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SEXUALLY TRANSMITTED DISEASES

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Contents

ARTICLES

ALSO IN THIS ISSUE...

SECRECY SURROUNDING SEXUALITY HINDERS STD-PREVENTION PROGRAMS

Mac Edwards

When Carolyn Patierno, SIECUS's director of programs, returned in December with a glowing report from the 1996 National STD Prevention Conference jointly sponsored by the U.S. Centers for Disease Control and the American Social Health Association, I knew this *SIECUS Report* on "Sexually Transmitted Diseases" would contain new and important information.

I wasn't quite prepared, however, for *The Hidden Epidemic: Confronting Sexually Transmitted Diseases,* the substantive report released by the Institute of Medicine at the conference and based on the collaborative work of dozens of U.S. organizations and hundreds of individuals.

We here at SIECUS felt that *The Hidden Epidemic* was so important that we asked and received permission from the Institute to reprint the Executive Summary as the lead article in this issue. (See pages 3 through 14.)

The report is important because it talks candidly about the enormous problem that this country faces in battling STDs and because it offers step-by-step strategies for solving it. Not surprisingly, many of those strategies relate directly to SIECUS's mission of disseminating information about sexuality and promoting comprehensive sexuality education.

The committee points out that one of the major reasons STDs are a problem is because they are rarely discussed. In reality, they say, Americans just do not feel comfortable talking about STDs—and about sexuality. They explain that this adversely impacts on STD prevention in the United States by:

- impeding education programs for adolescents
- hindering communication between parents and their children and between sexual partners
- promoting unbalanced sexual messages in the mass media
- compromising education and counseling activities of health care professionals
- hindering community activism regarding STDs
- impeding research on sexual behaviors.

Statistics uncovered by the committee show that:

- one of four women and one of five men (including married couples) in a recent survey had no knowledge of their partner's sexual history.[1]
- only 11 percent of teenagers get most of their information regarding STDs from parents and other family members.[2]
- embarrassment and discomfort discussing sexual health issues are major hurdles for clinicians to overcome in order to effectively communicate with their patients regarding sexuality and STDs.[3]

Finally, the committee looked to other developed countries to show further that the secrecy surrounding sexuality in the United States adversely impacts STD prevention. The Scandinavian countries, they found, have comparable levels of sexual activity, but much lower rates of curable STDs and unintended pregnancy.[4] They concluded by stating that these differences may be attributable to the pragmatic, rather than the moralistic, approach to sexuality issues and universal access to health services in these European countries.[5]

The committee has also made recommendations for a National STD-Prevention System in the United States (See pages 15 through 17.) broadly based on information sharing and these four strategies:

- overcoming barriers to adoption of healthy sexual behaviors
- developing strong leadership, strengthening investment, and improving information systems for STD prevention
- designing and implementing essential services in innovative ways for adolescents and underserved populations
- ensuring access to and quality of essential clinical services for STDs.

SIECUS is proud to share this important information developed by such an impressive group of health care professionals. We now ask that you use it to help implement a National STD-Prevention System in our country. In the process, you will also be helping SIECUS in its mission to inform and educate people about the role sexuality plays in all our lives.

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A SABBATICAL'S LESSONS

DEBRA W. HAFFNER, M.P.H.

I recently returned to SIECUS after a six-month sabbatical. In June—after eight years at SIECUS's helm, I began a unique and wonderful journey. I began my career in sexology 21 years ago, and, with the exceptions of brief maternity leaves following the birth of my two children, I have worked arduously without stopping.

The concept of a sabbatical every seven years is introduced in Leviticus: "Six years you may sow your field, and six years you may prune your vineyard … but in the seventh year, the land shall have a Sabbath of complete rest, a Sabbath of the Lord." (Leviticus 25:3–5). Rabbinic law still requires observance of the Sabbatical year in modern Israel. The Reverend Frank Hall, my minister, says that a sabbatical, like the sabbath, is a time off from trying to fix the world. I was ready.

A WONDERFUL MIXTURE

My sabbatical was a wonderful mixture of excitement, adventure, and new experiences. In July, my family lived in a sixteenth-century farmhouse in Cortona, Italy. I detached from the workaday world with long walks in vineyards, hikes in Tuscan hill towns, incredible fresh foods, and the most remarkable sunsets over the Val di Chianti.

I spent ten remarkable days in Israel, speaking at two international conferences, and, on weekends, exploring sacred places. The Israeli-Dutch Sexology Conference was highlighted by the opening address of a member of the Dutch consulate in Israel. He publicly affirmed the Netherlands' sexually healthy culture, and went on to say that "there is no teenage pregnancy problem in Holland" and "abortions represent only four percent of all pregnancies a year." (It is close to 40 percent in the United States.) I once again was struck by how our country's sexually repressive policies contribute to our social problems and sexually related morbidity.

During the fall, I had the privilege of being a Research Fellow at the Yale Divinity School. I audited three courses and conducted independent research on sexuality in scripture.

During my first month at seminary, I profoundly realized that it is my work in sexology that is my calling. In one of the first articles I read at Yale, *calling* was described as "discovering where the world's greatest need meets your greatest joy." I thought back to the first sexuality education course I attended in the summer of 1975. At the end of that first week at Yale, I just *knew* I was to do this work in my life.

I had set out to research scriptural passages that would support teaching sexuality information. What I discovered was much more profound. The Bible—both the Old Testament and the New Testament—integrate lessons about sexuality throughout their books. I excitedly noted that the book of Genesis includes at least 34 sexually themed stories, and that, in the Letter to First Corinthians, Paul addressed 17 topics that are generally included in a comprehensive sexuality education program. The many writers, editors, and canonizers of the Bible understood that sexuality was such an important part of people's lives that it had to be recognized by the community and religious leaders.

PARALLEL TEACHINGS

I was deeply moved to discover that the Bible's teachings about sexuality closely parallel SIECUS's and my own. For example, I believe that Scripture:

- recognizes that sexuality is a central part of life
- recognizes that sexuality can be a source of great pleasure and satisfaction as well as the font of pain and abuse
- affirms the sacredness of the body and sexuality
- recognizes that people must make wise, moral decisions about their sexuality and that they need support, guidance, and information to do so
- affirms that loving and respecting each other is the foundation for moral decisions.

I found the seminary deeply rewarding and enriching. I have been active in a liberal religious faith for more than a decade, but the recent attacks on SIECUS and on me and the issues I care so deeply about had left me feeling defensive.

After spending four months in a Christian seminary with Christian faculty and students, many of whom are evangelicals, I learned personally and directly that most conservative Christians do not share the political extremist views of SIECUS opponents. I have a profound respect for people who dedicate their lives to theology and ministry, and have discovered a new bridge to dialogue with those who believe differently than I do.

I return to SIECUS renewed and refreshed. My own ministry is more clearly defined. I am immeasurably grateful to the Board of Directors of SIECUS for this time and to the SIECUS staff who worked so hard and effectively in my absence. I approach the New Year with a renewed sense of dedication and commitment, as well as an appreciation of the blessings in my life. I hope 1997 will be a year of blessings for you, your family, and your work.

THE HIDDEN EPIDEMIC: CONFRONTING SEXUALLY TRANSMITTED DISEASES

The Committee on Prevention and Control of STDs
Institute of Medicine
Washington, DC

Of the top ten most frequently reported diseases in 1995 in the United States, five are sexually transmitted diseases (STDs). With approximately 12 million new cases of STDs occurring annually, rates of curable STDs in the United States are the highest in the developed world.

In 1995, STDs accounted for 87 percent of all cases reported that year among the top ten most frequently reported diseases in the United States. Despite the tremendous health and economic burden of STDs, the scope and impact of the STD epidemic are underappreciated and are largely hidden from public discourse.

Public awareness and knowledge regarding STDs are dangerously low, but there has not been a comprehensive national public education campaign to address this deficiency. The disproportionate impact of STDs on women has not been widely recognized. Adolescents and young adults are at greatest risk of acquiring an STD, but STD-prevention efforts for adolescents remain unfocused and controversial in the United States.

There are many biological and social factors that hinder effective prevention efforts, but few have been elucidated and addressed nationally. In addition, the roles and responsibilities of public versus private health care professionals in STD prevention have not been clarified in light of the recent changes in health care delivery and financing.

Given the above observations, the Institute of Medicine (IOM) convened the 15-member Committee on Prevention and Control of STDs in 1994 to:

- examine the epidemiological dimensions of STDs in the United States and factors that contribute to the epidemic
- assess the effectiveness of current public health strategies and programs to prevent and control STDs
- provide direction for future public health programs, policy, and research in STD prevention and control.

The committee was charged to focus its study on STDs other than HIV infection.

BROAD SCOPE AND IMPACT

The term "STD" is not specific for any one disease but denotes the more than 25 infectious organisms that are transmitted through sexual activity and the dozens of clinical syndromes that they cause. STDs are almost always transmitted from person to person by sexual intercourse. These infections are most efficiently transmitted by anal or vaginal intercourse, and generally less efficiently by oral intercourse.

Some STDs, such as hepatitis B virus infection and HIV infection, are also transmitted by parenteral routes--particularly among intravenous drug users through contaminated drug injecting equipment. In addition, pregnant women with sexually transmitted infections may pass their infection to infants in the uterus, during birth, or through breast-feeding.

STDs are transmitted among all sexually active people, including heterosexual persons, men who have sexual relations with men, and women who have sexual relations with women. Men who have sexual relations with men are at greater risk for many life-threatening STDs, including HIV infection, hepatitis B virus infection, and anal cancer compared to heterosexual men. Less is known about the risk of STD transmission among women who have sexual relations with women, but women who have sexual relations only with women (and whose partners do likewise) are generally at substantially lower risk for acquisition of STDs compared with men who have sexual relations with men and heterosexual persons.

IMPACT ON WOMEN'S AND ADOLESCENTS' HEALTH

Complications of STDs are more severe and occur more frequently among women than men for a number of reasons.

Editor's Note: *This article is reprinted with permission from the Executive Summary of* The Hidden Epidemic: Confronting Sexually Transmitted Diseases, *a 392-page report of the Committee on Prevention and Control of Sexually Transmitted Diseases published by the National Academy Press of the Institute of Medicine and released at the 1996 STD Prevention Conference of the U.S. Centers for Disease Control and the American Social Health Association in December.*

Readers interested in receiving the nearly 200 footnotes from the Executive Summary should write for a copy from the Institute of Medicine, Division of Health Promotion and Disease Prevention, 2101 Constitution Avenue, N.W., Washington, DC 20418 or should download it from the Internet at http://www.nap.edu.

The complete report is available for $39.95 per copy (plus $4.00 shipping and handling for the first copy and $0.50 for each additional copy) by calling 800/624-6242 or 202/334-3313.

Many STDs are transmitted more easily from a man to a woman than from a woman to a man. Sexually transmitted infections are also more likely to remain undetected in women, resulting in delayed diagnosis and treatment.

Every year, approximately 3 million American teenagers acquire an STD. Adolescents and young adults are the age groups at greatest risk of acquiring an STD for a number of reasons: They are more likely to have multiple sexual partners; they may be more likely to engage in unprotected intercourse; and their partners may be at higher risk of being infected.

Compared with older adult women, female adolescents and young women are more susceptible to cervical infections, such as gonorrhea and chlamydial infection, because the cervix of female adolescents and young women is especially sensitive to infection by certain sexually transmitted organisms. In addition, young people are at greater risk than older persons for substance use and other behaviors that may increase risk for STDs.

STDS AS EMERGING INFECTIONS

STDs are not a stationary group of infections and syndromes; eight new sexually transmitted pathogens have been identified since 1980, including HIV. In contrast to newly recognized viral STDs, some bacterial STDs, such as syphilis and gonorrhea, have been documented for centuries and have recently reemerged in the United States along with a spectrum of barriers to prevention.

STDs are severe social, health, and economic burdens worldwide. The World Bank estimates that STDs, excluding AIDS, are the second leading cause of loss of healthy life among women between the ages of 15 and 44 in the developing world. The World Health Organization (WHO) recently estimated that there were 333 million new cases of the four curable STDs (gonorrhea, chlamydial infection, syphilis, and trichomoniasis) worldwide in 1995 among adults 15 to 49 years of age.

HEALTH CONSEQUENCES OF STDS

The general population is largely unaware of the health consequences of STDs, and STDs are "hidden" from public attention for three reasons. First, many STDs are often asymptomatic and thus go undetected. Second, major health consequences, such as infertility, certain cancers, and other chronic diseases, occur years after the initial infection, so that there is a lack of awareness of any link to the original STD. Third, the stigma associated with having an STD has inhibited public discussion and education concerning the consequences of STDs and frequently prevents clinicians from educating their patients regarding STDs.

Cancers caused by STDs. Several sexually transmitted pathogens cause cancer. Certain types of sexually acquired human papillomavirus are now believed to cause nearly all cancer of the cervix, vagina, vulva, anus, and penis. Cervical infections with oncogenic types of human papillomavirus are associated with at least 80 percent of invasicocervical cancer cases; and women with human pipillomavirus infection of the cervix are ten times more likely to develop invasive cervical cancer than are women without such infection. Approximately 4,900 American women will die from cervical cancer in 1996, and approximately 16,000 new cases of cervical cancer are diagnosed each year, making cervical cancer the third most common reproductive tract cancer in women and the seventh most common type of cancer overall in women.

Much of the cervical cancer burden related to human papillomavirus infection may be averted by preventing high-risk sexual behaviors. Screening with the Pap smear is currently the best available method for reducing both incidence of and mortality associated with invasive cervical cancer, but this technique is not widely utilized among certain population groups. Hepatitis B virus is a sexually transmitted virus that causes hepatocellular carcinoma (liver cancer), one of the most common forms of cancer. Other sexually transmitted pathogens that are associated with cancers include human T-cell lymphotrophic virus type 1 (HTLV-1), linked to adult T-cell leukemia and lymphoma; human herpes virus type 8 (HHV8), linked to Kaposi's sarcoma; and Epstein-Barr virus (EBV), linked to lymphoma and nasopharyngeal (nasal cavity and pharynx) carcinoma.

Reproductive health problems. One of the most serious threats to the reproductive capability of women is pelvic inflammatory disease (PID), a preventable complication of certain STDs, most commonly chlamydial infection and gonorrhea. Each year more than 1 million U.S. women experience an episode of PID. At least one-quarter of women with acute PID experience serious long-term sequelae, the most common and important of which are ectopic pregnancy (the development of a fetus outside the uterus) and tubal-factor infertility (infertility resulting from blockage or damage to the fallopian tubes).

Ectopic pregnancy usually results from partial tubal blockage associated with PID. In 1992, the estimated number of ectopic pregnancies was 108,800, or one in 50 pregnancies. In the same year, approximately 9 percent of all pregnancy-related deaths were a result of ectopic pregnancy, making ectopic pregnancy one of the leading and most preventable causes of maternal death during pregnancy. At least 15 percent of all infertile American women are infertile because of tubal damage caused by PID. Of all women infertile because of tubal damage, no more than one-half have previously been diagnosed and treated for acute PID.

Health consequences for pregnant women and infants. STDs are associated with multiple, acute complications for pregnant women and their infants. Various sexually transmitted pathogens may be transmitted to the fetus, newborn, or

THE COMMITTEE ON PREVENTION AND CONTROL OF SEXUALLY TRANSMITTED DISEASES

The members of the committee responsible for this report were chosen for their special competencies and with regard for appropriate balance. They included:

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infant through the placenta (congenital infection), during passage through the birth canal (perinatal infection), or after birth through breast feeding or close direct contact. Active sexually transmitted infection during pregnancy may result in spontaneous abortion, stillbirth, premature rupture of membranes, and preterm delivery. Preterm delivery accounts for approximately 75 percent of neonatal deaths not caused by congenital malformations. Women with bacterial vaginosis are 40 percent more likely to deliver a premature infant compared with women without this condition. In addition, up to 80 percent of pregnancies associated with untreated early syphilis result in stillbirth or clinical evidence of congenital syphilis in the newborn. Sexually transmitted pathogens that have serious consequences among adults tend to cause even more severe, potentially life-threatening health conditions in the fetus or newborn, whose immune system is immature. Damage to the central nervous system, eyes, and auditory system is of particular concern.

Deaths associated with STDs. Of 513,486 persons with AIDS reported in the United States through December 1995, more than 62 percent (319,849) have died. The largest number of deaths related to STDs other than AIDS is caused by cervical and other human papillomavirus-related cancers; liver disease (e.g., chronic liver disease and liver cancer) caused by hepatitis B virus; PID; ectopic pregnancy; and various pregnancy, fetal, and neonatal complications. A recent study found that more than 150,000 deaths were directly attributed to STDs, including AIDS, from 1973 through 1992 among American women 15 years of age and older. The three leading causes of STD-related deaths in 1992 among these women were all related to viral STDs: cervical cancer, AIDS, and hepatitis B virus infection. The high rate of viral STD-related deaths and morbidity and the high costs of managing viral STDs and their complications in the United States underscore the importance of effective prevention programs for viral STDs.

IMPACT OF STDS ON HIV TRANSMISSION

Both "ulcerative" STDs, such as chancroid, syphilis, and genital herpes, and "inflammatory" STDs, such as gonorrhea, chlamydial infection, and trichomoniasis, increase the risk of HIV infection. Prospective cohort studies in Africa have demonstrated increased risk of HIV infection following genital ulcer disease as well as with inflammatory STDs. Genital ulcer disease may increase the risk of transmission per exposure by a factor of ten to 50 for male-to-female transmission and by a factor of 50 to 300 for female-to-male transmission. Numerous studies support the concept that STDs increase both infectivity of and susceptibility to HIV.

Early detection and treatment of STDs can have a major impact on sexual transmission of HIV. For example, a large prospective, randomized controlled trial in Tanzania found that the incidence of HIV infection was 42 percent lower in communities with improved management of STDs after two years compared with control communities.

In the absence of perspective studies or form trials of strengthened STD interventions to reduce sexual transmission of HIV in the United States (which may not be feasible), mathematical modeling may be essential to assess the potential impact of reducing STDs on HIV transmission. N. J. Robinson and colleagues predicted that a 50 percent reduction in the duration of STDs in Uganda could decrease HIV transmission by 43 percent—a prediction remarkably close to that observed in the intervention trial in nearby Tanzania. M. C. Boily has developed a model that shows that HIV infection could not be established in the general U.S. heterosexual population in the absence of chlamydial infection (or other STDs with comparable effects on HIV transmission). In addition, it is estimated that successfully treating or preventing 100 cases of syphilis among high-risk groups for STDs would prevent 1,200 HIV infections that are ordinarily linked to those 100 syphilis infections during a ten-year period.

ECONOMIC CONSEQUENCES OF STDS

The costs of a few STDs have been estimated, but no comprehensive, current analysis of the direct and indirect costs of STDs is available. Partly based on updated estimates of the economic burden of STDs by K. Siegel, the committee estimates that the total costs for a selected group of major STDs and related syndromes, excluding HIV infection, were approximately $10 billion in 1994. This rough, conservative estimate does not capture the economic consequences of several other common and costly STDs and associated syndromes such as vaginal bacteriosis and trichomoniasis. The estimated annual cost of sexually transmitted HIV infection in 1994 was approximately $6.7 billion. Including these costs raises the overall cost of STDs in the United States to nearly $17 billion in 1994. These cost estimates underscore the enormous burden of STDs on the U.S. economy. Much of the direct costs of STDs result from failure to detect and effectively manage STDs in their initial, acute stages. For example, nearly three-fourths of the $1.5 billion costs of chlamydial infections is due to preventable complications resulting from untreated, initially uncomplicated infections.

FACTORS THAT CONTRIBUTE TO THE HIDDEN EPIDEMIC

Behavior, biological, and social factors contribute to the transmission of STDs.

Biological factors. In addition to preexisting or concurrent STDs, biological factors that contribute to the hidden nature and spread of STDs include the lack of conspicuous signs and symptoms in infected persons (asymptomatic infections), the long lag time from initial infection to signs of severe complications, and the propensity for STDs to more easily infect young women and female adolescents than men. Many STDs, such as chlamydial infection, do not produce acute symptoms or clinical signs of disease, or they do not produce symptoms sufficiently severe for an infected individual to seek medical attention.

The long period of time (sometimes years or decades) from initial infection until the appearance of clinical problems, such as in the cases of human papillomavirus infection and genital cancer, and hepatitis B virus infection and liver cancer, often results in failure to attribute cases of STD-related cancers and other long-term complications to sexually transmitted infections. This failure, in turn, reduces the perceived seriousness of STDs and the motivation to undertake preventive action.

Other biological factors that may increase risk for acquiring, transmitting, or developing complications of certain STDs include the presence of male penile foreskin, vaginal douching, risky sexual practices, use of hormonal contraceptives or intrauterine contraceptive devices, cervical ectopy, immunity resulting from prior sexually transmitted or related infections, and nonspecific immunity conferred by normal vaginal flora.

Social factors. Some fundamental societal problems such as poverty, inadequate access to health care, inadequate education, and social inequity indirectly increase the prevalence of STDs in certain populations. In addition, lack of openness and mixed messages regarding sexuality create obstacles to STD prevention for the entire population and contribute to the hidden nature of STDs.

Poverty and inadequate access to health care. Health insurance coverage enables individuals to obtain professional assistance in order to prevent potential STD exposures and to seek care for suspected STDs. Persons who are uninsured delay seeking care for health problems longer than those who have private insur-

ance or Medicaid coverage. The age and ethnic groups with highest rates of STDs are also the groups with the poorest access to health services. One-third of persons in age groups at high risk for STDs are uninsured or covered by Medicaid.

Inadequate access to STD-related services may also be a problem for those with private health insurance. For example, those with private health insurance who are living at or near the poverty level have limited access to health care because of copayments and deductibles that are typically part of private insurance coverage. In addition, many health plans either do not cover certain important preventive productive health services related to STDS or they require copayments and deductibles for those services. Poverty and other socioeconomic factors also contribute to STD risk in other ways. Even if a person in poverty perceives himself or herself to be at risk for an STD, he or she may not practice preventive behaviors if there are other risks that appear more imminent or more threatening or both.

Substance use. Substance use, especially drug and alcohol use, is associated with STDs. At the population level, rates of STDs are high in geographic areas where rates of substance use are also high, and the rate of substance use and STDs have also been shown to co-vary temporally. At the individual level, persons who use substances are more likely to acquire STDs than those who do not. Use of drugs and other substances may undermine an individual's cognitive and social skills, making it more difficult to take protective actions against STDs.

Numerous studies show that drug use is associated with increased risk of STDs, including HIV infection. Crack use, in particular, strongly contributes to STD transmission by discouraging health-care-seeking behavior and modifying social norms with respect to behavior such as engaging in unprotected sexual relations or having multiple sexual partners; these factors may lengthen the duration of infectiousness. A number of studies have reported strong associations between alcohol use and high-risk, sexual behaviors among the general population, adolescents, men who have sexual relations with men, runaway youth, and mentally ill adults.

Sexual abuse and violence. Sexual violence against women and sexual abuse of children contribute to the transmission of STDs. Women who have been sexually abused during childhood are twice as likely to have gynecological problems, including STDs, than are women who do not have such a history. In addition, women with a history of involuntary sexual intercourse are more likely to have voluntary intercourse at an earlier age (a risk factor for STDs) and to have subsequent psychological problems. Many women who experience sexual violence may not be able to implement practices to protect against STDs or pregnancy.

STDs among children presented for care after the neonatal period almost always indicate sexual abuse. Sexually abused children may have severe and long-lasting psychological consequences, may become sexual abusers themselves, and may abuse other children. In addition, they may participate in a pattern of high-risk behavior that often puts them at risk for further abuse and subsequent STDs.

STDs among disenfranchised populations. STDs disproportionately affect disenfranchised groups, including sex workers, runaways, homeless persons, adolescents in detention, adults in detention, and migrant workers. These groups are important from an STD-prevention perspective because they represent "core" transmitters of STDs and are potential reservoirs of infection for the general population.

Rates of STDs, including HIV infection, are many times higher among incarcerated adolescents and adults than among the general population. Within prisons, unprotected sexual relations, intravenous drug use, and tattooing are potential modes of transmission of STDs, including HIV infection. A wide range of unprotected consensual and nonconsensual sexual activity occurs among prisoners and between prisoners and staff. In detention facilities, more emphasis is placed on HIV education than on education about other STDs, and very few correctional facilities provide access to condoms because of security concerns. The high annual rate of turnover among prisoners, 800 and 50 percent in jails and prisons, respectively, is a major barrier to screening programs and followup treatment for STDs.

SECRECY AS A CONTRIBUTING FACTOR

Although sex and sexuality pervade many aspects of American culture and sexuality is a normal aspect of human functioning, sexual behavior is a private—and secret—matter in the United States. The committee uses the term "secrecy" in this report to describe certain aspects of sexuality in the United States. By the term "secrecy," the committee includes both the passive byproduct of the inherent difficulties of discussing intimate aspects of life, and the ongoing efforts by some groups to prevent open dissemination of information regarding sexuality and its health consequences. The secrecy surrounding sexuality in the United States may have origins in the late Victorian social system.

The depiction of sexuality has been paradoxical within modern American culture. On the one hand, there is a saturation and sensationalism of sexual subjects. On the other hand, sexuality remains an extremely private and uniquely complex sphere of human behavior with sociocultural taboos and rules of behavior that make talking openly and comfortably about sexuality difficult. The secrecy surrounding sexuality and STDs adversely impacts on STD prevention in the United States by impeding sexuality and STD education programs for adolescents, hindering communication between parents and their children and between sexual partners, promoting unbalanced sexual

messages in mass media, compromising education and counseling activities of health care professionals, hindering community activism regarding STDs, and impeding research on sexual behaviors.

Barriers to open discussion regarding sexuality include gender roles; modesty; and cultural, family, or religious taboos against discussions of sexuality. Ironically, it may require greater intimacy to discuss sexual relations than to engage in them. The kind of communication that is necessary to explore a partner's sexual history, establish STD risk status, and plan for protection against STDs is made difficult by the taboos surrounding sex and sexuality. The discomfort that many Americans feel discussing sexual behavior is reflected in a recent nationwide survey showing that, including married couples, approximately one of four women and one of five men surveyed had no knowledge of their partner's sexual history.

Only 11 percent of teenagers get most of their information regarding STDs from parents and other family members. Because many parents do not talk to their children about sexuality, children are more likely to learn about it through clandestine and secretive exchanges with peers that result in a massive amount of misinformation.

Americans, especially adolescents, receive unbalanced mass media messages about sexuality, sexual behavior, and sexual responsibility. Premarital sexual relations, cohabitation, and nonmarital relationships are depicted as the norm for adults, but the mass media provide little frank and informed advice about STDs, sexuality, contraception, or the harsh realities of early pregnancy and parenting.

Television is currently the most significant mass media influence for adolescents, and children spend more time watching television than they do in school. A recent study found an average of ten incidents of sexual behavior per hour on network television during prime time. Although sexual relations are frequently portrayed on television, protective behavior is rarely shown and references to adverse consequences are rare; there are approximately 25 instances of sexual behavior portrayed on prime time television for every instance of protective behavior shown or comment regarding STDs or unintended pregnancy. Advertisers and program sponsors have implicitly supported sexual content in programming and commonly use sexual appeals to sell products, but they generally have refused to support the incorporation of explicit information regarding protective behaviors for STDs for fear of offending viewers. Opinion polls, however, show that most Americans support incorporating information regarding STDs and contraceptives, including condom advertisements, into mass media.

The secrecy surrounding sexuality compromises effective clinical preventive services. STD-related risk assessment and counseling are not routinely performed by most primary care clinicians. Embarrassment and discomfort discussing sexual health issues and adequate time and training are major hurdles for clinicians to overcome in order to effectively communicate with their patients regarding sexuality and STDs. The stigma associated with STDs hinders public discourse and, as a result, community activism for STDs. Because having an STD is still socially unacceptable, there are few if any patient-based constituent groups that advocate publicly or lobby for STD-related programs. In contrast, persons with cancer and other common diseases have successfully advocated for additional funding for their causes.

An examination of the social policies and experiences of other developed countries regarding sexuality underscores the adverse impact of the secrecy surrounding sexuality on STD prevention in the United States. For example, the Scandinavian countries have comparable levels of sexual activity, but their rates of curable STDs and unintended pregnancy are much lower than in the United States. These differences may be attributable to the pragmatic, rather than moralistic, approach to sexuality issues and universal access to health services in these European countries.

Research and training issues in sexuality. Despite the recent surge of research activity regarding sexual behaviors in response to the HIV epidemic, comprehensive data on contemporary sexual behaviors, attitudes, and practices are limited, and it is not understood how these factors are shaped by different societal, cultural, and familial contexts. Many epidemiological studies of human sexuality are outdated. While some government funding has been provided, there has been little major or consistent support from either the government or the private sector for behavioral and social science research on human sexuality since the work of Kinsey and his colleagues. Furthermore, societal ambivalence regarding sexuality poses substantial obstacles to sexual behavior research. For example, in 1991, there was unprecedented political interference with scientific research when federal administration officials, under pressure by congressional critics, blocked funding for studies of adolescent and adult sexual behavior after these studies had been approved for funding by a scientific peer review process at the National Institutes of Health.

Trends in sexual activity. Rates of sexual intercourse among American adolescents have increased dramatically in the last few decades. From 1971 to 1988, the proportion of sexually active adolescents and young women aged 15 to 19 years with more than one lifetime sexual partner increased nearly 60 percent. In the United States, nearly 70 percent of students in the twelfth grade have had sexual intercourse, and 27 percent of twelfth-grade students have had four or more sexual partners. Sexual intercourse among adolescents is sometimes initiated before the teenage years. A 1992 survey of 2,248 students in grades six, eight, and ten from an urban public school district found that 28 percent of sixth-graders and half of eight-graders reported having had sexual intercourse.

Knowledge and awareness of STDs among Americans is poor. In a 1993 national survey of 1,000 women from 18 through 60 years of age, almost two-thirds knew nothing or very little about STDs other than HIV/AIDs and only 11 percent were aware that STDs can be more harmful to women than to men. The lack of knowledge among women in high-risk groups was dramatic: 65 percent of young women reported "almost none" or "very little" knowledge regarding STDs.

REDUCING EXPOSURE AND TRANSMISSION

The rate of spread of STDs in a population is determined by three factors: (1) the rate of exposure of susceptible persons to infected individuals; (2) the probability that an exposed, susceptible person will acquire the infection; and (3) the length of time that newly infected persons remain infectious and are able to spread the infection to others.

Individual factors that influence exposure to and transmission of STDs include sexual behavior, perception of risk, and personal skills. Sexual and other behaviors that place individuals at greater risk of STDs include early onset of intercourse, greater number of partners, intercourse with high-risk partners, more frequent intercourse and certain sexual practices, lack of male circumcision, vaginal douching, and lack of barrier contraceptive use. As a result of poor knowledge and awareness of STDs, Americans commonly have underestimated their risk of infection. For example, in the 1993 national survey mentioned previously, 84 percent of women surveyed were not concerned about acquiring an STD, including 72 percent of young women (age 18 to 24) and 78 percent of women who reported having had "many" sexual partners. Knowledge, however, is necessary but not sufficient to motivate action. Individuals also need motivation, personal skills, and interpersonal resources to implement complicated behavior changes, including interpersonal communication and negotiation skills and a sense of self-efficacy regarding accomplishment of the relevant behaviors.

Behavioral methods. Behavioral interventions represent promising approaches to preventing STDs. While there are many reports of behavioral interventions to prevent STDs including HIV infection, most studies have not been conducted in a methodologically sound manner to determine their effectiveness in improving health outcomes. Many studies, however, show that behavioral interventions can have a positive effect on self-reported sexual health behaviors. In addition, two recent studies have demonstrated that certain feasible behavioral interventions are effective in reducing the risk of STDs and support a strong role for such interventions as part of a comprehensive approach to STD prevention.

A variety of strategies can lead to sustained behavior change to reduce risk of STDs. These intervention strategies include individually focused strategies; group- or community-based interventions; and structural or "macro" level legislative solutions. The intent of behavioral interventions is to reduce the incidence of new STDs by assisting individuals in changing behaviors in ways that decrease risk of contracting STDs, such as increasing condom use, delaying initiation of sexual intercourse, or reducing the number of partners.

A review of federally funded HIV-prevention studies that evaluated the impact of individual- and community-based behavioral interventions found that most interventions had positive effects on knowledge of AIDS and sexual behavior. An evaluation of the effectiveness of HIV prevention programs revealed that some behaviorally based prevention programs are actually cost-saving, and others are likely to be cost-effective relative to other health programs.

Individual-focused, community-based, and mass media interventions. Intensive small-group risk reduction interventions, largely guided by cognitive-behavioral theory, have been shown to be very effective in promoting self-protective behavior change. Preliminary results of a major randomized, controlled trial evaluating the impact of enhanced prevention counseling for HIV and STD risk reduction strongly support individual-focused counseling. In its latest report, the U.S. Preventive Services Task Force recommended that primary care clinicians counsel their adolescent and adult patients regarding measures to prevent STDs and that such counseling be tailored to the risk factors, needs, and abilities of each patient. It is important to note that clinician counseling does not work in isolation, but it is a necessary component of appropriate clinical management of STDs. Couple-based interventions to prevent high-risk behaviors are also promising approaches.

Community-based interventions to promote behavior change include both interventions that target specific high-risk groups and interventions that attempt to change community norms, most commonly through mass media messages. A number of intervention trials involving high-risk groups have been successful in improving knowledge and promoting behavior change. Some interventions have successfully changed norms in a community by utilizing peer opinion leaders and educators to endorse condoms and educate regarding their use. Such interventions have resulted in a dramatic decline in the frequency of unprotected intercourse within several months.

Public health workers recognize that, in order for behavior change to occur, the community environment should not be a barrier but be supportive of such changes. In response to this issue, "enabling approaches" to prevention have recently gained attention. These interventions are intended to either remove barriers to adoption of protective behaviors or to erect barriers to risky behaviors. Recent data indicate that environmental interventions that adequately

address structural or other barriers to behavior change are necessary for the adoption of healthy sexual behaviors.

There is compelling evidence that properly designed mass media campaigns can have beneficial effects on health behaviors. A recent review of HIV-prevention mass media campaigns concluded that, with the exception of campaigns in Australia and Britain, most of the campaigns that were intended to increase knowledge were successful. One prominent example is a Swiss multimedia campaign to promote condom use among adolescents and young adults that has significantly increased condom use among these groups.

School-based interventions. School is the primary source of STD information for most teenagers. Although many states require schools to provide instruction in HIV or STD prevention, these legal mandates are often underfunded and restrictive in the content of the instruction. For example, 19 states prohibit or restrict availability of, or in some cases, information regarding contraceptives to students through school health and education programs. Other limitations of current school-based education are the lack of consistent STD-related education at lower grade levels and inconsistent preparation of teachers who provide instruction on these topics. The quality of studies that have evaluated the effectiveness of school-based programs to reduce risky sexual behaviors varies greatly. A comprehensive review of 23 studies of school-based sexuality and AIDS and STD education programs found that programs that included instruction on contraception either delayed the onset of sexual intercourse or had no effect on onset. An evaluation of 23 local programs, including school-based programs, related to unintended pregnancy came to a similar conclusion.

Only 2.2 percent of all public high schools and 0.3 percent of all high school districts in the United States make condoms available to their students. There are only limited data on the effectiveness of school-based condom availability programs in increasing health-protective sexual behaviors and decreasing STD rates, since these programs are relatively few and newly established. Studies, however, show that the benefits of such programs clearly outweigh the risks. There seems to be wide support for school condom availability programs among the public, students, parents, and health care professionals. There is no evidence that students in schools with condom availability programs initiate sexual intercourse earlier or have intercourse more frequently compared with students in schools without such programs.

Other Methods. There are several other methods of preventing STDs.

Prophylaxis. Currently, the only effective vaccine available for prevention of an STD is the hepatitis B vaccine, but vaccines from other STDs are in various stages of development. The Advisory Committee on Immunization Practice (ACIP) has recommended that the hepatitis B vaccine be given to all infants, all 11- to 12-year-old children who have not been previously vaccinated as part of a routine adolescent immunization visit, and certain adults at high risk. Current data on hepatitis B vaccination coverage of persons in high-risk groups, including sexually active adolescents and men who have sexual relations with men, are limited, but vaccination coverage is considered to be low. Reasons for inadequate vaccination of these groups include lack of awareness among clinicians of groups at high risk for hepatitis B virus infection and lack of clinical opportunities to provide immunization, especially for adolescents. Hepatitis B vaccination of adolescents has been successfully implemented in school-based clinics, primary care clinics, and other clinical settings. Outside of limited federal demonstration projects, there are no major programs or public funds to increase vaccination of adults at high risk for sexually transmitted hepatitis B virus infection.

Condoms and other contraceptives. When used correctly and consistently (during every act of intercourse), condoms are highly effective against bacterial and viral STDs including HIV infection. Data show that condom use has increased in the United States in the last few decades, especially among younger persons. Factors that influence condom use include demographic factors, such as age, education level, race, and gender; ability to negotiate condom use; individual perceptions of condoms; and concerns that compete with protective behaviors among disenfranchised persons. Factors that are particularly important determinants of condom use among adolescents include access, availability, confidentiality, and cost of condoms.

Women who rely on sterilization, oral contraceptives, or another method for protecting against pregnancy are less likely to use condoms for disease prevention compared with other women. Sterilization and oral contraceptives are highly effective against pregnancy, but not effective against HIV infection or other STDs. Because no single method of preventing STDs or pregnancy confers the maximum level of protection against both conditions, use of dual protection—that is, a condom and another effective contraceptive for pregnancy—is especially important. It is not clear, however, how well the public understands the need for dual protection against STDs and pregnancy. Although the female condom has recently been approved for use in the United States, additional female-controlled contraceptive methods that are effective against all STDs are needed, including chemical or physical barriers to conception and to transmission of STDs.

Partner notification and treatment. Partner notification has been a component of STD programs in the United States for many years. Recent studies, however, show that current methods of partner notification are not highly effective for a number of reasons. These include concerns about the safety of the interviewers working in high-crime communities; the cultural sensitivity of the STD interviewers; and the large number of anonymous partners involved in sex-for-drug activities. Implementing alternative case-finding methods

and refocusing partner outreach toward communities and social networks, rather than utilizing traditional methods of partner identification, have been suggested as more effective strategies for reaching high-risk individuals.

Screening. Screening programs for many STDs are cost-effective and sometimes cost-saving. For example, using a decision model, Trachtenberg and colleagues (1988) estimated a net savings of more than $60 million (1986 dollars) over the first five years of a California statewide chlamydia screening program for asymptomatic women in family planning clinics. The Centers for Disease Control and Prevention (CDC) estimates that approximately $12 in costs associated with the complications of chlamydia and gonococcal infection could be saved for every dollar spent on early detection and treatment. The U.S. Preventive Services Task Force (1996) recently recommended a group of screening activities for primary care clinicians based on the age and STD risk categories of patients.

Not all screening programs are effective prevention measures. For example, as of 1996, 15 states still require premarital syphilis testing as a requirement for marriage licenses. The number of previously undetected cases of syphilis identified through premarital testing is extremely low. In addition, studies show the premarital tests for syphilis or HIV are not cost-effective and have little public health impact.

REDUCING DURATION OF INFECTION

Reducing the duration of STDs can be accomplished primarily by ensuring early diagnosis and treatment of infected persons and by reducing barriers to diagnostic and treatment services. Reducing the duration of STDs among infected individuals will reduce the period of time that an individual is infectious, and consequently reduce the numbers of partners exposed to infection. Early, specific diagnosis and treatment of symptomatic and asymptomatic individuals will prevent further transmission of STDs to their partners.

Appropriate diagnosis of an STD often requires multiple specific diagnostic tests because of the variety of STDs. Further complicating the diagnosis of STDs is the availability of several different diagnostic tests for each STD. Unfortunately, many clinicians fail to appreciate that no single laboratory test is optimal for use in all settings. In addition, some laboratory tests are unavailable at certain clinical sites, test results are often unavailable during the initial patient visit, and the expense of these tests may limit their availability and utility.

The diagnosis of an STD should lead to either curative or preventive therapy for the infected individual. While ideal therapy does not exist for many infections, highly effective antimicrobial therapy is available for all bacterial STDs as well as those caused by protozoa and ectoparasites. In contract, drugs for viral STDs have largely been limited to alleviating symptoms because they cannot eradicate the organism.

A significant barrier to appropriate treatment is failure to comply with a full course of medication. To address this problem, effective single-dose therapy for several STDs (e.g., chancroid, gonorrhea, syphilis, trichomoniasis) has been available for some time and single-dose therapy for chlamydial infection has recently become available. These single-dose regimens, while more expensive, have been shown to be as effective as multiple-dose regimens. Other major barriers to early diagnosis and treatment of infected persons include inadequate access to health care, lack of health-seeking behavior, inadequate training of health care professionals, inadequate financial and physical access to laboratory tests, and geographic factors.

CURRENT STD-RELATED SERVICES

Clinical services for STDs are provided in dedicated public STD clinics operated by local health departments, community-based health clinics operated by community-based health professionals or public agencies, and private health care settings. Most clinicians providing STD-related care in public or private settings emphasize diagnosis and treatment and, to a lesser extent, management of sexual partners, rather than other approaches to STD prevention. Most do not provide adequate STD risk assessment, prevention counseling, or other STD-related education.

Services in dedicated public STD clinics. The concept of a dedicated public STD clinic is based on evidence that many persons with STDs prefer anonymous and confidential services, cannot afford to obtain care elsewhere, and are unable to obtain care from private sector health care professionals who are unable or unwilling to provide STD-related care. The CDC is the only federal agency that supports dedicated public STD clinics. State and local health departments also provide financial support for these clinics under federal policies and guidelines.

Persons attending dedicated public STD clinics are generally young, disproportionately of certain racial or ethnic groups, and at high risk for multiple STDs. A substantial number of patients in dedicated public STD clinics have private health insurance coverage, and many privately insured patients use public STD clinics without acknowledging their health insurance status.

Based on published data, the committee's interactions with other health professionals, site visits, results of site assessments conducted by the CDC, and personal experience working with dedicated public STD clinics, it was concluded that the quality of care, scope of services provided, and other characteristics of these clinics are quite variable. In addition, the scope and level of services provided by many such clinics are limited by available resources, and these clinics often emphasize diagnosis and treatment and partner notification activities for a limited number of STDs.

Further, counseling and health education activities often are not emphasized, and providers receive little training in techniques and skills for conducting education or counseling. The performance of these clinics is usually evaluated on the basis of quantitative measures, such as numbers of patients seen and number of cases of specific diseases diagnosed, rather than on quality of care or other performance measures. Access to services after hours and on weekends is uncommon. For example, a large survey of local health agencies showed that only 23 percent of agencies offered services after 6 p.m. and only 5 percent had weekend hours.

Services in community-based and school-based clinics. Many types of community-based clinics, such as family planning clinics, prenatal clinics, youth and teen clinics, homeless programs, community-based health centers, and school-based clinics provide STD-related services. STDs are not the primary focus for these clinics, but rather are dealt with in a context of providing general or specific (e.g., family planning) heath care services. Although the populations served by community-based clinics overlap substantially with STD clinic patients, there is surprisingly little communication between these facilities. School-based health clinics in elementary and high schools and student health services on university and college campuses often provide STD-related services for their students. In 1994, diagnostic and treatment services for STDS were available in 16 percent of all middle and junior high schools and in 20 percent of all senior high schools in the United States.

Services in private sector settings. Most cases of STDs are diagnosed by private sector health care professionals, but very little is known about the volume, extent, disease prevalence, or spectrum of STDs encountered in private sector settings compared with either dedicated public STD clinics or community-based clinics. Available data suggest that the patterns of diseases seen in these settings may be quite different from those seen in public clinics.

Studies of the scope and appropriateness of STD-related services in private sector settings indicate that such services need to be improved. For example, in a recent survey, 55 percent of California primary care physicians reported treating at least one case of PID during the previous 12-month period, and of these physicians, 52 percent were either unsure of or did not follow the CDC's treatment guidelines for this STD. Partner notification is not well supported in private sector settings probably because most private sector clinicians do not accept responsibility for partner notification, there is no reimbursement for care of sexual partners, and providers may be either reluctant or not trained to interview patients regarding sexual practices.

Services in managed care organizations and other health plans. The rapid growth of managed care organizations in the United States and the rapid pace of conversion of state Medicaid programs to prepaid managed care plans have generated concerns regarding the design and implementation of these new programs and the accountability of the new managed care plans for quality.

There are both opportunities and concerns associated with the increased involvement of managed care organizations in the delivery of preventive and public health services. Compared with traditional indemnity health insurance plans and private practice providers, managed care organizations may be better able to improve STD-related services because they have an incentive to provide preventive services; they can more readily implement planwide programs; they are more likely to have a population-based perspective; they can support the services of highly trained health professionals; they usually have highly developed information systems to monitor STD-related trends; and they can be held accountable to purchasers for specific performance standards. A recent study showed that identifying, testing, and treating women at increased risk for asymptomatic chlamydial infection in a managed care organization reduced the rate of PID by more than 50 percent compared with women who received routine care.

The potential concerns regarding the increased role of managed care organizations in STD prevention include the following: STDs are not a high priority for most managed care organizations; there is a wide range of technical ability among such organizations in delivering services; managed care organizations may be reluctant to provide STD-related services that have not been shown to be cost-saving; persons with STDs may prefer to receive care outside of the plan for confidentiality or other reasons; and managed care organizations may not provide services to sexual partners of plan members if the partner is not a plan member.

A committee survey of managed care organizations selected primarily on the basis of their likelihood of serving high-risk populations (i.e., Medicaid, inner city), and therefore their increased likelihood of providing STD-related services, found that more than half (57 percent) of these organizations attempted to define high-risk groups for STDs and approximately half reported providing STD-related services that specifically targeted adolescents. Only 26 percent of managed care organizations reported that they provided STD-related services to persons outside their plan.

NATIONAL SURVEILLANCE AND INFORMATION SYSTEMS

National surveillance for STDs is part of the National Public Health Notifiable Disease Reporting System coordinated by the CDC. This system is fundamentally a "passive" system, and active case-finding for STDs is not routinely conducted. The passive reporting system for STDs has several major

limitations, including underestimation of true STD incidence and reporting bias toward public sector providers. Surveillance data are especially difficult to interpret when new diseases are added to the list of notifiable diseases or when new diagnostic technologies become available and are increasingly utilized.

A crucial but underdeveloped tool for directing and targeting STD prevention programs is the behavioral health survey. Examples of periodic surveys that are important in monitoring national trends in STD-related health behaviors include the Behavioral Risk Factors Surveillance Survey, the Youth Risk Behavior Surveillance System, the National Survey of Family Growth, the National Health and Nutrition Examination Survey (NHANES), and the National Survey of Adolescent Males. Other health behavior surveys and studies that are not periodically administered, such as the National Health and Social Life Survey, have also produced important data regarding sexual behavior. Serologic testing of sera collected as part of nationally representative data sets, such as the National Health and Nutrition Examination Survey, are potentially valuable adjuncts to routine disease or behavioral surveillance data, but such linked testing has been very limited.

The committee is not aware of nongovernmental organizations or associations that routinely collect data regarding STDs. However, the National Committee for Quality Assurance, through its Committee on Performance Measurement, is currently evaluating an STD-related performance measure (i.e., the percentage of women between the ages of 15 and 25 who were screened for chlamydial infection in the past year) for inclusion in subsequent versions of the Health Plan Employer Data Information System (HEDIS).

TRAINING AND EDUCATION OF HEALTH PROFESSIONALS

Training and education of clinicians is important because inadequate STD training and education results in inappropriate or inadequate clinical care for STDs. Studies show that training in STD-related clinical skills in U.S. medical schools is generally inadequate. Another IOM committee that examined the future of primary care concluded that the current system of clinical training for health care professionals is inadequate in preparing effective primary care professionals. That committee recommended that clinical training be based on a common core set of clinical competencies, regardless of their disciplinary background, to be defined by a coalition of educational and professional organizations and accrediting bodies. New advances in information technology, such as the Internet and Telemedicine, may prove to be important facilitators of training and education. Information technology, for example, has enabled many primary care clinicians to learn new skills or improve current practice through distance learning activities such as televised courses.

FUNDING OF SERVICES

Funding for state and local health department activities in STD prevention comes from the CDC through cooperative agreements, and from state and local governments. Reimbursement for STD-related services in the private sector comes from third-party reimbursement, such as private health insurance and Medicaid. Community-based health facilities such as family planning clinics and community health centers receive federal and other support to provide STD-related care. Local health departments only receive reimbursement for services provided by public STD clinics to persons with private insurance to the extent allowed by law or under written contract.

Using some broad assumptions regarding public funding for prevention and research activities and state and local contributions to STD-related services, the committee estimates that the total national public investment in STD prevention in federal fiscal year 1995 was approximately $230.8 million and that an additional $105.4 million was invested in biomedical and clinical STD research. Comparing these estimates to the estimated total costs of selected STDs (approximately $10 billion), the total costs associated with STDs in the United States in 1994 were approximately 43 times the total national public investment in STD prevention and 94 times the total national investment in STD-related research. State and local governments vary widely in their financial support for STD-related programs.

Current legislative proposals seek to consolidate some federal categorical programs, including STD programs, into block grants to the states. Proponents of block grants argue that categorical funding has forced programmatic rigidity and excess administrative costs upon local programs, thereby restraining innovation and local flexibility. Opponents of consolidating STD funding into a block grant along with other public health programs believe that STDs will suffer in competition with less controversial public health problems or other state priorities, because STD programs have traditionally weak political constituencies and cannot compete with programs that have powerful constituencies. In addition, allowing a state to set funding allocations would increase the already wide variability in STD programs among the states because some states may seriously neglect STD programs.

IOM COMMITTEE RECOMMENDS STRATEGIES FOR A NATIONAL STD-PREVENTION SYSTEM

The Committee on Prevention and Control of STDs has concluded that an effective national system for the prevention of such diseases does not currently exist in the United States, and that, as a result, STDs are a severe health burden to the country.

In developing a plan for a national STD-prevention system, the committee first wrote a vision statement. It described a system that would provide "services and information that support individuals, families, and communities in preventing STDs, including HIV infection, and that ensure comprehensive, high-quality STD-related health services for all persons."

It recommended four major strategies to establish a national system for STD prevention.

- Overcoming barriers to adoption of healthy sexual behaviors
- Developing strong leadership, strengthening investment, and improving information systems for STD prevention
- Designing and implementing essential STD-related services in innovative ways for adolescents and underserved populations
- Ensuring access to and quality of essential clinical services for STDs.

"An effective national system ...does not currently exist in the United States."

OVERCOMING BARRIERS

- An independent, long-term, national campaign should be established to:
  - –serve as a catalyst for social change toward a new norm of healthy sexual behavior in the United States;
  - –support and implement a long-term national initiative to increase knowledge and awareness of STDs and promote ways to prevent them; and
  - –develop a standing committee to function as an expert resource and to develop guidelines and resources for incorporating messages regarding STDs and healthy sexual behaviors into all forms of mass media.
- Television, radio, print, music, and other mass media companies should accept advertisements and sponsor public service messages that promote condom use and other means of protecting against STDs and unintended pregnancy, including delaying sexual intercourse.
- The Health Resources and Services Administration, health professional schools and associations, and schools and associations for training educators should support comprehensive sexuality training for health care professionals, educators, and researchers in order to increase their comfort working with sexual health issues and to increase their effectiveness in sexual behavior counseling.
- The National Institutes of Health and other federal agencies should continue to support research on health behaviors, including sexual behaviors, and their relationship to STDs.

DEVELOPING LEADERS AND SYSTEMS

- Private sector organizations and clinicians should assume more leadership and responsibility for STD prevention.
- Federal, state, and local governments, through the leadership of their respective health agencies, should ensure that all persons have access to comprehensive, high-quality STD-related services.
  - An independent, long-term national roundtable should be established as a neutral forum for public and private sector agencies and organizations to collaboratively develop and implement a comprehensive system of STD-related services in the United States.
  - Federal, state, and local elected officials should provide additional funding for STD prevention.
  - The Centers for Disease Control (CDC) should retain and immediately redesign categorical funding for STD programs.
- The federal government, through the Department of Health and Human Services and the U.S. Agency for International Development, and international organizations, such as the World Health Organization and the World Bank, should provide resources and technical assistance to global efforts to prevent STDs.
- The CDC should lead a coordinated national effort to improve the surveillance of STDs and their associated complications and improve the monitoring of STD-prevention program effectiveness.
- Federal, state, and local STD programs should encourage and provide technical assistance to employers and other purchasers of health care (including Medicaid programs), managed care organizations and other health plans, and other health care professionals to develop and utilize information systems that effectively integrate preventive services performance data with community health status indicators and STD program data.

- STD-related performance measures should be included in the Health Plan Employer Data Information System (HEDIS) and other health services performance measures to improve quality-assurance monitoring of STDs.

FOCUSING ON ADOLESCENTS, UNDERSERVED POPULATIONS

- The National Institutes of Health (NIH) and the CDC should continue to support and expand both basic and applied research in STD prevention.
- The NIH, the Food and Drug Administration (FDA), and pharmaceutical, biotechnology, and medical device companies should collaboratively develop effective female-controlled methods for preventing STDs.
- A major part of a national strategy to prevent STDs should focus on adolescents and interventions should begin before sexual activity is initiated, which may be before adolescence is reached. Interventions should focus on preventing the establishment of high risk sexual behaviors.
- All health plans and health care providers should implement policies in compliance with state laws to ensure confidentiality of STD- and family planning-related services, provided to adolescents and other individuals.
- All school districts in the United States should ensure that schools provide essential, age-appropriate STD-related services, including health education, access to condoms, and readily accessible and available clinical services, such as school-based clinical services, to prevent STDs.
- All health plans, clinicians, and public sponsored health clinics should provide or arrange for hepatitis B immunizations for their adolescent and adult patients according to the Advisory Committee on Immunization Practices (ACIP) guidelines. Given the difficulty in reaching adolescents in health care settings, public health officials should ensure that adolescents who are not immunized in health care settings are immunized through school-based or other community programs.
- Federal, state, and local agencies should focus on reducing STDs among disenfranchised populations (e.g., substance users, persons in detention facilities, prostitutes, the homeless, migrant workers).
- Prisons and other detention facilities should provide comprehensive STD-related services including STD prevention counseling and education, screening, diagnosis and treatment, partner notification and treatment, and methods for reducing unprotected sexual intercourse and drug use among prisoners.
- The NIH, FDA, and CDC should work with pharmaceutical and biotechnology companies to develop improved STD diagnostic tools (e.g., rapid saliva and urine tests) that are suitable for use in nontraditional health care settings (e.g., prisons, mobile clinics, the streets).

ENSURING ACCESS, QUALITY OF SERVICES

- Comprehensive STD-related services should be incorporated into primary care, including reproductive health services.
- Local health departments, with the assistance of the state health department, and in consultation with the community, should determine how to provide high-quality, comprehensive STD-related clinical services that meet federal and state quality standards most effectively in their communities.
- Based upon local conditions and health department determination, dedicated public STD clinics should continue to function as a "safety net" provider of STD-related services for uninsured and disenfranchised persons and for those who prefer to obtain care from such clinics.
- The CDC, in collaboration with state and local health departments, should ensure that services provided by dedicated public STD clinics are of high quality.
- Health professional schools, including schools of medicine, nursing, and physician assistants, should partner with a local health department for purposes of STD clinic staffing, management, and professional training.
- Health plans should provide for or cover comprehensive STD-related services, including screening, diagnosis and treatment, and counseling regarding high-risk behavior for plan members and *their sex partners*, regardless of the partners' insurance status.
- Federal, state, and local health agencies should educate employers, Medicaid programs, and other purchasers of health care regarding the broad scope and impact of STDs and the effectiveness of preventive services for STDs.
- Health plans, including managed care organizations, should develop collaborative agreements with local public health agencies to coordinate STD-related services, including payment for STD-related services provided to plan enrollees by public sector providers, including public STD clinics.
- The training of primary care providers should be improved by focusing on core clinical competencies, expanding training opportunities, gaining additional federal support, and monitoring and improving STD-related education.
- All clinicians should follow STD treatment guidelines recommended by the CDC and national medical professional organizations.
- Single-dose therapy for bacterial and other curable STDs should be available and reimbursable in all clinical settings where clinical care is routinely provided to populations in

which treatment compliance or follow-up are problems.

- All health care professionals should counsel their patients during routine and other appropriate clinical encounters regarding the risks of STDs and methods for preventing high-risk behaviors. Counseling for STDs, including HIV infection, should be reimbursed without copayments or other financial disincentives by Medicaid programs, managed care organizations, and other health plans.
- State and local health departments, with the assistance of the CDC, should redesign current partner notification activities for curable STDs in public health clinics to improve outreach, mobilize public health staff in new ways, and enlist support from community groups or other programs that provide services to high-risk populations.
- All health plans and clinicians should take responsibility for partner treatment and provide STD diagnosis and treatment to sex partners of plan members or others under their care as part of standard clinical practice. Diagnosis and treatment of partners should be reimbursable by third-party payers, including Medicaid, or by the partner's health plan if he or she is insured.
- Public sector laboratories should be reimbursed for STD-related laboratory tests performed on persons who have private health insurance coverage.

RURAL CENTER PUBLISHES 11 PRINCIPLES FOR HIV/STD PREVENTION EDUCATION

The Rural Center for the Study and Promotion of HIV/STD Prevention has developed a new fact sheet detailing 11 principles for creating HIV/STD prevention education messages for adolescents.

The fact sheet explains each principle and lists resource and reference materials.

The principles are:

1. Use behavior change models.
2. Use performance standards.
3. Use credible information sources.
4. Promote desired outcome.
5. Incorporate components of successful programs.
6. Assess the target audience.
7. Use health promoting/objective material.
8. Assure verbal/visual quality.
9. Account for varied ideological views.
10. Solicit views of parents and professionals.
11. Test message effectiveness.

For copies of the fact sheet, write to Rural Center for the Study and Promotion of HIV/STD Prevention, Indiana University, 801 E. Seventh Street, Bloomington, IN 47405-3085. Phone 812/855-1718 or 800/566-8644. Fax 812/855-3717.

PRESERVING REPRODUCTIVE CHOICE: PREVENTING STD-RELATED INFERTILITY IN WOMEN

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The increased availability of reliable and safe contraception in the United States has provided many couples with an important choice: when and/or if to have a child. Ironically, this reproductive choice is threatened by a largely preventable epidemic that severely impairs fertility or leaves many women—particularly young, sexually active women—involuntarily sterile.

This epidemic is caused by two bacteria predominately responsible for the majority of STD-related reproductive tract damage in women: *Chlamydia trachomatis* and *Neisseria gonorrhea*.[1] Of the two, chlamydia is the more common with an estimated 4 million new infections occurring every year.[2] In fact, in 1995, the first year that it was nationally reportable, chlamydia led the list of infections reported to the National Notifiable Disease Surveillance System (NNDSS).[3]

Fortunately, uncomplicated chlamydial and gonococcal infections are easily cured by early treatment with a short course or single dose of specific antibiotics.

MILD SYMPTOMS, SIGNIFICANT DAMAGE

Virtually all studies on chlamydia point to its asymptomatic nature. In fact, approximately 75 percent of infected women and up to half of infected men have no symptoms or such mild ones that they will not likely seek treatment.[4] This results in continued disease transmission, and, for women, increased risk for upper reproductive tract complications.

Of the estimated 2.6 million American women with chlamydia, 20 to 40 percent of those with untreated infections will develop pelvic inflammatory disease (PID), a spectrum of female upper genital tract disorders caused mostly by chlamydia and gonorrhea ascending from the cervix and vagina. This often results in scarring in and around the fallopian tube.[5]

Approximately one in five of those women with PID will become infertile and almost one in ten will experience a potentially life-threatening ectopic pregnancy. More than a third of those hospitalized with PID and over 90 percent of those hospitalized with chronic infection will eventually undergo surgery for pelvic pain.[6]

Diagnosis of PID is often difficult because no specific laboratory test or physical examination result is definitive. Although a "classic" case of gonococcal PID may cause appendicitis-like symptoms such as fever and acute lower pelvic pain, most cases of silent chlamydial PID often go unrecognized because the symptoms are so subtle, and the discomfort so mild or transitory (similar to the lower abdominal discomfort caused by menstrual pain or gastrointestinal upset) that a woman may not seek treatment. This "silent" form of PID may present a greater threat to a woman's fertility than the more "classic" form because those with acute PID are more likely to seek prompt care.

IN TREATMENT DELAY IS DANGEROUS

Unfortunately, delay in treatment increases the risk of transmission to unsuspecting sexual partners, and, in women, increases the likelihood for more serious medical problems. A recent study found that women with chlamydia or gonorrhea-related PID were two and a half times more likely to have impaired fertility when they delayed seeking treatment for three or more days after noticing symptoms than women who sought care immediately.[7]

Chlamydia, in particular, can impair or destroy the fragile cilia (hairs) in the fallopian tube and cause enough thickening to block it. These cilia, through their waving motion, transport the fertilized ova through the tube. Once destroyed, they do not regenerate. Furthermore, a tube blocked with scar tissue will lead to infertility because neither ova nor sperm can move through it. All of this damage can happen with very few symptoms. In one study, 50 percent of women seeking infertility treatment and with confirmed tubal occlusion reported no history of PID yet showed serological evidence of prior genital chlamydia infection.[8]

Infants born to mothers who are infected with chlymadia can also develop serious complications. Up to 50 percent of infants born to mothers with active chlamydial infection contract congenital eye infections, while almost one in five develop neonatal pneumonia.[9]

While only 1 percent of men develop painful epididymitis as a result of chlamydial infection, several recent studies suggest that a substantial level of asymptomatic infection may exist in males. Such infection contributes to the transmission of infections to women. It also increases the risk of HIV transmission at least two-to fivefold.[10]

TESTING, TREATMENT WORK

There is clear and compelling scientific evidence that routine testing and treatment for chlamydial infection results in a significant reduction of its prevalence and, more important, of PID incidence.

In a landmark study reported in the *New England Journal of Medicine* in May 1996, a randomized trial of chlamydia screening and treatment in a large Pacific Northwest Health Maintenance Organization (HMO) showed a 56 percent reduction in PID in the 12 months following intervention.[12]

Participants in the study were women under 34 years of age identified as at high risk for chlamydia. Half were offered chlamydia tests; 7 percent were found infected and were treated with antibiotics. The other half received no screening or treatment. After 12 months, the study found that less than 1 percent (0.9 percent) of those screened and treated developed PID, while 2.1 percent of the untested and untreated were diagnosed with PID.[12]

Over the past six years, a demonstration project in four Northwestern states has shown dramatic reductions of almost 60 percent in chlamydia infections in women following implementation of screening and treatment programs through family planning and other health care services.

Using similar models, a study in Wisconsin found that the prevalence of chlamydia infection in women was reduced 35 percent over a five-year period, and a study in Ohio, found a decline of 59 percent.[13]

Since 1994, with limited Congressional appropriations specifically aimed at chlamydia screening and treatment, the U.S. Centers for Disease Control and Prevention (CDC) has funded infertility prevention activities in publicly funded family planning and STD clinics. They have resulted in similar rapid declines in the prevalence of chlymadia.

WHO IS AT RISK?

The highest rates of chlamydia infection are consistently found among sexually active adolescent females under 20 years old, with reported prevalences of at least 10 percent and higher. Chlamydia infection rates in women 20 to 24 years of age are also unacceptably high: they are frequently reported in the range of 3 to 8 percent of all tested.[14]

Unlike gonorrhea, chlamydial infection occurs in all geographic regions of the country, is widely dispersed across racial and ethnic groups, and affects all socioeconomic classes.

Less information exists about rates of chlamydia infection in males because, for a variety of reasons, diagnostic testing is limited. A new, highly sensitive urine test, which will obviate the need for painful swabbing of the male urethra, will now, however, make it easier to determine male infection rates. Such a urine test is also now available to women.

Several studies of asymptomatic males have documented prevalences ranging from 4 to 10 percent while rates of infection in symptomatic males are much higher.[15] Though men rarely develop serious reproductive complications as a result of the disease, they serve as transmitters of the infection to women.

SCREENING GUIDELINES

Current screening guidelines published by the CDC recommend that all sexually active female adolescents test for chlamydia when they have a pelvic examination. Cervical biology places them at higher risk than older women because more columnar epithelium are exposed and vulnerable. Behavior places them at higher risk because they are more likely to have multiple sexual partners, to engage in unprotected sexual intercourse, and to have partners at higher risk for infection compared to most adults.[16] Several studies have shown that they are also at very high risk for persistent and recurrent infection—factors that contribute to upper reproductive tract sequelae.[17]

A recently published study demonstrates the need to screen *all* sexually active adolescents regardless of prior chlamydial infection. In this longitudinal study, teens with chlamydia at their first visit were predictably at highest risk for a subsequent infection. A disturbing finding showed that 6 percent of those uninfected at their first visit (and with no behavioral risk factors in the past three months) were found infected with chlamydia at their second visit.[18]

The CDC also recommends that sexually active females more than 20 years old should test for chlamydia if: (1) they have clinical signs of mucopurulent cervicitis (MPC) or a yellow or green discharge from the cervix; (2) report either a new or more than one sexual partner during the last three months; or (3) report inconsistent use of barrier contraceptives.

Similar age- and behavior-specific screening recommendations for men do not exist because accurate tests acceptable for widespread screening of asymptomatic males have only recently become available and because annual preventative health care is not as likely for young men as for young women.

TREATMENT OF PARTNER(S)

Expending resources on screening activities is pointless if adequate and timely treatment of *both* infected individuals and their sexual partner(s) does not occur. In many clinical settings, the interval between testing and receipt of test results is five to seven days or longer. One study of asymptomatic females in an urban STD clinic found that only 45 percent of chlamydia-positive women were brought to treatment within 20 days of testing, a third took over three weeks, and one in four infected women did not return for treatment.[19]

Of those who did return, 3.1 percent had developed symptomatic PID in the interval between the test and treatment.[20] This potential for conversion to symptomatic PID

underscores the need for a pelvic examination of chlamydia-positive women. While patient return rates vary, an essential feature of good clinical practice is establishment of effective tracking and patient recall systems to verify treatment status and to determine who has not returned for treatment.

Anyone infected with chlamydia is not considered properly treated if their sexual partners are not also treated. At a minimum, sexual partners of infected individuals, both male and female, must have prompt treatment because it may result in better treatment compliance, identification of "silent" PID, identification of additional STDs, and referrals of other sexual partners.[21]

Inadequate treatment of sexual partners of infected individuals, especially with a disease so asymptomatic, certainly increases the risk of reacquiring the disease. Reducing the rate of infection in a community through screening and treatment also reduces the risk of disease acquisition with subsequent new partners.

Finally, it is importatnt that individuals receive the correct treatment. The CDC regularly publishes recommended treatment regimens for all STDs and state and local health departments are excellent resources for obtaining the most current information as well as for consultation on specific treatment questions. (For more details or to order publications from the CDC, call 404/639-8063.)

As mentioned previously, antibiotic treatment for uncomplicated, lower genital tract chlamydia or gonorrhea infection is very effective and widely available. The treatment for PID requires more than one type of antibiotic to cover multiple organisms, and consistent antibiotic treatment over a longer period of time.

STEPS FOR PROVIDERS, EDUCATORS

There are a number of things that health care providers and educators can do to help prevent the spread of STDs. They include proactive approaches to:

- **Assessing a client's STD risk.** A 1994 national probability sample of physicians and other office-based health care providers found that only 16 percent of physicians and 27 percent of other providers (nurse practitioners, physician's assistants, midwifes, and nurses) reported that they evaluate all new adult patients in terms of STD risk. Approximately 50 percent conduct an STD risk history only if prompted by symptomatic patient complaints.[22] If providers do not routinely initiate discussion and inquire about STD risk, they will miss many opportunities for intervention.
- **Assuring that all sexually active adolescents and young adults are screened for chlamydia and that those over 24 years old are tested if appropriate.** The highest rates of asymptomatic chlamydial infection are reported in women under the age of 24. Even when widespread screening and treatment programs are effective in reducing prevalence, adolescents remain particularly vulnerable. Since implementation of widespread screening programs for males have not been technically, economically, or logistically feasible, less information about the potential impact of broader screening efforts of this population is available.
- **Assuring that prompt and accurate treatment is available for infected patients and their sexual partners.** Once diagnosed, prompt treatment of infected individuals and their sexual partner(s) is key to controlling further disease transmission, and, for women, to averting long-term sequelae. The responsibility of health care providers does not end with the treatment of an infected person. Failure to treat sexual partners often results in persistent or recurring infection, factors which increase the risk of impaired fertility. If they are not able to provide partner evaluation and treatment, these providers should, at a minimum, assist in making referral arrangements to local health departments that can ensure that proper treatment is started.
- **Educating clients and communities about chlamydia.** A recent of survey commissioned by the Campaign for Women's Health and the American Medical Women's Association found that American women are neither adequately informed nor concerned about their personal risk for STDs. (This includes women under 24 years of age, women with multiple sexual partners, and women whose current sexual partners have had multiple sexual partners.) Over 70 percent of women between 18 and 24 years of age were not worried about an STD, and nearly 80 percent of women who have had multiple sexual partners were not worried. Over 80 percent of women whose current partners have had multiple sexual partners were not worried. Two-thirds of American women know almost nothing about STDs other than HIV/AIDS. Only 11 percent know that STDs are usually more harmful to women's health than to men's and only 63 percent had heard of chlamydia.

CONCLUSION

The impact of unrecognized and untreated chlamydia and gonorrhea infections often causes severe, long-term consequences. Delayed diagnosis and treatment, especially in women, is common because many women, as well as their health care providers, neither recognize STD risks nor fully appreciate their adverse consequences.

Because these infections are also common among adolescents and young adults, health care workers who interact with these populations have a particular responsibility to become actively involved in STD intervention and prevention efforts. This may mean including some type of sexual

risk discussion as a routine practice and expanding clinical services to provide testing and treatment.

Preventing the adverse consequences of STDs should be seen as a top priority and key intervention in the promotion of reproductive health and preservation of reproductive choice.

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SEXUALLY TRANSMITTED DISEASES IN THE UNITED STATES

Of the top ten most frequently reported diseases in the United States in 1995, half—accounting for 87 percent of all cases—were sexually transmitted diseases (STDs). With approximately 12 million new cases occurring annually, rates of curable STDs in the United States are the highest in the developed world.[1]

The public and private costs of STDs are tremendous. A conservative estimate of total costs associated with the most common types is approximately $10 billion. This increases to $17 billion when HIV/AIDS infections are included.[2]

Despite these tremendous health and economic burdens, the scope and impact of the STD epidemic are still underappreciated. And, to a large extent, the diseases are largely hidden from public discourse.[3]

INCIDENCE AND PREVALENCE*

- At least 1 person in 4 will contract an STD at some point in his or her life.
- More than 12 million Americans, 3 million of whom are teenagers, are infected with an STD each year.
- As many as 56 million American adults and adolescents may have an incurable viral STD other than HIV.
- Chlamydial infection is the most common bacterial STD. More than 4 million cases occur each year. Just 23 percent of American adults under 65 cite chlamydia when asked to name any STDs.
- About 200,000 to 500,000 new cases of genital herpes occur each year, and 31 million Americans are already infected with the genital herpes virus (herpes simplex virus, or HSV).
- At least 24 million people are infected with human papillomavirus (HPV) or genital warts, and as many as 1 million new infections occur each year. HPV is associated with cervical and other genital and anal cancers.
- Trends in viral STD infections are unknown, but initial visits to doctors for genital warts and herpes have increased steadily over the last 30 years, dropping off slightly in the last five years.
- Between 1987 and 1991, the number of annually reported cases of syphilis—over 100,000—was at its highest levels in 40 years.
- At least 800,000 cases of gonorrhea occur each year.

HEALTH CONSEQUENCES*

- Millions of women, men and children are affected by long-term complications of STDs, including various cancers, infertility, ectopic pregnancy and spontaneous abortion, and other chronic diseases.
- At least 15 percent of all infertile American women are infertile because of tubal damage caused by pelvic inflammatory disease (PID) resulting from an STD.
- Viral STDs result in lifelong incurable infection. Seventeen percent of American adults under 65 think all STDs are curable—but a large majority (80 percent) know that not all STDs are curable.
- STD infections increase susceptibility to HIV. People with an active syphilis, genital herpes, or chancroid infection, or who have chlamydia, gonorrhea, or trichomoniasis are 3 to 5 times more likely to contract HIV than other people. More than half (54 percent) of American adults under 65 do not know that STDs increase susceptibility to HIV.

IMPACT ON WOMEN*

- Complications of STDs are more severe and more frequent among women than among men. For example, women are more susceptible to reproductive cancers and infertility once infected.
- Women are biologically more susceptible than men to becoming infected if exposed to an STD. For example, a woman's risk of contracting gonorrhea from one act of unprotected intercourse is as high as 90 percent while the risk to a man is approximately 30 percent.
- Among couples with one infected partner, the annual risk of herpes infection is 19 percent when transmitted from a man to a woman and 5 percent when transmitted from a woman to a man.
- STDs are less likely to produce symptoms in women and are therefore more difficult to diagnose until serious problems develop. Up to 80 percent of chlamydia infections in women are asymptomatic compared to 40 percent in men. From 30 to 80 percent of women with gonorrhea are asymptomatic while fewer than 5 percent of men are asymptomatic.

IMPACT ON TEENAGERS AND YOUNG ADULTS*

- Three million teenagers—about 1 in 4 sexually experienced teenagers—acquire an STD every year. By the end of 1995, there were more than 2,300 teenagers diagnosed with AIDS.
- Young adults are the age group at greatest risk of acquiring an STD for a number of reasons: they are more likely to have multiple sexual partners; they may be more likely to engage in unprotected intercourse; and their partners may be at higher risk of being infected.
- Compared to older adult women, female teenagers are more susceptible to cervical infections, such as gonorrhea and chlamydial infections, due to their cervical anatomy.
- Chlamydia is more common among teenagers than among adult men and women; in some studies, up to 30 percent of sexually active teenage women and 10 percent of sexually active teenage men tested for STDs were infected with chlamydia.

REAL FACTS: THE MOST COMMON STDs*

STD	Annual Estimated Incidence	Curable
Chlamydia	4 million	yes
Trichomoniasis	3 million	yes
PID	1 million	yes
Gonorrhea	800,000	yes
HPV or Genital Warts	500,000–1 million	no
Genital Herpes	200,000–500,000	no
Syphilis	101,000	yes
HIV/AIDS	80,000	no

CRITICAL COMPONENTS OF STD PREVENTION & CONTROL**

Communities need critical prevention and control services to help reduce costly complications of STDs. They should include both these patient-based and population-based approaches:

- **Screening high-risk populations for prevalent STDs.** Because the prevalence of STD infections varies from place to place, private sector providers may benefit from consulting with public health professionals on disease prevalence in their community in order to select cost-effective strategies for providing relevant STD screening services.
- **Treating individuals with diagnosed and presumptive infections.** Recommendations of STD experts on treatment regimens for STDs should be readily available to health care providers. Quality assurance programs should be implemented to ensure that STD treatment is consistent with state-of-the-art medicine.
- **Providing prevention counseling and education.** Both public and private sources are needed to provide STD prevention counseling and education to individual patients in order to reach those affected by STDs. Such services are essential to reach sexual partners, to address future infections, as well as to ensure that medication is taken properly and that patients return for followup care. Community education about STD prevention is also important for changing risky behavior before infection occurs
- **Notifying, treating, and educating partners of persons diagnosed with STDs.** A sexual partner who has been exposed to an STD should be informed of his or her potential infection by the infected person, his or her health care provider, the provider's staff, or public health staff trained in partner notification. In most states, the law protects public health personnel in the notification process but does not protect other persons. Private providers and public health personnel may work together to provide sexual contacts with information on all aspects of needed care. Notification is a key step to prevent reinfection and further spread of STDs.
- **Reporting STD cases to assist in planning, evaluating, resource allocating, and coordinating efforts.** Health departments monitor and analyze reported STDs to identify problems in specific communities, to evaluate the effects of control measures, and to detect changes in trends. Complete and accurate reporting is essential so that the partnership of private providers and public health personnel can appropriately address STD problems. Laws in every state require providers to report some STDs. Most states require reporting of gonorrhea, syphilis, chlamydia, and AIDS. Several require reporting of herpes, HIV infection, or STD complications such as PID. Under-reporting of STDs results in failure to note disease trends and inadequate planning to address STD problems.

These approaches are needed because:

- **Screening and treatment will prevent significant future complications.** When left untreated, STDs can result in severe consequences including infertility, tubal pregnancy, chronic pain, cancer, premature births, low birth weight, congenital infections in newborns, and even death. In addition, HIV transmission is much more likely when other STDs are present, making STD treatment an important intervention for prevention of HIV infection. For example:
  - In the United States, chlamydia—which infects approximately 4 million people each year—causes the majority of uterine and fallopian tube infections or PID in women. PID is the leading cause of preventable infertility and tubal pregnancy. Tubal preg-

nancy, in turn, is the leading cause of first-trimester pregnancy-related death in African-American women.

- Prospective epidemiological studies have repeatedly demonstrated twofold to fivefold increases of HIV transmission when other STDs are present. In addition, other STDs have been demonstrated to increase HIV susceptibility in women by increasing the cells targeted by HIV CD4 cells in their cervical secretions. Other STDs have also been shown to increase the probability that HIV will be transmitted from an HIV-infected person to another person. A recent study demonstrated that in communities with improved STD treatment, HIV transmission was reduced by 42 percent.

- **Screening and early treatment are cost-effective.** The cost of untreated STDs far exceeds the cost of prevention services. For example, evidence indicates that chlamydia screening and treatment decreases the incidence of costly complications, such as PID. A random trial of chlamydia screening demonstrated a 60 percent reduction in the incidence of PID in the screened group in the 12 months following testing. Treatment of the consequences of chlamydia (e.g., PID, infertility, ectopic pregnancy) is estimated to be 12 times greater than the cost of screening and treatment.

- **These approaches would result in a healthier population.** STDs are strongly linked to long-term health complications. For example, the association between human papillomavirus and cervical cancer is well documented. STDs are one of the most important preventable causes of adverse outcomes of pregnancy, including low birth weight/premature birth, congenital infection, stillbirth, and postpartum infection. The two leading causes of preventable infertility are chlamydia and gonorrhea. Women, adolescents, and people of color are disproportionately affected by STDs and their consequences. STD prevention services could dramatically lower the incidence of STDs, their long-term consequences, and their significant cost. The overall health of Americans would improve with the routine availability of these components of STD prevention.

RESOURCES

For more information about STDs, contact:

American Social Health Association (ASHA)
P.O. Box 13827
Research Triangle Park, NC 27709
202/543-9129
http://sunsite.unc.edu/ASHA/

National AIDS Hotline
800/342-AIDS (English)
800/344-7432 (Spanish)
800/243-7889 TTY Service for the Deaf

National Herpes Hotline
919/361-8488

National STD Hotline
800/227-8922

ASHA Resource Center
Publications about Herpes and HPV
800/230-6039

ASHA Healthline
Publications about sexual health communication
800/972-8500

SIECUS
130 West 42nd Street
Suite 350
New York, NY 10036-7802
http:\\siecus@siecus.org

** *Critical Components of STD Prevention & Control* is a document published by the STD Prevention Partnership, a group of national organizations with shared concern about the continuing spread of STDs, including HIV, and with a mission to support and encourage partnerships among the private, voluntary, and public sectors in developing and implementing strategies to reduce the incidence and impact of STDs. Detailed references for *Critical Components of STD Prevention & Control* are available from the Division of STD Prevention of the U.S. Centers for Disease Control and Prevention, 404/639-8260 or by E-mail at jel6@cpsstd1.em.cdc.gov

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* The statistics in this *Fact Sheet* are from a briefing paper, *Sexually Transmitted Diseases in the United States: Exposing the Epidemic,* prepared by the Kaiser Family Foundation, The Alan Guttmacher Institute, and the National Press Foundation and based on:

- *The Hidden Epidemic: Confronting Sexually Transmitted Diseases,* The Institute of Medicine, National Academy Press, 1996.

- *Survey on Public Knowledge and Attitudes About STDs Other Than AIDS,* Kaiser Family Foundation, 1996.

- *Testing Positive: Sexually Transmitted Disease and the Public Health Response,* The Alan Guttmacher Institute, 1993.

Managing Herpes: How to Live and Love With a Chronic STD

By Charles Ebel
American Social Health Association
P. O. Box 13827
Research Triangle Park, NC 27709
800/230-6039
1996, 206 pp.
$19.75 (including shipping)

The American Social Health Association (ASHA) deserves applause for creating this herpes resource that masterfully translates its extensive counseling, research, and public education experience into a work that will benefit health educators, practitioners, and herpes patients alike.

Complex medical information is engagingly presented, creating a wide potential audience by assuming no previous knowledge while still covering the latest scientific debates. The tone is practical and compassionate, appropriate even for the newly diagnosed.

Managing Herpes answers virtually all medical questions—from how herpes is transmitted through open sores to why the skin tingles just prior to an outbreak. The author, who is a sexuality educator, expertly begins by addressing common concerns and debunking misconceptions (such as getting herpes from a toilet seat).

From there, he goes well beyond standard herpes educational materials by discussing in detail the latest diagnostic tests, appropriate timing of treatment for greatest efficacy, and the often glossed over relationship between Herpes Simplex I and Herpes Simplex II. (The author points out that people infected first with oral herpes often build up an immune response which allows them to resist catching genital herpes or to temper an outbreak.)

While fully describing the difficulties of herpes outbreaks and the lifelong nature of infection, the book is also wonderfully upbeat. With an estimated 50 percent or more of Americans infected with the Herpes Simplex I virus and an estimated 20 percent infected with Simplex II, readers need to know that they are not alone in their diagnosis. Moreover, they can live well even though infected.

Encouragingly, most people experience less frequent and less severe outbreaks after their initial episodes. With this in mind, the author gives practical suggestions for managing stress and building immune resistance. He also offers valuable insights on informing partners, finding a sensitive practitioner, and preventing transmission during pregnancy and future sexual experiences.

Instead of banishing herpes-positive people to a life of celibacy, he provides paths around obstacles, such as discussing herpes with new sexual partners thereby allaying fears and celebrating sexuality. The subtitle "How to *Live and Love* (emphasis added) with a Chronic STD" is quite well deserved. For more counseling information, contact the National Herpes Hotline directly at 919/361-8488.

This book was reviewed by Sonja Herbert, SIECUS public policy associate.

Talking About Sex: A Guide for Families

Planned Parenthood
Federation of America
810 Seventh Avenue
New York, NY 10019
800/669-0156
$29.99

Talking About Sex: A Guide for Families is a dynamic, animated video produced by the Planned Parenthood Federation of America as part of a comprehensive sexuality education kit that includes a *Parent's Guide* to help them talk to their children about sexuality issues and an *Activity Book* for children to use in determining how much they have learned from the video.

Over the course of 30 minutes, the video focuses on parent-child relationships and the initial awkwardness that often exists when sexuality issues surface in conversation. The video offers different methods of dealing with these awkward feelings and communication problems so that children will get the information they need and parents will communicate the messages they want. *Talking About Sex* is humorous and compelling for both teens and parents and is ideal to watch together to generate discussion.

Aimed at preteens and teens on the brink of or experiencing puberty, this video looks at issues involved with becoming a healthy sexual adult. It also strongly affirms that parents are and should be the primary sexuality educators of their children. Although it touches on many different issues, it is designed primarily as a tool to promote open communication among teens and their parents.

The video depicts various scenarios of teens wanting information from their parents and parents not using the proper methods to talk with them. The "coach" who narrates the video blows the whistle on instances of miscommunication and goes back to watch the scene again, replaying it with more open and honest communication.

In addition to illustrating the means to creating more open channels of communication between adolescents and their parents, *Talking About Sex* also accurately answers commonly asked questions about growing up, body changes, and relationships.

In one scenario, a boy needs to talk to his father about nocturnal emissions. After overcoming his initial discomfort, the father does research on the question and assures his son that he is normal as he explains the biological reason for this occurrence.

In another scenario, a girl goes to her aunt with concerns about her pregnant friend. Her aunt explains the different pregnancy options her friend can consider while she assures her niece it was good she asked for her assistance.

Other issues addressed include sexual orientation, sexually transmitted infections (STIs) and sexually transmitted diseases (STDs), contraception, the distinction between falling in love and physical attraction, and menstruation.

Although the video deals innovatively with subjects that are often difficult to discuss, it is surprisingly stereotypical in its depiction of parental roles and family composition. For example, mothers discuss love and relationships with their daughters in the kitchen while sons and fathers talk about nocturnal emissions while they fix the car. In this sense, the video's messages are confused with the images of traditional gender roles.

The video's 60-page *Parent's Guide* is filled with facts to help parents teach kids about sexuality. In addition, it provides them with advice about how to initiate talks with their children as well as respond to their questions. The 16-page *Activity Book* is for young people 10 to 14 years of age. The activities reinforce important information and help boys and girls deal with adolescent issues.

Whether family members watch the video alone or together, *Talking About Sex* opens the door for sharing information.

This video was reviewed by Amy Levine, SIECUS librarian, and Caroline Kelley, SIECUS publications assistant.

Transgender Warriors: Making History From Joan of Arc to RuPaul

Leslie Feinberg
Beacon Press
25 Beacon Street
Boston, MA 02108-2892
1996, 212 pp.
$27.50

In *Transgender Warriors*, the author introduces her historical analysis with the words, "I couldn't find myself in history. No one like me seemed to have ever existed. But I had to know why I was so hated for being different."

Arranged chronologically, *Transgender Warriors* traces the evolution of transgenderism from ancient times to the present day. Feinberg structures her expansive journey through history around the questions, "Have we always existed?" "Have we always been so hated?" "Have we always fought back?"

As a result, the reader discovers that transgender expression is celebrated in many cultures. Feinberg illustrates this through her positive descriptions of the Native American Two Spirit, known as the *berdache* by European colonizers; the religious rites of Near Eastern, Middle Eastern, and Mediterranean transsexual priestesses; and the transspiritual expression of shamans in Vietnam, China, and India.

In the ensuing chapters, Feinberg carefully examines the transition from ancient to current gender order. She equates the emergence of patriarchy with the origin of gender oppression. In this era, such "transgender warriors" as the French Joan of Arc, the Welsh revolutionaires Rebecca and her daughters, and the Irish peasant rebel Molly Maguires emerged. By way of her discovery of cross-dressing as a form of peasant rebellion, Feinberg makes an argument for the alliance between class struggle and gender oppression.

Transgender Warriors argues that transgender oppression is linked in one way or another to all forms of oppression. Feinberg analyzes the role of patriarchy and colonialism on class, gender, sexuality, and race. Thus, her narrative of trans-history calls for solidarity among all oppressed people.

This book was reviewed by Caroline Kelley, SIECUS publications assistant.

ABSTINENCE-ONLY EDUCATION PROMOTED NATIONWIDE; CHECK SIECUS WEB SITE FOR LATEST DETAILS

Both the U. S. Congress and the Clinton Administration are moving quickly on abstinence-only agendas that have the potential to seriously impact on sexuality education and pregnancy-prevention programs at the federal, state, and local levels of government nationwide, says Daniel Daley, SIECUS director of public policy.

Specifically

- The U.S. Congress's recently passed welfare reform legislation contains a large-scale national abstinence-only education program.
- A proposed teenage pregnancy-prevention initiative revolves around abstinence-only programs.

The *SIECUS Report* will provide detailed information on these important new developments in its April-May issue. In the meantime, sexuality education professionals can find the latest facts on the SIECUS Web site (http://www.siecus.org) under "What's New."

SIECUS Report readers interested in joining the SIECUS Advocates network should send their name and address to Daley at SIECUS, 1711 Connecticut Avenue, N.W., Suite 206, Washington, DC 20009.

A SIECUS Annotated Bibliography of Organizations and Available Materials

Gender identity plays a large part in the development of an individual's sexuality. In fact, *A Descriptive Dictionary and Atlas of Sexology* (R. T. Francoeur, editor, Westport, CT: Greenwood Press, 1991, 241.) defines gender identity as "the internalized sense of being male, female, or having an ambivalent sexual status; the self-awareness of knowing to which sex one belongs."

The purpose of this bibliography is to address the complicated and multifaceted issues related to the subject of gender identity. The literature is vast and diverse. As a result, this bibliography focuses not only on such specific subjects as transgenderism and transvestism but also on anthologies and books that debate and analyze the social construction of gender. For consistency, the bibliography uses the word *cross-dresser* in all references to this subject (rather than the variations *cross dresser* or *crossdresser*).

SIECUS does not sell or distribute any of these publications. They are, however, available for use in our Mary S. Calderone Library. For those interested publishing certain books, each annotation contains contact and price information.

Copies of this bibliography are available for purchase from the SIECUS Publications Department. Costs are: 1-4 copies, $2.00 each; 5-49 copies, $1.75 each; 50-100 copies, $1.50 each; 100 or more copies, $1.25 each.

SIECUS is located at 130 West 42nd Street, Suite 350, New York, NY 10036-7802; 212/819-9770; FAX 212/819-9776; E-mail: <SIECUS@siecus.org>; Web site: <http://www.siecus.org>.

This bibliography was written and compiled by Amy Levine and Caroline Kelley of the SIECUS staff.

GENDER

Boys and Girls: The Development of Gender Roles

Carole R. Beal

This analysis of gender follows the evolution of development from child to adolescent. Primarily aimed at students in the field of developmental psychology, the book focuses sequentially on boys' and girls' early development, the difference between group identity and individual identity, and the impact of social class and ethnicity on gender development.

1994; $38.84; 359 pp; ISBN 0-07-004533-X; McGraw-Hill, Inc., P.O. Box 548, Blacklick, OH 43004; 800/262-4729; FAX: 614/759-3644; E-mail: <customerservice@mcgraw-hill.com>; Web site: <http://www.books.mcgraw-hill.com>.

Debating Gender, Debating Sexuality

Nikki R. Keddie, Editor

This book concentrates on two central theoriticians, Michel Foucault and Sigmund Freud, in examining the effect of their theories on contemporary and past perceptions of sexuality. Essays from the author's book, *Contention*, range from discussions and responses on procreation and female oppression to the male search for gender identity. Each are written by respected scholars and theorists. (This publication also debates the key issues relating to sexuality in a format ideal for those involved in forensics.)

1996;$18.95; 331 pp; ISBN 0-8147-4655-1; New York University Press, 70 Washington Square South, New York, NY, 10012; 800/996-6987; FAX: 212/995-3833; Web site: <http://www.nyu.edu/pages/nyupress/index.html>

Gender Blending: Confronting the Limits of Duality

Holly Devor

Based on a compilation of interviews of 15 women who reject traditional femininity yet maintain their female identity, the book examines the social construction of gender. Devor takes the perspective that gender is a social distinction which is different but not entirely removed from biological sexuality. She also examines the impact of contempo rary gender distinctions on women.

1989; $14.95; 178 pp; ISBN 0-253-31637-5; Indiana University Press, 601 N. Morton Street, Bloomington, IN, 47404-3797; 800/842-6796; FAX: 800/842-6796; E-mail: <iup@indiana.edu>; Web site: <http://www.iub.indiana>.

Gender: In Cross-Cultural Perspective, 2nd Edition

Caroline B. Brettell & Carolyn Sargent, Editors

This collection of essays examines cultural constructions of gender through human evolution as well as the impact of gender on historical change. The anthology approaches gender through a cross-cultural and comparative analysis.

1996; $28.00; 504 pp.; ISBN 0-13-533613-9; Prentice-Hall, Inc., A Simon & Schuster Company, Englewood Cliffs, NJ 07632. Order copies from: Order Processing Center, P.O. Box 11071, Des Moines, IA, 50336; 800/947-7700; FAX 800/835-5327; Web site: <http://www.phdirect.com/phdirect>

Gender Play: Girls and Boys in School

Barrie Thorne

Drawing on her daily observations from elementary schools in the United States, Thorne provides innovative insights into how children construct and experience gender in school. Defining gender identity as a social process involving groups of children, this book presents the argument that age, ethnicity, race, sexuality, and social class

A SIECUS Annotated Bibliography of Organizations and Available Materials

influence the organization and meaning of gender and that it shifts with social context. *1995; 237 pp; $15.95; ISBN 0-8135-1923-3; Rutgers University Press, Building 4161, P. O. Box 5062, New Brunswick, NJ 08903-5062; 800/446-9323; FAX 908/445-1974; E-mail:<dtgross@rci.rutgers.edu>; Web site:<http://sociology.rutgers.edu/rupress>.*

Making Gender: The Politics of Erotics and Culture

Sherry B. Ortner

Spanning approximately 25 years, Ortner draws on her work in feminist anthropology to present a significant reconsideration of culture and gender. This collection of essays theorize the way people act within a cultural context in order to alter those very contexts. They include: "Is Female-to-Male As Nature Is to Culture?," "Rank and Gender," and "Borderland Politics and Erotics: Gender and Sexuality in Himalayan Mountaineering." *1996; $25.00; 262 pp; ISBN: 0-807-04632-9; Beacon Press, 25 Beacon Street, Boston, MA 02108-2892; 617/742-2110; FAX: 617/723-3097; Web site: <http://www.uua.org/Beacon/homepage.html>.*

Queer Studies: A Lesbian, Gay, Bisexual, and Transgender Anthology

Brett Beemyn & Mickey Eliason, Editors

This anthology addresses the relationship between personal sexual identity and the larger society. The collection is presented in two parts: The first focuses primarily on "Issues of Gender" and the second, on "Queer Theory in Practice," puts these issues into perspective. Unlike many gender theory books, this anthology was designed for a broader readership and is equally accessible to both academics and lay people.
1996; $24.95; 318 pp; ISBN 0-8147-1258-4; New York University Press, 70 Washington Square South, New York, NY 10012; 800/996-6987; FAX: 212/995-3833; Web site: <http://www.nyu.edu/pages/nyupress/index.html>

Third Sex, Third Gender: Beyond Sexual Dimorphism in Culture and History

Gilbert Herdt, Editor

A comprehensive anthology of essays, this collection focuses on the evolution of sexual dimorphism in Western culture in comparison to the less dichotomized gender roles of non-Western cultures. The information is divided into two parts: "Historical Contributions" and "Anthropological Contributions." The first half focuses on the treatment of gender in Western history (including discussions about the Sapphists of London and gender morphology in the Balkans.) The second half examines different perceptions and manifestations of gender in non-Western cultures. This anthology is valuable for its insight into the marked difference between the model of gender in Western culture and other cultures.
1993; $20.00; 614 pp; ISBN 0-942299-82-5; Zone Books, 611 Broadway, Ste. 608, New York, NY 10012; 212/529-5674; FAX: 212/260-4572; E-mail: <urzone@aol.com>. Orders copies from: MIT Press, 55 Hayward Street, Cambridge, MA 02142; 800/356-0343 ext.772; FAX: 617/625-6660; E-mail: <mit-press-orders@mit.edu>.

TRANSGENDERISM

Blending Genders: Social Aspects of Cross-Dressing and Sex-Changing

Richard Ekins & Dave King, Editors

This anthology of essays approaches the topics of transgenderism and cross-dressing from a variety of angles. The essays are presented in four main categories: political, medical, social, and autobiographical. This resource is a valuable academic tool as it offers an edifying perspective on gender in literature and history. The collection is particularly useful for research in gender theory.
1996; $17.95; 257 pp; ISBN 0-415-11552-3/paperback; Routledge, P.O. Box 6904, Florence, KY 41042-6904; 800/634-7064; FAX: 800/248-4724; E-mail: <routledge@kdc.com.routledge>; Web site: <http://www.routledge.com>.

Changing Sex: Transsexualism, Technology, and the Idea of Gender

Bernice L. Hausman

Through reconstruction of current thought on transsexualism as a disorder of gender identity, Hausman demonstrates how current medical advances make the development of new theories possible. Chapters include "Plastic Ideologies and Plastic Transformations," "Managing Intersexuality and Producing Gender," "Body, Technology, and Gender in Transsexual Autobiographies," and "Semiotics of Sex, Gender, and the Body."
1995; $17.95; 245 pp; ISBN 0-8223-1692-7; Duke University Press, P. O. Box 90660, Durham, NC 27708-0660; 919/687-3612; FAX: 919/688-4574; E-mail: <mbrodsky@acpub.duke.edu>; Web site: <http://www.duke.edu/web/dupress>.

Cross-Dressing with Dignity: The Case for Transcending Gender Lines

Peggy J. Rudd, Ed.D.

This book describes the cross-dresser's quest for a dignified life. It is based on a research study of 830 cross-dressers who describe how they have dealt with such negative emotions as their guilt, loneliness, and deception. In addition, it describes how some have found solutions.
1993; $12.95; 173 pp; ISBN 096267621-7; PM Publishers, Inc., P.O. Box 5304, Katy, TX 77491-5304; 713/347-6563; FAX: 713/347-8747; E-mail: <pmpub@pheonix.net>; Web site: <http://www.pmpub.com>.

Cross-Dressers: And Those That Share Their Lives

Peggy J. Rudd, Ed.D.

Written from the perspective of a woman who is married to a cross-dresser,

A SIECUS Annotated Bibliography of Organizations and Available Materials

this book provides guidance to male cross-dressers and their loved ones. Through personal accounts of others, as well as from her own experience, this book addresses such topics as understanding cross-dressing, telling family and friends, and working on relationships. Dr. Rudd is also the author of *My Husband Wears My Clothes: Cross-Dressing From the Perspective of a Wife.*

1995; $14.95; 112 pp; ISBN: 0-9626762-3-3; PM Publishers, Inc., P.O. Box 5304, Katy, TX 77491-5304; 713/347-6563; FAX: 713/347-8747; E-mail:<pmpub@pheonix.net>; Web site:<http://www.pmpub.com>.

Cross-Dressing, Sex and Gender

Vern L. Bullough & Bonnie Bullough

This book is divided into two major parts. Part One offers a cultural and historical background of cross-dressing. Part Two examines modern views and issues related to cross-dressing. It also includes a chapter on transsexualism.

1993; $18.95; 382 pp; ISBN 0-8122-1431-5; University of Pennsylvania Press, P.O. Box 4836, Hampden Station, Baltimore, MD 21211-4836; 800/445-9880; FAX: 410/516-6998.

Fantastic Women: Sex, Gender and Transvestism

Annie Woodhouse

This feminist study of transvestites in Britain focuses on sexual politics and power imbalances within the social construction of gender. Chapters include: "Seeing Is Believing: Sex, Gender and Appearance," "Best of Both Worlds? Transvestites' Lives," "The Boy Can't Help It: Scientific Views of Transvestism," and "Transvestism and Marriage."

1989; $15.00; 157 pp; ISBN 0-8135-1444-4; Rutgers University Press, Bldg. 4161, P.O. Box 5062, New Brunswick, NJ, 08903-5062; 800/446-9323; FAX: 908/445-1974; E-mail: <dtgross@rci.rutgers.edu>; Web site: <http://sociology.rutgers.edu/rupress>.

Feminizing Hormonal Therapy for the Transgendered

Sheila Kirk, M.D.

This book, written for the male-to-female transgendered person, presents information based on medical research and reports to the medical community. Dr. Kirk emphasizes that "good health is paramount...anything that risks good health is foolhardy and irrational." Topics include: endocrinology; anatomy and biochemistry; function of the sexual hormones; complications of hormonal use; medical evaluations—the initial examination and periodic monitoring; and frequently asked questions. She also writes about masculine hormonal therapy as well as medical, legal, and workplace issues.

1996; $14.95 + $2.00 shipping and handling; 84 pp; ISBN 1-887796-01-0; Together Lifeworks, P.O. Box 38114, Blawnox, PA 15238-9998; 412/781-1092; FAX: 415/781-1096; E-mail: <sheilakirk@aol.com>.

Gender Shock: Exploding the Myths Of Male & Female

Phyllis Burke

This book examines three major aspects of gender: behavior, appearance, and science. Through analysis of current research in psychology, genetics, neurology, and sociology, Burke challenges the many myths of America's gender system of male and female. She also addresses the popular diagnosis in children of *gender identity disorder.*

1996; $23.95; 308pp; ISBN 0-385-47717-1; Bantam Doubleday Dell Publishing Group, Inc., 2451 S. Wolfe Road, Des Plaines, IL 60018; 800/323-9872; Web site: <www.bdd.com>.

In Search of Eve: Transsexual Rites of Passage

Anne Bolin

This work examines transsexualism through an anthropological lens, looking at 16 male transsexuals and the "rites of passage" they undergo in the process of becoming women. The book contains a literature review in the appendix and an extensive bibliography.

1988; $14.95; 210 pp; ISBN 0-89789-115-5; Greenwood Publishing Group, 88 Post Road West, West Port, CT 06681; 800/225-5800; FAX: 203/222-1502; E-mail: <custserv@greenwood.com>; Web site: <http://www.greenwood.com>.

Masculinizing Hormonal Therapy for the Transgendered

Sheila Kirk, M.D.

This companion to *Feminizing Hormonal Therapy for the Transgendered* is written for the female-to-male transgendered person. The same topics are covered in both books from different perspectives. (See this page.)

1996; $14.95 + $2.00 shipping and handling; 57 pp; ISBN 1-887796-02-9; Together Lifeworks, P.O. Box 38114, Blawnox, PA 15238-9998; 412/781-1092; FAX: 415/781-1096; E-mail: <sheilakirk@aol.com>.

Medical, Legal & Workplace Issues for the Transsexual

Sheila Kirk, M.D. & Martine Rothblatt, J.D.

This book provides comprehensive and accurate information encountered by transsexuals or those going through this transition. Focusing on medical, legal, and workplace issues for the transsexual, it addresses three distinct periods for each topic: the transition, the surgical experience, and convalescence.

1995; $18.95 + $2.00 shipping and handling; 148 pp; ISBN 1-887796-00-2; Together Lifeworks, P.O. Box 38114, Blawnox, PA 15238-9998; 412/781-1092; FAX: 415/781-1096; E-mail: <sheilakirk@aol.com>.

My Husband Wears My Clothes: Cross-Dressing From the Perspective of a Wife

Peggy J. Rudd, Ed. D.

This is the first book written on the topic of cross-dressing by the wife of a cross-dresser. Rudd examines myths and

addresses common questions of family and friends. The underlying objective of this book is to replace fear and misunderstanding with factual information.
1993; $12.95; 147 pp; ISBN 0-9626762-0-9; PM Publishers Inc., P.O. Box 5304, Katy, TX 77491-5304; 713/347-6563; FAX: 713/347-8747; E-mail: <pmpub@oheonix.net>; Web site: <http://www.pmpub.com>.

Transgender Nation

Gordene Olga Mackenzie

This book examines the traditional categories of sexuality and gender and asserts that contemporary therapies such as sexual reassignment surgery fundamentally support assimilation and discourage tolerance. Mackenzie takes the perspective that "disorder" lies within the culture and not with the individual.
1994; $14.95; 190 pp; ISBN 0-87972-597-4; Bowling Green State University Popular Press, Bowling Green, OH 43403; 800/515-5118; FAX: 419/372-8095; E-mail: <jamend@bgnet.bgsu.edu>; Web site: <http://www.plenum.com>.

Transgender Warriors

Leslie Feinberg

This work looks at individuals who have defied the cultural boundaries of sexuality and gender throughout history as well as the interrelationship of class, nationality, race, and sexuality. Woven through moving, personal narrative, this history provides a captivating and insightful look at transgendered individuals over time and throughout diverse cultures.
1996; $27.50; 212 pp; ISBN 0-8070-7940-5; Beacon Press, 29 Beacon Street, Boston MA 02108-2892; 617/742-2110; FAX: 617/7233097; Web site: <http://www.uua.org/Beacon.homepage.html>.

The Transsexual Empire: The Making of the She-Male

Janice G. Raymond

Originally published in 1979, this book challenged the medical psychiatric definition of transsexualism as a disease, and it offered sexual conversion hormones and surgery as the cure. Just reissued after 15 years, the book has a new introduction on transgenderism. Chapters include "Everything You Always Wanted to Know About Transsexualism," "Are Transsexuals Born or Made—or Both?," "Sappho by Surgery: The Transsexually Constructed Lesbian-Feminist," and "Therapy As a Way of Life: Medical Values Versus Social Change."
1994; $17.95; 220 pp; ISBN 0-8077-6272-5; Teachers College Press, 1234 Amsterdam Avenue, New York, NY 10027. Order copies from: Teachers College Press, P.O. Box 20, Williston, VT 05495-0020; 800/575-6566; FAX: 802/864-7626.

Transvestites and Transsexuals: Toward a Theory of Cross-Gender Behavior

Richard F. Docter

This book explores transvestism and transsexualism. The three main approaches to discussing this topic are the biological or medical model, the intrapsychic or psychodynamic model, and the developmental or learning model. A clinical and psychological-based analysis, this book is best suited to people with some knowledge of developmental psychology or clinical psychology.
1988; $39.50; 251 pp; ISBN 0-306-42878-4; Plenum Press, A Division of Plenum Publishing Corporation, 233 Spring Street, New York, NY 10013; 800/221-9369; FAX: 212/807-1047; E-mail: <books@plenum.com>; Web site: <http://www.plenum.com>.

True Selves: Understanding Transsexualism For Families, Friends, Coworkers, and Helping Professionals

Mildred L. Brown & Chloe Ann Rounsley

This book is a resource for the lay person interested in transgenderism. Brown and Rounsley break down the information into several parts ranging from chapters on psychological development to a section about sexual reassignment operations. Each chapter poses questions and confronts common misconceptions about transgendered people and offers recommendations to caregivers and family. Although the title includes helping professionals as a target audience, the information is more appropriate for people with little or no background in transgenderism. The material is presented in a simple, straightforward style and is easy to understand.
1996; $25.00; 271 pp.; ISBN 0-7879-0271-3; Jossey-Bass Inc., 350 Sansome Street, San Francisco, CA 94104; 800/956-7739; FAX: 800/605-2665; E-mail: <cmaden@jpb.com>; Web site: <http://www.josseybass.com>

OUT OF PRINT

Christine Jorgensen: A Personal Autobiography

Christine Jorgensen

This autobiography details the life of Christine Jorgensen whose dignity and courage set an example for the thousands of transsexuals who followed her path.
1967; 332 pp; out of print; available in libraries.

Lieutenant Nun: Memoir of a Basque Transvestite in the New World

Catalina De Erauso
Translated from the Spanish by Michele Stepto & Gabriel Stepto

This book is one of the earliest known autobiographies by a woman whose life flourished in folklore, legend, and drama. It presents a portrait of a brave young woman who was a committed participant in the conquest of the Americas despite her defiance of her society's gender roles.
1996; $16.95; 80 pp; ISBN 0-8070-7072-6; Beacon Press, 25 Beacon Street, Boston, MA 02108-2892; 617/742-2110; FAX: 617/723-3097; Web site: <http://www.uua.org/Beacon/homepage>.

A SIECUS Annotated Bibliography of Organizations and Available Materials

Studies in the Psychology of Sex, Volume 7, Eonism and Other Supplementary Studies

Havelock Ellis

Eonism (named after Chevalier d'Eon de Beaumontis, a French public figure and famous transvestite in the late eighteenth century) is Ellis's term for *transvestism*. In this volume of his large work on the psychology of sexuality, Ellis examines transvestism through case studies.

1928; 539pp; out of print; available in libraries.

The Transsexual Phenomenon

Harry Benjamin, M.D.

This book covers many aspects of transsexualism. Sections on sexual reassignment surgery and hormone therapy are written to make the information clear and understandable to lay people. This book is one of the first of its kind and remains an important text even though there have been many advances in this area since it was published.

1966; 286 pp; out of print;available in libraries.

Transsexualism and Sex Reassignment

Richard Green, M.D., & John Money, Ph.D.,Editors

This book is a collection of articles on various aspects of transsexualism. Chapters on legal, psychological, and treatment (sexual reassignment) issues are included.

1969; out of print but available in xerographically reproduced format; $158.80/hardcover; $152.80/paperback; 512 pp; Books on Demand, Division of UMI, 300 N. Zeeb Road, Ann Arbor, MI 48106-1346; 800/521-0600, extension 4806; FAX: 313/973-1464; E-mail: <lclement@umi.com>; Web site: <http://www.umi.com/hp/contacts/5.html>.

Transvestites: The Erotic Drive to Cross Dress

Magnus Hirschfeld, M.D. Translated by Michael A. Lombardi-Nash, Ph.D.

Originally published in 1910 under the German title *Die Transvestism*, this classic is now available in English for the first time. The historical aspects of transvestism are discussed, and 17 cases are described and analyzed.

1991; $43.95; 424 pp; ISBN 0-87975-665-9; Prometheus Books, 59 John Glenn Drive, Amherst, New York 14228-2197; 800/421-0351; FAX: 716/691-0137.

ORGANIZATIONS AND WEB SITES

American Educational Gender Information Service (AEGIS)

P.O. Box 33724
Decatur, GA 30033
770/939-2128 (business)
770/939-0244 (helpline)
FAX: 770/939-1770
E-mail: <aegis@mindspring.com>
Web site: <http://www.ren.org/rafil/AEGIS.html>

AEGIS is a nonprofit clearinghouse for information on transgender and transsexual issues. It maintains the National Transgender Library & Archive. Their publications include *Chrysalis: The Journal of Transgressive Gender Identities* and *AEGIS News.*

East Coast Female-To-Male Group (ECFTMG)

P.O. Box 60585
Florence Station
Northhampton, MA 01060
413/584-7616

ECFTMG is a peer support group for all female-to-male transgender, cross dressers, transsexuals, and their partners.

Education TV Channel (ETVC)

P.O. Box 426486
San Francisco, CA 94142
415/564-3246

ETVC is a support organization serving the educational, social, and recreational needs of gender-challenged people and their loved ones. They maintain a lending library and publish the *ETVC Newsletter.*

FAQ: Hormone Therapy for F2M Transsexuals

http://www.saving.com/confluence/hormone/f2m.html

Female-To-Male International Inc. (FTM)

5337 College Avenue.
No. 142, Oakland, CA 94618
Voice mail: 510/287-2646
FAX: 510/547-4785

FTM International, Inc., provides peer support and education for and about female-to-male transsexual men. This includes information and networking for women who are exploring gender identity issues as well as for men who are in transition. It also provides educational services to the general public on transgender issues. It publishes the *FTM Newsletter.*

Gender Books

Web sites: <http://www.ftm-intl.org/ref/biblio.html> and <http://www.ftm-intl.org/intro.html>

Gender Dysphoria Program

Department of Family Practice
University of Minnesota
Medical School
1300 South Second Street
Suite 180
Minneapolis, MN 55454
612/625-1500

This program provides lectures and seminars on gender dysphoria and related therapy and support groups.

Health Law Standards of Care for Transsexualism

1993 Version (TStar)—Adopted by ICTLEP http://www2.wintermute.co.uk/snuffles/The_Plaid/ Legal/hlsct.html

Harry Benjamin International Gender Dysphoria Association, Inc. (HBIGDA)

1300 South Second Avenue
Suite 180
Minneapolis, MN 55454
612/625-8078

HBIGDA is a professional membership organization of gender specializing counselors, psychotherapists, psychiatrists, surgeons, and researchers. Its publications include *HBIGDA: Standards of Care* for transsexual medical and psychological treatment, a

A SIECUS Annotated Bibliography of Organizations and Available Materials

newsletter, international membership directory, and periodic bulletins.

Horizon Institute, Inc.

P.O. Box 5757
Deltona, FL 32728-5757
904/789-3225
FAX: 904/ 532-5969

This organization conducts *The World of Gender,* a professional gender training series on video tape.

International Foundation for Gender Education (IFGE)

P.O. Box 229
Waltham, MA 02254-0229
617/899-2212
FAX: 617/899-5703
E-mail: <IFGE@world.std.com>
Web site: <http://www.transgender.org/tg/ifge>

An advocate and educational organization on gender identity, IFGE produces *Transgender Tapestry,* a magazine for and about the gender community as well as educational video, audio, and printed materials.

Intersex Society of North America

P.O. Box 31791
San Francisco, CA 94131
Phone: 415/436-0585
E-Mail: <info@isna.org>

This is a peer support, educational, and advocacy group founded and operated by and for intersexuals (persons born with mixed sexual anatomy). It publishes a newsletter called *Hermaphrodites with Attitude.*

Leslie Feinberg Biography

http:www.ftm-intl.org/hist/bios/feinberg.html

The Plaid

http://www2.winternute.co.uk/users/snuffles/The_Plaid/gender.html

Outreach Institute of Gender Studies

126 Western Avenue
Suite 246
Augusta, ME 04330
Phone/FAX: 207/621-0858

Committed to the exploration and understanding of gender identity, role development, and conscious gender communities, the Outreach Institute has an extensive library of books addressing significant concerns of gender communities. Publications include *The Journal of Gender Studies* and numerous information packets.

Renaissance

http://www.ren.org

Renaissance Education Association, Inc.

987 Old Eagle School Road
Suite 719
Wayne, PA 19087
610-975-9119
E-mail: <reninfo@cdpub.com>

Renaissance is a nonprofit, educational organization created to provide support and information about gender issues to transvestites, transsexuals and their families. In addition, it educates the professional community and the public at large about transgender behavior and the people who exhibit such behavior. It publishes *Renaissance News & Views,* a monthly newsletter.

Resource of Gender Sites

http://www.firstnethou.com/brenda/resl.htm

Sex Change Indigo Pages— Male to Female Doctors

http://www.servtech.com/public/perette/sc/ftm.html

The Society for the Second Self, Inc. (Tri-Ess)

P.O. Box 194
Tulare, CA 93725
209/688-9246

Tri-Ess is a private, nonprofit educational, social support and outreach corporation. It has local chapters in every major region of the United States.

Spouses' Partners' International Conference or Education (S.P.I.C.E.)

P.O. Box 5304
Katy, TX 77491-5304
918/455-6835
E-mail: <Melpeg@Phoenixnet.com>

This organization provides services to women in committed relationships with heterosexual male cross-dressers, and for their cross-dresser spouses.

St. Louis Gender Foundation

http://members.aol.com/stlgf1/index.html

The Transsexual News Telegraph: The Magazine of Transsexual Culture

4 issues/$18.00 U.S.A.
TNT, 41 Sutter Street
No. 1124
San Francisco, CA 94104-4903
415/703-7161
E-mail: <GailTNT@aol.com>

Transgender Forum & Resource Center

http://www.cdspub.com/tgfrc.html

Transsexual Women's Resources from Ann Lawrence, MD

http://members.aol.com/tssource/index.html

TRI-ESS International

http://www.firstnethou.com/brenda/tri-ess.htm

What Does the Bible Really Say About Transsexualism?

http://haven.ios.com/~melody/transandbible.html

Editor's Note: *When accessing the Web sites, remember that:*

- *SIECUS does not necessarily endorse the sites included in this list.*
- *A search engine will help if you have trouble locating a site.*