Many become prostitutes, which can lead to acquiring STIs, including HIV. This is unfortunate, especially since infertility is often preventable. Much of infertility is caused by STIs that women acquire in their late teens. By the time they reach full adulthood, they are already infertile.

"For this reason, providers need to give women information about how to preserve their fertility," Dr. Sinei emphasizes. "One way would be to promote condom use with the reasoning that it can help preserve fertility. This might motivate couples to use condoms regularly."

CONDOMS AND FERTILITY

When used consistently and correctly, condoms are effective contraceptives. They also provide protection against HIV infection and gonorrhea, and are presumed to protect against other STIs that can lead to infertility.⁵ Untreated gonorrhea and chlamydial infections are associated with fertility impairment or infertility in both men and women.⁶ These and other STIs — particularly herpes and syphilis — are also associated with adverse pregnancy outcomes, including spontaneous abortion, premature birth, and stillbirth.⁷ For this reason, providers should consider each client's risk of STI and HIV infection (as assessed by STI prevalence in the community and a woman's specific risk behaviors) and, if that risk is substantial, promote condom use. At-risk women should be encouraged to use condoms for disease prevention even if they are using another method for contraception.

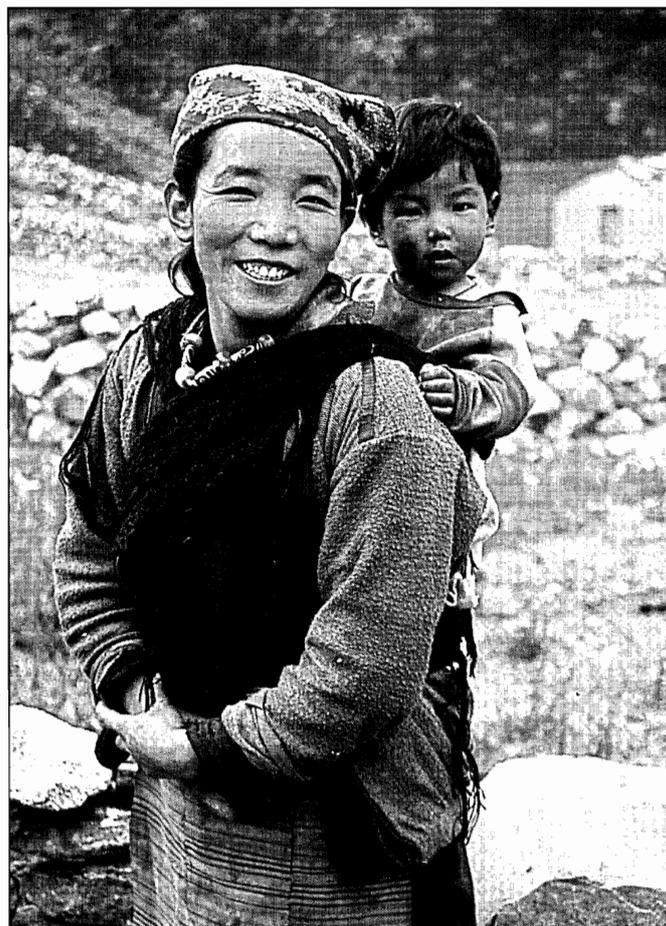
Providers should emphasize consistent and correct use of condoms. The likelihood of a woman acquiring gonorrhea or syphilis from an infected partner is about 50 percent for each act of unprotected sexual intercourse.⁸ The probability that she will acquire gonorrhea from an infected partner is about double her risk of becoming pregnant

during each unprotected sexual act, even when she is most fertile. (Her probability of acquiring chlamydial infection or viral STIs, especially HIV, during each unprotected coital act may be somewhat lower.⁹)

Dr. Ward Cates, president of FHI's Institute for Family Health, a division of FHI, notes that encouraging condom use during high-risk situations could result in more consistent use than counseling clients to use condoms during all sexual encounters. "Counseling women to use condoms during every sexual encounter may seem too unrealistic to them and result in abandoning condom use altogether, while promoting condom use in high-risk situations may ultimately end up in more protected sexual acts."

Some researchers have suggested that encouraging contraceptive use — ideally, condoms — in conjunction with early resumption of sexual relations after childbirth may reduce men's unprotected

LYNLEY COOK/FHI



A PROUD MOTHER IN NEPAL. IN SOME CULTURES, WOMEN ACHIEVE ADULT STATUS AND RESPECT ONLY AFTER THEY BECOME MOTHERS.

INFERTILITY'S GRIM CONSEQUENCES

Infertility in the developing world is a widespread phenomenon affecting men and women alike. Rates of infertility differ markedly among regions of the world and even within countries. But they can be substantial. In some areas of Africa, for example, as many as a third of couples are estimated to be infertile.¹

Research indicates that men contribute to or are the sole cause of a couple's infertility more than half the time,² but women often bear the blame for a couple's inability to have children.

Infertility is a devastating event for women in many cultures throughout the world. In rural Mexico, a woman who cannot conceive is typically stigmatized by the community, labeled a "mule" and "useless."³ In Ethiopia, a study of a population-based sample of 6,179 ever-married women found that 95 percent of those who did not have a child during their first marriage divorced within 20 years, with the vast majority of these divorces occurring within the first five years of marriage. In contrast, only 23 percent of women who bore a child during their first marriage divorced within 20 years. While divorce in Ethiopia does not carry the social stigma that accompanies it in

other settings, a woman's economic status and that of her family often suffer as a result.⁴

Infertility can also result in women engaging in extramarital affairs in hope of conceiving, behavior that places them at high risk of contracting a sexually transmitted infection (STI), including HIV. A 1997 study among diverse members of the Macua ethnic group in northern Mozambique found that nearly all of the 34 female study participants who considered themselves infertile had engaged in extramarital affairs with the hope of becoming pregnant.⁵

— Emily J. Smith

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during pregnancy and the period of postpartum abstinence.¹¹

HORMONAL METHODS AND FERTILITY

Hormonal contraceptives are among the most effective contraceptives available, but concerns about their effect on fertility may prevent some women from using them. Nearly half of 498 female Nigerian university students believed that oral contraceptives (OCs) could damage the uterus, and 41 percent believed they could cause infertility, a 1993 study showed. These mistaken fears may have discouraged students from adopting this method, since three-quarters expressed a lack of desire to do so.¹² Similar fears were reported by 40

ethnic Chinese-Canadian women recruited from two Canadian abortion clinics to participate in a 2002 study to identify barriers to the use of OCs. A common fear was that the pills could cause permanent infertility.¹³ Even some providers mistakenly fear that hormonal methods such as depot medroxyprogesterone acetate (DMPA) may cause infertility, a survey conducted from 1993 to 1995 among more than 1,000 Northern European and U.S. clinicians found.¹⁴

Use of hormonal methods does not threaten fertility. However, these methods may cause menstrual bleeding disturbances that can make women wonder whether their fertility is in jeopardy. Providers need to reassure clients that such side effects are predictable and normal and that neither the health nor fertility of clients is threatened. In fact, studies have found that fertility returns quickly after the discontinuation of hormonal methods. (The exceptions are the progestin-only injectables DMPA and norethisterone enanthate [NET-EN]. Return of fertility may be delayed by six to 10 months from the date of the last injection, but there is no permanent damage to fertility.) A 1997 study among 70 Brazilian, Chilean, Colombian, and Peruvian women using the once-a-month, combined injectable Cyclofem found fertility restored by one month following discontinuation, with more than half of the women becoming pregnant six months after discontinuation. Eighty-three percent were pregnant one year after discontinuation, and 94 percent of these pregnancies resulted in a live birth. Fertility returned so quickly that researchers have recommended that providers bring this to the attention of Cyclofem users so as to prevent unplanned pregnancies shortly after discontinuation.¹⁵

Ovulation also returns shortly after stopping the use of OCs. "The return is quicker with today's low-dose pills than with higher-dose pills used in the past," notes Dr. David Grimes, FHI vice president of biomedical affairs. In fact, fertility may return all too quickly if oral contraceptive pills are abandoned or missed. A 1995 study found that women who missed one or more pills per cycle were nearly three times as likely to experience an unplanned pregnancy than were women who took the pills consistently.¹⁶

extramarital affairs during this period and thus protect their wives from fertility-threatening STIs. In Côte d'Ivoire, the belief that sperm may poison breastmilk prevents many couples from resuming sexual relations soon after the birth of a child. But men practicing such postnatal abstinence were twice as likely to engage in unprotected extramarital sex as men who were not, a 2001 study based on the 1994 Côte d'Ivoire Demographic and Health Survey found. Condoms, the researchers noted, could be promoted with the idea that they would protect against the poisoning of breast-milk.¹⁰ A 2002 study conducted in Nigeria found similar beliefs about sperm poisoning breastmilk and similar behavioral patterns among Nigerian men

IUDS AND FERTILITY

The IUD is a highly effective reversible contraceptive used by more than 106 million women worldwide.¹⁷ Since it can be used safely for 10 years or more, it is also economical.

Some women erroneously associate the IUD with PID and subsequent infertility, but use of the copper IUD (the most common type of IUD now being inserted) in itself does not pose a significant risk to a woman's fertility.¹⁸ Rather, bacteria are the culprits in the development of PID and associated infertility.¹⁹ If a woman has an STI at the time an IUD is inserted, the process of IUD insertion can introduce STI-causing bacteria from the cervix into the uterus and fallopian tubes, which can later cause PID. For this reason, providers should attempt to identify women with cervical infections or those who are at increased risk of such infections. The World Health Organization (WHO) medical eligibility criteria for safe use of contraceptives state that current infection with an STI contraindicates IUD use, as does any previous pelvic infection or STI that has not been cured for at least three months. The WHO criteria also state that

IUD use is not usually recommended for women at increased STI risk unless other more appropriate methods are not available or not acceptable.²⁰ Research suggests, however, that even when cervical infection is present at the time of IUD insertion, only a small percentage of women subsequently develop PID.²¹

While little risk of infection exists after IUD insertion if women are screened carefully and IUDs are correctly inserted in an antiseptic environment, providers need to be aware of the signs of PID infection and educate users to recognize and report any symptoms of infection. Patients with PID may have lower abdominal pain, chills and fever, menstrual disturbances, cervical discharge containing pus, and cervical tenderness. They should be treated with antibiotics as soon as possible, and their sexual partners should be examined and treated appropriately.²²

Meanwhile, other mistaken beliefs about IUDs persist. Myths and fears were the biggest barriers to IUD use reported by 30 El Salvadorian Ministry of Health clinic providers who were interviewed by FHI researchers in 1999. Among the most common fertility-related fears was the

belief that an IUD could become embedded in a woman's uterus.²³ Although possible, this is rare. "The slight indentation in the lining of the uterus caused by this event should resolve with IUD removal and have no ultimate effect on a woman's fertility," says Dr. Grimes.

Research has found that women who understand that IUD use in itself poses no threat to fertility can confidently use the method for delaying, spacing, or limiting childbirth.²⁴ "I had it for two years, maybe longer," said one of 18 IUD users who participated in a focus group discussion during FHI's IUD study in El Salvador. "It was inserted, and I didn't feel anything that would hinder me, not a string hanging, nothing. When I decided to have it removed, [it] was because I wanted to have another child."

This study also found that providers who dispel infertility myths about IUDs help women make informed contraceptive choices. As one user explained, "I attended a talk where they said there was a possibility of you becoming pregnant [during IUD use]. The baby could be born with the IUD, and it would need an operation. I spoke to the doctor about that and was

PHILIP WOLMUTH/PANOS PICTURES



PROVIDERS NEED TO REASSURE CLIENTS THAT USE OF HORMONAL METHODS DOES NOT THREATEN FERTILITY. HERE, A DOCTOR AT THE JAFPP HUSAYN CLINIC IN AMMAN, JORDAN, EXPLAINS THE USE OF ORAL CONTRACEPTIVE PILLS TO A MOTHER.



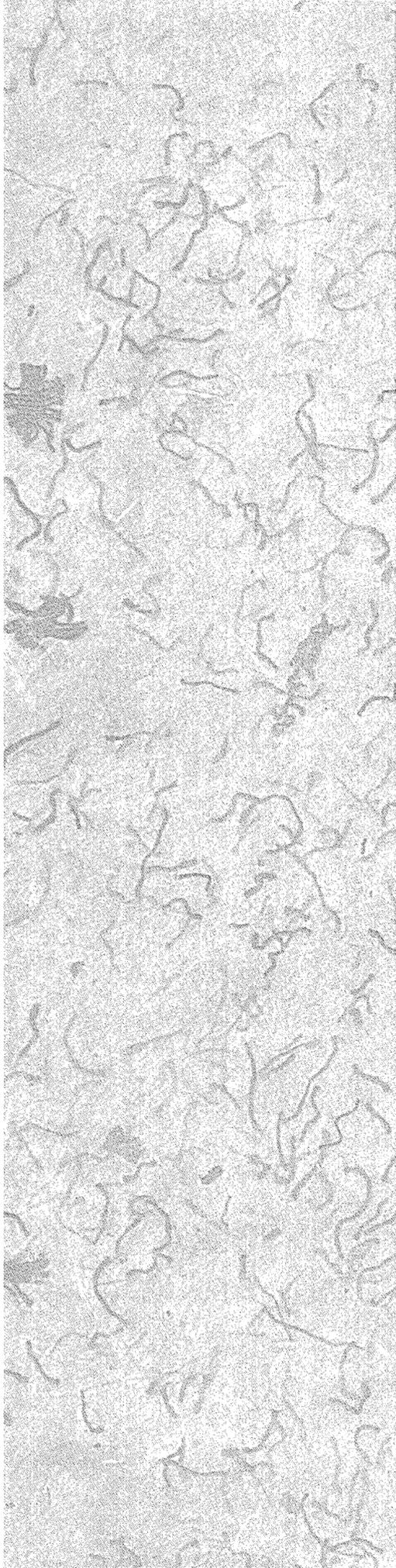
MOTHERHOOD OFTEN BRINGS PRIDE IN CONTINUING THE FAMILY LINEAGE. HERE, AN INFANT'S MOSLEM BAPTISM IN DAKAR, SENEGAL, IS A JOYFUL OCCASION FOR BOTH HER MOTHER AND GRANDMOTHER.

told, "No, that is not possible." At that point, the woman said she chose to have an IUD inserted.

— Emily J. Smith

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As Menopause Approaches, Needs Change

But contraception is still important for sexually active older women.

Between peak childbearing years and menopause, a woman's fertility gradually declines, reducing her risk of an unplanned pregnancy. Yet, a risk still exists.

Not only is contraception important for a sexually active older woman, since pregnancy late in life presents increased risks to her health and that of her fetus, but also careful consideration should be given to providing a contraceptive method that is appropriate to the changing needs of her body. Furthermore, sexually active older women and men — just like younger individuals — may need to protect themselves against sexually transmitted infections (STIs), including HIV. (See articles, pages 26 and 29.) Those at risk of infection should be counseled to use condoms consistently and correctly and to reduce the number of their sexual partners.

The need for contraception to prevent pregnancy ends only at menopause when menses permanently end, signaling that the ovaries are no longer producing eggs that could be fertilized. Menopause is considered to have occurred only after a woman has not menstruated for one year. However, for a period of about four years before menopause — during perimenopause — a woman's ovaries may intermittently produce eggs, and she may become pregnant if she remains sexually active and does not use contraception. Meanwhile, about 50 percent of a woman's reproductive life

occurs between the time she has achieved her desired family size and the time she has reached menopause. During that extended period, a sexually active woman needs effective contraception.¹

Patterns of contraceptive use differ throughout the world, but sexually active women older than 35 tend to be particularly likely not to use contraception. Some erroneously believe that they cannot become pregnant so late in life. Many women also abandon contraception as they approach menopause because they mistakenly believe that use of contraception — particularly hormonal methods — grows more risky with advancing age, even among healthy women.²

The consequences of abandoning contraception before menopause, however, may be serious if not life threatening. At this stage of a woman's reproductive life, the medical risks of pregnancy to both mother and child are greatest and include pregnancy-induced hypertension, hemorrhage, increased risk of maternal death, spontaneous abortion, premature delivery, fetal abnormalities, and fetal and infant death. An unplanned pregnancy late in life can be emotionally stressful and even socially undesirable in some settings. Women older than 35 years also are particularly likely to abort unplanned pregnancies and to suffer complications and death associated with abortion.³

SELECTING AN APPROPRIATE CONTRACEPTIVE

A number of factors must be considered when helping a woman approaching menopause to select an appropriate contraceptive. Her physical condition is unique in that she may be experiencing and seeking relief from menopausal-like symptoms, or may desire protection against bone loss and various reproductive tract cancers.⁴ Her reproductive priorities and sexual behavior also may differ from those of a younger woman. She may be less concerned about preserving her fertility. Divorce, separation, or widowhood may have ended a stable relationship with one sexual partner, and she may now have new and even multiple sexual partners, putting her at increased risk for an STI. However, she is likely to have sex less frequently and, when she does have sex, she may anticipate the event and be better prepared to protect herself against both pregnancy and STIs. (See article, this page.) Her likelihood of becoming pregnant may be further reduced if her sexual partner is an older man.⁵ Recent research involving 782 healthy European couples indicates that men's fertility begins to drop as early as age 35, resulting in delayed conception. (The study found, for example, that a 35-year-old woman with a 35-year-old partner had a 29 percent chance of getting pregnant in one month. But a 35-year-old woman with a 40-year-old partner had only an 18 percent chance of doing so.)⁶

Little is known about patterns of contraceptive use by older women, especially those in developing countries. But, in general, sterilization is the most common choice of older women and men. According to U.S. data from the 1995 National Survey of Family Growth, two-thirds of married 40- to 44-year-old men and women chose sterilization as a contraceptive method, compared with one-third of married 30- to 34-year-olds and 7 percent of married 20- to 24-year olds.⁷ In a study in New Delhi, India, of the contraceptive use and sexual behavior of 500 women — half of whom were 35 years old or older — over 40 percent of the older women had been sterilized. In this setting, where it is common to marry and then bear children early in life, many older women apparently chose to be sterilized

because they considered their reproductive careers to be over. Only 1.2 percent of older women used oral contraceptives (OCs), compared with 10 percent of younger women. And while both younger and older women preferred the use of an intrauterine device (IUD) over OC use, IUD use fell markedly from 23 percent to 5 percent after the age of 35.⁸

Female sterilization is a safe and highly effective irreversible form of contraception for healthy older women. Moreover, a growing body of evidence — including a large, prospective cohort study — suggests that it may reduce the risk of ovarian cancer.⁹ “How this important protection might occur is unknown,” says Dr. David Grimes, FHI vice president of biomedical affairs and author of a published editorial on the subject.¹⁰ “Altered blood supply to the ovary is one possibility. Another is that sterilization prevents importation into the abdomen of cancer-causing substances.”

Nevertheless, some older women may be uncomfortable with the irreversibility of the method,¹¹ and may more readily accept the reversible sterilization that an IUD

provides. “IUDs can be safely used by healthy women of any age,” note Dr. Grimes and FHI senior epidemiologist Dr. David Hubacher, who recently published a systematic review of evidence of the non-contraceptive health benefits of IUD use.¹² “Inserted when a woman is 40 years old, it can remain in place through menopause and thus may be the last contraceptive a woman needs.” Furthermore, case-control studies offer fair evidence that copper-bearing and nonmedicated IUDs provide the noncontraceptive health benefit of protecting against endometrial cancer.¹³

When the Copper-T 380A IUD was introduced as an alternative to female sterilization in Rajasthan, India, researchers observed that the IUD was preferred by older women and women who had achieved their desired family size, especially tribal women. Only 30 of 216 IUDs inserted over three years were removed. IUD use gave women the freedom to change their minds about further child-bearing, while reducing their dependence on doctors and on the expensive equipment needed for female sterilization.¹⁴

THE BENEFIT OF EXPERIENCE

Older women tend to have more contraceptive experience than do younger women. As a result, they may more responsibly use and maximize the effectiveness of periodic abstinence and barrier methods. Their lower fertility and generally reduced frequency of sexual intercourse also may offset the lower effectiveness of these methods.

However, in an older woman whose menses have become irregular, the effectiveness of periodic abstinence may decrease if it is based only on a calendar approach or on signs of fertility. Measurements of basal body temperature or cervical mucus can increase effectiveness in such cases, although the number of permissible days for intercourse may be further limited using these approaches.¹

The relatively high failure rate of condoms and such methods as diaphragms, cervical caps, and spermicides decreases as fertility declines with age. If an older woman's vaginal walls sag, securely fitting and retaining a diaphragm may be difficult. A cervical cap that fits directly onto the cervix may be a better option. Vaginal dryness, often a problem for older women, can be relieved by the use of lubricating spermicidal preparations that are recommended for use with these methods.²

— Kim Best

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Before fitting an older woman with an IUD, providers should take into account her pre-existing menstrual pattern. If she already has dysfunctional uterine bleeding, heavy bleeding, or painful menstruation, any increased menstrual blood loss or pain associated with an IUD may be unacceptable.¹⁵ Because an older woman is more likely to have a tight cervical canal than a younger woman, IUD insertion may be more difficult. "If a difficult insertion is anticipated," advises Dr. Grimes, "the woman can be given 400 µg of misoprostol, a widely available and inexpensive drug, by mouth or vagina the night before or four hours in advance of the procedure. This will dilate the cervix. A paracervical block also can make the insertion more comfortable." An IUD should be removed after menopause since it may complicate the evaluation of any postmenopausal bleeding that may occur. Menopause will be obvious because the copper IUD does not mask the end of menses.

In contrast to copper-bearing or non-medicated IUDs, the levonorgestrel-intrauterine system (LNg-IUS) that continuously releases progestin into the uterus controls the dysfunctional menstrual bleeding that older women commonly experience. It also reduces menstrual bleeding and thus may be a good alternative to hysterectomy, which is often considered when menstrual blood loss is unacceptably heavy. Two randomized, controlled trials of the LNg-IUS as an alternative to hysterectomy showed that women offered this method were far more likely to cancel their planned hysterectomy than women assigned to continue their current, conservative medical treatments. Eighty percent and 64 percent of women in the LNg-IUS arms of the two trials canceled their surgery compared with 9 percent and 14 percent of women assigned to conservative medical treatments in the two trials.¹⁶

The LNg-IUS can protect the uterine lining, or endometrium, of older women receiving estrogen replacement therapy to control menopausal symptoms.¹⁷ And its sustained release of levonorgestrel directly into the uterus may result in fewer systemic side effects than the release of progestins via pills or implants.¹⁸

CURT CARNEMARK/WORLD BANK



AN OLDER COUPLE FROM PAKISTAN. UNTIL A WOMAN REACHES MENOPAUSE, SHE AND HER PARTNER NEED TO USE EFFECTIVE CONTRACEPTION TO PREVENT AN UNPLANNED PREGNANCY IF THEY ARE SEXUALLY ACTIVE.

COMBINED HORMONAL METHODS

When used consistently and correctly, the low-dose combined oral contraceptives (COCs) available today are highly effective. So, too, are combined injectable contraceptives (CICs). Regardless of their age, women who use these contraceptive methods face very little danger of adverse cardiovascular events — including thromboembolism (blockage of a blood vessel), stroke, and heart attack — as long as they have no history of cardiovascular disease and have no risk factors for cardiovascular disease, such as hypertension, diabetes, or a habit of smoking cigarettes. (COCs are contraindicated for women 35 or older who smoke 15 cigarettes or more daily, and are not recommended for women 35 years or older who smoke even fewer cigarettes. CICs are not recommended for women 35 years or older who smoke 15 cigarettes or more daily.)¹⁹

As a woman ages, her risk of thromboembolism and hemorrhagic stroke attributable to COC use rises. However, the incidence and mortality rates of all cardiovascular events (stroke, heart attack, and venous thromboembolic disease) in women of reproductive age are very low.

The annual risk of death from cardiovascular disease attributable to COCs among users who do not have risk factors for such disease is about two deaths per million users at 20 to 24 years of age, two to five deaths per million users at 30 to 34 years of age, and approximately 20 to 25 deaths per million users at 40 to 44 years of age.²⁰

COCs provide important noncontraceptive benefits. Their use by women of any age nearly halves the risk of ovarian and endometrial cancer, with protection continuing for 10 to 15 years after discontinuation and longer duration of use offering greater protection.²¹ (Whether CICs offer similar protection remains unknown.) Whether COC use increases the risk of breast cancer has been the subject of two recent studies. The first, a meta-analysis, showed a small increase in risk with recent use but a significantly lower risk of metastatic disease.²² The second, a population-based, case-control study among more than 9,000 women 35 to 64 years of age, showed that current or former COC use was not associated with increased risk of breast cancer, even among women who have close relatives with the disease.²³ Conducted by scientists at the U.S.

Centers for Disease Control and Prevention and the National Institutes of Health, this is the largest study ever to examine the possible risks of breast cancer among COC users.

Meanwhile, numerous studies indicate that perimenopausal women who use COCs can preserve bone mineral density (in contrast to nonusers, who experience bone loss). This suggests that perimenopausal women who use COCs may enter menopause with stronger bones.²⁴

“Another advantage of COC use is that it makes menstrual bleeding regular, like clockwork, and thus may reduce the need for invasive procedures or gynecologic surgery to diagnose or treat the irregular menstrual bleeding so common among older women,” says Dr. Grimes. “While often benign, irregular bleeding in older women must be investigated to rule out the possibility of endometrial cancer.”

Finally, COCs are highly effective in controlling hot flashes and other bothersome menopausal symptoms as women approach menopause. Hormone replacement therapy (HRT) can also do so at

lower doses of hormones than those contained in COCs. But HRT cannot be used as a contraceptive, and growing evidence indicates that HRT’s risks must be carefully balanced against its benefits. Providers should discuss those risks and benefits with women taking HRT or those planning to do so.

Five-year data from a recent large U.S. study of the major health benefits and risks of HRT use by healthy postmenopausal women showed that use of combined estrogen/progestin HRT raised the risk of stroke by 41 percent and the risk of heart attack by 29 percent, compared with placebo.²⁵ Other studies had indicated a short-term, increased risk of adverse cardiovascular events among postmenopausal women with established heart disease receiving combined HRT, although that risk declined over time.²⁶

The large U.S. study — the Women’s Health Initiative — also found that combined HRT reduced the risk of colorectal cancer and hip fractures, but raised the risk of breast cancer by 26 percent. (This

increased risk led to the premature termination of the part of the study comparing estrogen/progestin HRT with placebo.) Other studies have also indicated that current or recent use of HRT for five years or longer is associated with an increased risk of breast cancer.²⁷ However, several epidemiological studies indicate that HRT users have a significantly lower risk of metastatic breast cancer than nonusers,²⁸ and use of HRT by postmenopausal women is associated with a reduced risk of death from breast cancer, according to a recent review by FHI researchers of published observational evidence on the subject.²⁹

A disadvantage of COC or CIC use late in a woman’s reproductive life is that prolonged use masks the onset of menopause. (A woman will continue to bleed each month as long as she uses these estrogen-containing methods.) In settings where expensive laboratory testing of fertility is not feasible or available, there are a couple of ways to ensure that menopause has occurred and that COC use can be permanently abandoned without risking an unplanned pregnancy. First, a woman can



RICHARD LORD

A FAMILY FROM THE SANKE RIVER, CAMBODIA. ABOUT HALF OF A WOMAN’S REPRODUCTIVE LIFE OCCURS BETWEEN THE TIME SHE ACHIEVES HER DESIRED FAMILY SIZE AND THE TIME SHE REACHES MENOPAUSE.

stop COC use and use a barrier method for six months. If she does not menstruate for six months, contraception can be stopped. If regular menstruation returns, she can restart the COC. After another year, she can repeat the procedure: stop COC use and use a barrier method for six months.³⁰ Or, a healthy nonsmoker can continue COCs until age 53 or older, when permanent cessation of ovulation is nearly certain.

PROGESTIN-ONLY METHODS

Perimenopausal women for whom estrogen is contraindicated, such as smokers and women with cardiovascular risk factors, who still wish to use a hormonal contraceptive method can safely use progestin-only injectables, pills, or implants.

However, unpredictable bleeding patterns associated with such methods — ranging from normal cycles to erratic short or long cycles, nuisance spotting, and amenorrhea — may prove unacceptable for some women. In a two-year, prospective study among 60 women older than 35 years in Bangkok, Thailand, irregular bleeding due to the use of the progestin-only, three-month injectable depot-medroxyprogesterone acetate (DMPA) was the main reason why four of every five women discontinued the method.³¹ Because older women tend to have gynecological problems that cause menstrual bleeding irregularities, care must be taken to evaluate those irregularities before progestin-only methods are begun. Also, if frequent or prolonged bleeding develops during use, a gynecological cause must be ruled out. Because the return to regular menstrual cycles is long and unpredictable after DMPA use is discontinued, quick identification of menopause may be difficult.

DMPA offers the noncontraceptive health benefit of protecting against uterine fibroids³² and may protect against endometrial cancer.³³ Its use has been associated with reduced bone density in premenopausal women, but bone density increases after the drug is discontinued. Residual effects of DMPA use on postmenopausal bone density are small and unlikely to have a substantial impact on fracture risk.³⁴

For older women, levonorgestrel implants may be a better contraceptive option than progestin-only injections

because they continuously release hormones in lower doses and for longer periods of time. (The six-rod Norplant implant provides safe and effective contraceptive protection for seven years;³⁵ the two-rod Jadelle implant, for five years.³⁶) Use of the six-rod Norplant implant among 100 women ages 35 to 47 years was found to be safe and effective in a recent, one-year prospective study in Thailand.³⁷ “Studies of levonorgestrel implants in various countries indicate that effects on bone density, if any, are small,” says Irving Sivin, a senior scientist at the New York-based Population Council who has extensively studied and helped to develop progestin-only contraceptives. “In terms of fibroids and reproductive system cancers, these implants appear neither to benefit nor harm users.”

Progestin-only pills (POPs) are somewhat less effective than COCs. However, older women’s reduced fertility coupled with their better adherence to the regimen of taking a POP at the same time each day offsets this lower efficacy. Two doses of POPs (providing at least 0.75 mg levonorgestrel per dose) can also be used by older women as emergency contraception to prevent pregnancy after unprotected intercourse, method failure, or incorrect method use.

WHEN CAN CONTRACEPTION STOP?

“A woman may still have some menstrual bleeding in her late reproductive years, but many of her menstrual cycles will be anovulatory,” says Dr. Grimes. “And, by the time she is in her 50s, her fertility is nearly zero.” Indeed, some experts suggest that women be advised to abandon contraception at the age of 50, while others recommend waiting six to 12 months after a woman’s last menstrual cycle. Women who use hormonal methods that mask the cessation of menses should be advised to continue using the methods until age 53, Dr. Grimes adds.

But, regardless of an individual’s age, one reproductive health consideration does not change: Consistent and correct condom use remains essential for sexually active women at risk of contracting an STI, including HIV.

— Kim Best

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CONTRACEPTIVE CONSIDERATIONS FOR OLDER WOMEN

METHOD	ADVANTAGES	DISADVANTAGES
LESS EFFECTIVE*		
Abstinence (periodic)	<ul style="list-style-type: none"> • Does not mask menopause 	<ul style="list-style-type: none"> • Determining fertile days may be difficult if menses are irregular • No HIV/STI protection
Condoms (male or female)	<ul style="list-style-type: none"> • Only methods that protect against HIV/STIs • Do not mask menopause 	<ul style="list-style-type: none"> • Must be used correctly with each act of intercourse
Diaphragms, caps	<ul style="list-style-type: none"> • Do not mask menopause 	<ul style="list-style-type: none"> • Devices may be difficult to fit in older women • Protection against HIV/STIs unknown
Spermicides	<ul style="list-style-type: none"> • Do not mask menopause 	<ul style="list-style-type: none"> • No HIV/STI protection
EFFECTIVE*		
Combined oral contraceptive pills (COCs)	<ul style="list-style-type: none"> • Strongly protect against ovarian and endometrial cancer • Prevent bone loss • Normalize menstrual bleeding • Control menopausal symptoms 	<ul style="list-style-type: none"> • Not appropriate for women at risk of cardiovascular disease • Mask menopause • No HIV/STI protection
Progestin-only pills (POPs)	<ul style="list-style-type: none"> • Can be safely used when estrogen is contraindicated 	<ul style="list-style-type: none"> • Regimen requires stricter compliance than for COCs • No HIV/STI protection
Emergency contraceptive pills (ECPs): COCs or POPs	<ul style="list-style-type: none"> • No medical contraindications for use by women at risk of cardiovascular disease 	<ul style="list-style-type: none"> • Not meant for repeated use • No HIV/STI protection
MORE EFFECTIVE*		
Combined injectable contraceptives (CICs)	<ul style="list-style-type: none"> • Estrogens in CICs may be less potent than those in COCs, possibly causing fewer side effects 	<ul style="list-style-type: none"> • Not appropriate for women at risk of cardiovascular disease • No HIV/STI protection
DMPA: progestin-only injectable	<ul style="list-style-type: none"> • Can be safely used when estrogen is contraindicated • Protects against uterine fibroids • May protect against endometrial cancer 	<ul style="list-style-type: none"> • May make bleeding patterns unpredictable • No HIV/STI protection
Subdermal implants	<ul style="list-style-type: none"> • Can be safely used when estrogen is contraindicated • Effective for 5 to 7 years 	<ul style="list-style-type: none"> • May make bleeding patterns unpredictable • No HIV/STI protection
Intrauterine device (IUD): Copper T 380A	<ul style="list-style-type: none"> • Effective for at least 12 years • Does not mask menopause • May protect against endometrial cancer 	<ul style="list-style-type: none"> • May add to menstrual bleeding problems • Insertion may be more difficult in older women • No HIV/STI protection
Levonorgestrel intrauterine system (LNg-IUS)	<ul style="list-style-type: none"> • Effective for at least 7 years • Reduces menstrual bleeding • Complements hormone replacement therapy 	<ul style="list-style-type: none"> • Insertion may be more difficult in older women • No HIV/STI protection
Sterilization (male or female)	<ul style="list-style-type: none"> • May protect against ovarian cancer • Does not mask menopause 	<ul style="list-style-type: none"> • Irreversible • No HIV/STI protection

*Effectiveness is defined here as: "less effective" for most users (becoming "effective" when used consistently and correctly), "effective" for most users (becoming "more effective" when used consistently and correctly), and "more effective" for all users. Definition of effectiveness adapted from Trussell J. Contraceptive efficacy. In Hatcher RA, Trussell J, Stewart F, et al., eds. *Contraceptive Technology, Seventeenth Revised Edition*. New York: Ardent Media, 1998.

HIV/AIDS Does Not Spare Older People

A common perception is that AIDS afflicts only young people. In HIV/AIDS prevention campaigns, wrinkled faces are seldom featured. Global reporting of HIV/AIDS prevalence tends to refer only to children and individuals of reproductive age (ages 15 to 49 years), as if persons 50 years and older could not be infected with HIV or develop AIDS.¹

Many older people themselves believe their risk of HIV infection is low.² Often unfamiliar with methods to prevent sexually transmitted infections (STIs), including HIV, and no longer needing contraception, they are unlikely to use condoms consistently during sex for either pregnancy or disease prevention.³

Furthermore, believing themselves to be at low risk of HIV/AIDS, many older people do not seek testing for HIV infection.⁴ If they become sick with AIDS, they may dismiss their symptoms as part of the aging process. Not receiving or delaying diagnosis and treatment of AIDS decreases the likelihood of survival. In fact, older people often do not survive as long as younger people because of delays in diagnosis and treatment⁵ and because age appears to accelerate the progress of HIV infection to AIDS.⁶

Despite the impression that AIDS is a younger person's disease, older people are not spared. Older, sexually active men and women at risk of infection should adopt safe sexual behaviors, such as using condoms correctly and consistently.

In the United States, about 11 percent of AIDS cases occur among people ages 50 years and older, with that number reaching 15 percent in some parts of the country. Heterosexual sex is increasingly a source of these infections.⁷ Trends are similar in other developed countries. In Western Europe, about 10 percent of new

HIV infections reported between January 1997 and June 2000 were among people older than 50 years.⁸

"The share of total AIDS cases among people ages 50 years and older in developing countries is generally lower than that in developed countries, probably because there are relatively fewer older people in these populations," notes Dr.

GRACE WANG/FHI



John Knodel, a professor at the University of Michigan's Population Studies Center and principal author of a recent report about the global impact of AIDS on persons 50 years or older.⁹ "The percentages of cases occurring in men or women ages 50 years or older are approximately 5 percent in Asia, 6 percent in Africa, and 7 percent in Latin America. In Africa and

Asia, where heterosexual intercourse is the main mode of HIV transmission, older men tend to have higher rates of HIV infection than older women. This likely reflects the fact that sexual relations typically occur between couples in which the man is older than the woman." (See chart, page 27.)

In view of these statistics, reproductive health care providers should keep in mind that:

- Many older people are sexually active. A 1999 survey by the U.S.-based American Association of Retired Persons (AARP) of a nationally representative sample of 1,384 people 45 years and older found that approximately two-thirds of men and women ages 45 to 59 years who had sexual partners said they had sexual intercourse at least once a week. (Over a quarter of those 75 years and older reported doing so.)¹⁰ And a study of sexual activity among persons

ages 50 years and older in Thailand, based on a large nationally representative survey conducted in 1995, found that substantial proportions of older married Thais remain sexually active, although at lower levels than older persons in Western countries.¹¹ (See graph, page 28.)

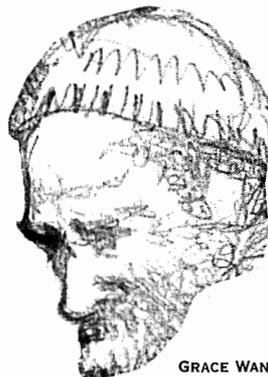
- If older clients are sexually active, they may be at risk for HIV. Many persons diagnosed with AIDS at 50 years or older were probably infected as younger adults, but many infections are newly acquired — often through heterosexual sex. (Specific risks associated with heterosexual sex include unprotected sex, multiple sexual partners, and infection with other STIs.) That older persons often face these risks was demonstrated in a six-year, retrospective study of 239 new patients, 60 years and older, receiving genitourinary medical care at a hospital in the United Kingdom. Over half (121) of the 239 patients were single, divorced, separated, or widow/widowers. They were "on their own," the researchers noted, "resulting in sex with casual partners and even with prostitutes. On the other hand, protective sex was performed by only a minority of this group, probably because they link protection with contraception only."¹²

- Discussing sexuality or asking questions about sexual activity may be appropriate with aging clients. Older people are less likely than younger people to talk about such matters with a doctor, and doctors tend not to ask their older patients about sexual behavior.¹³

- Providers should be prepared to discuss HIV/AIDS, its risk factors, and safe sex practices with older people.

Older people, in both developed and developing world settings, often know less than younger people about HIV/AIDS.¹⁴

- Counseling older, sexually active, at-risk clients to use condoms is important. A 1994 U.S. study, based on data from two



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large cross-sectional national surveys, found that at-risk persons 50 years or older were one-sixth as likely to use condoms during sex as at-risk persons in their 20s.¹⁵ Another U.S. study conducted in 12 state and local health department clinics among 556 women with AIDS attributed to heterosexual contact (11 percent of whom were 50 years or older) showed that older women were less likely than younger women to have used a condom before their HIV diagnosis.¹⁶

- Physical changes associated with menopause (such as a decrease in vaginal lubrication, vaginal shortening and narrowing, and thinning of vaginal walls) can increase a woman's risk of STI/HIV infection if she has unprotected sexual intercourse.

- Suggesting that an older, at-risk client be tested for HIV infection, particularly if that person reports feeling sick, may be appropriate. A study in New York City among 78 HIV-infected men and women ages 50 years and older indicated that asymptomatic individuals often waited to get HIV testing or medical care, even if they knew they were at risk for the infection. Even those with symptoms often delayed seeking HIV testing or medical care, attributing those symptoms to other illnesses, normal aging, or menopause.¹⁷

Meanwhile, many health care providers are not well aware of older persons' risk for HIV infection¹⁸ and may be less likely to suspect it among older clients than among younger ones. About two-thirds of

OLDER PERSONS AS PERCENTAGES OF AIDS CASES

COUNTRY	TOTAL AIDS CASES	PERCENTAGES OF CASES AGES 50+ YEARS		
		TOTAL	MEN	WOMEN
Africa ¹	233,336	5.6	7.3	3.6
Asia ²	119,320	4.5	4.8	2.9
Latin America ³	198,322	7.4	7.6	7.0
Other				
Australia	8,096	9.3	12.4	17.0
Canada	16,235	11.2	11.0	16.3
France	49,421	12.9	13.1	12.4
Germany	18,515	16.4	17.2	10.4
United Kingdom	16,791	11.0	11.7	5.6
United States	733,371	10.7	11.0	9.1

Source: U.S. Centers for Disease Control and Prevention. UNAIDS epidemiological fact sheets for individual countries, 2000 update. *HIV/AIDS Surveillance Rep* 1999;11(2). In Knodel J, Watkins S, VanLandingham M. *AIDS and Older Persons: An International Perspective*, PSC Research Report 02-495. Ann Arbor, MI: Population Studies Center, 2002.

1. Based on data for 26 countries; 65% of the cases attributable to Côte d'Ivoire and Tanzania.
2. Based on data for 10 countries; 96% of the cases attributable to Thailand.
3. Based on data for 7 countries; 91% of the cases attributable to Brazil and Mexico.

330 U.S. primary-care physicians surveyed in 1996 reported that they rarely or never discussed HIV/AIDS or HIV infection risk reduction with patients older than 50 years. They were also less likely to counsel older patients to seek HIV testing than younger patients.¹⁹ This failure to consider the possibility of HIV infection among older persons is due in part to the fact that AIDS-related opportunistic infections that commonly occur among persons ages 50 years or older (HIV encephalopathy and wasting syndrome) often have symptoms similar to those of other diseases associated with aging (Alzheimer's disease, depression, and cancer).²⁰ These symptoms include memory problems, fatigue, and weight loss. Health professionals also may make the mistake of assuming that night sweats and depression are only symptoms of menopause, when they may be symptoms of AIDS. Such confusion often results in older people with AIDS not having their disease diagnosed.²¹

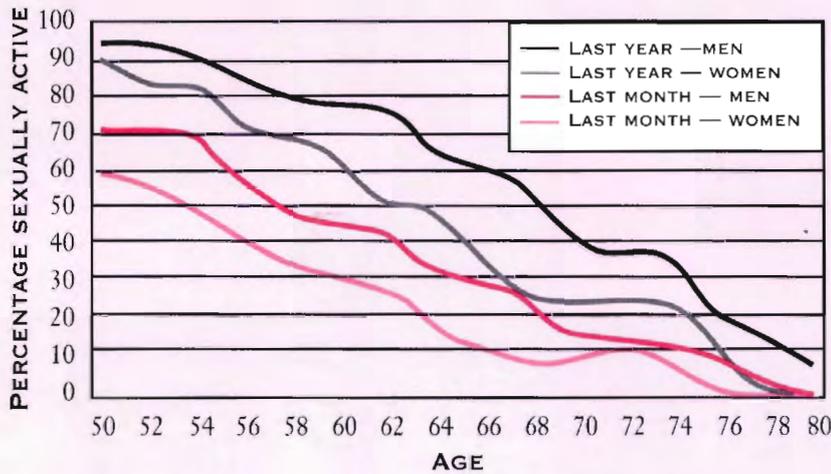
- Postponing testing and treatment increases the chance that HIV-infected people will transmit the virus and may result in life-threatening delays in treatment, if available. The length of time

between HIV infection and the development of AIDS — as well as total survival time — is shorter among HIV-infected older people.²² As of 1996 in the United States, persons 50 years and older with AIDS were twice as likely as younger persons to die within a month of their diagnoses.²³ In a 1998 U.S. study of 321 AIDS patients ages 60 years and older and 7,511 AIDS patients 20 to 39 years old, older patients' median life span from time of diagnosis was nine months compared to 22 months for younger patients.²⁴

- Even when antiretroviral drugs are available, an older person with HIV/AIDS is more difficult to treat than a younger person. Older individuals are more likely than the young to have chronic medical problems — such as high blood pressure, diabetes, peripheral vascular disease, and coronary artery disease — and the drugs they take for these conditions may adversely interact with drugs used to control HIV/AIDS. However, a recent U.S. study among 101 patients ages 50 and older and 202 patients ages 18 to 39 years, all of whom received antiretroviral therapy from 1993 through 1999, found that older

SEXUAL ACTIVITY AMONG MARRIED OLDER THAIS

BASED ON A 1995 SURVEY IN THAILAND



Source: Knodel J, Chayovan N. Sexual activity among the older population in Thailand: evidence from a nationally representative survey. *J Cross-Cult Gerontol* 2000;16(2):173-200.

patients were more likely than younger patients to achieve blood levels of HIV below detectable limits, perhaps because they were less likely to stop taking their medications.²⁵

— Kim Best

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'No One Thinks Older Persons Are at Risk'

I learned the hard way that you do not have to be young to become infected with HIV," says 67-year-old Jane Fowler. More than 10 years ago, at the age of 55, the retired career journalist from Kansas City, Missouri, USA, found out that she was HIV-positive. Although her diagnosis was devastating, she feels lucky to have learned of her HIV status when she was still healthy. "Often, HIV infection is not diagnosed in older people until an AIDS-defining illness develops," she says. "That's largely because no one thinks older persons are at risk."

Fowler, herself, did not think she was at risk. She had been married to one man for over two decades before divorcing in 1983. Three years later, at the age of 50, she had unprotected sex with a friend she had known her entire adult life. She never considering using a condom because "condoms for people of my generation were for birth control and I had had in my 40s a surgical procedure to prevent pregnancy."

Also, Fowler never expected her friend to be infected. She believed she knew him well and she trusted him. "Older people often think that HIV won't happen to them," she says. "Also, you may think you know a person well . . . perhaps he has the same background, the same education, and so on. He may seem healthy. So you think there is no need to be concerned about unprotected sex. But you must always be concerned, because no one ever knows anyone else's true sexual history."

Fowler was diagnosed with HIV at a time when antiretroviral drugs had become available and her use of those drugs has helped prevent her infection from developing into AIDS. "I am blessed," she says. Yet, during the first years after her diagnosis, "I withdrew and lived quietly. I withdrew because I lacked the courage to face possible discrimination, rejection, intolerance," she says. During this period, Fowler shared what was happening to her with her family and a small group of friends whom she could trust.

Such a reaction, especially among older HIV-infected persons, is not unusual. "Not only does one experience the stigma of aging, but there is the stigma of having a disease caused by drug use or sex," Fowler says. "I did not use drugs and I lived a conventional lifestyle. I was not promiscuous. But if you are HIV-positive, people tend to think you have been promiscuous and, worse, cannot understand how an older person could be sexually active, let alone promiscuous."

Despite the stigma associated with her infection, Fowler ultimately concluded that her self-imposed semi-isolation was a mistake. "I decided to publicly acknowledge my predicament and bring a prevention message to noninfected people, particularly those my own age," she says. "Suddenly, I became determined to make a difference. I decided to stand up and say: 'Look at this wrinkled face. This is another face of HIV.'"

In the spring of 1995, Fowler became what she calls an "HIV/AIDS activist." She has now given about 500 speeches to audiences of all ages and helped found the National Association on HIV Over Fifty, for which she served as board cochairperson for five years. She now directs the national HIV Wisdom for Older Women program (Web site: <http://www.hivwisdom.org>) based in Kansas City, and is actively involved in numerous other HIV/AIDS-related organizations.

Among the many messages she shares is the need "to dispel the myth among health care providers that older people are not sexually active and are not engaging in behaviors that put them at risk for HIV. I have spoken to numerous acquaintances and none have had their sexual history taken by their health care providers. An older person's sexual behavior is not something that providers want to talk about."

That is not surprising. "Imagine a health care provider in his or her late 30s or 40s sitting across the desk from a woman 60 or 65 years old," Fowler says. "It's like talking to 'Mom' about sex.

That's uncomfortable, and so it is not often done. Also, in some cultural contexts, providers who are younger than their clients would never ask such questions, out of honest respect for their elders."

Older HIV-infected persons often sink into depression and isolation because "they are probably not as good at participating in support groups as younger people," Fowler says. "And, because of the stigma of the disease, many older women may not be able to tell members of their families."

Fowler says she is fortunate that her 38-year-old son, with whom she was always candid about sex, "was and remains my best support. Without his support and that of his fiancée, I could not do what I am doing these days." The drugs Fowler once took restricted her life, but her current drug regimen is simple and interferes little with her activities. "With each year, I become busier, going wherever I am invited — crisscrossing the country, even traveling abroad," she says.

Meanwhile, Fowler is encouraged that many other older people will avoid her fate. "Many people in their 50s who are in new relationships are now demanding that their partners be tested for HIV infection before beginning a sexual relationship," she says. "And my advice is to always talk about protected sex before you are in the heat of passion. If your partner refuses to use protection, find another partner. Having unprotected sex — even with someone you think you know well — is not worth risking your life."

— Kim Best □

"You think there is no need to be concerned about unprotected sex. But you must be concerned, because no one ever knows anyone else's true sexual history."

The Many Meanings of Menopause

To best serve women approaching menopause, providers need to identify and keep in mind various values, beliefs, and practices associated with the end of a woman's reproductive life.

In some cultural settings, menopause brings women unprecedented freedom and even power. Yet, in others, it is associated with loss, poor health, and lowered self-esteem. Where menstrual bleeding is highly valued as a sign of health and youth, menopausal women may welcome even abnormal bleeding as a sign of continued fertility and thus fail to seek necessary medical care.

For many women who have had little access to contraception and have been unable to control their fertility, menopause is a welcome end to the fear of unplanned

pregnancy. For the first time, they may actually enjoy sexual intercourse.

Women in some settings may also find that menopause confers special privileges.¹ For example, various tribes in the northwestern parts of Cameroon believe that women become wise when menstruation ends and thereafter can rise in social stature and even assume leadership positions.² In Nigeria, postmenopausal women often are given more power both within and outside of the home.³ Among the Hausas of northern Nigeria, menopausal women even win physical freedom, being released from confinement (a practice imposed when they are married) when menstruation ceases. However, menopause also can strip women of their identity and

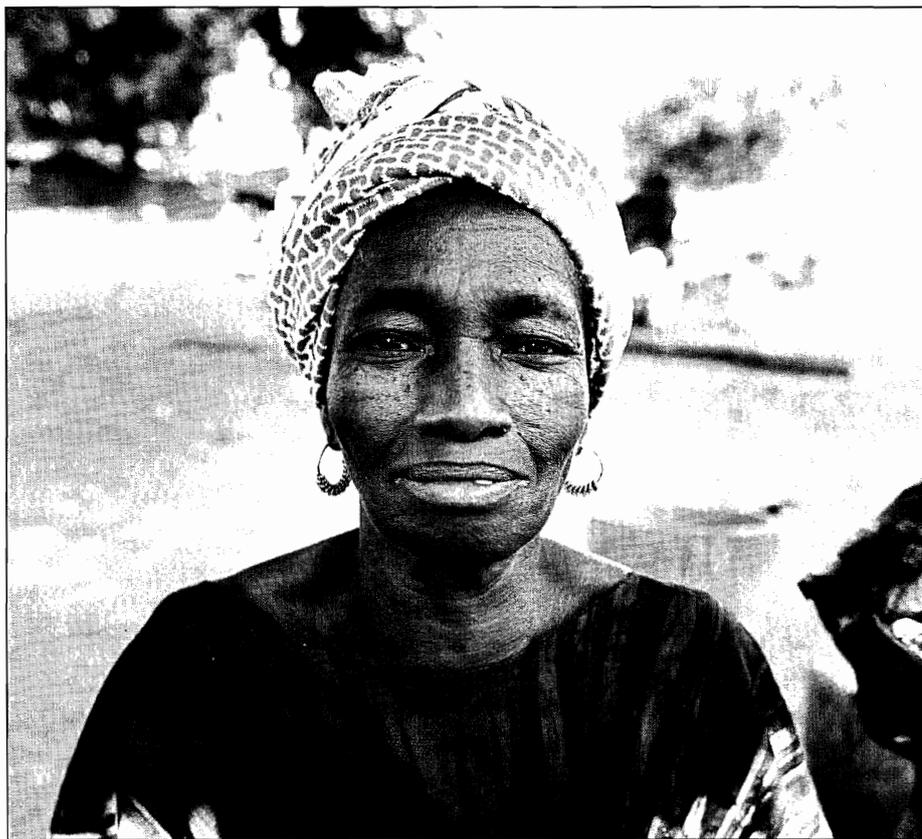
bring sexual prohibitions. Among the Hausas, postmenopausal individuals are no longer considered to be women and are denied the right to have sexual intercourse.⁴

For childless women in many settings, menopause signals a loss of hope for motherhood and can result in depression. Even women who have children may suffer a drop in self-esteem in response to the loss of reproductive capacity. The importance of maintaining the appearance of continuing fertility is such that many menopausal women from Côte d'Ivoire adopt hormonal contraception to induce monthly bleeding.⁵

Commonly, women report ambivalence about menopause. In a 1997 survey conducted by FHI in El Alto and La Paz, Bolivia, among 816 menopausal and postmenopausal women ages 45 and older (from the original nationally representative sample for the 1993-1994 Demographic and Health Survey), most women described either positive or neutral feelings about menopause. They were relieved not to be menstruating and not to be at risk of an unplanned pregnancy. However, about a third of the women reported negative feelings, primarily due to fears of aging and of related health problems. And, when the 83 menopausal women in the survey were asked what they considered to be appropriate sexual activity for women who had gone through menopause, about two-thirds said that they thought they should have sex less frequently or not at all. A third reported that their relationships with their partners had deteriorated since menopause.⁶

Three-quarters of 456 women ages 45 to 60 years queried in a population-based survey, based on the 1991 Demographic Census of the Brazilian Institute of Geography and Statistics, reported a lack of sexual desire. A third of the sample reported sexual abstinence, although the main reason for forgoing sexual relations was lack of a sexual partner or a medical problem afflicting their regular sexual partner. Among the older women, maintenance of sexual activity was associated with

BERYL GOLDBERG



AN OLDER WOMAN FROM MALI ATTENDS A DISCUSSION ABOUT A VILLAGE CLINIC. IN SOME CULTURAL SETTINGS, MENOPAUSE MARKS THE BEGINNING OF A PERIOD OF FREEDOM AND POWER.

IN MEMORIAM

We are sad to note the passing of Dr. Theodore M. King, chairman of FHI's Board of Directors from September 2000 until his death on May 22, 2002 at the age of 71.

Dr. King also served as FHI's president/chief operating officer from 1991 to 1998. He was a former vice president for medical affairs at the Johns Hopkins Hospital and the Johns Hopkins Health Systems, Baltimore, Maryland, USA, and a former chairman of the hospital's department of gynecology and obstetrics.

"Dr. King was a multitalented clinician, teacher, researcher, and manager who, as a leader for this organization, created a sea of stability for programs," says Dr. Albert



Siemens, FHI chief executive officer. "He had a big heart for women and their families and an understanding of medicine and culture that transcended borders."

Dr. Ward Cates, president and chief executive officer for FHI's Institute for Family Health, recalls Dr. King's commitment to "advancing the reproductive choices of women worldwide and improving both the quality of, and access to, global reproductive health services. He had a special compassion for the most vulnerable populations, seeking ways to make the full spectrum of fertility-control options available to them."

In addition to his contributions to FHI, Dr. King was a founder, trustee, and later president of the Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO), and authored more than 150 publications on such topics as heart disease and pregnancy, contraception, adolescent pregnancy programs, and female reproductive physiology.

greater earning power, being in a stable relationship (especially marriage), and current use of hormone replacement therapy. Also, better-educated women reported greater enjoyment of sex.⁷

In settings where menstruation is seen as a cleansing process and evidence of a healthy uterus, its absence may be viewed as a sign of poor health.⁸ As a result, older women who experience bleeding or develop abdominal masses due to cancer may welcome these events as signs of continued fertility or pregnancy and thus fail to seek medical care. Cancers of the reproductive tract — including cervical, endometrial, and ovarian tumors — usually occur between 35 and 65 years of age and, because they are often reported and diagnosed late in the developing world, kill many women there. For this reason, it is imperative that health care providers educate older women about normal changes related to menopause and encourage early reporting and evaluation of abnormal changes.⁹

— Kim Best

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9. Wambua. □

Resources

EXAMINATION GUIDELINES

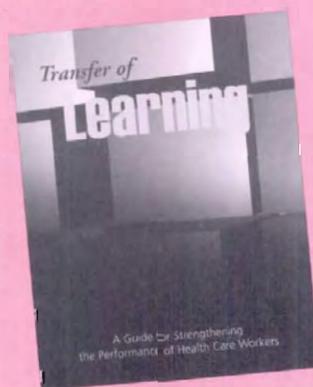
A step-by-step approach to performing breast and pelvic examinations and teaching breast self-examination to women, *Guidelines for Performing Breast and Pelvic Examinations*, is available in English, Spanish, French, and Russian. The Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO) guidelines outline clinical and counseling skills needed to provide high-quality reproductive health care, including suggestions for helping women feel more comfortable during the examinations and for making the examinations easier to perform. The guidelines are part of a learning package that includes a course syllabus for group-based training, pre- and mid-course questionnaires, learning guides, checklists, and other materials needed to learn and teach these skills. In addition, a training video, which demonstrates the key steps for performing these examinations, is available on VHS or CD-ROM in English, French, Spanish, and Russian. The guidelines (cost U.S. \$5) and the training video (cost U.S. \$20 for SECAM and NTSC VHS, U.S. \$31 for PAL VHS, or U.S. \$10 for CD-ROM) can be ordered by e-mail (orders@jhpiego.org), telephone ([410]-614-3206), or online at: <http://www.jhpiego.org/pubs/index.asp>.

STRENGTHENING PERFORMANCE

Transfer of Learning: A Guide for Strengthening the Performance of Health Care Workers provides strategies and techniques for use before, during, and after training interventions to facilitate the transfer of knowledge and skills, and to ultimately improve job performance. The 33-page guide, a joint publication of PRIME II and JHPIEGO, is designed as a tool for supervisors, trainers, and providers working in the area of reproductive health. It can also help program and policy specialists better understand the support and resources needed to ensure transfer of learning. To obtain a free copy in English, Spanish, or French, contact PRIME II or JHPIEGO, as follows:

- Reynolds Richter, The PRIME II Project, 1700 Airport Road, Suite 300, CB 8100, Chapel Hill, NC 27599-8100, USA. Telephone: (919) 966-5636. Fax: (919) 966-6816. E-mail: rrichter@intrah.org.
- Materials Administration Division, JHPIEGO Corporation, 1615 Thames Street, Suite 200, Baltimore, MD 21231, USA. Telephone: (410) 955-8558. Fax: (410) 955-6199. E-mail: orders@jhucpc.org.

Electronic and interactive versions are also available at: <http://www.intrah.org/tol/index.html>, <http://www.prime2.org/tech-leader.shtml>, and <http://www.reproline.jhu.edu/english/6read/6pi/tol/index.htm>.



INFORMED AND VOLUNTARY DECISION MAKING

Choices in Family Planning: Informed and Voluntary Decision Making is a module developed by EngenderHealth to help reproductive health service providers and others better understand how individuals make informed and voluntary reproductive health care decisions, and the individual, community, policy, and service delivery factors that support or impede that process.

The module consists of three sections: a discussion guide that explores key concepts, a preliminary assessment guide for determining a program's strengths and weaknesses, and a "next steps" guide for strengthening informed choice within programs. This resource is free to providers in developing countries. For others, cost is U.S. \$5. To

obtain a copy, contact: EngenderHealth, Material Resources, 440 Ninth Avenue, New York, NY 10001, USA. Telephone: (212) 561-8000. Fax: (212) 561-8067. E-mail: Materialresources@engenderhealth.org.

