health where their values are part of the common heritage of the men and women who choose this field. Any full account of the history of public health will accord an important place to the women who have worked as physicians, public health nurses, scientists, volunteers, and activists.[10] Any listing of public health's heroes must include such names as Margaret Sanger, Lillian Wald, Jane Addams, Alice Hamilton, Josephine Baker, and Martha Eliot, to mention only a few of those historic women who have risen to prominence in America through determined effort as well as intelligence. Only recently have women been permitted to scale the heights of the profession; the many contemporary women in positions of national visibility include Antonia Novello, the surgeon general of the United States, Bernadine Healy, director of the National Institutes of Health, and Faye Wattleton, president of Planned Parenthood. As always, much of the less glamorous but essential work of health agencies everywhere is carried out by women.

The struggle of women in the health care professions should be more than simply the winning of more respect, recognition, and economic rewards, and more than achieving national visibility for a few, exceptionally talented women. It must also be a struggle to transform our socially dominant priorities so that the characteristics and qualities that have been traditionally relegated to the female sex, such as caring and compassion, are generally valued as essential to a good society and are implemented insofar as our knowledge and abilities permit. Our extraordinary technological capacity potentially could be turned to support these values rather than, as too often happens, serving as justification for ignoring them. The effort to guarantee the conditions in which the more vulnerable members of society can claim their rights to health and happiness is fundamental to feminism and also to public health. We are pleased that these issues have been raised by a physician-historian whose research on the 12th century provides a long perspective on value changes which we may already have embraced, but still need to implement as a matter of political will and cooperative endeavor. □

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# Men Who Have Sex with Men: Continued Challenges for Preventing HIV Infection and AIDS

Since the first reports of AIDS were published, homosexual and bisexual men have been and will continue to be of major importance for the epidemic of HIV infections in this country. To date, more than 120 000 cases of AIDS have been reported in the United States among men who have had sex with other men.[1] According to one estimate, by April 1990 the cumulative number of HIV infections among homosexual and bisexual men was approximately 590 000, with an additional 40 000 cases among homosexual or bisexual men who also used intravenous drugs.[2] It is estimated that by the end of 1993, between 240 000 and 287 000 homosexual and bisexual men will develop AIDS, with 32 400 to 51 800 men developing AIDS during 1993 alone.[3]

Categorizing homosexual and bisexual men as a single group may be appropriate for AIDS surveillance purposes to indicate the most likely mode of HIV infection (male-to-male sexual contact); yet Chu and colleagues, in their article published in this issue of the journal, make the important observation that these men represent a diverse group.[4] On the basis of their review of Centers for Disease Control (CDC) AIDS surveillance data, the authors conclude that of those men who reported having sex with other men since 1977 (and on whom information concerning sexual contact with women was available), 26% were bisexual. Men defined as bisexual differed from men defined as homosexual in a number of important respects, including race/ethnicity and other risk factors for HIV infection such as use of intravenous drugs.[4]

In this analysis, men were defined as homosexual or bisexual on the basis of their history of male and female sexual partners since 1977, as reported on the AIDS case surveillance form. Reported sexual history (as indicated on the surveillance form), sexual behavior (including predominant or recent practices), and sexual identity are not necessarily synonymous, as the authors indicate. For example, men who were identified as bisexual may include men who are gay-identified but report a female partner at some time in the past, men who are bisexual and self-identified as such, and men who may consider themselves heterosexual but occasionally have sex with other men. One or more of these categories (as well as men who are exclusively homosexual) may include some men who have sex with other men in exchange for money.[5]

The total number of men who have sex with men has not been well established but appears to be considerable. According to one analysis based on a national survey, approximately 20% of men may have at least one same-sex encounter during their lifetime, with approximately 7% having such contact after the age of 19.[6] For this large and diverse group of men, there are several important public health challenges concerning the HIV epidemic.

**Editor's Note.** See related article by Chu et al. on page 220 of this issue.

One important challenge is the prevention of new HIV infection. Prevention efforts need to be sustained, and in a manner that is relevant for the target population to which they are addressed. Strategies for men who are gay-identified may be less relevant for men who are self-identified as bisexual or heterosexual. Intervention and education programs also need to be appropriate for different age, racial/ethnic, socioeconomic, and geographic populations. For example, one survey of 18- to 25-year-old gay men reported that a significant proportion had engaged in anal intercourse without a condom within the preceding 6 months.[7] This stresses the importance of additional research and prevention efforts for young men who have sex with men. As Chu et al.[4] report, 24% of homosexual and 42% of bisexual men with AIDS were black or Hispanic; therefore, prevention programs must specifically consider the social and cultural background of racial and ethnic minorities.

One group deserving continued attention are those men (including many men who are gay-identified) who have made major reductions since the beginning of the epidemic in high-risk sexual behaviors.[8,9] These changes have been positive and dramatic. However, recent reports of "relapse" to unsafe sexual practices among some of these men[10,11] indicate the importance of continuing prevention programs to reinforce risk reduction practices. For other men who have intermittently or continuously had unsafe contacts, or who only recently have become sexually active, other risk reduction strategies may be more appropriate. Continued behavioral and epidemiologic research is needed to better understand the diverse group of men who have sex with men (including bisexual men) in order to develop and evaluate the most effective interventions.

Preventing infection among bisexual men is also important for preventing infection in their female partners (and vice versa). For example, reports from Mexico and Brazil suggest that sexual contact with bisexual men may be responsible for many cases of HIV infection in women.[12,13] Therefore, educational messages for bisexual men should also stress prevention of heterosexual transmission.

For the many men who are already HIV infected, an additional set of prevention challenges exist. These challenges are to develop and provide necessary interventions to help prevent AIDS and other HIV-related complications. In this regard, knowledge of HIV antibody status is desirable so that those persons who are HIV positive can receive additional clinical and laboratory follow-up and recommended care.[14] This care includes monitoring of CD4+ lymphocyte counts, with (as appropriate) initiation of antiretroviral therapies with, for example, zidovudine,[15] prophylaxis against specific diseases such as *Pneumocystis carinii* pneumonia,[16] and other recommended interventions.

Just as programs to prevent HIV infection need to be appropriate for the diverse group of men who have sex with men, programs to prevent HIV disease among those who are already infected also need to reflect this diversity. For example, educational messages to encourage HIV antibody testing need to reach and be accepted by the entire spectrum of men who may be at risk for HIV infection. Counseling and social services to support those individuals who are found to be HIV positive should consider the cultural and economic background of these individuals as well as the background of their partners and families. Health care services to prevent HIV disease need to be available and affordable to be utilized.

Homosexual and bisexual men have been profoundly affected by the AIDS epidemic during the last decade. As the HIV epidemic continues to expand and evolve, it is vital that relevant and innovative research as well as prevention and assistance programs continue for these men. Public health needs for the next decade include programs to prevent new HIV infections and interventions to prevent HIV disease progression. Preventing HIV infection and HIV disease has obvious human benefits; in addition, given the expense and complexity of providing medical and other care for persons with AIDS, such interventions are beneficial in terms of cost and utilization of limited health care resources. Government and other health agencies should continue to work with community and private organizations to minimize the impact of this epidemic on all affected and at-risk populations, including the diverse group of men who have sex with men. □

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