



National Institutes of Health

Sex-Related Research at NIH Addresses Critical Public Health Issues

Sexual dysfunction has a major impact on individuals, families and society.

Sexuality and sexual relationships are an important part of the lives of most adults. About half of all married men, 18 to 59, report their relationship to be extremely satisfying emotionally and physically. Nevertheless, 43% of women and 31% of men suffered some form of sexual dysfunction during the past year, according to a 1999 report in the *Journal of the American Medical Association*, "Sexual Dysfunction in the United States: Prevalence and Predictors." Another study documented that 62 % of women suffering from sexual dysfunction had difficulty becoming aroused.

While 17 million men have obtained Viagra prescriptions for erectile dysfunction, producing \$1.5 billion in sales in 2001, the drug does not help a significant number of men. For women, there is far less that can be offered. Less is known about sexual arousal in women. Little wonder that a recent survey indicated that only 14% of doctors offered any treatment when women complained of sexual problems.

Dissatisfaction with sexual relations can double the likelihood of divorce.

Children grow up in broken homes as a result.

Sexual dysfunction can result from other medical conditions and from their treatment.

- More than a third of men with diabetes suffer erectile dysfunction.
- About 15% of men treated for high blood pressure experience erectile dysfunction -- and frequently quit taking their medication as a result.
- Similar side effects from drugs for depression cause as many as 90% of the affected patients to abandon their medication.
- The treatment of common cancers, including prostate and breast cancers, can result in sexual dysfunction in men and women.

More study urged by the Surgeon General.

Last year, the federal government published the *Surgeon General's Call to Action to Promote Sexual Health and Responsible Sexual Behavior*. It concluded that sexual health is a public health issue of great impact and requiring more attention. The report explicitly called for more federal investment in basic research into the neglected area of human sexual development.

In addition, 15 million Americans become infected with one or more sexually transmitted diseases (STDs) each year. Drug use increases the likelihood that an individual will engage in risky sexual behavior, which could increase STD infection rates even more. About half contract lifelong infections. Chlamydia infections and their subsequent problems cost Americans more than \$2 billion a year, while gonorrhea costs nearly \$1.1 billion.

The pelvic inflammatory disease that can result from these and other sexually transmitted diseases affects a million American women and may cause infertility in 10% of them. In other cases, STDs in pregnant women may cause congenital or perinatal infections that damage their children's brains, spinal cords, eyes and hearing for life.

The missions of several Institutes of NIH lead to their support of sex-related research. The type of research supported ranges from basic research on the development and physiology of sexual functioning to research on public health outreach to prevent potentially adverse outcomes of sexual behavior such as STDs.

More specifically, examples of areas receiving NIH support include:

- Normal psychosexual development
- Biological factors contributing to psychosexual differentiation and management regimens when differentiation is disrupted
- Animal studies examining brain mechanisms with the aim of reducing the adverse effects associated primarily of medication-induced sexual dysfunction
- Sexual functioning and quality of life among cancer survivors
- Sex hormone changes associated with weight-loss
- Preventing sexual abuse, especially among vulnerable populations, e.g. children and the elderly
- Clinical trials of interventions designed to delay initiation of sexual behavior among young men and women
- Decision-making regarding child-bearing and contraceptive use
- The health and medical consequences that can result from the interaction between drugs and sexual behavior, including the acquisition and transmission of infectious pathogens such as HIV/AIDS and STDs.

Today's Research - the basis for tomorrow's cures.

Sexuality and sexual relationships are an important part of the lives of most adults, but many suffer frigidity, impotence, sexually transmitted diseases, and unwanted pregnancies. Millions of Americans need preventive and therapeutic help. Problematic sexual relationships, sexual violence including rape, and other problem behaviors are also costly to individuals and to society. Solutions, preventive measures and therapies will only come about - as in other medical areas - through responsible research. The applications for research support from NIH and its Institutes are carefully screened by independent panels of experts to ensure their potential value and, when human subjects are involved, are reviewed and followed by community review boards of scientists and lay representatives of the community. These reviews ensure that today's research will form the basis - as it has throughout NIH's long history - for the preventive measures, public health campaigns, therapies and cures that will improve our functioning health tomorrow.