

CHAPTER 41

From the Doctor's Notebook

Sexual intercourse, like any activity, has consequences. In other sections of this book we cover the emotional, psychological and social aspects. Now we want to review the physiological dimension. The most obvious is the possibility of conception and pregnancy. Pre-marital and extra-marital sexual relations carry other risks as well, in particular catching a venereal or sexually transmitted disease (STD).

Sexually Transmitted Diseases

Fifty years ago there were two notable sexual diseases worldwide: syphilis and gonorrhea. Various other STDs were known only to the world of prostitutes. Today doctors have identified more than 25 kinds of STDs. Many, such as chlamydia, genital herpes, hepatitis B and human papilloma virus, have become commonplace among young people. These diseases range in their effects from minor discomfort to chronic pain to infertility and death.

Statistics show that *one in every four* Americans between the ages of 15 and 55 is living with an STD, two-thirds of them being under the age of 25. In Russia since 1990 the incidence of syphilis and other sexually transmitted diseases among teenagers has multiplied several-fold.

The reason for these dramatic statistics is the increase in promiscuity, particularly among young people. Having sex with someone is like having sex with that person's past sexual partners, too. You may think your partner is healthy, but how would you know if his or her past partners were also uninfected? It is impossible to know not only the history of one's sexual partner but also the history of his or her partners, and their partners, too—*ad infinitum*. The fact is that the enormous increase in STD infection makes it dangerous for anyone to have sex outside of marriage.

Here is a list and description of the most common STDs:

Chlamydia

In 1976 chlamydia was reported for the first time. Now it is the most common venereal disease in the United States. There is evidence that up to a third of all sexually-active teens are already infected with this disease. Chlamydia can cause infection of the uterus, fallopian tubes and ovaries. This infection can cause scarring and lead to infertility and painful intercourse even after the acute infection has been treated with antibiotics. In having sex with a chlamydia-infected partner, a person has a 50% chance of contracting the disease.

Genital Herpes

This disease became common in 1984 and today affects more than 30 million Americans. It causes cold sores, ulcers, headaches, fever and genital discharge. No

cure has been found, so once you have it you have it for life. Imagine having to tell the person you want to marry that you have an incurable venereal disease. Infection with herpes also threatens the unborn, because an outbreak during pregnancy carries a 60% risk of infecting the child, which often leads to death or severe brain damage.

Syphilis

This is one of the oldest STDs, having been known since the late 15th century. It is a bacterial disease that can be cured by penicillin. It was on the decrease, but its incidence has dramatically increased during the last decade. The disease develops in three stages. The first is rather mild and leads to a painless ulcer. The second stage, which develops anywhere from three weeks to six months later, is a flu-like illness followed by a latency period (which may last several years) during which the bacteria spreads. In the third stage there is a breakdown in the blood and nervous systems, often leading to insanity, paralysis and death. An infected pregnant woman can pass it on to her unborn child, causing meningitis, deformities or stillbirth.

Gonorrhea

Gonorrhea is also a bacterial disease. It usually causes an acute inflammation of the genital passages. Sometimes there are no symptoms while the disease progresses within the body. It is extremely infectious, and in women it can also spread to the uterus and fallopian tubes, causing infertility. It is now the primary cause of arthritis in young adults. In the past it could be cured by penicillin, but recently a number of resistant strains have developed, making its treatment increasingly difficult. Today one out of ten sexually active teens is infected.

Pelvic Inflammatory Disease

This disease, a more generalized infection of the female organs caused by chlamydia and gonorrhea, infects more than one million women annually, 30% of whom are teenagers. Because scarring from the pelvic infection prevents normal passage of fertilized eggs to the uterus, it is the most rapidly increasing cause of infertility among women today.

Human Papilloma Virus

This virus infects up to half of certain groups of unmarried sexually active people. It causes venereal warts which can lead to painful intercourse as well as greatly increased risk for precancerous growths and cervical cancer. Women who have venereal warts are 1,000 to 2,000 times more likely to get cervical cancer than those without the warts.

Medical research has indicated that there are a number of risk factors that increase a person's chance of contracting an STD. They are:

- ✗ Beginning sexual activity at an early age.
- ✗ Having many sexual partners.
- ✗ Having sex with someone who is promiscuous.

HIV/AIDS

In the late 1970s doctors in the United States began to encounter patients with rare diseases who seemed to have severely damaged immune systems. In 1981 they gave this disease the name AIDS, Acquired Immune Deficiency Syndrome. The term "acquired" indicates that AIDS is a disease that one contracts from someone else. The disease was first discovered mainly among homosexual men and drug abusers. In



Typical Opportunistic Diseases Associated with AIDS

- *Parasitic infections* of the mouth and intestine, leading to diarrhea and severe weight loss, loss of teeth, open sores in the mouth.
- *Viral infection* of the retina leading to blindness.
- *Lung infections* such as pneumonia (developed by half of all AIDS patients) and tuberculosis (developed by a third).
- *Neurological disorders* including the progressive destruction of the tissues of the brain and spinal column.
- Various forms of *cancer*, such as Kaposi's sarcoma, causing extremely painful tumors and swellings.

1984 researchers found that the disease was being caused by a virus, which they called the Human Immunodeficiency Virus, or HIV.

HIV/AIDS sufferers can now be found in every country of the world. Currently worldwide it is estimated that 40 million people are living with HIV/AIDS, while more than 16 million have already died from this disease. That number is currently increasing at the rate of three million each year. AIDS has become the fourth-leading cause of death in the world. The World Health Organization has called HIV/AIDS the worst epidemic in human history. Every day 16,000 new people are being infected by HIV. The latest forecast is that AIDS will claim an additional 65 million lives by the year 2020.

When the HIV virus enters the body, it begins to multiply by taking over white blood cells, which are supposed to defend the body, and turns them into carriers of the virus. During this stage, although a person looks healthy, he or she is able to infect others with the virus.

In the second stage of the disease, which may not arrive until several years later, clearer symptoms appear. These may include weight loss, diarrhea and extreme fatigue. The virus is still multiplying, in the process damaging and destroying the immune system—the organs, cells and tissues of the body that fight off disease and infection. The immune system eventually becomes so weak that the person cannot fight off even a mild illness like a cold or chicken pox.

At this point the disease moves into its third stage, during which the person in his or her weakened state may contract one or a number of so-called "opportunistic" diseases from which he or she will die. The evidence is that most people who contract HIV will go on to develop AIDS, and most these will die within three years. Despite decades of research and billions of dollars of investment, no cure or even an effective vaccine is yet in sight.

How is HIV/AIDS spread?

In reality, the HIV virus is rather weak and can survive only in body fluids. Therefore, any behavior that involves the exchange of body fluids is a risk. The main sources of infection are:

- ✗ Sexual relationships (more than 80% of the cases worldwide)
- ✗ Shared needles by drug abusers (5%)
- ✗ Blood transfusions
- ✗ Infected mothers passing on the virus to newborn babies

By far the most common way that HIV is being transmitted worldwide is through promiscuous sexual behavior. Prostitutes in particular are notorious for carrying the HIV virus—in some cities up to 80-90% are known to be infected. However, any type of promiscuous behavior places a person at risk. What began as a



"homosexual" disease in recent years has spread rapidly into the heterosexual world through premarital and extramarital affairs.

Another far less common way that HIV is being transmitted is through drug abusers who share needles on which there remain tiny particles of blood contaminated with the virus. There have been cases of patients in hospitals contracting the virus from transfusions of unchecked donated blood, although with increased vigilance these types of cases have been drastically reduced. Tragically millions of babies have been infected by their own mothers who were carrying HIV. Fortunately there is no evidence that someone can be infected by casual contact with someone carrying the AIDS virus.

Do contraceptives protect against STDs?

Not completely. The contraceptive that has been most promoted is the condom, which is actually designed to prevent the transmission of sperm. Thus, the pores of a condom membrane are smaller than sperm but many times larger than HIV and other viruses that cause STDs. In addition to this, condoms often leak and as is the case with many STDs do not cover the genital area affected. Because of these factors, we cannot responsibly say that condoms present an effective barrier to STDs. For instance, several studies conducted in the 1990s showed that, even with consistent condom use, sex between couples in which one partner is infected with HIV results in the infection of the other partner in about one-fourth of the cases on average. Even in preventing pregnancy, for which they were originally designed, condom failure rates have been shown to be between 13-27% for those under 20 years of age.

Who is at risk?

STDs, including HIV/AIDS, are behavior-related diseases. Therefore, they are among the most avoidable diseases in the world. People most at risk are those who engage in casual sex or have sexual relationships outside marriage, homosexuals, and intravenous drug users.

Although all the above are diseases that affect the physical body, they also affect a person's psychological well-being. A person who has an STD is likely to feel guilty, angry, resentful, ashamed and suffer from low self-esteem. Those people who know they have such a disease but continue to engage in sex are committing a serious crime, since their behavior may lead to the death or severe illness of their partners.

What can I do?

If you do not want to contract an STD, avoid high-risk behavior, which includes sex outside marriage as well as casual sex and drug abuse. If you have not had a sexual experience, keep it that way. Don't let anyone convince you that "it won't happen to you" if you start having sex.

If you have had sex, or taken drugs using a shared needle, then you are already at risk. The first thing to do is STOP. Then you should consult a doctor to get a health check. A doctor usually will be able to tell you if you are infected or not. If not, thank your lucky stars and make a new start.

If you are infected, at least you can face the future honestly. In order to stop spreading the disease, you should not have sexual relations with anyone. Some STDs can be cured. Although AIDS itself has no cure, you may be able to receive treatment for some of the opportunistic diseases. With a healthy diet and by abstaining from alcohol and cigarettes, you can avoid additional strain on your immune system.

Individual Exercise



Listed below are some statements about STDs. Which are true and which are false? If a statement is false, write a correction.

1. Usually you can tell if a person has syphilis just by his or her physical appearance.
2. STDs can be reliably detected through a simple blood test.
3. Only homosexuals and drug users are really at risk from AIDS.
4. STDs are now so widespread that almost anyone can get one of them.
5. Having sex with just one boyfriend or girlfriend is not a high-risk behavior, especially if you always use a condom.
6. Only less than half of people who are infected with the HIV virus will develop full-blown AIDS.
7. There have been several reported cases of AIDS being transmitted simply by hugging and kissing.
8. The risk of contracting an STD can be greatly reduced by the behavior we choose.