

Gonorrhea: A Very Common Infectious Disease

Background:

- ❖ Gonorrhea is a curable sexually transmitted infection caused by the bacteria *Neisseria gonorrhoeae*, a bacterium that can easily grow and multiply.
- ❖ It is transmitted during vaginal, anal, and oral sex, and the bacteria can infect the genital tract, mouth, and rectum of both men and women. The bacteria are carried in semen and vaginal fluids and cause a discharge. Ejaculation does not have to occur for gonorrhea to be transmitted. It can also be transmitted from a mother to a baby during delivery.
- ❖ According to the CDC, it is the second most commonly reported disease in the United States.
- ❖ The symptoms are most likely to appear within 2 to 10 days after sexual contact with an infected partner. In both men and women, symptoms of rectal infection usually include discharge, anal itching, and occasional painful bowel movements with blood in the feces and usually appear 2 to 5 days after infection, but could appear as long as 30 days. The symptoms in men usually appear within 2 to 5 days after infection, with a possible range targeting from 1 to 30 days. Men experience symptoms more often than women. They include: White, yellow, or green pus from the penis with pain, burning sensations during urination that could be severe, and swollen testicles. Most women are asymptomatic and the early symptoms of gonorrhea are usually mild. Small numbers of people could be infected for several months and experience no signs of symptoms. Women can experience initial symptoms such as: Bleeding associated with vaginal intercourse, painful or burning sensations when urinating, and yellow or bloody vaginal discharge. Women could also experience more advanced symptoms, which could indicate the development of pelvic inflammatory disease and include cramps and pain, bleeding between menstrual periods, vomiting, or a fever.
- ❖ Health care providers usually use three main laboratory techniques to diagnose gonorrhea. The use of more than one test increases the chance of a more accurate diagnosis. (1) A sample could be obtained for testing from the parts of the body most likely to be infected, such as the cervix, urethra, rectum, or throat, and the sample is sent to a laboratory for analysis; (2) A urine sample could also be tested in a laboratory for gonorrhea that is present in the cervix or urethra; (3) A fast laboratory test can be done in certain clinics or doctor's offices is a Gram stain. A sample from a urethra or a cervix from a Gram stain allows doctors to see the

gonorrhea bacterium under a microscope. This works better for men than for women.

- ❖ Gonorrhea could be treated and health care providers usually prescribe a single dose of antibiotics. The most common antibiotics used to treat gonorrhea include: Cefixime, ceftriaxone, ciprofloxacin, ofloxacin, and levofloxacin. Pregnant women, or people younger than 18 years old should not take ciprofloxacin or ofloxacin, but health care providers will provide the safest and best antibiotic for each individual patient.
- ❖ If left untreated, gonorrhea could cause complications, such as pelvic inflammatory disease and infertility. In untreated infections the bacterium could spread into the reproductive tract and very rarely can spread into the blood stream and infect the joints, heart valves, or the brain. Inflammation of the joints could occur when spread through the blood stream into the joints, which is very serious. When gonorrhea is left untreated in men it can cause epididymitis, which is a painful condition of the testicles that can lead to infertility, and it also affects the prostate gland and causes scarring in the urinary canal. The most common complication from gonorrhea left untreated is pelvic inflammatory disease (PID), which is a serious infection of the female reproductive tract. PID causes scar tissue to form on the fallopian tubes and if the tubes are even partially scarred, the fertilized egg may not be able to pass to the uterus. When this does happen the embryo may implant in the tube causing a tubal or ectopic pregnancy, which may result in a miscarriage and could cause death of the mother.

Statement of the Problem:

- ❖ The goal stated in Healthy People 2010 is to “Promote responsible sexual behaviors, strengthen community capacity, and increase access to quality services to prevent sexually transmitted diseases (STDs) and their complications” (Healthy People, 2006).
- ❖ Issues stated in Healthy People 2010: “A 1997 Institute of Medicine (IOM) report characterized STDs as “hidden epidemics of tremendous health and economic consequence in the United States” and stated, “STDs represent a growing threat to the Nation’s health and that national action is urgently needed” (Healthy People, 2006).
- ❖ Sexual behavior objectives in Healthy People 2010 are “to increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active and to increase the proportion of sexually active persons who use condoms” (Healthy People, 2006).
- ❖ According to Healthy People 2010, “Prevention opportunities arise from an understanding of STD transmission dynamics. The rate of STD infection in a population is determined by the interaction of three principal factors: (1) The rate

at which uninfected individuals have sex with infected persons (rate of sex partner exchange or exposure, (2) The probability that a susceptible exposed person actually will acquire the infection (transmission), and (3) The time period during which an infected person remains infectious and able to spread the disease to others (duration). Effective STD prevention requires effective population-level and individual level interventions that can alter the natural course of these factors. IOM advised in its report, “Use of available information and interventions could have a rapid and dramatic impact on the incidence and prevalence of STDs in the United States. Many effective and efficient behavioral and biomedical interventions are available” (Healthy People, 2006).

- ❖ Some behavioral interventions include giving further attention to helping parents to become better at imparting STD information, a small percentage of adolescents are currently receiving STD information from parents, schools are the main source of STD information for most teenagers, and school-based health information as well as school-based health service programs are potentially beneficial to young persons.
- ❖ Some biomedical interventions include minimizing the probability of infection, disease, or both, after exposure due to vaccines.
- ❖ According to Healthy People 2010, “National communication efforts are needed to help overcome widespread misinformation and lack of awareness about STDs” (Healthy People, 2006).

Epidemiological Picture:

- ❖ According to Healthy People in 1996, 650 thousand estimated new cases of gonorrhea occurred in the United States.
- ❖ According to Healthy People 2010, 123 new cases of gonorrhea per 100,000 population occurred in 1997 and the target is 19 new cases of gonorrhea per 100,000 population in 2010.
- ❖ Any sexually active person can be infected with gonorrhea. (CDC, 2006)
- ❖ In the United States, the highest reported rates of people infected with gonorrhea are among sexually active teenagers, young adults, and African Americans. (CDC, 2006).
- ❖ CDC estimates that more than 700,000 persons in the United States get new gonorrheal infections each year. While only about half of these infections are reported to CDC (CDC, 2006).
- ❖ According to CDC, “In 2002, 351,852 cases of gonorrhea were reported to CDC” (CDC, 2006).

- ❖ “In the period from 1975 to 1997, the national gonorrhea rate declined, following the implementation of the national gonorrhea control program in the mid-1970s. After a small increase in 1998, the gonorrhea rate has decreased slightly since 1999. In 2002, the rate of reported gonorrheal infections was 125.0 per 100,000 persons” (CDC, 2006).

Solutions:

- ❖ **Planned Parenthood of Connecticut** (www.ppct.org/medical/healthservices_intro.htm)

For over 80 years, the mission of Planned Parenthood of Connecticut has been “to protect the fundamental rights of all individuals to manage their own fertility and sexual health, and to ensure access to the services, education and information to realize that right” (Planned Parenthood of Connecticut, 2006). Over 58,000 men and women received medical services provided by Planned Parenthood in 2004. With Community Education & Outreach programs, Planned Parenthood’s Education & Training Department has reached over 16,000 people. They also had over 1,000 political advocates help them at the March for Women’s Lives in Washington, which assisted them in getting the vote out in November. In Connecticut alone, Planned Parenthood has 19 health centers that distribute affordable and high quality medical care as well as skilled and compassionate staff members whom are specialists in the reproductive health care areas and in women’s issues. Planned Parenthood offers gynecological exams, birth control methods, special services for men and women, and the testing and treatment of HIV, STDs and other infections. They test for and are able to treat sexually transmitted diseases that include chlamydia, gonorrhea, trichomonas, herpes, and genital warts, but they also will test for syphilis and HIV with treatment only by referral from the patients. For women, they offer tests and treatment options for vaginal infections like yeast infections, bacterial vaginosis, urinary tract infections, and bladder infections, which may sometimes result from a sexually transmitted disease.

- ❖ **American Social Health Association** (www.ashstd.org)

Since 1914, the American Social Health Association “has been dedicated to improving the health of individuals, families and communities, with a focus on sexually transmitted diseases and infections” (American Social Health Association, 2006). They are a non-profit organization as well as America’s authority for sexually transmitted diseases. They develop and deliver accurate and medically reliable information about STDs and for this the public, their patients, and providers, along with policy makers, recognize them. Across the United States, the American Social Health Association provides educational pamphlets and books to give to clients and students at public and college health clinics. In order to help correspond information about the risks, transmission, prevention, testing, and treatment of STDs, community-based organizations rely on the American Social Health Association as well. They will help people get the support, the facts, and the answers to important questions that are much needed. They also will help people find referrals, join support groups, and find thorough information

about STD's. They provide testing and treatment for various STDs and infections caused by STDs, such as, chancroid, chlamydia, crabs, gonorrhea, hepatitis, herpes, HIV and AIDS, the human papillomavirus, molluscum contagiosum, NonGonococcal Urethritis, pelvic inflammatory disease, scabies, syphilis, vaginitis and trichomoniasis.

❖ **The Division of STD Prevention and Control Program**

(http://dchealth.dc.gov/doh/cwp/view.a.1373.q.582949_dohNav_GID.1801.dohNav,%7C33183%7C33189%7C,.asp)

The Division of STD Prevention and Control is located in Washington, DC at the DC General Hospital. The mission of the Division of STD Prevention and Control Program “is to interrupt the spread of sexually transmitted diseases (STDs) – with an emphasis on gonorrhea and syphilis. Their long-term goal is to lower the incidence and prevalence of STD's by integrating clinical services; epidemiology; the Laboratory Reactor Program; the Gonorrhea Screening Program; the Chlamydia Screening Program; and the Information and Education Program” (Division of Sexually Transmitted Disease Control, 2006). The Division of STD Prevention and Control Program offers a variety of services, such as testing, examination, and treatment, confidential counseling, contact tracing, partner notification, statistical analysis reporting, and follow up. They also offer several 24-hour hot lines to help patients with questions pertaining to different sexually transmitted diseases. The staff provides regular STD testing and treatment as well as examinations and diagnoses for syphilis, gonorrhea, chancroid, granuloma Inguinale and lymphogranuloma, and venereum, along with other sexually transmitted diseases and infections. They also provide routine follow-up appointments to assure the health of their patients.

Additional Internet Resources:

American Social Health Association. (1999-2006) *Learn About STIs/STDs: Gonorrhea Fast Facts*. Retrieved March 29, 2006, from http://www.ashastd.org/learn/learn_gonorrhea_fact.cfm

Behrman, A. (2005, November 21) *eMedicine: Gonorrhea Article*. University of Pennsylvania School of Medicine. Retrieved April 1, 2006, from <http://www.emedicine.com/EMERG/topic220.htm>

CDC Department of Health and Human Services: Centers for Disease Control and Prevention. (2004) *Sexually Transmitted Diseases: STD Surveillance 2004 National Profile of Gonorrhea*. Retrieved March 29, 2006, from <http://www.cdc.gov/std/stats/gonorrhea.htm>

Bibliography:

American Social Health Association. (1996-2006) *About ASHA: Welcome*. Retrieved March 29, 2006, from http://www.ashastd.org/about/about_overview.cfm

CDC Department of Health and Human Services: Centers for Disease Control and Prevention. (2004, May) *Gonorrhea – CDC Fact Sheet*. Retrieved March 29, 2006, from <http://www.cdc.gov/std/Gonorrhea/STDFact-gonorrhea.htm>

Division of Health: Welcome to Washington. (2006). *Division of Sexually Transmitted Disease Control*. Retrieved March 25, 2006, from http://dchealth.dc.gov/doh/cwp/view,a,1373,q,582949,dohNav_GID,1801,dohNav,%7C3183%7C33189%7C,.asp

Healthy People 2010: Midcourse Review. (2006). 25-2. *Gonorrhea: Bacterial STD Illness and Disability*. Retrieved March 27, 2006, from <http://www.healthypeople.gov/data/midcourse/comments/faobjective.asp?id=subid=2>

Healthy People 2010. (2006). 25 *Sexually Transmitted Diseases: Goal, Overview, Issues, and Opportunities*. Retrieved March 27, 2006, from <http://www.healthypeople.gov/document/html/volume2/25stds.htm>

National Institute of Allergy and Infectious Diseases: National Institutes of Health, U.S. Department of Health and Human Services. (2004, October). *Gonorrhea*. Retrieved March 25, 2006, from <http://www.niaid.nih.gov/factsheets/stdgon.htm>

Planned Parenthood of Connecticut, Inc. (2005). *Planned Parenthood of Connecticut Mission Statement*. Retrieved March 29, 2006, from <http://www.ppct.org/who/aboutppc.shtml>

Back to Betty C. Jung's Web site	http://www.bettyjung.net/
Back to Fact Sheet Directory	http://www.bettyjung.net/Pch202fs.htm