HIV/AIDS REFERENCE LIBRARY FOR NURSES VOLUME 8

TEACHING MODULES FOR CONTINUING EDUCATION IN HUMAN SEXUALITY

WORLD HEALTH ORGANIZATION
Regional Office for the Western Pacific
Manila

HIV/AIDS Reference Library for Nurses

TEACHING MODULES FOR CONTINUING EDUCATION IN HUMAN SEXUALITY

volume 8

These modules are designed for use by teachers

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FOREWORD

Nurses and other health care workers are often required to help people overcome problems related to sexual matters. Maintenance of good health does not always protect people from sexual problems. Professionals may be faced with questions about family planning, fertility regulation methods and pregnancy or concerns about sexual functioning. Clients may have sexually transmitted diseases or be at risk of contracting them. In particular, human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS) cause great concern about sexual practices.

To be effective, those providing health services must understand their own feelings and be comfortable talking about sexual matters. It is important to be able to understand and help clients whose sexual preference, culture or lifestyle differs significantly from their own. A good rapport depends on the health care worker's professional ability to create a comfortable atmosphere and have a non-judgemental discussion with the client. Health care workers are best able to help people with sexual problems if they are knowledgeable about, and comfortable with, the topic of human sexuality.

Instructors are faced with the challenge of teaching student health care workers about human sexuality. This can be difficult because sexuality is a taboo subject in many cultures. Students may not be aware of how their own ability to give help or care to others is affected by these taboos. For example, in many cultures, people do not talk openly about sexuality or about sexual practices prevailing in their communities.

The use of the *Teaching Modules for Continuing Education in Human Sexuality* may help health care workers to deal more confidently with sensitive sexual issues. The modules may also improve their communication and counselling skills to better perform their role as community educators and motivators in a variety of fields such as family planning, sexually transmitted disease and HIV/ AIDS.

These teaching modules are designed to enable teachers of students in the field of health services to discuss human sexuality with confidence. They are specifically designed to help health care professionals examine their attitudes, feelings and beliefs about sexuality and give an opportunity to experience talking out loud about different aspects of sexuality. When using these modules the teachers should have greater confidence in teaching sexual history taking and counselling about sexuality.

This booklet is not meant to be a replacement for courses on human reproduction, birth control, fertility, family values or sexual responsibility. All these topics can be adequately covered in other classes. The influence of religion and spirituality on sexuality have not been exhaustively covered in these teaching modules, since our aim is to present the clinical view of sexuality and not the moral aspects. The modules will help teachers of health care professionals become comfortable teaching their students about sexuality.

S.T. Han, MD, Ph. D.
Regional Director

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PREFACE

The original *Teaching Modules for Basic Nursing and Midwifery Education in the Prevention and Control of HIV Infection,* developed in 1988, have been successfully adapted, implemented and well-evaluated in Member States in several WHO Regions.

As more and more feedback was received from those who had used this material, WHO Global Programme on AIDS decided in 1992 to rewrite and update all of the modules. Discussions took place with nurses and nursing educationalists in several countries in the WHO Regions. As a result of these discussions and, as technical and scientific knowledge increased, the modules were re-developed by nursing educationalists at the Riverside College or Health Studies (North West Thames Regional Health Authority AIDS Education Unit) in London, United Kingdom.
December 1995

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ACKNOWLEDGEMENTS

The HIV/AIDS Reference Library for Nurses series has benefited from the expertise and dedication of many nurse researchers, writers, educators and administrators who developed much of the material, as well as consultants and participants to several WHO Western Pacific Regional workshops in 1988 and 1989.

The WHO Regional Office for the Western Pacific HIV/AIDS Reference Library for Nurses was the result of efforts by nurses in the Western Pacific Region and other health care workers around the world in their attempt to stop the spread of HIV infection through the improvement of their understanding of the problem, its control and management.

It is our hope that these books will contribute to nursing services throughout the Western Pacific Region in the prevention and control of AIDS.

INTRODUCTION

Human sexuality and sexual health

Sexuality is an important aspect of the human personality and is inextricably woven into the fabric of human existence. There are few people for whom sex has not been important at some time. Sexuality is a quality of being human; it is a powerful and purposeful aspect of human nature and it is an important dimension of our humanness.

Sexuality is more than just overt sexual behaviour; it spans and underlies the complete range of human experience and contributes to our lives, and to the lives of our clients, in many ways. A healthy or positively developed sense of sexuality:

- enables many people, through children, to establish a link with the future;
- provides a means of physical release and sexual pleasure;
- binds people together;
- allows us to communicate subtle, gentle, or intense feelings;
- provides a sense of self-worth when sexual experiences are positive;
- and is also one of those factors that builds an individual's identity.

Defining sexual health is as difficult as defining the concept of health itself. The concept of sexual health, used in these modules, stresses that sexual health is not just about the issue of sexually transmitted diseases. Concepts important in defining sexual health often include characteristics, such as the need for and the importance of: having a knowledge about sexual phenomena and a positive body image; having a self-awareness about one's attitude to sex and an appreciation of one's feelings about sexuality. It also includes having a well-developed, usable value system that provides input for sexual decision-making and having the ability to create effective relationships with members of both sexes. And finally, most definitions would stress the importance of having some degree of emotional comfort, interdependence, and stability with respect to the sexual activities in which they participate.

The following definition of sexual health is presented as a step towards a definition of sexual health.

Sexual health is the integration of the emotional, intellectual, and social aspects of sexual being, in ways that are positively enriching and that enhance personality, communication, and love.

...thus the notion of sexual health implies a positive approach to human sexuality, and the purpose of sexual health care should be the enhancement of life and personal relationships and not merely the counselling and care related to procreation or sexually transmitted diseases.[1]

[1] Source: *Education and treatment in human sexuality: the training of health professionals. A report from a WHO meeting.* Geneva, World Health Organization, 1975 (WHO Technical Report Series, No.572). (N.B. The above quotation is included as the definition of sexual health in the ICPD document Para. 7.1).

Nurses often ask, quite rightly: "Why do health care professionals need to be concerned with sexual health?" The answer is because nursing has traditionally been concerned with the total person. Nursing has a holistic view of clients, and, as sexuality is a basic human need, it is an essential focal point of nursing care. The promotion of sexual health is a legitimate role for the nurse.[2]

Unfortunately, the exploration of sexual health in many pre- and post-registration nursing education programmes is frequently inadequate. Teachers of nursing are often unprepared and unskilled in promoting learning experiences focused on human sexuality and sexual health. Consequently, nurses are often uncomfortable with both their own sexuality and that of their clients. For most nurses, the sexual needs, problems or concerns of their clients are anxiety-producing, embarrassing and uncomfortable topics that are best left alone and ignored.

The continuing demand by nurses for teaching support within the arena of human sexuality confirms the need to provide health care professionals opportunity to discuss and explore areas of human behaviour which were ignored during their formal educational preparation. This failure to incorporate and integrate human sexuality into nursing curricula is not unique to any country .In most parts of the of the world, where all forms of sexually transmitted diseases, including HIV infection, continue to exist as an important threat to health and well being, AIDS training has, for the first time, legitimized teaching and learning focused on human sexuality. Training needs analysis consistently demonstrates that an area of intense need is to provide a safe environment in which to legitimize teaching and learning opportunities focusing on human sexuality. This is true in Europe and North America and has also been found to be true in Africa and India. Here is the paradox; where the need is greatest, the smaller are available learning resources. These teaching modules attempt to help meet this need for reliable, accurate and adaptable teaching materials, which can be made sensitive to the culture in which they are being used.

[2] Fogel CI, Lauver D. *Sexual health promotion,* Philadelphia, USA, W .8. Saunders, 1990.

These teaching modules were originally conceived and developed by the World Health Organization Regional Office for the Western Pacific (WPRO) in 1992 as an important part of their HIV / AIDS Reference Library for Nurses. In 1994, they were partly re-written and updated on behalf of the WHO Regional Office for the Western Pacific by educational specialists at the Centre for Sexual Health and HIV Studies, in the School of Health and Science at Thames Valley University, London.

MODULE 1
SEXUALLY TRANSMITTED DISEASES

General objective

On completion of this module, the student will understand the causes of and treatments for the major sexually transmitted diseases (STD), and be able to plan prevention strategies for individuals and communities.

Learning outcomes

On completion of this module, the student will be able to:

- list the most prevalent sexually transmitted diseases, with their causes, methods of transmission, and treatments;
- discuss which of these diseases are most prevalent in their own communities;
- design and plan a strategy for prevention of STD for an individual; and
- discuss ideas for STD prevention activities in a community .

Introduction

One of the major barriers to sexual health is the existence of sexually transmitted diseases (STD). Since eradication of all STD is an unrealistic solution, learning and teaching ways to prevent these diseases is an effective way of promoting sexual health.

This module will present an overview of the cause, course of disease and general treatment for the most prevalent sexually transmitted diseases. Prevention strategies will be discussed at length. People who do STD prevention activities need to be very comfortable talking about sexual behaviours. The information and exercises in Module 2 will help health care professionals become more knowledgeable and comfortable.

Learning activities

Learning activity 1. *What are sexually transmitted diseases? How are they spread and treated?*

Sexually transmitted diseases (STD) are infectious diseases that can be spread from person to person through close sexual contact. Some can also be spread in other ways. Some affect only the genitals and others affect other parts of the body also. Some STD can be very serious (even life threatening), while others might be only uncomfortable and annoying. No matter what the disease is, it is a threat to sexual health, and it is the responsibility of health care workers to treat STD and promote their prevention. Some STD are described below.

STD are a threat to sexual health

Vaginal infections

There are some vaginal infections that can be spread by sexual contact, but which can also have other causes. They are very common. One of the most important factors in the development of these infections is the pH (or level of acidity) of the vagina. When the pH is more alkaline, certain organisms can grow more rapidly and can cause problems. Some causes of vaginal alkalinity are hormone levels (birth control pills or pregnancy), douching, oral antibiotics, panty-hose, nylon underpants, menstruation, stress, lack of sleep or presence of semen in the vagina.

Vaginal alkalinity predisposes to infections.

Candidiasis

Most women' s vaginas carry the fungus, candida albicans, that causes this condition all the time. When the chemical balance of the vagina changes (with douching, taking some antibiotics, or just before the menstrual period) the candida might grow faster and cause symptoms. There can be a white, cheese-like discharge, and itching, burning and red irritation of the vagina and vulva. Men can have itching and irritation of the penis and the yeast can live under the foreskin of an uncircumcised male. This fungus also lives usually in the mouth and in the intestine. Sexual partners can pass the organism to each other during intercourse or oral-genital sexual activities. Sexual activity is not necessary, however, to contract the initial colonization of yeast. Candidiasis is also known as moniliaisis or yeast infection. It can usually be easily treated with antifungal vaginal suppositories or creams (clotrimazole is the most common). Women who are immunocompromised may need repeated or more aggressive treatment.

Trichomoniasis

The *Trichomonas* organism is usually spread during sexual intercourse. It is a protozoan that can live for several hours in water or on a moist surface outside the body, so it is possible (but not common) for it to be spread in bath or swimming water or on toilet seats or wet towels. In the woman, symptoms are often uncomfortable. There is an abundant white or yellowish, frothy discharge. The discharge has a bad smell. The vagina and vulva are usually irritated, inflamed, itchy and sore. The male harbors the organism under the foreskin, or in the urethra. He may have a small amount of white discharge, itching or burning, but men are usually symptom free. It is important for all the sexual partners of the infected individual to be treated at the same time, since the organism can be continuously passed back and forth. Treatment is the oral administration of metronidazole.

Bacterial vaginosis

Gardnerella vaginalis, the organism that causes bacterial vaginosis, often lives harmlessly in the vagina. When the vagina becomes alkaline, it can overgrow and become an infection with uncomfortable symptoms. This organism can also live in the urethra or under the foreskin of the man.

Women with bacterial vaginosis often have a thin discharge. The discharge is usually grey, but can be white, yellow or green. There is a bad, fishy smell with this discharge. There can also be irritation of the vagina and vulva. Men might also have some irritation of the urethra (causing burning on urination), foreskin or glans.

Treatment for this infection is the oral administration of metronidazole. As with *Trichomonas,* all sexual partners should be treated at the same time.

Bacterial vaginosis is not always transmitted sexually. The pH of the vagina determines whether or not the organisms grow enough to cause infections. Wearing cotton underwear, washing the genitalia daily or before intercourse, changing tampons or pads frequently, douching only under care providers, instruction, and limiting use of antibiotics can help prevent these infections.

Gonorrhoea

Gonorrhoea is a very common infection of the sexual organs. It is also known as "the clap". Its incidence is not well documented in countries of the Western Pacific Region but is estimated to be very high. It is a big problem because it is easily spread sexually and can have severe complications if not properly treated.

Neisseria gonorrhoeae (gonococcus) is the bacterium that causes gonorrhoea. It is spread from person to person through sexual activities. It infects the mucous membranes of the urethra, the cervix, the throat, the rectum or the conjunctiva (the covering of the eye). It can therefore be passed on through many activities. It is most commonly spread through vaginal or anal intercourse. When someone touches their infected genitals, then touches their eyes, it can spread to the conjunctiva. Babies can get gonorrhoea of the eyes during birth while passing through an infected cervical opening. Gonnorhoea can be passed to someone's throat during fellatio or cunnilingus. It is not easily passed through mouth kissing.

Gonorrhoea is highly infectious and spreads easily and rapidly.

There can be serious complications to gonococcal infections when they are not promptly treated. In the eye, scarring of the conjunctiva can cause blindness. In men, the infection can spread to the testicles (epididymitis) and cause pain and sterility. In women it can spread from the cervix to the Bartholin's or Skene's glands causing pain and abscesses. It can also spread through the uterus to the Fallopian tubes causing pelvic inflammatory disease (PID). This infection can be very serious, leading to high fevers and sometimes death. Later, women can have ectopic pregnancies and often become sterile. Sometimes the infection can spread through the abdominal cavity to cause perihepatitis

(infection around the liver). If the gonococcus organisms get into the blood stream, the infection becomes disseminated. Then it can show up in the skin and joints (gonococcal arthritis-dermatitis syndrome). It can even cause bacterial endocarditis (heart infection), meningitis (infection of the tissues around the brain) or hepatitis (liver infection).

In men, the signs and symptoms of gonorrhoea are fairly easy to recognize. Two to five days after becoming infected, the man will usually have burning of the urethra and difficulty urinating. There will be green or yellow discharge (called "a drip") from his penis. In anal gonorrhoea there is often itching, pain and anal discharge.

Gonorrhoea often goes unnoticed in women and can cause serious complications when left untreated.

Gonorrhoea is less obvious in women. It takes five to ten days for symptoms to appear in cervical infection. There may be some vaginal discharge or even burning on urination, but often there are no symptoms at all. There is often yellow or green drainage from the opening in the cervix, but the woman may not be aware of this. Sometimes the Bartholin's or Skene's glands Gust inside the vagina) are tender or pus can be milked from them. Sometimes the cervix or uterus are tender and there may be some abdominal discomfort. It is often difficult to diagnose gonorrhoea in women, and complications happen often. Since women may not have any indication that there is something wrong, they can easily spread the infection to their sexual partners without knowing it.
Prompt treatment of gonorrhoea is very important. Penicillin used to be used effectively to treat it, but now there are many strains of gonococcus that have developed resistance to penicillin. These days ceftriaxone intramuscular injection (one dose), or spectinomycin intramuscular injection (one dose) are the treatments of choice for uncomplicated gonorrhoea. Doxycycline, tetracycline or

erythromycin are also used to cover the possibility of concurrent *Chlamydia* infection. All recent (one week before appearance of symptoms) sexual partners should also be treated.

Syphilis

The numbers of cases of syphilis have been getting larger every year all over the world. It is especially worrisome that syphilis cases are increasing among adolescents. There seems to be a link between increasing numbers of AIDS virus infection and the increase in syphilis.

Syphilis is caused by *Treponema pallidum,* a delicate corkscrew-like bacterium (known as a spirochete). It can only live in warm moist places and can be passed from person to person through contact of mucous membranes (vagina, urethra, mouth) or open skin with open syphilis sores. Many kinds of sexual activities can spread syphilis infection. The sores (chancres) usually erupt in the genital region, but can sometimes appear in the mouth, the anus or the skin surrounding the genitalia. Transmission can occur during vaginal or anal intercourse, fellatio, cunnilingus, or any contact of the chancre with any mucous membrane or open skin. Unborn babies can also contract syphilis from an infected mother. The spirochete travels through the placenta from mother to child.

Syphilis is a potentially lethal disease with mild early symptoms.

Syphilis has four stages. The four stages are primary, secondary, latent and tertiary syphilis. If it is not properly treated, it can take many years to go from primary to tertiary disease. Primary syphilis shows up as a chancre (an open painless sore) which appears about two to six weeks after infection at the site where the spirochete entered the body. It develops from a small red bump to

a red open sore. The sore usually has a raised border and may have a yellow or grey scab. It feels hard and rubbery .In men the chancre is usually on the glans, the shaft of the penis or on the scrotum. Most men seek medical care when the chancre appears. In women the chancre might appear on the labia, on the vaginal walls, or on the cervix. If there has been anal intercourse, oral- anal contact, or oral-genital contact, the chancre might appear in or around the anus or on the lips or tongue. Women are less likely to seek medical care because it is more difficult for them to see the chancre. Chancres of the anus can easily go undetected. There are usually enlarged lymph nodes on both sides of the groin. These are non-tender, smooth, firm and rubbery in texture. Primary syphilis is sometimes asymptomatic (probably because the chancre goes unnoticed). The chancres are full of spirochetes and can easily infect other people who contact them. After one to five weeks, the chancre heals completely even when there has been no treatment. Two weeks to six months later the disease progresses to secondary syphilis. Although asymptomatic, the patient remains infectious to others during all this time.

Syphilis is often called "the great pretender" because the primary chancre is not noticed and secondary syphilis can look like many other diseases.

In secondary syphilis a generalized skin rash appears. There are many red, hard bumps that don't usually itch or bum at all. The rash often appears on the palms of the hands and soles of the feet. Sometimes the rash is accompanied by a fever, fatigue, or swollen lymph nodes. As with the primary stage, the symptoms of secondary syphilis will resolve completely without treatment. The disease proceeds to the latent stage in a few weeks.

Latent syphilis can last for many years. During this stage, the patient has no symptoms and does not know anything is wrong. The person is infectious to sexual partners for about the first year of the latent stage. A pregnant woman

is always infectious to her fetus, however, and the patient's blood remains infectious because the spirochetes are still living and multiplying there.

The fourth stage, tertiary syphilis, can show up between three and forty years later. Only a few people with untreated syphilis will develop the serious complications of this late stage of the disease. There are many manifestations of tertiary syphilis. People can have lesions of the liver, skin, bones or other organs. They can develop problems of the nervous system, the heart or the great blood vessels. In neurosyphilis there are often severe mental disturbances. Even when complications develop at this stage, though, treatment can help.

Congenital syphilis occurs when pregnant women pass their syphilis infection on to their fetus. It can cause many problems in the fetus, and others that can show up in childhood. Among these are spontaneous abortion, stillbirth, skin problems, runny nose, encephalitis, liver problems, blood problems, multiple organ failure, bone inflammation, dental malformations, blindness, deafness, and mental deficits. Testing and treating pregnant women for syphilis can easily prevent this.

The treatment of choice for primary, secondary and early latent (less than one year duration) syphilis is one dose of benzathine penicillin G intramuscular injection. For people with penicillin allergies, alternative drugs are doxycycline, tetracycline or erythromycin taken orally, or ceftriaxone by intramuscular injection. For late syphilis, benzathine penicillin must be given by injection weekly for three weeks. Alternatively, longer courses of doxycycline or tetracycline may be used. It is very important to locate and treat the sexual partners of syphilis patients (those with whom they had sexual contact during the first two years of their syphilis infection) to avoid further spread of the disease.

Chlamydial infection

Chlamydia trachomatis is a small bacterium that lives inside cells. It is an unusual bacterium and shares some of the characteristics of bacteria, and some of viruses. It requires cell culture to be detected in clinical infection. It causes several manifestations of sexually transmitted infections. It is the main organism causing non-gonococcal urethritis and post-gonococcal urethritis. Reiter's

syndrome sometimes follows chlamydial infection. Chlamydial infection is the most common cause of mucopurulent cervicitis that can lead to endometritis. It is a very common cause of proctitis. Newborn babies get conjunctivitis from passing through the birth canal of an infected mother. This may lead to blindness. Another serotype of *Chlamydia* causes one of the classic sexually transmitted diseases, lymphogranuloma venereum. This sexually transmitted disease is prevalent in tropical countries, especially in Southeast Asia, India, East and West Africa, and South and Central America. Another chlamydial infection, C. *pneumoniae* is a common cause of respiratory illnesses and is not sexually transmitted.

Chlamydial infection is the cause of several recognized sexually transmitted diseases and syndromes. It causes more cases of STD than any other organism.

C. trachomatis infection is transmitted through sexual activities in which infected fluids are exchanged. This occurs most often with vaginal or anal intercourse. Chlamydial infections of the mouth or throat are extremely rare. Infections of the eye (often leading to blindness) are common in babies born to infected mothers. They have also happened to adults who touch their infected genitals, and then their eyes. Chlamydial infections are often asymptomatic. When symptoms do appear, it is usually one to three weeks after the infection occurs.

In men, the most common chlamydial infection is nongonococcal urethritis (NGU) or post-gonococcal urethritis (PGU). When men have a urethritis that is not due to gonorrhoea, or which persists after gonorrhoea treatment, this is usually due to chlamydial infection. Other organisms that can cause NGU or PGU are herpes, *Gardnerella vaginalis, Trichomonas,* or *Ureaplasma urealyticum.* Chlamydial urethritis usually produces a urethral discharge that is thinner, clearer, and less copious than that from gonorrhoea. There may be some burning on urination, but less than with gonorrhoea. Untreated chlamydial infections in men

can progress to epididymitis and can cause sterility .Sometimes the aftermath of chlamydial urethritis is Reiter's syndrome, a combination of arthritis, rash on the soles of the feet, conjunctivitis and urethritis. Reiter's syndrome occurs in more males than females, and can be preceded by some intestinal infections as well as chlamydial urethritis.

Because there are often no symptoms, chlamydial infections often do not get treated, and the disease spreads easily and rapidly

In women, chlamydial infection most commonly manifests as mucopurulent cervicitis. This can progress to endometriosis, and infection of the fallopian tubes. Scarring form this infection can lead to sterility and ectopic pregnancies. It is very common for women to have untreated chlamydial infections that lead to complications since they often have no noticeable symptoms. When symptoms do occur in women they are mild. Women might have slight burning on urination, increase in clear vaginal discharge, or abdominal pain. Pregnant women with chlamydial cervicitis can pass the infection on to their babies (in the form of conjunctivitis) as the baby passes through the infected birth canal. Symptoms of swelling and eye discharge can start in five to fourteen days after birth. If untreated or allowed to progress, it results in blindness.

Both men and women can contract chlamydial proctitis from anal intercourse. The symptoms may include rectal pain, mucous in the stool, bleeding from the anus, and sometimes rectal stricture. The symptoms are fairly mild at first, so they might be easily ignored.

Treatment for chlamydial infections is with doxycycline, tetracycline or erythromycin. Babies with chlamydial conjunctivitis are treated with erythromycin syrup.

Another STD caused by C. *trachomatis* (but by a different strain) is lymphogranuloma venereum (LGV). It is transmitted in the same way as other chlamydial infections, by genital or oral contact with infected fluid. The first stage of the disease occurs three days to three weeks after infection. A small painless vesicle appears on the genitalia, the anus or the mouth. This vesicle soon becomes an ulcer. It goes away in a few days without treatment. Some men develop a bubonulus (a tender nodule at the base of the penis) which can rupture or form sinuses or fistulas. The next stage, which occurs seven to thirty days after the primary lesion resolves, is regional lymphangitis. The lymph nodes that drain the area of original infection get swollen, then tender and finally quite painful. Usually these are inguinal nodes, but with mouth or throat infections they can be nodes under the chin, in the neck or in the clavicular region. These enlarged lymph nodes are called bubos. Often the bubos are only on one side. The swelling and progression of these nodes is gradual. The bubos go from being hard and firm, to softer masses often with reddened skin. They will sometimes rupture, or form draining sinuses or fistulas. Many just form hard masses. The patient may also have fever, chills, headache, stiff neck, loss of appetite, nausea, vomiting, muscle and joint pains or skin rashes. Women may have lower abdominal or back pain. Those with rectal infections may have mucoid discharge from the anus. Late complications of LGV include elephantiasis (grotesque swelling due to lymphatic blockages) of the genitals (penis, scrotum or vulva), other genital deformities, ulcerative lesions (especially of the vulva), perianal abscesses, rectal strictures, fistulas, and large perianal swellings known as lymphrrhoids.

LGV causes ulcers which can increase the risk of contracting HIV infection. Later, it can cause genital deformities.

Treatment of LGV is with doxycycline, tetracycline, erythromycin, or sulfadiazine. Infected lymph nodes must often be drained through aspiration, and fistulas or other structural problems may require surgery. Sexual contacts of people with chlamydial infections should be examined and treated.

Chancroid

Chancroid is a sexually transmitted disease caused by a bacterium called *Haemophilus ducreyi.* Other names for chancroid are soft chancre, soft sore, ulcer molle, and chancre mou. It is common in many African and Asian nations and has been on the increase in the urban populations of the United States. Many more men than women have been reported as having chancroid. As with- many other STD, chancroid is more difficult to detect in women, and this leads to misleading statistics.

H. ducreyi is exclusively sexually transmitted and rarely enters the body except through the skin or mucous membranes of the genitalia. It is usually passed on during sexual intercourse. Primary lesions located away from the genitals are very rare. The infection can be spread to other parts of the body through touching.

Three to seven days after infection, a small red papule appears at the site where the organism entered. In a day or so, the papule erodes to become an ulcer . There may be more than one ulcer. They are almost always on the genitals. These ulcers are tender and soft. They often have some pus at the base. Sometimes the ulcers are very large, or several small ones can coalesce and look like one large ulcer. There is usually an area of redness around the ulcer, and the edges are flat or undermined. Sometimes an ulcer will be non-tender, especially in women who have ulcers on the vaginal walls or the cervix. Many patients with chancroid develop bubos (tender, swollen lymph nodes) which are usually in the inguinal area. These appear about one week after the ulcers. They are red and soft, and may rupture. Besides being painful the bubos can cause scarring and deformities. The presence of genital ulceration is a risk factor for contracting HIV infection.

When ulcers appear on the genitals they must be diagnosed and treated right away. There is much risk of other infections and later complications if they are ignored.

It is important to treat the ulcers as soon as they appear. Treatment is with erythromycin, ceftriaxone, sulfamethoxazole/trimethoprim, amoxicillin/clavulinic acid, or ciprofloxacin. Many strains of *H. ducreyi* have become resistant to penicillin. Also, there is much difference in the organism's susceptibility to antibiotics in various geographic regions, so susceptibility testing is very important

Donovanosis

The cause of donovanosis is a bacterium called *Calymmatobacterium granulomatis.* It is also called granuloma inguinale, granuloma venereum, granuloma donovani, chronic venereal sore, and granuloma inguinale tropicum. It is found mostly in tropical or subtropical locations. Papua New Guinea, North and Central Australia, Southern India, Central and West Africa, the Caribbean, and South America all have some cases of donovanosis. Even in these places the infection is rare.

Donovanosis is spread by sexual transmission (mainly sexual intercourse). It is only mildly infectious, and transmission seems to require repeated exposures.

The disease develops slowly after exposure. The exact incubation period is not known. First a hard bump appears which soon becomes an ulcer. The lesions of this disease can be very different. Sometimes they are depressed, fleshy ulcers that bleed easily and do not hurt. They can also be elevated tissue growths that look like big warts. Sometimes there are painful lesions that eat away at surrounding tissue and often look purulent and have a foul smell. Or there can be a band of fibrous tissue or a deep clean ulceration. The formation of subcutaneous nodules that can rupture and drain pus is a rare occurrence. These may look like swollen lymph nodes, but they are actually psuedobubos just under the skin. The lesions almost always appear on the genitals. They can be very disfiguring if left untreated. They can also cause problems with urination, defecation and sexual activities and enjoyment. Treatment of donovanosis is with tetracycline, doxycycline or sulfamethoxazole/trimethoprim. Follow up of patients is very important since some large lesions may fail to resolve even with adequate treatment, and surgery may be necessary .

Genital warts

Warts of the genital area (condylomata acuminata) are caused by human papillomavirus. For a long time genital warts were thought to be inconvenient, but benign. But now it turns out that human papillomavirus (HPV) infection is strongly associated with dysplasia and squamous cell cancer of the cervix, penis, anus and vulva.

The incidence of warts is very high in the developed countries. Sub-clinical papillomavirus infection is thought to be even higher. The epidemiology of HPV in developing countries has not been adequately investigated. It is primarily seen in young, sexually active adults, and the prevalence has been growing rapidly in the USA since the 1960s.

Medical people used to think genital warts were harmless. Now we know that they probably cause cervical, anal and penile cancer.

Genital warts are transmitted through sexual activities. These include vaginal and anal intercourse, fellatio and cunnilingus. The warts can appear anywhere on the genitalia (cervix, vagina, vulva, penis, scrotum, perineum). They can often appear in and around the anus, and sometimes are seen in the mouth.

Condylomata acuminata start as small bumps, and grow to have a fernlike or cauliflower appearance. They can get very large. They are whitish-grey, grey, yellow, or light red in color. Sometimes the warts are flat. Many times papillomavirus infection is asymptomatic. No warts can be seen in these infections, but the affected tissue will turn white when a 5% acetic acid solution is applied. Sometimes HPV infection can cause itching or burning of the affected skin or mucosal area.

Complications of warts include cosmetically unsightly lesions, lesions that cause mechanical difficulties (such as obstruction of urine flow when they occur in the urethra), and cancer. There are over 40 strains of HPV. Some of these are strongly associated with genital cancers. Warts can also become traumatized, and open lesions can form. These can become infected and these infections are often hard to treat. HPV infection can also be passed on to babies born to infected mothers.

Treatment of genital warts and HPV infection is very important. The treatment of choice is cryotherapy (freezing) with liquid nitrogen. Alternative regimens, usually less well tolerated than cryotherapy, include application of podophyllin resin in tincture of benzoin, or trichloroacetic acid 90% solution. Sometimes surgery is necessary to remove very large warts. Treatment of asymptomatic infections with cryotherapy is also recommended due to the high likelihood of progression to cancer. Sexual partners of patients with genital warts should be examined and treated if indicated.

Herpes

There are two types of virus that cause herpes lesions. They are called herpes simplex virus (HSV) type 1 and type 2. Genital herpes is usually type 2, while the herpes that causes lesions of the lips and mouth is usually type 1. Type 1 can sometimes cause genital lesions, however, and type 2 can cause orolabial

lesions. Herpes infection is widespread in the USA and other developed countries. Its incidence in developing nations is not well documented. Almost everyone in developed countries has the type 1 virus that causes lip and mouth lesions. The type 2 virus (causing genital lesions) is less common, but still widespread. In most people herpes is uncomfortable and annoying, but not a major health concern. For people with immune suppression, however, such as people with AIDS, herpes can be a life-threatening infection. It is also a very serious disease for newborn babies. As with other STD that cause open lesions, having herpes makes it easier to become infected with the human immunodeficiency virus (HIV), the cause of AIDS.

The HSV enters the body through the skin or mucous membranes of the mouth or genital area. It causes ulcerations and other symptoms in only about half of the people it infects. Once the HSV is in the body there is no known way to get rid of it. It stays in a dormant state, living in the nerve root near the spinal column, for the rest of the patient's life. It is thought that people are the most infectious to others when open lesions are present, but they are often infectious at other unpredictable times. Sometimes people pass on this virus to others without even knowing they are infected. Transmission usually occurs during genital contact of any kind. This includes intercourse, close genital contact, mouth to genital contact and even sometimes from contact of other body parts such as fingers with infected areas. Herpes infections of anal and rectal areas can also occur, usually from anal intercourse. If someone touches their eyes after touching an infected lesion they can transmit the infection to the conjunctiva and this can lead to blindness.

Genital herpes is usually caused by type 2 virus, but sometimes type 1 is found in the genitals. Oral sex can pass type 1 to the genitals and type 2 to the mouth area.

The initial episode of herpes usually occurs two to ten days after infection. Genital herpes lesions commonly occur anywhere on the penis, the scrotum, the urethra, the perineum, the vulva, the perianal area, the cervix and the vagina. Less common are lesions of the skin surrounding the genitals or the buttocks. There are three manifestations of genital herpes disease, primary herpes, first episode non-primary herpes, recurrent herpes, and asymptomatic or sub clinical herpes.

Primary herpes is the first outbreak of lesions that occurs soon after infection. There is not always a primary outbreak of lesions. There are usually many small, red, painful vesicles (blisters) which can start anywhere the infection started. These lesions can be quite extensive (covering the genitals) and very painful. Accompanying the lesions are flu-like symptoms. Fever, malaise, headache, stiff neck and aching muscles and joints are common in primary herpes. The blisters soon break and leave painful ulcerations that may coalesce and cause large ulcers. Lesions are usually in crops. There is often swelling of lymph nodes in the area of infection. Women with cervical or vaginal infection may have discharge. Often there is dysuria and urethral discharge, especially with urethral infection. Primary herpes lasts two to three weeks.

First episode non-primary herpes occurs when the person has been infected with herpes sometime in the past, but did not have an initial outbreak. Also, sometimes if people have antibodies to the opposite kind of herpes, infection with the new type will produce a much less severe first episode. It is much less severe than primary herpes. There are fewer lesions and systemic symptoms are milder or absent. First episode non-primary herpes usually lasts about two weeks.

Recurrent herpes is what happens when the HSV that has been dormant in the nerve root returns to the area of primary infection. There are only a few lesions that usually cluster only in one spot. Most people who have had a primary episode will have recurrences. These will decrease in frequency and there is much variation in lengths of time between outbreaks in different people. The lesions usually come back in the same spot every time. There are many things that can trigger recurrent herpes outbreaks. Some of these are menstruation,

fatigue, emotional stress, other diseases, immune suppression, skin trauma, sunburn and exposure to cold. The lesions of recurrent herpes usually take seven to ten days to clear. Often there are no systemic symptoms in recurrent herpes.

A person can have herpes infection and pass it on to someone else without ever knowing they are infected. A first outbreak of herpes can happen many years after primary infection.

Asymptomatic or sub-clinical herpes occurs when infection has taken place but there has been no outbreak. Sometimes the lesions are so subtle that the person does not notice them. Many people with genital herpes have no symptoms ever. This may be why herpes is so widespread. It can be easily transmitted without the infected person ever knowing that they are infected.

It is important to remember that herpes can be transmitted to babies of infected mothers as they pass through the birth canal. This infection is known as neonatal herpes. Herpes in newborns is usually a very serious disease. It is almost always fatal or at least causes severe damage to the baby' s nervous system. Much neonatal herpes can be avoided if women know they are infected. Delivery by caesarean section greatly reduces the risk that the baby will become infected. Detailed physical examination of the mother can usually reveal the presence of active genital herpes lesions. Transmission is unlikely without active lesions in the mother.

The most serious complication of genital herpes is infection of newborns. Babies usually become very ill from neonatal herpes infection.

There is no cure for genital herpes infection. Once someone is infected they remain so for life. The virus lives in a dormant state in the nerve root, occasionally moving back down the nerve to the skin or mucous membrane to cause an outbreak. An antiviral drug, aciclovir, can reduce the length and severity of an outbreak (especially in primary herpes). It does not cure the infection.

Hepatitis

There are several viruses that cause hepatitis (an infection of the liver). Some of these are sexually transmitted, and others are suspected to be sexually transmitted.

Hepatitis A is a viral disease that is transmitted through the faecal-oral route (the virus is in the faeces and is transmitted to another person when the faecal matter enters the other person's mouth). Some sexual activities facilitate this transfer of faeces to the mouth (anal intercourse, touching of the anal area, anilingus).

Fifteen to fifty days after infection the patient may have fever, malaise, nausea and vomiting and anorexia. In severe cases there may also be jaundice. Fulminant hepatitis rarely occurs. The sickness lasts about one to three weeks and is usually quite mild. Many people who contract hepatitis A infection never have any symptoms at all. There is no chronic disease and no carrier state for hepatitis A.

Treatment is largely symptomatic (bed rest, fluids, easily digested food). Sometimes people are given gamma globulin shots when they know they have been exposed to hepatitis A, or expect that exposure might take place in the near future. There is no easily available vaccine for hepatitis A at present, although work is progressing on usable, affordable vaccine.

The most important thing to remember is that hepatitis is passed on through contact of the mouth with faeces, or through sexual activities. Being careful in all activities where this contact might occur is important for hepatitis prevention.

Hepatitis B is another viral disease. This is a sexually transmitted disease that can be passed on through contact with sexual fluids. It is also a bloodborne infection. So a person can get hepatitis B from sexual activities in which semen or vaginal fluids are shared, or from blood contact (through transfusion, needle sharing, blood to mucous membrane or open skin) with an infected person.

The symptoms of hepatitis B can start anytime from one to six months after infection. The symptoms often start slowly and seem mild, but the disease can become very serious. It usually starts with mild fever, nausea, malaise, fatigue, and sometimes a rash. In a few weeks more serious symptoms such as jaundice appear. Fulminant hepatitis is more common than in hepatitis A, and this can be fatal. Some cases progress to chronic hepatitis, and many people become hepatitis B carriers and remain infectious to others. Infected mothers pass the infection on to their babies either *in utero* or during the birth process. Most infants do not get sick from this infection, but can become carriers of the virus (so they can infect others later). A few neonates do become very ill from hepatitis B, and some die. There is very strong evidence that people who have been infected with hepatitis B virus are more likely to get liver cancer, especially those with chronic infection.

There is no cure for hepatitis B, and treatment for those who get sick is mainly supportive. There is a very effective hepatitis B vaccine, but its usefulness is limited by the fact that there must be three injections a month apart, and it is quite expensive. In some countries where there is a very high prevalence of hepatitis B infection, vaccination of all newborn babies is being considered.

Another virus, hepatitis D virus, sometimes goes along with the hepatitis B virus. It is an incomplete virus and cannot live without the hepatitis B virus. When it is present, it makes hepatitis B a much more serious disease.

Hepatitis C was formerly known as non-A/non-B hepatitis before the causative agent, hepatitis C virus, was isolated. It is very probable that it is sexually transmitted like hepatitis B. It is known that it is transmitted through blood

contact. Its incubation, onset and the course of disease are very similar to hepatitis B. It more often results in a chronic disease state then hepatitis B. There is no cure or vaccine for hepatitis C.

AIDS

Since the *HIV/AIDS Reference Library for Nurses* (of which this booklet is a part) is devoted to education about HIV infection and AIDS, only a brief summary of this complex disease will be presented here. More complete information is found in the other six booklets of this series, especially volume 5 of the series, *leaching Modules for Basic Nursing and Midwifery Education in the Prevention and Control of AIDS.*

AIDS stands for acquired immune deficiency syndrome, and is caused by a virus called the human immunodeficiency virus (HIV). The disease was first recognized in 1981 when some male homosexuals in Los Angeles, California, fell ill with a rare form of pneumonia that had only been seen in people with immune suppression. More and more people started appearing with diseases related to low immune systems. Many people in Central Africa, the Caribbean, and Europe were found to have this immune suppression syndrome. Research and knowledge about this disease process progressed rapidly. By 1985, it was known that a virus caused this disease, that it was transmitted sexually and through blood contact, and a blood test existed which detected antibodies to the virus. It was also known that the disease caused severe damage to the human immune system, and that most people who became infected would die from its complications. Evidence of HIV infections was found from as far back as 1977 .Since 1985 there has been much work on finding good treatment for people who are infected. There is also much research into an effective vaccine, and on developing better ways of prevention through education.

HIV is transmitted from person to person mainly through sexual activities. The virus is found in large quantities in blood and sexual fluids (semen and vaginal secretions). Transmission occurs when fluid containing a large enough quantity of virus contacts open or abraded skin, or intact mucous membrane (such as the lining of the vagina, the rectum, or the urethra). It can be passed on through blood transfusions, needle sharing, organ transplants, and from mother to fetus

during the birth process. By far the greatest numbers of HIV infections have occurred through sexual intercourse. Many have also taken place from infected mothers to their babies during birth, and from receiving transfusions of infected blood. People who have shared needles used to inject drugs without cleaning the needles in between have transmitted the infection to each other. A few health care workers have been infected through needle sticks, and even fewer through open skin contact with infected blood or virus samples. Some health care workers have passed the virus from patient to patient by using contaminated syringes, needles and other infusion equipment without cleaning them between patients. Mostly, however, AIDS is a sexually transmitted disease.

HIV infection is one of the world's biggest public health problems. It has the potential to cause severe problems, not only in health care, but in the whole economic situation of developing countries.

HIV causes disease mainly by infecting and damaging the human immune system. It enters the body either through direct inoculation into the blood stream, or through the mucous membranes. It then takes up residence in the lymph nodes where it replicates and becomes stronger. After some years it begins causing severe damage to the immune system, destroying the T cells it infects. It also infects and damages brain cells, cells of the bowels, the skin, the bone marrow and others. HIV is not as easily transmitted as hepatitis B. It seems to take large amounts of virus, and often repeated sexual encounters for infection to take place. Of course infected people have times when they are more infectious than others (are releasing larger amounts of virus), but there is no way at present to predict when these times might be. It is certainly possible to become infected with HIV after one encounter. Actual blood to blood contact (transfusions, needle sharing) is the most efficient way to transmit the virus.

The stages of HIV infection have been described and classified in different ways. Many (but not all) people have an initial sickness soon (a few days to two weeks) after becoming infected. This acute HIV illness is like the flu, with fever, malaise, fatigue, headache and often a rash. It only lasts about a week. Then there is a period of time when there are no symptoms at all. This can last two years to twelve years. During all this time infection is present and the person is infectious to others. When symptoms begin they can often be mild. People might have fatigue, headaches, paresthesias, mild forgetfulness, cough, fever, night sweats, persistent diarrhoea, swollen lymph nodes, weight loss, loss of appetite, persistent yeast infections of the mouth or vagina, and other mild but persistent infections. Later, as the immune system becomes more damaged, there are more serious infections that are more difficult to treat. Many of these infections are the kind that people only get when their immune systems do not work well (opportunistic infections). At this stage cancers and neoplasms can also occur and be very difficult to treat. During this late stage the patient is said to have AIDS. Before that, when there are no symptoms or only milder symptoms, the patient is said to have HIV infection, HIV disease, or ARC (AIDS-related conditions). Most people with AIDS will die from one of these overwhelming infections or cancers.

HIV infection can spread rapidly and silently because there is such a long period of time when there are no symptoms and people do not know that they are infected.

The fact that HIV can hide for such a long time without causing symptoms means that people usually do not seek medical care until they have had the infection for years. They have also been infectious to others for years and may have spread the virus to many other people. AIDS is usually a prolonged and debilitating illness that inevitably terminates in death. It strikes people who are sexually active, usually young adults. There is no cure and no vaccine. These

facts make HIV infection one of the most serious public health problems today. In some communities AIDS has devastated the young adult population leaving many orphans, few people to do productive work, and a government drained of money and other resources.

Treatment of AIDS consists mainly of antibiotics for the many infections patients get. Many people also turn to alternatives to western medicine. There are many ways to support AIDS patients and help with symptom relief. Unfortunately, though, when the immune system is badly damaged, eventually patients will die from overwhelming infection, tumours or the ravages of HIV on other parts of the body. Some antiviral medications that slow down the activity of the HIV are somewhat effective. These are AZT (Azidothymidine), DDC (Dideoxycytosine), and DOI (Dideoxyinosine). There is no cure for HIV infection at present. Work on an effective and affordable vaccine against HIV is in progress, but is very complex. Researchers are optimistic that such a vaccine will be developed, but it may take many years. In the meantime many more people are becoming infected, becoming ill and dying.

Diagnosis of STD

Most of the STD discussed in learning activity 1 can be diagnosed by looking at smears under the microscope, doing cultures or testing blood specimens for particular antibodies. When laboratory facilities and funds are available it is important to carry out testing for definitive diagnosis of STD. In many places, however, the facilities and/or the money are lacking. Also, sometimes, definitive testing takes too much time, and treatment for most STD is most effective when it is started right away. Many practitioners have learned to treat STD symptomatically, this is known as the syndromic approach to STD management and means that if patients have the right set of symptoms for gonorrhoea, then they are treated for gonorrhoea without laboratory tests. Guidelines for both proper laboratory testing for STD and for the syndromic approach to STD management exist and are in use in many places.

Learning exercise 1. 1 Types of STD

In small groups, make lists of the STD which fall into the following categories:

(a) STD which cause ulcers;

(b) STD which cause discharge from penis or vagina;

(c) STD which cause constitutional illness (fever, malaise, nausea, vomiting, muscle aching);

(d) STD that are caused by bacteria;

(e) STD that are caused by viruses;

(f) Infections caused by yeast, fungi or parasites;

(g) STD which may have no symptoms;

(h) STD which can cause blindness;

(i) STD that might cause genital deformities; and

(j) STD that can cause death.

When the lists are complete, note which diseases share more than one characteristic. Discuss the implications of these lists on diagnosis of STD.

Learning exercise 1.2 Study visit

Arrange a visit to an STD clinic. At the clinic the students should have a chance to interview both the clinic staff and some patients. The purpose of the interviews is to get an idea about how the clinic runs, what kinds of STD are treated there, how they are treated and what kind of follow-up is done. This is also a chance to see how the patients view their disease and treatment.

Some possible questions for staff:

(a) Which STD do you see the most often?

(b) How are they usually treated?

(c) Do you do definitive diagnostic testing, or do you treat according to symptoms?

(d) Do you test for HIV infection? Which patients do you test?

(e) Do you provide patient education about the STD you treat?

(f) How is the education done?

Some possible questions for patients:

(a) Is this your first visit to the clinic?

(b) How long have you had your symptoms?

(c) Did you have any difficulties in coming to the clinic? In other words did you have any fear or anxiety about coming here?

(d) Which STD do you have?

(e) What do you know about this disease?

(f) How did you find out about it?

(g) How do you feel about your treatment at this clinic?

Learning exercise 1.3 Case studies

The following case studies can be used for self study, group discussion, or in any way that is considered most useful. Role playing is the recommended way to use them. We will use these case studies again in learning activity 2 and role playing will be more appropriate then. For learning activity 1 just answer the following questions discussing your answers in the small groups:

- What other information do you need?
- Which STD might this client have?
- What information does he/she need about the Sill?

It is suggested that the teacher replace the names in the case studies with appropriate local names.

***Case* 1**

Yvonne is 21 years old. She is a sex worker. She has not been feeling well for about two weeks (with nausea, vomiting, malaise) and today her eyes and skin started to turn yellow.

***Case* 2**

Donald woke up this morning with burning in his penis. When he tried to urinate he had excruciating burning pain (like there was ground up glass in there). He has noticed some dark yellow discharge (like pus) from the tip of his penis. He just started having sexual intercourse with his new girlfriend last week.

***Case* 3**

Jack is 38 years old, unmarried and a prominent businessman in your community. He has very bad pain in his anal region which started a few days ago and has got worse. Examination reveals a large ulceration at the anal opening which is extremely tender to touch.

Case 4

Peter, a 19 year old college student, is worried about a small, red, hard ulceration on his penis. He noticed it a week ago and it has not gone away. It does not hurt. He likes to have sex and has many different partners, both male and female. He has not stopped his sexual activities.

Case 5

Claire is 30 years old, married, with three children. She has been having abdominal pain on and off for a month and it has gotten worse in the past three days. A month ago she had some dysuria and a lot of yellow vaginal discharge, but it stopped so she did not seek medical care. She has suspicions that her husband is seeing another woman, but she does not want to talk to him about it because he might get angry .He often hits her when he is angry.

Case 6

Susie, a 12 year old schoolgirl, comes to the clinic because she has a red, open sore on her vulva and big, tender lump in her groin on the same side. She tells you that she has been forced to have sex with her father for the past six months, and he has a sore on his penis and groin bumps which have burst.

Learning activity 2. *Prevention of sexually transmitted diseases*

The most important aspect of STD, from a public health standpoint, is the teaching of prevention. STD are the results of certain kinds of sexual behaviours between people. If people can alter their sexual behaviour, they can avoid getting STD. Teaching people how to avoid STD, and trying to find the most effective ways to teach different groups of people are important roles for health care workers everywhere. The best ways to teach STD prevention are different

for different communities. Sometimes a campaign of ads on television may be effective. Classes in sex education in schools are often helpful. For some groups one to one teaching from a peer is an effective way of helping people stay safe from STD. In all cases, clear, concise messages, easily understood by the majority of the people involved are essential. The messages should also be stated in a way that is not offensive. At the same time they must convey a sense of importance and urgency. It is not easy to get people to change behaviours, especially sexual behaviours. Sex is very personal and talking about it is embarrassing to most people. Asking people to look at their own behaviour, assess it for STD risks, and then change risky behaviours is very difficult. Health care workers are in an ideal position to teach their patients. They must be sensitive as well as creative and very clear in this kind of teaching. They can also be effective in organizing and carrying out community teaching activities.

What should health care workers be teaching about STD prevention?

Abstinence is the best way to prevent getting or passing on STD. If people avoid sexual contact with each other then there is no possibility of contracting diseases that are transmitted in this way. If a person wants to be 100% safe from STD, this is the only way. It is probably not realistic to expect that the majority of people will want or be able to be entirely sexually abstinent. It is important, however, to teach that abstinence is a choice, and the only way to be totally sure of not getting an STD. It is also important to remember that self masturbation, dreaming and fantasizing will not bring on STD. Abstinence means only avoiding sexual contact with other people.

Monogamy, or having sex only with one partner who is free of STD, is the next best choice. There is always some slight risk, because no one can be totally sure of someone else's behaviour, but when there is a good basis of honesty and trust between a couple, then this is a viable option. When one member of the couple has sexual contacts with anyone else, however, the safety of this arrangement is greatly reduced for both partners. Sometimes one member of a couple has suspicions that the other member is not faithful, but has not confronted the issue because of fear of violence, not wanting to disturb an

otherwise happy union, or even because having sex outside of the primary relationship is very common and tacitly approved of in some societies. It is important to encourage people to be very honest in their assessment of their own situations. Honest assessment of risk is often the first step towards STD prevention. The health care worker must use great sensitivity in helping people assess their risk. Advice about confronting suspicions of unfaithful behaviour should be given only with full understanding of the situation and with great care.

It is a fact of human life, that many people have more than one sexual partner, and wish to continue having multiple partners even though they understand that it is risky for STD. Often even those who would like to change find it very difficult if not impossible. Many health care workers may feel this behaviour is "wrong", but it is important to put these feelings aside and teach people other ways to prevent STD. One way to ensure safer sexual contacts is to thoroughly assess a potential partner's STD risk status. This can only be done by getting to know a person well before engaging in sexual activities. Then the two can candidly discuss their sexual histories with each other. It is important to avoid sex with people who have had multiple partners, have a history of STD or of injected drug use. Ideally, both partners should have a thorough physical examination for STD, as well as blood tests for syphilis and HIV infection. Even these precautions are not entirely reliable if a person has had risky sex in the past six months.

No matter how reasonable all the above seems, many people will still continue to have sexual contact without knowing their partners well. For this reason, health care workers should be prepared to teach their patients about other means of STD prevention. Probably the most reliable method is correct use of a latex condom. This is a sheath that fits over the erect penis and provides a barrier to the sharing of sexual fluids. Condoms can be very effective in reducing the risk of any STD if they are used consistently and properly. They reduce risk, but they are not 100% safe. The only completely safe sex is no sex. Most people know about condoms and many have used them, but a number of people do not know how to use them correctly. Condoms can break, slip off or leak. The main problems with condoms, however, are forgetting to put it on, not putting it on soon enough, or not putting it on or taking it off properly. The condom also may not cover or provide complete protection from infected lesions, such as syphilitic chancres, herpes blisters, chancroid, donovanosis

or warts. It is important that health care workers teach their patients about condom use. Simply handing out condoms, even with printed instructions, is not enough. It is necessary to use a model of a penis in order to show patients the steps of condom use. Patients should be asked to demonstrate putting on and taking off a condom using the model.

Instructions for condom use

I. Before buying the condom, and before opening the packet for use, the expiration date on the packet should be checked. Condoms should not be used past their expiration date. Condoms are good for three years after their manufacturing date.

2. Condoms should be stored in a cool, dark, safe place. Putting them in a jeans pocket, in a wallet kept in a pocket or loose in a purse with other items is not safe. Warmth causes the latex in the condom to wear out faster and contact with other objects can damage the wrapper and cause holes in the condom. Also, do not buy condoms which have been stored somewhere hot or are displayed in the hot sun.

3. A condom should be kept handy whenever sexual activities are anticipated.

4. The condom should be put on the erect penis before the penis is allowed to enter the mouth or penetrate the vagina, or the rectum. This way no sexual fluids will enter the penis or contact the mucous membranes of the other partner.

5. Open the condom packet carefully with plenty of light so the condom will not be damaged, and any previous defects or damage can be seen.

6. Most condoms have a nipple-like reservoir tip. Some have just a plain rounded tip. With either kind, the tip should be squeezed to expel any air, then the condom should be carefully unrolled onto the erect penis.

7. Many condoms are lubricated, but if more lubrication is needed, use a water based lubricant (like KY jelly). Do not use oil based lubricants. Oil based lubricants {like Vaseline) will cause the latex to be weak and tear easily.

8. The condom should stay in place until sexual activities are completed.

9. After ejaculation, the man should grasp the base of the condom firmly and carefully withdraw his penis.

10. The condom should be removed before the penis gets too soft. This way it call be easily removed without spilling any semen.

11. Dispose of the condom carefully in the trash. It should not be put in a flush toilet because it tends to plug the plumbing.

Besides condoms, some spermicides and barriers can help in STD prevention. Some spermicides are effective in killing bacteria and viruses. Women who use them have lowered rates of cervical infections such as gonorrhoea and *Chlamydia.* Also the use of diaphragms with spermicidal jelly, and the contraceptive sponge (which is a sponge barrier permeated with spermicide) may be somewhat protective against infections of the cervix. Their effectiveness against ulcerative STD, HIV infection and hepatitis is not known and questionable, however. Some spermicides may cause skin and mucous membrane irritation and ulceration that can actually increase the risk of contracting HIV infection.

STD prevention should be the combined effort of government agencies, non-governmental organizations and health care workers.

Prevention of STD involves much more than counselling individual patients about reducing risks. Widespread education about sexuality and disease prevention is necessary. Determining what kind of education will work and setting up effective programmes can be a difficult task. The cooperation and funding of the local Department of Health is essential. Nongovernmental organizations (NGO) often have monetary and human resources for disease prevention programmes. Health care workers can be very effective in educating governments and NGO about the importance of prevention efforts and which kinds of efforts are likely to be the most effective in individual communities.

Learning exercise 2. 1 Condom game

Since condoms are one of the most effective barriers for prevention of STD, it is important that everyone know how to use them correctly. The following game helps to imprint the steps of condom use and help students feel more comfortable with the idea of teaching them.

Hand out cardboard placards with the following steps in condom use and sexual intercourse written on them. Have the participants line up in what they feel is the correct order, holding up the placards.

Leftover participants should comment on the order.

1. Check expiration date
2. Buy condom
3. Store condom in cool, safe place
4. Sexual attraction
5. Foreplay
6. Erection
7. Open condom packet carefully
8. Pinch air out of condom tip
9. Unroll condom onto erect penis
10. Apply water based lubricant
11. Penetration
12. Orgasm (ejaculation)
13. Grasp base of condom
14. Withdraw penis

15. Remove condom carefully
16. Dispose of condom
17. Penis becomes flaccid

After the game, assemble in small groups and talk about how it felt to play the game. Then each group member must instruct the rest of the group in condom use using a penis model.

Learning exercise 2.2 Case studies

Using the same case studies as in learning exercise 3 of this module, role play the situations. In small groups of 3 or 4 students, assign roles of provider of care (counsellor), client, observer. The situation should be acted out as if the client (described in the paragraph) has come to the provider to seek help for the problem. Each member of the small group should have a chance to play each role. Roles should be changed every 5 to 15 minutes depending on time restraints and the depth of counselling which is appropriate for the students in the class.

For each case, assuming that your diagnosis of the STD in learning exercise 3, was correct, counsel the client about the cause of the STD, and about ways to prevent this and other STD in the future.

Learning exercise 2.3 Community prevention activities

In learning exercise 2 of this module, the students visited STD clinics. Their experiences and what they learned about STD prevention activities may be useful in this exercise. In small groups, discuss the following:

- What kinds of STD prevention activities exist in your communities? Make a list.

- Are these activities adequate? Why or why not?
- What kind of STD prevention activities are needed in your community?

In small groups, brainstorm ideas for STD prevention activities. Be sure to list all the ideas that come up, no matter how ridiculous or impossible they sound. Now decide which are at all feasible.

MODULE 2
SEXUAL PROBLEMS AND THERAPIES

General objective

On completion of this module, the student will be able to identify, discuss and counsel patients about a number of sexual problems.

Learning outcomes

On completion of this module the student will be able to:

- identify and describe the most prevalent problems of sexuality in males and females;
- explain some theories of the causes of these problems, both biological and/ or psychological;
- counsel patients about the existence of some basic therapies for sexual problems; and
- refer patients to appropriate care facilities for therapy for sexual problems in their own communities.

Introduction

Being sexually healthy means freedom to enjoy sexual activities. Patients sometimes complain of problems with their sexual satisfaction. These problems can be based on physical causes, problems in relationships or psychological difficulties. In our health care roles it is important to be open to hearing about these problems, and to know how to advise patients in order to help them seek resolution.

In different cultures, different aspects of sex are important, and the kinds of problems which are presented may be different. It is important to remember that most of the information in this booklet may be universally useful, but each health care worker must identify what sexual problems are prevalent in his/her own culture and what avenues are available for help in their own community.

This module is designed to give an overview of what kinds of problem may be present and what therapies have been useful in some societies. In other cultures, these may be less useful or even make problems worse (Bancroft, 1989). It is up to health care workers in each society to explore their own values and decide whether or not therapies used successfully in other societies will be helpful in their own patients. It is not expected that students will be able to do sex therapy after completing this module, only that they will be aware that such therapies exist and be able to make appropriate suggestions.

Learning activities

Learning activity 1. Why do people have sexual difficulties ?

People can have trouble with their sex lives for many reasons. Bancroft (1989) discusses the complexity of sexual arousal and response. As can be seen from the psychosomatic circle of sex (see Figure 2.1) there are many points at which interference can disturb sexual arousal and/or response.

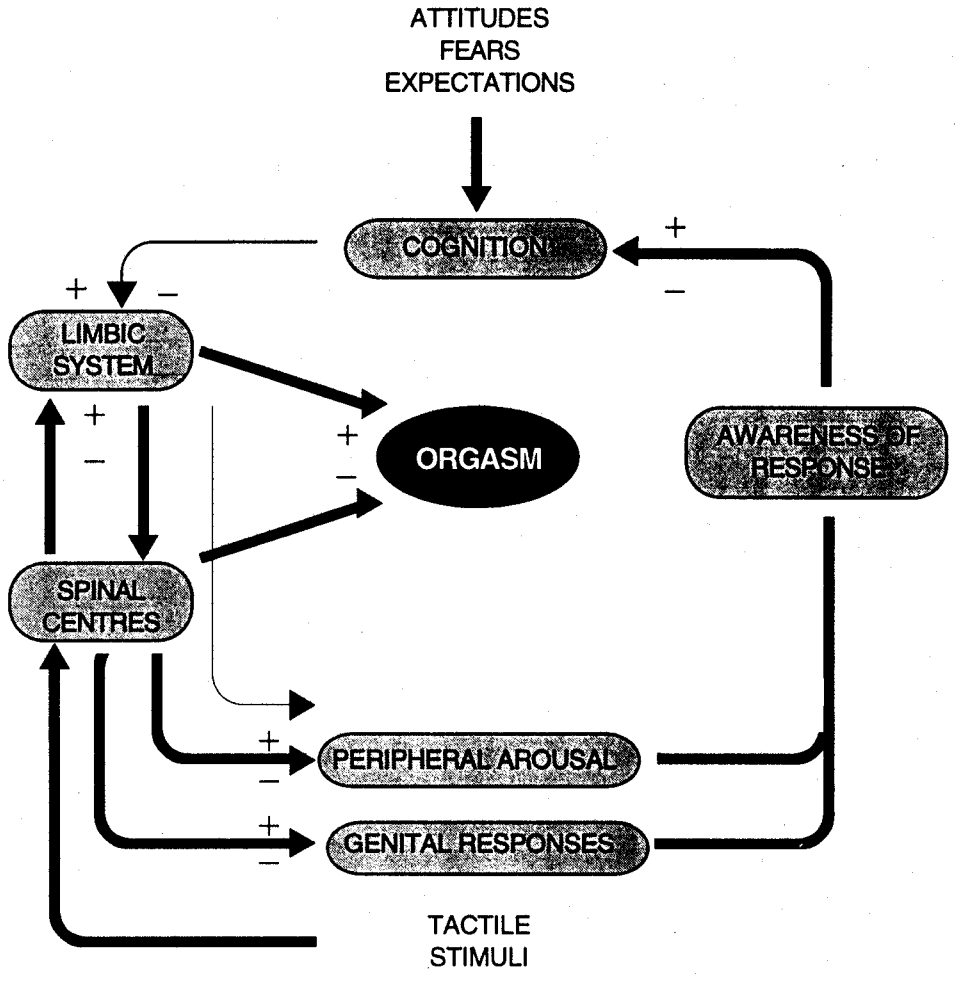

Figure 2.1. The psychosomatic circle of sex (adapted from Bancroft, 1989)

Cognition

The majority of the problems for which people seek help have their origins in the cognition and awareness (thinking) portion of the circle. Attitudes, fears and expectations are important factors affecting cognition (or the way we think about sex). These are, in turn, influenced by many other factors. Problems in relationships (interpersonal problems, i.e. poor communication, fear, anger, differing expectations) are among the most common causes of sexual problems between people.

Psychological problems, such as depression, are also common causes of lowered sex drive.

The main reasons for sexual problems have their roots in thinking.

Cultural influences can also be important. A woman who lives in a culture which disapproves of sexual enjoyment in women may not have a fully satisfying sexual relationship.

Childhood learning is an important factor in sexual health. A child who has been told that touching his genitals will cause insanity may have some trouble later in life having an enjoyable sex life free of fear.

Knowledge about sexual functioning is an important aspect of sexual health. If a person has never been taught about sexual anatomy or response there may be problems later.

And certainly self-concept plays an important role in sexual health. People who do not feel good about themselves often have trouble enjoying a fulfilling sex life. All of these factors and more can enter the psychosomatic circle of sexual response in negative ways and disturb sexual functioning.

Limbic system and spinal centres

At the level of the central nervous system, disturbances can cause disruptions of sexual arousal. Anything which affects the limbic system or spinal pathways or centres can cause problems. Constitutional or innate problems within the limbic system are thought to be at the root of many sexual arousal problems (having very little interest in sex). Levels of male and female hormones affect the limbic system and thus the libido. Psychoactive drugs and alcohol can inhibit sexual response. Also, drugs which change the levels of sex hormones (anti-androgens, anti-convulsants, oral contraceptives) in the blood can affect libido. Mood disturbances, such as depression, may have links with the limbic system which explain the decreased sex drive. Also, neurological abnormalities or injuries which disturb the nerve pathways from the peripheral parts of the body to the spinal centres or brain might inhibit sexual response.

Hormones, drugs, alcohol, mood disturbances and neurological abnormalities can all disturb sexual functioning at the central nervous system.

Genital response

The sexual response of the genitalia (female vulva, vagina and clitoris; male penis and testicles) depends mainly upon adequate blood flow and vasocongestion (filling with blood and swelling). Vascular disease and vasculitis can cause obstructions to blood flow to and/or from the genitals. Also, arteriovenous leaks can keep the genitals from staying engorged with blood. Disruption of nerve supplies to erectile tissues (from trauma or surgery) can cause problems with genital response, as can problems with the autonomic nervous system (as occurs in diabetes and multiple sclerosis). Hormones, once again, have direct effects

on the genitals and alterations in levels (especially androgens, estrogen and prolactin) can cause disturbances in genital response. Finally, pain in the genitals inhibits sexual response. Pain in men can be caused by a foreskin which is too tight, tears in the genital skin and other lesions, inflammation or deformities.

In the female, genital pain during intercourse can occur from vaginal dryness, inadequate vasocongestion, failures of uterine elevation or vaginal ballooning and hormonal (estrogen) deficiencies (causing thin vaginal walls). Any conditions causing vaginal infection (see Module I) or other inflammation (sensitivities to creams, rubber, deodorants, clothes, powders, douche solutions) can cause irritation and pain.

Problems in genital response can come from vascular disease, leaks, disruptions of nerve supply, problems with muscle tone or pain.

Another cause of genital response problems, especially in women, comes from the tone of the muscles of the pelvic floor. Laxity of the muscles decreases sexual satisfaction for both the male and female partner. Muscles which are too tense can cause difficulties in vaginal entry (vaginismus). Other conditions, such as prolapse of ovaries, uterus or bladder, endometriosis or tumours can cause painful intercourse in women. Also, a very small vaginal opening, an intact hymen, Bartholin's cysts, scarring after episiotomy, prominent fourchette (skin fold at the back of the vagina) and other abnormalities of the vaginal anatomy can cause pain.

Non-genital peripheral arousal

The genitals are not the only part of the body which becomes aroused during sex. Problems in sex can be traced to problems in the other parts of the body. The reverse can also be true. Remember that during the sexual response there are many cardiovascular changes (increase in heart rate and blood pressure) so

that when there are problems in these areas the sexual response can suffer. Also, problems which cause pain and/or deformity in other parts of the body (congenital anomalies, arthritis, injuries, surgeries) can inhibit sexual response.

Tactile stimulus

The amount and kind of stimulus (touching) given and the person's ability to feel that stimulus are all important in sexual response. Sometimes, partners' being able to communicate with each other and tell or show each other what kind of stimulus feels good is all couples need to correct sexual problems.

Communication is important for people to tell each other what feels good.

People can have problems with feeling stimulus to the genitals due to neurologic lesions or injuries or psychological problems. Both erotic anaesthesia (not being able to feel stimulus) and hyperaesthesia (stimulus which is felt too strongly, to the point of pain) have been reported.

Hormone (androgen) levels can also affect genital sensitivity, as can age.

Orgasm and ejaculation

For the male, problems with ejaculation and orgasm (too fast, too slow or none at all) are fairly common. Drugs, neurologic lesions, and levels of male sex hormones can all have influence on the having and timing of orgasm and ejaculation. Psychological factors and experience are probably most important

to the males' being able to control when ejaculations happen. Learning to control or hold back ejaculation usually takes some time and practice.

For men, orgasmic problems usually centre around being able to control orgasms. For women, it is often a problem of being able to lose control in order to have an orgasm.

In females, orgasmic dysfunctions are very common. Very little is known about the physical causes for these problems. Usually anorgasmia (lack of orgasms) has a psychological cause. The attitudes of the society in which a woman lives towards female roles in general and towards sexual enjoyment for women are very important factors influencing orgasmic problems in women. It is a controversial topic as to whether having orgasms or not is even to be considered a problem for women.

Learning exercise 1. 1 Discussion

Consider the following excerpt:

> For the woman, orgasm is a challenge to let go and lose control; for the man, the challenge is to keep control to some extent to avoid ejaculating too quickly. The implications of this particular and seemingly physiological contrast between the sexes have not been fully recognized. (Bancroft, 1989, p. 373.)

In small groups discuss the quotation trying to answer the following questions:

(a) What is your first reaction to this statement on a feeling level?

(b) What would be the reaction of the majority of people in your community?

(c) Why might people have sexual problems in your society?

(d) Does this quote shed any light on the origins of sexual problems between men and women?

(e) Would you consider anorgasmia in women to be a problem?

Learning exercise 1.2 Case history

Hope, a 25 year old housewife, was raised with the idea that men and women should be together only in marriage and only for the purpose of procreation and family life. She has been taught that men are superior and that her role is to fulfil her husband's sexual needs and have children. Hope's father drank too much and when she was in her early teenage years he used to come to her room and have sex with her when he was drunk. She has suppressed her memories of these happenings. She is now married to Jimmy who loves her and is good to her and they have three children. They have confided to their health care provider that they are feeling unhappy about their sex lives. He would like to have sex more often, but can see that Hope doesn't want to and this decreases his enjoyment. She would rather not have sex at all and feels resentful of her husband's demands.

In small groups discuss:

(a) What might be some reasons why Hope and Jimmy feel differently about sex?

(b) What parts of Hope's past could be responsible for her dislike of sex?

(c) Discuss the importance of sexual enjoyment for women in your society .

Learning exercise 1.3 Case history

Aki, a 34 year old married man with a family, admits to his health care provider that he has been unable to maintain an erection for more than a few minutes during the past year. He has not been able to have intercourse. He is

distraught over this problem. In careful questioning it emerges that whenever he has a full erection and tries to have intercourse he has exquisite pain at the tip of his penis. The pain got worse last year and that was when his erectile difficulties began. Since this problem started he has been unable to concentrate at work and has stopped talking to his wife and children. He says he feels too depressed and ashamed to be able to go on living.

In small groups discuss this case answering the following questions:

(a) What do you think might be some of the causes of Aki's erectile difficulties?

(b) Does this scenario seem possible in your community?

(c) Why do you think Aki has had such a severe reaction to his sexual problem?

(d) Discuss the importance of sexual functioning for men in your society.

Learning activity 2. What kinds of sexual difficulties do people have and what therapies are there to help with these problems ?

The majority of the information available about problems of sexuality is from developed countries. This does not mean that people in other countries do not have sexual problems. The limited sexual research which has been done so far in Asian and Pacific countries indicates that problems do occur, and that they may be quite similar to those in other countries. Brief descriptions of problems and therapies will be given here. The usefulness of this in other parts of the world must be decided by the teachers and health care workers who will be using these modules. The people most familiar with their own cultures are the best people to decide whether or not this information is appropriate to teach. Perhaps this learning activity will bring up questions and discussion about what problems of sexuality exist in different societies. During this learning activity

it will be important to explore the attitudes, values and beliefs of those using the activity , and the realities of the sexual problems in that particular society .

Some of the possible causes of sexual difficulty have been discussed in the previous learning activity. Now some of the actual problems will be described, along with the therapies which are sometimes helpful. Please remember that some conditions should be referred to practitioners who are experts in treating them. Health care workers should only attempt to use therapies they are familiar and comfortable with.

Cognition - relationship, communication or personal psychological difficulties

By far the majority of sexual problems have their origins in problems in the relationship between the partners, or in psychological problems in one or both partners. Often, counselling to improve communications between partners is all that is needed to improve sexual functioning. In some cases, long-term psychotherapy for more serious problems, such as depression, is necessary .

In couples, sex therapy counselling focuses on getting the partners to .relax and trust each other. This removes some of the inhibitions which make sexual satisfaction difficult.

Relaxation and trust between partners can usually improve sexual relations.

Individual therapy (involving one person and the therapist) must often focus on relaxing many of the deeply ingrained taboos which people have grown up believing. Cultural Influences, however, are often very strong, and become a real obstacle in achieving the goals of sex therapy. Removing the effects of

childhood learning about sexuality can also be very difficult when there have been many negative messages or traumatic experiences about sex.

Sex counselling can be very effective, however, in the areas of improving communication between partners, increasing the individual's or couple's knowledge about sex, improving self-understanding and learning physical relaxation and enjoyment (see the section on Sensate focus).

Limbic system and spinal centres

As was mentioned in learning activity 1, hormone levels, drugs, alcohol, mood disturbances, neurologic lesions (or anything which affects the limbic system or spinal pathways) can disturb sexual functioning. Problems in these areas can take many forms, but they are usually difficulties in arousal. This means that in the presence of stimulation, adequate sexual arousal does not take place.

Therapies in this area should first centre on correcting the cause of the disturbance. In some cases, testing of hormone levels and further investigation can lead to diagnosis of correctable physiological problems. There are some drugs which change the levels of sex hormones circulating in the body (anti-androgens, anti-convulsants, oral contraceptives, etc.). Some medications prescribed by health care workers can depress sexual functioning (barbiturates, some blood pressure drugs, etc.). A thorough history of drug taking can uncover the root of some problems in sexual interest and arousal. Stopping or lowering the dosages of some medications can sometimes correct arousal problems. However, patients should never change their medications without consulting, their health care provider.

Physical problems or drug taking should be corrected, if possible, to help people with problems in sexual arousal.

Many of the drugs that are abused are central nervous system depressants which can cause depression of the limbic system. Alcohol is one the most widely used substances which can depress sexual functioning, even when taken in moderate amounts. People often think of alcohol as a sexual aid, but this is incorrect. Careful counselling about the effects of drugs and alcohol is a necessary part of sexuality therapy.

As mentioned previously, correcting mood disturbances through psychotherapy can be helpful in renewing interest in sexual activity. When the problem is a neurologic abnormality or injury, the therapy might be correcting the lesion. If correction is impossible, then helping the patient/client to adjust their sexual activities and satisfactions to the situation is helpful. For example, a person with a spinal cord injury may be paralyzed and unable to move the pelvic area. Normal sexual arousal and sensation may still be intact, however. In this case, sexual intercourse and orgasm can still occur, but the other partner must do all the movement. When neurologic lesions impair sensation and/or normal sexual arousal (vaginal lubrication/erection) then people can be counselled in how to feel sexually satisfied through stimulation of other parts of the body, and maintaining close physical contact with a loving partner. It is important to remember that sexual health is concerned with much more than just physical satisfaction.

Genital response

In learning activity 1, it was learned that for genital response to occur in a normal manner, the vascular structure, nerve supply (especially the autonomic nervous system), hormone levels, and muscle tone must be intact. Also, pain must be at a minimum. When someone has difficulties with genital response, it is important to evaluate the person for problems in any of these areas. Often, physical examination will reveal the origins of problems, such as tight foreskin in the male, or scarring or other vaginal or vulvar abnormalities in the female. A very thorough physical examination and sexual history are very important in finding the cause of problems relating to genital response

Erectile failure

The problem of erectile failure (inability to get or sustain an erection) has often been called impotence. This word implies that sexual fulfilment and power are closely related. The terms erectile failure, or erectile inhibition have less emotion attached to them. Sometimes there are physical problems (such as vascular leaks or nerve damage) which cause erectile failure. A thorough physical examination and history should be done to rule these out. The most common cause of erectile failure is performance anxiety. This means that when the man thinks of sexual activity, he becomes anxious that he will not be able to have an erection or that he will not be able to keep the erection during penetration and intercourse. This anxiety then keeps him from having an erection. A single episode of erectile failure, *or* any number of complex thought and/or emotional processes can trigger this anxiety. Therapies range from simple reassurance to long-term psychotherapy. The goal of therapy is to lower anxiety. The partner can learn techniques to stimulate the man and take responsibility for penetration of the penis. This can substantially reduce the man's anxiety. Of course, a trusting relationship with good communication between partners is an essential ingredient in overcoming erectile difficulties.

Reduction of performance anxiety can often correct erectile failure.

When erectile failure does have a physical cause that cannot be corrected, or when other therapies have not helped, there are some surgical or mechanical treatments. Penile implants (plastic cylinders surgically implanted in the penis) have been successful in some patients. Some implants stay rigid all the time, while others contain a small pump and valve which are implanted in the scrotum and can be pumped up and deflated as needed. Some men have tried a kind of vacuum pump which fits over the penis, causes a vacuum and helps the

corpora cavernosa fill with blood. Still others have tried intracavernosal injections in which sterile water is injected into the penis with a syringe. When erections are of great importance to the patient, often one of these devices can be very helpful to his self image.

Lack of vaginal lubrication

A common female genital response problem is lack of vaginal lubrication. Lubrication occurs because of vasocongestion (swelling) of the vagina and vulva. When there is not enough stimulation of the woman's genitals or the stimulation is not of the right kind, arousal and lubrication do not occur adequately for comfortable penetration. Also, low estrogen levels during and after menopause causes vaginal dryness.

Using a water based lubricant is sometimes the best way to deal with lack of vaginal lubrication.

Therapy for lack of lubrication should depend on the cause. In the case of physiological dryness, use of a water based lubricant can be very helpful. A remedy for vaginal dryness due to menopause is the use of either oral hormone replacement therapy, or estrogen vaginal cream. Often, the most helpful therapies for correcting female arousal difficulties are those which simply give accurate information about sex. Correcting sexual misconceptions and reducing ignorance about sexual activities can often be all that is necessary to help a woman to relax sufficiently to experience normal arousal. When the problem is that there is insufficient stimulation, then therapy focuses upon communication between the partners. When the woman can tell or show her partner what feels good, then lubrication is much more likely to occur. Again, trust and comfort between partners are of great importance. Often, therapy will centre around resolving conflicts and other relationship problems.

Vaginismus

Vaginismus is a problem that happens less often than inhibition of vaginal lubrication. It is an involuntary contraction (spasm) of the vaginal muscles. The spasm is usually strong enough to keep anything from entering the vagina. Intercourse or even pelvic examination become impossible. This is an involuntary response, and may be caused by fear, pain, anger or ambivalent feelings. Sometimes, women with vaginismus have experienced sexual assault in the past, or have very strong societal or religious taboos against sexual activities. Women with vaginismus may have normal sexual arousal in all other ways, and do have orgasms.

Usually vaginismus can be resolved with a programme of progressive relaxation and introduction of dilators into the vagina.

Although the muscle spasms of vaginismus are involuntary, women can learn to control them so that pelvic examination or intercourse can occur. First, the woman must want to be able to control the spasms. Counselling may be necessary to discover if she wants to change, and to uncover and resolve past conflicts, relationship problems, or areas of misinformation. Treatment for the problem continues with teaching of relaxation techniques, along with self awareness and self exploration exercises. Next, after some time, she will go on to being able to slowly insert her own lubricated finger into her vagina. She can then learn to insert more fingers without spasms occurring. The use of dilators (cylindrical shaped objects of different sizes) can often be helpful. Therapy then continues to having the sexual partner gradually insert fingers, dilators and eventually his penis into the vagina. With time and patience vaginismus can usually be completely resolved. Open communication and trust between the sexual partners are extremely important throughout the steps of therapy for vaginismus.

Painful intercourse

Pain during sexual intercourse is a common problem. In the male it can be caused by tight foreskin, skin tears or other lesions, inflammations or deformities. In women it can come from vaginal dryness, inadequate vasocongestion, failures of vaginal ballooning or uterine elevation and estrogen deficiencies. Vaginal inflammation, infections and many physical characteristics that might interfere with the vaginal opening (including small vaginal opening) can contribute to pain in the female. In both sexes, physical exam and a detailed history are very important in diagnosing the problem.

There is usually a physical cause that is easily correctable for painful intercourse.

A tight foreskin can be corrected with simple surgery, as can prominent fourchette, scarring after episiotomy, prolapses, intact hymen and other anatomical abnormalities. Cysts, endometriosis and tumours are also usually correctable with surgery. Vaginal dryness should be investigated, but can usually be dealt with by using hormone replacement therapy (for the menopausal woman), estrogen creams, or water based lubricants. Other problems of arousal (lack of uterine elevation or vaginal ballooning) often come from not getting enough of the right kind of stimulation (see next section, Tactile stimulus). Sometimes no physical cause can be found for painful intercourse. Often relaxation techniques, self awareness, resolution of relationship problems (anger and resentment), building of trust, and/or opening avenues of communication can be very helpful to couples.

Tactile stimulus

An important part of sexual experience is the kind and amount of actual physical touching which people do for themselves or each other. This stimulation can be to any place on the body, not just the genitals. Often stimulus in other places produces sexual arousal. These areas are known as erogenous zones. Every person has different erogenous zones and likes different kinds of touching. When people are afraid or ignorant about their bodies, it is often difficult to touch themselves or their partners in ways that produce sexual pleasure. Relaxation and comfort with touching are necessary and can be learned. Also, sexual partners need to be able to communicate well with each other to tell each other in words or actions what feels good and is sexually stimulating. When couples understand this and get some help in trying different ways to talk with each other about this sensitive topic, their satisfaction with sex can increase tremendously. Often, improving communication around tactile stimulus can be the most important part of helping couples with sexual difficulties. Improving communications often involves dealing with cultural taboos, past life experiences, religious concerns, beliefs about sexual roles and stereotyping.

Communication between sexual partners is essential to be able to tell each other what feels good.

Two tactile stimulus problems that have been noted are sexual anaesthesia (inability to feel sexual stimuli) and sexual hyperaesthesia (feeling sexual stimuli too strongly). Both of these can be from neurological lesions, but usually there is a psychological cause. Reduction of fear and anxiety can be very helpful.

Orgasm in women

Difficulties having orgasms are very common in women. In learning activity 1, some of the reasons that might cause women to have trouble having orgasms were discussed, and whether or not it is even important for a woman to experience orgasm. If women do wish to have orgasms and are having trouble with this, there are therapies that can help. When looking at orgasm problems in women it is suggested to use the terms "preorgasmic difficulties" (never having had an orgasm), and "secondary nonorgasmic difficulties" (lack of orgasm in certain situations) instead of the standard "anorgasmia" or "orgasmic dysfunction"[1]. The new terms imply that the difficulty is probably temporary and correctable, and that it is not caused by something "wrong" with the woman.

Preorgasmic difficulties

If a woman has never experienced orgasm she can be said to be preorgasmic. The implication is that she can have orgasms with the correct information, stimulus, resolution of feelings, relaxed state of mind, and/or trust and communication with her partner. It was learned in learning activity I that, in order for a woman to have an orgasm, she must be able to let go of control of her emotions and bodily responses. This can be very difficult for some women, especially in the presence of another person.

The first step in helping a woman to achieve orgasm is to make sure she has the information she needs about her own body. It is helpful for her to know her sexual anatomy as well as how the sexual response works. It may also be beneficial for her to understand her partner's anatomy and response, but the first focus should be on herself. In fact, progressive self awareness activities constitute the major strategy for helping preorgasmic women. In groups or with a therapist, women can learn much about their own bodies. Many women have never looked at their genitals and have never touched those areas to give themselves pleasure (masturbated).

[1]Crooks R, Baur K. *Our sexuality.* Fifth edition. Redwood City, California: Benjamin-Cummings, 1992.

A woman can learn to have orgasms by becoming comfortable touching her own genitals and giving herself pleasure.

Programmes for helping women become orgasmic start with self body exploration. The woman begins by exploring her own naked body visually, then with her fingers. She concentrates on the sensations from the exploration. She explores her whole body including her genitalia. Then she goes on to stimulate the areas that feel best, intentionally not getting to orgasm. After some time of becoming stimulated, and stopping, she may continue the arousing activity to orgasm. She is taught to be aware of distracting thoughts, but to refocus on the sensations. Sometimes, a woman may use a vibrator to help her have her first orgasm, or may need private therapy to help overcome the effects of cultural or religious taboos or negative sexual experiences. When there are major relationship problems, then therapy may be indicated for the couple.

Secondary nonorgasmic difficulties

Many women have had orgasms in the past, but now no longer have them. Others have orgasms in some situations and not in others. Some can have orgasms with self stimulation but not with a partner, or with manual or oral stimulation, but not during intercourse. All of these are known as secondary nonorgasmic difficulties.

Should these be considered as problems? If a woman feels that her lack of orgasm in some circumstances is problematic, then it is a problem for her. There are ways she can deal with this and, perhaps, resolve it.

The same self exploration activities used in preorgasmic difficulties can often be helpful in secondary orgasmic difficulties. If the woman can learn to masturbate to orgasm then she can usually learn to tell or show her partner how to stimulate her in the same way. Trust and communication between partners are of the utmost importance. Therapy for secondary orgasmic difficulties is largely a

process of solving relationship problems, then integrating stimulating activities so that the woman can achieve orgasm in the desired circumstances. Sometimes the woman will come to the realization that there is nothing wrong with her present way of enjoying sex, and will stop pushing herself to have orgasms in a certain way. Many times women who wish to have orgasms during intercourse find that continuing manual clitoral stimulation during intercourse will bring them to orgasm. Usually women can find satisfactory solutions to orgasmic problems through exploration by themselves and with their partner.

Orgasm and ejaculation in men

Rapid ejaculation

Another term for rapid ejaculation is premature ejaculation. This problem exists when the man ejaculates earlier in the sexual encounter than he wants to. For some men this means ejaculating even before penetration, and for others it might mean climaxing before his partner has had a satisfying experience. Rapid ejaculation is a very common problem in men.

As was learned in learning activity 1, the challenge for men in orgasm is to be able to control the response; to be able to hold back long enough to give his partner pleasure. Many men have had to conceal their sexual activities when they were young (like masturbating quickly in the shower, or having furtive intercourse in the back seat of the car) and have developed the habit of coming to orgasm very quickly. Experience and learning are very important in sexual response. Lasting longer can be learned. A way to help a man last longer is to teach him to draw back from sexual stimulation just before orgasm. A technique which men can use on themselves, or that their partners can learn is called the squeeze technique. This consists of the man getting close to orgasm, then stopping the sexual stimulus. At this point the man can either just stay still and be aware of the subsiding pre-ejaculatory sensations, or apply strong pressure (squeeze) with the thumb on the frenum and two fingers on the top and bottom of the penis. He squeezes the tip of the penis. After doing this exercise several

times on various occasions the man has a better awareness of how he feels just before orgasm, and has the confidence of knowing that he can control his ejaculations. His partner can help by learning how to apply the squeeze, but the man must tell his partner when to do this.

A man can learn to last longer by being able to recognize how he feels right before orgasm and then pulling back.

It is sometimes useful to try to help men with rapid ejaculation to reduce their performance anxiety .One way to do this is to encourage other sexual activities besides intercourse. When men find that they can give their partners sexual pleasure in other ways (such as oral-genital or manual stimulation) they often become less anxious. With lowered anxiety, they may find that it is easier to delay ejaculation.

Ejaculatory inhibition

A problem that is much less common than rapid ejaculation is ejaculatory inhibition. This means that the man cannot ejaculate during coitus. Primary ejaculatory inhibition means that he has never been able to ejaculate during intercourse. Most men with this problem have had ejaculations during manual or oral stimulation, but a few have never ejaculated at all. Secondary ejaculatory inhibition means that he has had ejaculations during intercourse in the past, but no longer does. Sometimes men are also unable to have full orgasms during coitus. Guilt, conflict with his partner, fear of getting the woman pregnant and other relationship difficulties can cause this. Physical causes for ejaculatory inhibition are very rare. Sometimes a traumatic event related to sexual activity can be the cause of ejaculatory inhibition.

Often, ejaculatory inhibition can be resolved with psychotherapy and a programme of reconditioning.

Psychotherapy to resolve emotional and/or relationship issues may be the most important part of treatment for ejaculatory inhibition. When these are no longer an issue, then reconditioning therapy similar to that for rapid ejaculation can be very useful. This programme starts with sensate focus exercises (see next section). When the partners have become relaxed with each other's bodies, then the man proceeds to having an ejaculation any way he can (manual or oral stimulation from his partner, or self stimulation). The couple then continue sessions with progressively more stimulation by the partner, until the partner can stimulate the man's orgasm with no need for self stimulation. They then go on to trying penetration when the man is almost to the point of orgasm. He withdraws if ejaculation does not occur very soon after penetration and the partner continues with manual or oral stimulation. When the man is able to ejaculate inside using this method, often he can easily progress to beginning intercourse sooner and sooner in the sexual encounter. Ejaculatory inhibition can usually be resolved with a programme like this.

Sensate focus

A programme of progressive mutual exploration that has helped many couples become more comfortable with each other and resolve many kinds of sexual difficulties is known as sensate focus. It is designed to increase communication and relaxation between partners by non-demand touching, caressing and stimulation. Non-demand means that the partners do not expect any sexual performance from each other during the sessions. This is a good way for couples to be able to focus on the sensual part of their relationship without getting caught up in sexual patterns that may have been a problem.

Sensate focus gives couples a way to begin to feel more comfortable with each others' bodies and learn to communicate about what feels good. It is focus on sensation.

The first step in sensate focus is for one partner (the giver) to begin touching the other partner (the receiver). Both people are naked. The giver touches the receiver all over the body (except the genitals) slowly. All kinds of touching can be tried. The receiver tells the giver when something hurts or does not feel good and when something feels especially good. Then the partners change roles. The sessions should be long enough for the partners to get relaxed and explore each other's bodies thoroughly. They should also be separated by some time. In this exercise couples can learn much about how to give each other pleasure, and how to be the receiver of pleasure.

When both people feel comfortable with the first step, they can then go on to genital touching, without intercourse or orgasm. In the same way as in the first step, the giver now spends time thoroughly exploring and touching the receiver's genitals. The receiver tells the giver what feels good and what does not. The partners should not go on to sexual activity or stimulation to orgasm in this step.

Next, after a few sessions of the first two steps, the partners may go on to stimulation to orgasm, or sexual intercourse. Most couples find that these exercises help them to relax with each other and to be able to communicate more clearly. Sensate focus can be valuable to many couples whether they have sexual "problems" or not.

Conclusion

In the field of therapy for sexual problems, it is usually the case that giving people the correct information about sex, and helping them to relax, trust each other and communicate better are helpful. When problems are more serious and do not go away with simple information giving and counselling, it is important to know where to refer people to get more help.

Learning exercise 2.1 Discussion

What kind of sexual problems do people have in your society?

(a) In small groups, discuss this question by having each person in the group describe an interaction with a patient/client in which a sexual problem was discussed. What was the problem? Is this problem unusual in this community? Were you comfortable discussing the problem?

(b) On a board or large sheet of paper list all the problems that are discussed. Each group member should decide whether each problem could possibly be a problem in their community and should list their conclusion in their journals. If everyone in the group is from the same community, this part of the exercise can be done as a group, with conclusions listed on the board.

(c) A spokesperson from each group will present an overview of the problems discussed in their group to the large group.

(d) Assign someone to make a master list of all available services discovered by the large group. Distribute the list to all class members.

Learning exercise 2.2 Discussion

Where can people find help for sexual problems in your community?

(a) In small groups discuss what services you already know that are accessible to people with sexual problems in your community .Start a list of these services including name of organization, type of service available, address and telephone number. These services may be groups that offer counselling for individuals or groups, private health care providers, counsellors, or nongovernmental organizations that offer services for particular groups of people. Sex counselling need not be the primary function of the person or organization.

(b) It is very possible that no one in the group will know of any services for sexual problems, or that none exist. It is important to find out what does exist. Homework for the group is to find out about these services. Group members can use the telephone book and make telephone calls to find out this information. It might also be helpful to talk to health care providers and counsellors in your area to get more information. A good place to start is at the sexually transmitted disease clinic.

(c) If you do have services available, field trips can be arranged for small groups to visit them. Interviews with the doctors, nurses, or counsellors might be arranged asking such questions as:

- What kinds of problems are treated here?
- How do you help people with these problems?
- What other services do you refer clients to?
- What therapies have you found to be the most helpful?
- What therapies have you found to be the least helpful?
- What services are lacking in this community?

Learning exercise 2.3 *Case studies*

The following case studies can be used for self study, group discussion, or in any way that is considered most useful. Role playing is the recommended way to use them. In small groups of 3 or 4 students, assign roles of provider of care (counsellor), client, observer. The situation should be acted out as if the client (described in the paragraph) has come to the provider to seek help for the problem. Each member of the small group should have a chance to play each role. Roles should be changed every 5 to 15 minutes depending on time restraints and the depth of counselling which is appropriate for the students in the class. At the end, the group members should take some time to answer together the following questions:

- What sexual difficulty did the client have?
- What kind of help did he/she need?
- When you were the consular, were you comfortable
- counselling the client?
- What do you need to feel more comfortable?
- Are appropriate services available in your community?
- What services are needed?
- What needs to be done to develop these services?

It is suggested that the teacher replace the names in the case studies with appropriate local names.

Case study 1

Jun is a 25 year old married man. He lost his job as a bus driver six months ago and has not been able to find another one. He and his wife have been fighting a lot. They almost never have sex anymore, and he is thinking of leaving his wife, or finding a new sex partner.

Case study 2

Marie is having her yearly PAP smear. She mentions to you that she has not enjoyed having sex for several years and wants to know if this is normal for a woman of her age (38 years old). Although her husband is a good man and loves her, she simply does not feel sexually excited when they make love.

Case study 3

Michael is a 33 year old man who likes to go out at the weekends to bars, drink a lot of beer, and take a partner home for sex. He is quite worried, because lately he has had trouble with his erections. He finds that they come and go, and that he is not usually able to have intercourse.

Case study 4

Clare is 31 years old, married with no children. She has never been able to have intercourse because her vaginal muscles tighten too much to allow entry of her husband's penis. She and her husband have had sexual enjoyment through oral sex and mutual masturbation, but they would like to have a baby.

Case study 5

Jonathan and Susan have been dating for about a year. They love each other and are thinking about getting married. They have been sleeping together for several months and are concerned because Jonathan has quick and satisfying orgasms, but Susan does not feel satisfied. Both partners have grown up with very strict religious taboos about sexual activities and they are very embarrassed to talk to each other about sex.

Case study 6

Paul and Mark are 28 years old and feel happy in their relationship which is of 5 years duration. Mark has been feeling unhappy, however, about their sex life. He likes mutual masturbation and oral sex, but would like to have anal intercourse. He usually ejaculates very quickly with any sexual stimulation, and always before entry.

MODULE 3
SEXUALITY AND AGING, CHRONIC ILLNESS AND DISABILITIES

General objective

On completion of this module, the student will have an understanding of the changes that occur in human sexuality during aging and some of the special sexual needs and problems that can occur in chronic illness and disabilities.

Learning outcomes

On completion of this module, the student will be able to:

- identify and describe the major changes in human sexuality which occur during aging;
- explain the effects several types of chronic illness might have on the sexuality of the patient;
- explain the special problems of sexuality which can be encountered by persons with various disabilities;
- discuss the effects of various drugs on sexuality;
- explore ways of helping people in hospitals and institutions to retain their sexual lives; and
- discuss and counsel patients about maintaining sexual health in aging, chronic illness and disability.

Introduction

Human sexuality is an area of concern throughout a person's life span. Sexual activities, desires and needs do not begin and end with the reproductive years. Also, people with illnesses or disabilities have the same needs for sexual expression and contact as anyone else. In this module are discussed the changes in sexuality that occur with aging. Sexuality in the context of various chronic illnesses and disabilities is also explored. Sexual health can be maintained during aging, illness and disabilities.

Several drugs have been implicated in sexual problems and these will be highlighted. Especially important for health care workers to explore are the special problems of sexuality and sexual expression in hospitals and institutions. The idea that the patients we treat for other problems are also sexual beings might be a new thought for many. The fact is that the sexual needs of our patients have often not been given the attention necessary to help maintain sexual health. This module addresses these areas of concern and gives students a chance to discuss ways of helping patients of all ages and in all kinds of health states to acknowledge and fulfil their sexual needs.

Learning activities

Learning activity 1. In what ways does sexuality change in older age?

It is a myth that older people do not need sex as much as younger people. It is also a myth that older people are not likely to be sexually active. Some changes in sexuality (both physical and psychological) take place in older age. These changes do not mean that sexual desires, needs or activities cease. Many people remain sexually active in older age.

Old people need sex too

Women

In women the main sexual change that occurs with aging is that menstruation stops. This usually happens around the age of 50 when the ovaries stop producing ova, and hormone levels change. The estrogen secretion by the ovaries begins to slow down at around age 40. By the time ovulation stops, the ovaries are not producing estrogen at all. Some estrogen still remains from other organs, but the levels are dramatically reduced. For several years around the time of menopause (cessation of menstruation) women may experience a variety of phenomena. These vary greatly from woman to woman. The most common are hot flushes and night sweats. Others include sleep disturbances, itchy or burning skin, sensitivity to touch, numbness or tingling, memory and concentration problems, depression and anxiety. They are most acute two years before and after menopause. Estrogen pills (hormone replacement therapy - HRT) or use of estrogen patches may help and may also help to avoid heart disease and osteoporosis in post-menopausal women. The use of estrogen replacement is controversial, however, because of possible increased risk for uterine and breast cancer.

Menopause occurs over several years and causes uncomfortable sensations for many women.

The most obvious change caused by menopause is that the woman is no longer able to have babies. Some women may mourn this loss, but for others it brings a new freedom and may increase feelings of sexual intimacy.

There are also changes in the woman's sexual response cycle. In the excitement phase, vaginal lubrication may take longer and may not be as copious. Many women need to use lubricants. Also, the tissues of the vulva and vagina become thinner and tend to lose some of their elasticity. This can lead to pain during sexual intercourse. There can be reduced sensation in the clitoris that leads to reduction in excitement. During the plateau phase, the elevation of the uterus and the development of the orgasmic platform may take place more slowly and to a lesser degree. During orgasm there may be fewer and weaker contractions of the uterus and the platform. Resolution occurs more rapidly than before menopause. Generally things take longer, but most women report that the pleasure of sexual activities remains the same or even increases in older age. There is more time for the psychological intimacy which is a natural aphrodisiac.

Men

In men there is no dramatic event (such as the cessation of menstruation in women) which heralds sexual aging. There is just a gradual change in the intensity and duration of the sexual response. These changes are related to gradually decreasing levels of testosterone (which begins in early adulthood). During excitement, it takes longer to get an erection. It often takes more direct physical stimulation of the penis to produce an erection, whereas just thinking sexual thoughts would produce one before. It is important for men to realize that this slowed rate does not mean he has erectile dysfunction but is a natural part of the aging process. Most men retain the ability to have erections throughout their life span. The plateau phase is usually prolonged. There may be less muscle tension and elevation of the testes, and complete erection may not occur until just before orgasm. This may actually increase the pleasure of both partners. Orgasm may be less intense as a man gets older. There are fewer muscle contractions, less fluid is ejaculated, and there is less force to the ejaculation. Resolution occurs more rapidly in the older man. There is usually no decrease in the pleasure from sexual activities. In fact, some men find that having more leisure time and more intimacy with their partner increases their sexual pleasure.

Men take longer to get excited when they are older .

One problem frequently encountered by older men is the change in the prostate gland. Inflammation of this gland (prostatitis) occurs more often in older men. There is also often an increase in prostate tissue that can lead to urinary hesitancy and frequency. Tumours of the prostate gland are fairly frequent in older men. These conditions may require surgery which can then lead to erectile problems. Fortunately, the majority of these surgeries do not cause problems.

Men also experience some changes in their sexual organs. The size and firmness of the testicles decrease and less sperm is produced. Many men remain fertile well into old age, however.

Conclusion

Although there are changes in sexuality in both sexes during older age, most of these changes are in time and intensity. Many people have very satisfactory sex lives well into old age. Older couples often find their intimacy increases and anxiety decreases as many of the cares of having and raising children and developing a career end. This leads to greater sexual enjoyment. Some couples find that they are faced with relationship problems in older age that could be ignored when they were busy with children and careers. Sexual intimacy often suffers under these circumstances. Counselling can help. When older people are single (through widowhood. divorce or choice) they will often use masturbation for sexual satisfaction. Older people date, start new relationships or have brief sexual encounters just as younger people do. They can also be at risk for sexually transmitted diseases. It is a mistake for health care providers to assume that because someone is old, they have no sexual concerns.

Learning exercise 1. Speaker/interviews

It may be possible to find an older person (or more than one) who would be willing to come to class and talk about their sexuality. Students should be instructed to remain respectful in attitude and question asking. An alternative to this would be to have students interview older adults in a nursing home or hospital. Some questions to ask in these interviews might include:

- Are you sexually active at present?
- Do you find that there are changes in your sexual activities or enjoyment now that you are older?
- What kinds of sexual concerns do you have?

People might be uncomfortable with the idea of approaching older adults to ask about speaking or being interviewed on this topic. Usually, a respectful attitude in combination with a polite explanation of the goals of the class will ease the conversation. It might help to explain the necessity of talking to a variety of people to get a real picture of how things are. It might also be helpful to read the module about taking a sexual history in Volume 7 of this series before proceeding.

Learning exercise 2. Discussion

How do you feel about old people and sex?

In small groups, discuss the following questions. Start by brainstorming all the thoughts and feelings of the group members. Write them all on the board or a large piece of paper. Leave time to have a discussion about the thoughts and feelings that come out in the brainstorming session.

- Is it right for people to continue having sex when they are old?
- When reproduction is no longer possible, should sexual interest stop? Does it stop?

- Do the theories about sexual health pertain to older people? In what ways?

Learning exercise 3. *Case studies*

The following case studies can be used for self study, group discussion, or in any way that is considered most useful. Role playing is the recommended way to use them. In small groups of 3 or 4 students, assign roles of provider of care (counsellor), client, and observer. The situation should be acted out as if the client (described in the paragraph) has come to the counsellor to seek help for the problem. Each member of the small group should have a chance to play each role. Roles should be changed every 5 to 15 minutes depending on time restraints and the depth of counselling which is appropriate for the students in the class. At the end, the group members should take some time to answer together the following questions:

- What difficulty did the client have?
- What kind of help did he/she need?
- When you were the counsellor, were you comfortable counselling the client?
- What do you need to feel more comfortable?

Case 1

A 65 year old female is at the medical clinic complaining of urinary frequency. She looks nervous and frightened. She has always been well before. As you talk to her you find out that she lost her husband five years ago, and has recently started a new sexual relationship with a younger man. She is embarrassed to talk about it and is afraid her symptoms are related to her sexual activities.

Case 2

A 70 year old man is very worried about his lack of erections. He has always been sexually active with several partners. Lately, when he thinks about sex he does not get erections as readily as he used to. This has gradually gotten worse over the last year and he is now afraid that he is becoming impotent.

Case 3

A 76 year old homosexual man is at the clinic because of the appearance of a small, painless ulcer on his penis. He is otherwise very healthy and he and his lifetime partner have been enjoying their retirement years.

Learning activity 2. Is sexuality 8 concern in people with chronic illnesses?

As has been learned, sexuality is a concern throughout a person's lifetime. It remains a concern when people become ill. Sometimes, when people are very acutely ill, sex will be less important. But there are many illnesses which are chronic, and become apart of the patient's everyday life. In these cases there may be some special sexual concerns. Some medications may cause problems in sexual response. Some diseases cause sexual problems, as well as general health and movement problems that may require adaptations to allow for sexual activities. Health care workers need to be aware of these to provide help. When they are aware and open to talking about concerns about sexuality in chronic illness, patients are more likely to talk to them, making it easier to help the patients find solutions to their difficulties. In this section sexuality in the context of some of the more common chronic diseases is explored.

People who are chronically ill still have sexual needs.

Diabetes

People with diabetes mellitus usually live a long time with their disease. It is an endocrine disease which causes the pancreas to produce insufficient amounts of insulin. Because diabetes usually eventually causes dysfunctions of the autonomic nervous and circulatory systems, men with the disease often have erectile difficulties. Women have reported problems with desire, lubrication and orgasm. Men often have retrograde ejaculations {ejaculations into the bladder). Patients have fewer sexual problems when there is good blood sugar control, and people who are better adapted psychologically to their disease and accepting of it, seem to report fewer sexual difficulties. Health care providers can do much to help diabetics maintain good blood sugar control and adjust to their disease. Sexual dysfunction is not inevitable in diabetes.

There are alternatives for men who have lost erectile capacity .As mentioned in the section on sexual therapies, surgical implants are available (penile prostheses). Some men may choose to use injections into the corpora cavernosa, or the vacuum tube method to assist their erections. When sexual expression through intercourse is very important to men, these methods may be considered.

People with diabetes need not lose the ability to function sexually.

Women diabetics can make use of water based lubricants if they have lubrication problems. Vibrators can increase sexual sensation and assist orgasm. Women must be particularly aware of the increased risk of vaginal infections (especially yeast) due to their disease.

Multiple sclerosis

Multiple sclerosis (MS) is a disease that causes a gradual deterioration of the myelin sheath surrounding nerves. It causes problems with vision, sensation and gradual loss of the ability to move voluntarily. Many people with MS have sexual difficulties at some point in their disease process. Sensations can be altered in the genitalia and elsewhere such that touch is not felt or is felt too strongly, thus leading to arousal difficulties. Some MS patients lose their sexual desire. Even when sensation and arousal are not affected, the gradual paralysis leads to its own set of difficulties. MS patients remain sexual beings throughout their lives, however. It is a mistake to assume that someone with this disease has lost the need for sexual closeness. Health care providers can help patients find activities that help them remain sexually fulfilled.

Heart disease

Many people have found it necessary to limit their physical activity due to heart disease. Often patients are afraid to be sexually active, thinking that this strenuous effort will be too much for their hearts. It turns out, however, that intercourse and orgasm are no more strain on the heart than the brisk walking recommended for many heart patients. If patients avoid athletic activities during sex, they need not have fears that being sexually active will damage them. People with heart disease need to hear this message early in their disease process, since many people harbour anxiety over sex that can be much more harmful than the sexual activities themselves. However, the advice given to people about sexual activities must be individually tailored. For people with end stage heart disease sexual activities may need to be very limited, but for those people for whom moderate exercise can be safely recommended, most sex is also safe.

Some diseases make it necessary to plan sexual activities around timing for pain medications, or to experiment with positions.

Strokes

Cerebrovascular accidents (strokes) are very common. The cause is disruption of blood flow to part of the brain due to blockage of arteries, or haemorrhages. Sometimes there is very little damage from a small stroke, but often there is resulting paralysis, speech problems, and other problems with sensation and mobility. Sexual problems that may result range from those due to limited mobility, to lack of interest due to emotional disturbances (especially depression). People with strokes might not have the same sensory input from their genitals or other body parts that they used to have. It takes time to adapt to the different physical sensations and body mobility after a stroke. Adapting sexually can be just as important as other kinds of adaptation. Patients may need reassurance that it is still all right to have sex and that it will not cause another stroke. Often people need help in accepting their altered body image before they feel like sexual activity. Most of all they need their health care providers to be aware that they are still sexual beings so that they can talk about their concerns and receive help in exploring solutions.

Arthritis

Arthritis is a crippling disease that affects many people, both young and old. It causes inflammation, pain and stiffness of joints. Arthritis can cause so much pain that sexual activities are very limited or almost impossible. It also limits sex because of immobile joints. Some patients have such limited motion of their hands that they have trouble masturbating. Arthritis patients often have depression or are very fatigued. Health care providers can help people with arthritis by

encouraging them to investigate sexual positions that are most comfortable. Suggestions for help are to take pain medications 30 minutes before sexual activities are attempted, use moist heat packs on joints just before sex, plan sex for times when fatigue is least likely, and experiment with positions and activities which avoid use of the affected joints.

AIDS

AIDS is a sexually transmitted disease which causes a gradual deterioration of the patient's immune system, and eventual death, usually from opportunistic infections. People now often live a number of years with AIDS and sexuality is a concern. Since AIDS is a sexually transmitted disease, people who have it often feel guilty and ashamed, even when they contracted the disease in another way. They may have very valid fears about passing the disease to someone else during sexual activities. When patients become ill, there are problems of low energy levels and depression which make sex more difficult. Health care providers can help by teaching safe sex practices (see Module 2 in Volume 7 of this series), giving reassurance, and being open to questions and discussion about sexual activity. An accepting attitude from a health care provider can do much to help AIDS patients feel better about themselves.

Cancer

People with cancer can be of any age. The sexuality of cancer patients is often overlooked. Cancer and its treatments can be devastating to a person's sexuality. The disease itself can cause pain and hormonal imbalances. Treatments such as chemotherapy or radiation can cause illness, fatigue, hair loss and other disfigurement. People with cancer need health care providers who can help them by listening and talking about relationship, intimacy and sexual concerns. Many issues come up for couples when one partner gets cancer and sexuality can suffer. People can make use of pain medications just before lovemaking, find comfortable positions or even use erotic fantasy in order to maintain sexual intimacy.

Disfigurement does not preclude sexual need or activity.

Surgery

Many kinds of surgery can cause disfigurement or other changes that might turn into problems in sexuality. Surgery on sex organs often gives people sexual concerns. Hysterectomy changes a woman's sexual identity because she is no longer able to bear children. If the ovaries are removed, there will be a sudden change in hormone levels (surgical menopause) and the adjustment to taking oral hormones can result in emotional and physical ups and downs. Mastectomy (removal of abreast) can have severe effects on a woman's self image and thus her sexuality. Orchidectomy (removal of a testicle) can be psychologically devastating to a man. If one testicle remains, hormone levels may still be intact. Removal of both testicles requires hormone replacements and possibly placement of a prosthesis. Men who have had such surgery may need much encouragement and counselling. Prostatectomy (removal of all or part of the prostate gland) can cause erectile dysfunctions because there is sometimes nerve damage during the surgery. Other surgery that can greatly affect a person's sex life includes those which result in a colostomy or urostomy. These openings in the abdominal wall, covered by a bag to collect faeces or urine, are difficult for patients to get used to. Since they are visible to the sexual partner, there is often the need for some sexual adjustment. People have been able to re initiate satisfying sexual activities successfully after all of these types of surgery. It is important for health care workers to be aware and open to talking about sexual concerns with surgery patients.

Drugs

Some drugs have been implicated in sexual dysfunctions. Others have been said to act as sexual stimulants. The truth is that there are very few drugs that have been proven to either decrease or enhance sexual activities. Of course drugs that are sexual hormones or which decrease or increase the levels of these hormones will often have sexual side effects. Drugs that depress the central nervous system or excite it will have effects on sexual functioning also. With many other drugs, the sexual effects are even less clear cut.

The anti-hypertensives are a class of drugs that are often thought to decrease sexual functioning. It is unclear whether some of the reported problems might be from the hypertension itself. The ganglion blockers, which are no longer commonly used, produced complete erectile and ejaculatory failure. The adrenergic blockers (guanethidine and bethanidine) have also been associated with erectile and ejaculatory problems, and methyldopa is also associated with loss of libido. The beta adrenergic blockers (such as propanolol) seem to cause much fewer sexual side effects. The alpha blockers have caused ejaculatory failure without effect on erections or orgasms. Sexual problems have been reported by the takers of many other anti-hypertensives, but conclusive studies have not been done.

There are some reports of delayed orgasm from the use of minor tranquilizers in women, but the major tranquilizers (phenothiazines) have been widely implicated in loss of sexual interest, delayed orgasm and orgasm without ejaculation. One major tranquilizer that is a butyrophenone (benperidol) has been used for control of sexual behaviour because it reportedly greatly reduces sexual interest. The other butyrophenones do not seem to produce this effect.

The anti-depressant drugs (monoamine oxidase inhibitors and tricyclics) have been widely reported to be associated with many sexual side effects from ejaculatory failure to inhibition of orgasm. Epileptics often have sexual problems, which are usually attributed to the taking of anti-convulsant drugs. Most of these have endocrine effects which lead to reduction in testosterone levels, and thus decrease in sexual interest.

Hormones themselves are often used therapeutically for sexual problems. Those which are used for other purposes (such as birth control pills and steroids) can also have sexual side effects. Both of these have been implicated in arousal problems. Other drugs that indirectly affect sex hormone levels (such as digoxin, metoclopramide, and cimetidine) have been reported to have complex sexual side effects, mostly around decrease in libido.

Human beings have always searched for drugs which will enhance sexual interest and functioning. None have been studied and found conclusively to have these effects. The closest the developed countries have come to finding such an aphrodisiac, is in the drug Ldopa which is used to treat Parkinson's disease, but no conclusive studies have yet been completed. Many people believe that drugs such as alcohol, opiates, marijuana and cocaine are sexual stimulants. Although small amounts of these may decrease inhibitions and seem to stimulate sexual interest, in the long run they all become depressants of sexual functioning.

Learning exercise 2.1 Study visit

Plan a visit to a clinic or hospital where there are patients who suffer from chronic diseases, such as diabetes or arthritis. Interview one or two patients about how their disease has affected their sexual activities. The visit should be planned with the director of the institution, and discussed beforehand with the staff. This will facilitate the students' access to the patients and allow the staff to suggest patients who would be the most amenable to such an interview.

Learning exercise 2.2 Case studies

The following case studies can be used for self study, group discussion, or in any way that is considered most useful. Role playing is the recommended way to use them. In small groups of 3 or 4 students, assign roles of provider of care (counsellor), client, and observer. The situation should be acted out as if the client (described in the paragraph) has come to the counsellor to seek help for the problem. Each member of the small group should have a chance to play each role. Roles should be changed every 5 to 15 minutes depending on time

restraints and the depth of counselling which Is appropriate for the students in the class. At the end, the group members should take some time to answer together the following questions:

- What difficulty did the client have?
- What kind of help did he/she need?
- When you were the counsellor, were you comfortable counselling the client?
- What do you need to feel more comfortable?

Case 1

A 28 year old man who was recently diagnosed with diabetes says he has been having trouble maintaining his erections. He says the difficulty started when he found out that this is a common problem with male diabetics.

Case 2

A 49 year old woman with arthritis is dismayed because her husband often wants to have sex with her early in the morning. She used to enjoy this also, but now she finds that her arthritis pain is at its worst in the early morning and she does not enjoy the sexual activities.

Case 3

A 60 year old man recently had surgery for colon cancer and was left with a colostomy. He is so embarrassed about having the opening in his abdomen, he will not let his wife see it. They no longer have sex, and he will not let his wife touch him. She is very upset and wants to know how to help him.

Case 4

A 40 year old woman complains that she no longer feels like having sex. She has enjoyed an active sex life until just recently. She just started taking high blood pressure medications last month.

Learning activity 3. What about the sexuality of people with disabilities?

It is often believed that people with various kinds of disabilities are not concerned about sexuality. People with disabilities are sexual beings just like anyone else. It is important that this fact is recognized by health care providers who care for them. It is wrong to assume that when someone is confined to a wheelchair or is mentally disabled they have no need for sexual counselling. In fact, they have as much need as, or more than, people who have no disabilities.

There are many ways in which people with disabilities can find fulfilment.

Spinal cord injury

Spinal cord injuries (SCI) can be of different kinds. Most leave the patient paralyzed either from the waist down (paraplegic) or from the neck down (quadriplegic). Sexually, the person with SCI has many challenges. Most patients do not have normal sensation in the pelvic area, so sexual sensations will be very different. People with SCI report that their sexual desire remains intact. Most people are able to have some satisfying sexual experiences after

learning what feels good and experimenting with different activities. For some people, being able to have sex may be very important to their self esteem.

Men may have erectile difficulties. Most men with SCI do have erections, though many are the reflexive kind in response to stimulus. Only a few men still have erections in response to sexual thoughts or visual stimuli. Most men with SCI do not have ejaculations. Orgasms are often experienced, but the sensations are different. Often the orgasmic response is experienced as a feeling of general tension and release. Sometimes one part of the body which still has feeling will feel very stimulated and excited during sex. Most men with SCI, even when they do have erections and ejaculations, are not fertile.

Women with SCI have challenges to their sexuality also. Most women with SCI report that although they had a long period of adjustment, they have been able to establish enjoyable and satisfying sexual relationships. Although genital sensation is almost always absent, women with SCI do experience orgasm. These orgasms are different from what they had before their injury .The sensations of warmth and release may be felt in parts of the body other than the genitals. Fertility in women with SCI is relatively unaffected. Although there is increased risk for some problems (such as urinary tract infections, premature labour and anaemia), most women can have a normal pregnancy and delivery .Birth control can be a problem for women with SCI. Pills increase the risk of thromboembolism, diaphragms are not practical, and intrauterine devices (IUD) may be risky because of lack of pain sensation to warn about infection. Teaching partners to insert diaphragms, use foam or the sponge, or having the partner use condoms may be reasonable alternatives.

In summary, people with SCI are sexual beings. Health care workers can help their patients to maintain sexual activity and sexual health by encouraging them to experiment with activities and positions. One of the main obstacles to sexual health for people with SCI may be the feeling that they are no longer supposed to have sexual feelings or be sexually active. Talking about it can help. The health care provider who is open to questions can help the patient explore feelings and be comfortable trying different things. Sometimes practical suggestions about positions to try, use of vibrators to stimulate orgasm, timing sexual activity after bladder and bowel emptying to avoid accidents, etc. can be very helpful.

Cerebral palsy

Cerebral palsy (CP) is a disease caused by brain damage in early life. Patients with CP have varying degrees of muscle spasticity. This spasticity makes most aspects of sexual functioning difficult. For example, CP patients may find it difficult (or impossible) to position themselves for sexual intercourse. Masturbation may be a problem because spasm of the hand muscle makes directed movements difficult. Health care workers can help by listening and asking questions about sexual functioning. People with CP have sexual desires and are capable of having fulfilling, sexually healthy lives. They may need help in very personal and private ways such as positioning for sexual intercourse.

Mental disabilities

People who are mentally disabled (due to genetic, organic or physical causes) usually have sexual desires just like people who are not disabled. It is a mistaken assumption that they should not be taught about sex, and that their sexuality is somehow perverse. As in other areas of their learning, they need simple, consistent and repetitive teaching about sexuality (especially about birth control and protection from sexually transmitted diseases) if they are to become sexually responsible. There is controversy as to whether or not people with mental disabilities should be allowed to marry or live conjugally with a partner. They certainly need teaching and support to be able to protect themselves from being sexually exploited. Health care providers can be aware of these needs in their mentally disabled patients. Openness to talking about these issues with the patient and their caretakers is essential.

Sexual health is not reserved for people who are physically and mentally capable of caring for themselves.

Sexuality in hospitals and institutions

Sexual health is possible for those who are hospitalized or who must live in institutions. Unfortunately, most hospitals and institutions are not set up to foster privacy. This makes sexual activities difficult. Most people who are ill or who have physical or mental disabilities still have sexual needs and desires. It can be very difficult to gratify these in institutions. Even masturbation is problematic when there are many people sleeping in the same room. Health care workers can help. Being aware that these problems exist and fostering an attitude of openness about sexuality are beginnings. A nurse can influence attitudes of staff and colleagues by talking openly about the sexual needs of patients, or by not being outraged about the patient whose husband always draws the curtain around his wife's bed so they can be intimate when he visits. Those who have power to create and change hospital policies can advocate setting aside private rooms for sexual activities, or sexuality classes for staff and patients. There are many ways to make gradual changes. The place to start, as always, is with our own attitudes and feelings about sex. Health care workers who are open and honest with themselves about sexuality will be better able to influence and change the workings of hospitals and institutions.

Learning exercise 3. 1 Speaker

Invite someone with a disability to come to class and speak about their sexuality. If you cannot find a person willing to do this, there may be video tapes available to watch of disabled persons talking about sexuality.

Learning exercise 3.2 *Study visit*

Visit a hospital or institution and interview a disabled person about their sexuality. It might be helpful to read the module about taking a sexual history in Volume 7 of this series to get some ideas about how to approach this sensitive topic.

Learning exercise 3.3 Case studies

The following case studies can be used for self study, group discussion, or in any way that is considered most useful. Role playing is the recommended way to use them. In small groups of three or four students, assign roles of provider of care (counsellor), client, and observer. The situation should be acted out as if the client (described in the paragraph) has come to the counsellor to seek help for the problem. Each member of the small group should have a chance to play each role. Roles should be changed every 5 to 15 minutes depending on time restraints and the depth of counselling which is appropriate for the students in the class. At the end, the group members should take some time to answer together the following questions:

- What difficulty did the client have?
- What kind of help did he/she need?
- When you were the counsellor, were you comfortable counselling the client?
- What do you need to feel more comfortable?

Case 1

On your ward in the hospital is a 21 year old man who became paraplegic in a car accident one year ago. For a long time he was despairing and talked a lot about how it would have been better if he had died. Recently his behaviour has become less despairing and more hostile, including rude sexual comments and attempts to grab at female employees. You sit down to talk to him about this.

Case 2

Your patient in the clinic has a mentally retarded daughter who has just reached puberty .She tells you she thinks it would be wise to have her daughter sterilized. She is concerned that with such poor impulse control her daughter is likely to get pregnant and have a mentally retarded baby. She does her best to keep her daughter away from males and has not talked to her at all about sex.

Case 3

During shift change report the nurses start gossiping and laughing about what occurred during the evening shift yesterday. One of the nurses describes in great detail how the friend of a gay man came to visit. The two men went into the bathroom and locked the door. The nurse makes comments about what they were probably doing in there and says "how can they do those disgusting things with each other! And in the hospital! I think we need to be sure that does not happen again". You are the nurse's supervisor and you call her into your office to counsel her about her behaviour.

GLOSSARY

Abortion — The spontaneous or medically induced termination of pregnancy.

Adolescence — The period from the onset of puberty to sexual and physical maturity.

Adultery — Sexual intercourse between a married person and someone other than their spouse.

AIDS — (Acquired Immune Deficiency Syndrome). A later stage of a viral disease that impairs the body's ability to fight infections and cancers. People with AIDS are susceptible to a wide range of life-threatening infections. These infections often can be treated, but currently there is no cure for the underlying immune deficiency caused by the virus.

Amenorrhoea — The absence of menstruation due to reasons other than pregnancy, breast-feeding or the menopause.

Ampulla — The dilatation near the end of the vas deferens that undergoes muscular contraction during the emission phase of ejaculation.

Anilingus — Licking the anus. Also called oro-anal stimulation or "rimming". To avoid the spread of germs, both those natural to the bowel of the person being rimmed, and various pathogens, the cleaner the anus the better; also, rimming may be made safer by the use of such barriers as dental dams (see below).

Anaphrodisiac — A substance that inhibits sexual desire.

Androgens — Hormones produced by the adrenal glands in both sexes and by the testes in men that promote the development of male genitals and secondary sex characteristics and influence sexual motivation in both sexes

Anti-androgens	Drugs that inhibit the action of androgens.
Aphrodisiac	A substance that arouses sexual desire.
Areola	The dark circle surrounding the nipple.
Artificial insemination	Introduction of semen into the vagina or uterus to induce conception, using means other than sexual intercourse. AID is artificial insemination by a donor; AIH is by the husband/partner.
Bartholin's glands	Two small glands just inside the vaginal opening.
Bartholin's cyst	Cyst on Bartholin's gland (can become infected and painful).
Bisexual	Frequently refers to a person who is attracted to (and has sex with) persons of both sexes.
Brothel	A place where sex workers work.
Candida albicans	A fungus or yeast normally present in the vagina. Excessive amounts cause vaginal irritation.
Castration	Removal of the testes or ovaries.
Cavernous bodies	Areas of erectile tissue in the penis and clitoris that engorge with blood during sexual arousal.
Celibacy	Literally meaning being single, i.e. not married. It implies that the celibate person does not have sexual relations with another. A person may be celibate for various reasons, including: religious faith and practice (e.g. nuns, monks and priests of certain religions); separation from a partner; not having met the 'right' person yet; or through fear of sex or contracting sexually transmitted diseases. Some of these reasons may be perceived to be positive contributions towards the individual's life, others (such as fear), may be detrimental to the sexual and psychological health.
Cenrix	The neck of the uterus.
Chancre	A sore that develops at the site of infection with syphilis.

Chastity Literally, remaining sexually pure, in thought, word and deed. Chastity is often seen to be a religious virtue. Abstention from sexual activity.

Cilia Hair-like structures that line the inside of various body structures, including the fallopian tubes and vas deferens.

Circumcision Removal of the foreskin in the male (see also Female genital mutilation).

Clitoral hood The skin at the junction of the labia minora that protects the clitoris.

Clitoris A highly sensitive organ in the vulva that heightens sexual response.

Cohabitation Literally, living with another person; usually implying a sexual relationship (with or) without marriage.

Coitus Latin for penetrative intercourse (usually penis-vagina)

Coitus interruptus A Latin term which usually refers to a man withdrawing his penis from a woman's vagina prior to ejaculation, usually as a form of contraception. However, coitus interruptus is an exceptionally unreliable form of contraception (as the man may be oozing semen and sperm throughout most of the sexual encounter); it also means that STDs and HIV can be passed this way; it can cause pelvic congestion in the woman, and it is frequently found to be psychologically unsatisfactory for both partners. Coitus interruptus is described in the Book of Genesis in the Hebrew Scriptures/ Christian Old Testament as performed by a man called Onan, hence "onanism", which is now inaccurately applied to masturbation.

Condom See Prophylactic.

Contraception Prevention of conception using techniques, devices or drugs.

Corpora cavernosa	See Cavernous bodies
Corpus spongiosum	See Spongy body
Corpus luteum	Yellowish body found in the ovary after rupture of a Graafian follicle. The corpus lutem secretes progesterone to prepare the uterine lining for implantation of the fertilized ovum.
Cowper's glands	Two pea-sized glands that secrete an alkaline fluid into the urethra during sexual arousal in the male.
Cremaster muscle	A thin layer of muscle along the spermatic cord that lifts the testicles when contracted.
Cremasteric reflex	Involuntary contraction of the cremaster muscle caused by stroking the inner thigh.
Crura	The connections between the cavernous bodies and the pubic bones.
Culture	Behavioural and psychological characteristics shared by a particular society.
Cunnilungus	Licking or tonguing the clitoris and vulva. (Also called oral sex, and has many local names).
Cystitis	Inflammation of the bladder or urethra characterized by discomfort during urination.
Dental dam	A small square of latex rubber (or substitute, such as a condom split open, or plastic food-wrap) put over the clitoris and labia, or anus, for oro-genital/oro-anal licking (see anilingus and cunnilingus).
Date rape	A term gaining increasing recognition in legal circles, signifying the non-consensual penetrative intercourse (vaginal or anal) by a person or persons known to the victim (e.g. someone 'dating' or 'courting' the person raped).
Differentiation	The development of male or female sex organs in the fetus.
Digital sex/contact	Sex play involving fingers or toes. These may be inserted into the vagina, anus or mouth for sexual stimulation.

Dildo	A phallic (penis-like) object, usually used for sexual stimulation by inserting it into the vagina or rectum. Dildoes are frequently made to look like real penises (even if the size is somewhat exaggerated!). Similarly, a vibrator is a phallic object with batteries and a motor, to give motorized stimulation to the recipient. Substitutes are found by using all sorts of similar-shaped objects (e.g. bananas, courgettes/ zucchini, and cucumbers), or those with obvious dangers, such æs glass bottles, other breakable objects, or objects which might get lost inside (especially the rectum).
Douche	Washing out the vagina or rectum, with clear water or a particular solution, usually for reasons of hygiene and before or after intercourse/ encirclement. This procedure is now thought to be detrimental to sexual health for a few reasons: it alters the pH balance of the vagina, thus predisposing the woman to certain Sills; if done rectally, it changes the natural flora of the bowel, again, predisposing to certain STDs; and it may cause slight trauma to otherwise intact mucosa.
Ductus deferens	See Vas deferens
Dysmenorrhea	Pain or discomfort associated with menstruation.
Dyspareunia	Pain or discomfort during intercourse.
Ejaculation	Expulsion of semen out of the penis.
Ejaculatory ducts	Two short ducts in the prostate gland.
Ejaculatory	Inability of a male to ejaculate inside the vagina inhibition
Emission phase	The first stage of male orgasm in which seminal fluid collects in the urethral bulb.

Encirclement	Vaginal (or anal) encirclement of a penis; emphasizing the role of the active participant in what is called 'penetrative intercourse' when the active partner is the male insertor.
Endocrine system	System of glands that secrete hormones directly into the bloodstream.
Endometrium	The mucous membrane that lines the uterus. Epididymis Structure attached to each testis that stores sperm. Erectile inhibition Inability of a man to achieve erection in response to sexual stimulation.
Erection	Increase in size of the penis or clitoris due to engorgement with blood.
Erogenous zones	Areas of the body that respond to sexual stimulation.
Estrogen	A class of hormones responsible for the development of secondary sex characteristics and regulation of the menstrual cycle in females, and the inhibition of spermatogenesis in males.
Estrogen replacement therapy (ERT)	Supplementary estrogen given to alleviate the symptoms of menopause.
Excitement phase	Masters and Johnson's term[1] for the first phase of the sexual response cycle, marked by engorgement of sexual organs and raised muscle tension, heart rate, and blood pressure.
Exhibitionism	The sexual meaning of this word refers to the act of exposing one's genitals to another, for sexual excitement and gratification.
Fallopian tubes	Two tubes that extend from the uterus to the ovaries.

[1]Masters WH and Johnson VE. *Human sexual response.* Bantam, 1981.

Fellatio	A Latin term for sucking or licking a penis (also called "oro-genital stimulation" and has many local names).
Female genital mutilation	Includes removal of the clitoris (clitoridectomy); removal of the clitoris and labia minora; and removal of the clitoris, labia minora and inside surfaces of the labia majora (infibulation). Sometimes incorrectly referred to as female circumcision.
Fetishism	Extreme sexual interest in an inanimate object or a part of the body.
Fimbriae	Fringe-like ends of the fallopian tubes which collect the released ovum.
Follicle	Stimulating hormone (FSH) - a pituitary hormone that stimulates the development of ovarian follicles in the female and sperm production in the male.
Forceps	Instruments used to assist delivery when the baby is at risk, for instance after prolonged second-stage labour.
Foreplay	The concept that all sexual contact (oral, manual or mechanical) prior to penetrative intercourse/ encirclement is simply a means-to-an-end, i.e. leading up to penetration/encirclement.
Foreskin	Skin that covers the penile or clitoral glans.
Fornication	Pejorative term for coitus between unmarried people.
Fourchette	Skin fold at the posterior of the vaginal vestibule.
Frenulum	See Frenum
Frenum	A thin, highly sensitive fold of skin that connects the foreskin to the underside of the penile glans.
Frottage	Rubbing one's genitals against another person (body rubbing) for sexual gratification. This may be either consensual, or non-consensual, e.g. when someone rubs their genitals against another person in a crowded place, such as a bus or train.

Fundus	The top portion of the uterus.
Gay	An old term for a homosexual (usually male) who identifies with an open gay culture or 'scene' (female homosexuals frequently prefer the term lesbian). This term has been popularized in many parts of the world since the late 1960s, often used with gay liberation, gay rights, and gay lifestyle (bars, holiday resorts, restaurants, etc.)
Genital herpes	A viral infection in the genito-anal region caused by the herpes simplex virus (HSV) type 2. The virus can lay dormant for periods of time (even years), erupting sporadically into tiny blistering lesions which can exude infectious viral particles. (Note: HSV 1 is the virus which usually causes oral herpes, often called the 'cold sore'; this common condition is not usually considered to be sexually related).
Genitals	Or genitalia: the sex organs.
Gender identity	Perception of oneself as either male or female.
Genital tubercle	The part of a fetus that develops into the external genitals. It is undifferentiated prior to six weeks of age.
Gigolo	Male sex worker who services women.
Glans	The highly sensitive head of the penis or clitoris.
Gonads	Testes or ovaries.
Gonadotropin-releasing factors	Substances produced by the hypothalamus that stimulate the pituitary to produce gonadotropins.
Gonadotropins	Pituitary hormones that influence the gonads.
Gonorrhea	A sexually transmitted disease that initially inflames the mucous membranes of the reproductive system.
Graafian follicle	A cyst in the ovary that contains a maturing ovum.
Group sex	Having sex with more than one person at a time, or at least in the company of others (e.g. an orgy).

GUM Genito-urinary medicine; the branch of health care which includes caring for people with sexual health needs, such as sexually transmitted diseases, including HIV infection and disease.

Gynaecology The health care speciality for caring for specific issues related to women's sexual and/or reproductive health.

Hermaphroditism Presence of biological characteristics of both sexes.

Herpes See Genital herpes.

Heterophobia A compound from the Greek words meaning "a fear of the opposite (sex)" (see also: misogyny)

Heterosexism/ heterosexist Usually means favouring heterosexuality or heterosexuals, and implies an element of homophobia.

Heterosexual A person sexually attracted to members of the opposite sex.

HIV Human immunodeficiency virus. This term was adopted in mid-1986 as the name for the virus which causes AIDS. It distinguishes the virus causing AIDS from other retroviruses and indicates an independent species. The virus previously was referred to as HTLV-III (Human T Cell Lymphotropic Virus, Type Three) LAV (Lymphadenopathy Associated Virus), and ARV (AIDS-related retrovirus). It renders the human immune system deficient and unable to resist opportunistic infections and the development of cancers.

Homophobia A compound from the Greek words meaning "a fear of the same (sex)"; usually used to imply hatred and abuse (e.g. so-called "Queer" bashing) of homosexual people. Homophobia may be found in derogatory remarks towards homosexual people, as well as in institutionalized discrimination and other forms of unequal treatment and discrimination.

Homosexual	A person sexually attracted to members of the same sex.
Hormones	Chemical substances produced in various parts of the body that influence specific target organs.
Human chorionic gonadotropin (HCG)	A hormone that helps to maintain the initial stage of pregnancy by increasing progesterone secretion by the ovary.
Hustlers	A term referring to male sex industry workers or sex workers. It may imply that the 'hustler' has sexual relations with men or women, and its meaning may change in different countries or cultures. In some countries, the term 'rent boy' is used.
Hymen	The membrane that partially or completely covers the vaginal opening. It is sometimes tom or broken when a virgin girl or woman has her first penetrative intercourse/encirclement, but can also be done on inserting objects into the vagina such as tampons, and spontaneously upon strenuous exercises etc. The virgo intacta (intact virgin) is often highly sought after and prized in many cultures, hence, some 'vaginal' virgins may have other forms of sex (e.g. oral, anal or manual) so as not to have vaginal intercourse before their wedding. This has major implications for understanding safer sex and sexual practices; also, with such wide use of tampons for menstruation, the absence of the hymen cannot be taken as proof that the woman has "lost her virginity" (i.e. had vaginal penetrative intercourse with a man).
Hypothalamus	The part of the brain that regulates several processes, including the reproductive functions.
Hypothalamic-releasing factors	Chemicals secreted by the hypothalamus that stimulate hormone production in the pituitary .
Hysterectomy	The surgical removal of the uterus.

Imperforate hymen	A hymen that completely seals the vaginal opening.
Impotence	See Erectile inhibition.
Incest	Sexual relations (usually including penetrative intercourse) with members of one's own family, either those too close for a legal marriage (eg. father and daughter; brother and sister; 'close' blood cousin, etc.) or, less frequently, relatives of the same sex. This raises major issues about such relationships, frequently centring around the sexual abuse of one of the participants.
Inguinal canal	The canal in the groin through which the testicles descend to the scrotum during fetal development.
Interstitial cells	Testosterone-producing cells located between the seminiferous tubules.
Interstitial-cell-stimulating-(ICSH)	A hormone secreted by the pituitary gland that stimulates testosterone production in the interstitial hormone cells.
Introitus	The opening to the vagina.
Intromission	Insertion of the penis into the vagina.
Kegel exercises	Exercises that strengthen the muscles underneath the external genitalia.
Labia majora	The outer lips of the vulva.
Labia minora	The inner lips of the vulva.
Lactobaccili	Bacteria normally present in a healthy vagina. Lesbian Female who has sex with another/other female(s).
Lesbian	The word is originally from the island of Lesbos, where the whole community comprised women. The ancient leader of this all-women community was Saphos.
Leucorrhoea	A vaginal discharge characteristic of several infections.

Leydig's cells	See Interstitial cells.
Libido	Sexual motivation.
Limbic system	A subcortical brain system that influences sexual behaviour.
Luteinizing hormone (LH)	Pituitary hormone that stimulates ovulation in the female and production of androgens in the male (where it is known as ISCH).
Male rape	A term signifying non-consensual anal penetration of one man by another/others. Such a practice has often been denied any legal recognition, although there are now advances in the law in many countries, to actually recognize it for what it is.
Masturbation	Stroking and manually stimulating the clitoris, in the woman, or penis, in the man, usually to the point of orgasm or ejaculation. There are many local, often derogatory , terms for it.
Menarche	See menstruation.
Menopause	See menstruation.
Menstruation	The periodic discharge (usually of a cyclic nature, e.g. every 3-4 weeks) of the non-pregnant uterine lining, in the form of blood passing via the vagina. It starts in girls about 9 years old in some cultures, though is frequently a few years later in others (e.g. with the full onset of puberty in the early teens). Its commencement is called the menarche; it finishes with the menopause frequently in the woman's later 30s through to early 50s, or with surgical removal of the ovaries and/or uterus.
Midwife	A trained birth attendant.
Misogyny	From the Greek, meaning to hate women, hence: a misogynist
Mittleschmerz	Abdominal pain that sometimes accompanies ovulation.

Moniliasis	See Candida albicans.
Mons veneris	Cushion of fat over the pubic bone above the vulva
MSM	A recent term coined to describe men-who-have- sex-with-men (hence, the alternative: MWHSWM) who may not describe themselves with other titles such as gay, homosexual or bisexual.
Mucosa	Moist membranes that line certain parts of the body, such as the penile urethra, vagina and mouth. (AKA mucous membranes.)
Multigravida	Referring to a female who has been pregnant on more than one occasion (irrespective of how the pregnancy continued or was ended).
Multiple orgasms	Several orgasms occurring within a short time.
Multiparous	Referring to a female who has given birth on more than one occasion.
Myotonia	Muscle tension.
Negative-feedback mechanism	The interaction between endocrine glands and their target organs and cells that regulates hormone production.
Neisseria gonorrhoeae	The bacteria that cause gonorrhea infections.
Nocturnal emission	Ejaculation during sleep, a "wet dream".
Oral sex	Stimulation of the penis or vulva with the mouth. See also fellatio and cunnilingus.
Orchidectomy	The surgical removal of the testes.
Orgasm	Muscular contractions of the pelvic floor that occur at the peak of sexual arousal.
Orgasm phase	Masters and Johnson's term for the third phase of the sexual response cycle, during which orgasm occurs.
Os	The opening in the cervix.

Ovaries	Pair of organs that produce ova and sex hormones in the female.
Ovulation	The rupture of a Graafian follicle to release mature ovum.
Ovum	The female reproductive cell.
Paedophilia	From the Greek meaning to love children. In current use, it usually refers to people who have sex with children.
Pelvic Inflammatory disease (PID)	An infection in the uterus and surrounding area.
Penis	External male sexual organ.
Perineum	The area between the vagina or scrotum and anus.
Petting	Sexual contact excluding coitus.
Pheromones	Odours produced by the body that can affect sexual activity. In humans, the exact mechanism is not yet clearly understood.
Piercing	Usually refers to the adornment of the body with jewelry through pierced skin, e.g. rings in the ears and nose. It may also refer to piercing the skin (for the insertion of jewelry or other objects) as part of a person's sex life, e.g. rings through other parts of the body, including the nipples and genitalia.
Pimp	One who is paid to procure business for sex workers.
Pituitary gland	A gland located in the brain that secretes hormones which affect other endocrine glands.
Plateau phase	Masters and Johnson's term for the second phase of the sexual response cycle in which muscle tension, heart rate, blood pressure, and vasocongestion increase.
Pornography	Visual and written materials of an explicit sexual nature.
Postpartum period	The first few weeks after childbirth.

Premarital sex	Coitus before marriage.
Premature ejaculation	Ejaculation that occurs so quickly that sexual pleasure is impaired.
Preorgasmic	Never having experienced orgasm.
Prepuce	See Foreskin.
Preputial glands	Small glands located in the penile foreskin that produce a lubricating fluid.
Priapism	Prolonged and uncomfortable penile erection.
Primagravida	Refers to a female who has been pregnant only once.
Primary erectile inhibition	Inability of a man to achieve an erection with a partner.
Primiparous	Refers to a female who has given birth on one occasion only.
Progesterone	Hormone secreted by the corpus luteum and placenta responsible for the changes in the endometrium during pregnancy and the menstrual cycle.
Prophylactic	Something which 'prevents' an undesired outcome, e.g. in health terms, a prophylactic (medicine) prevents infection or disease; in sexual terms, may refer to the prevention of pregnancy (e.g. antispermicides, contraceptive pill, etc.) and/or STD, e.g. contraceptives such as the male or female condom. The condom is also called a preservativo, a 'preservative'.
Prostatectomy	Surgical removal of the prostate.
Prostate gland	A gland at the junction of the bladder and urethra that produces most of the seminal fluid released during ejaculation.
Prostatitis	Inflammation of the prostate.
Prostitute	Sex worker.
Prostitution	Selling sexual services.

Puberty	The age at which the reproductive organs mature and secondary sex characteristics appear.
Pubic lice	Pediculosis (or phthirus) pubis are one of two species of lice which can affect humans (pediculosis humanus = body lice proper). Pubic lice are spread primarily through close bodily contact during sex. There may be rare occasions when they are found in the eyebrows, too.
Rape	Non-consensual sexual intercourse under actual or threatened force.
Rape trauma syndrome	Emotional problems suffered by people who have been raped.
Rapid ejaculation	See Premature ejaculation.
Refractory period	The time following male orgasm before another orgasm can occur .
Resolution phase	Masters and Johnson's term for the fourth phase of the sexual response cycle, or return to the non-excited state.
Retrograde ejaculation	Expulsion of semen into the bladder.
Rhythm method	A contraceptive method based on calendar estimation of fertile days.
Rugae	The folds of the vagina.
Sadomasochism (S and M)	The giving (sadism) or receiving (masochism) of physical or psychological pain to attain sexual satisfaction.
Scrotum	The pouch of skin that encloses the testes.
Secondary erectile inhibition	Impotence in a man who has previously experienced erections.
Secondary erogenous zones	Areas of the body that are conditioned to be erotically sensitive.

Secondary nonorgasmic	Woman who can experience orgasm through masturbation but not with a partner .
Secondary orgasmic dysfunction	Kaplan's label[2] for a woman who no longer experiences orgasm.
Secondary sex characteristics	Non-genital physical characteristics that develop during sexual maturation, such as body hair, breasts, and deepened voice.
Semen	The ejaculate, which is comprised of sperm, and fluids from the seminal vesicles and prostate and Cowper's glands.
Seminal fluid	See Semen.
Seminal vesicles	Two small glands situated on either side of the prostate gland that store sperm prior to ejaculation and produce some of the seminal fluid.
Seminiferous tubules	Sperm-producing structures in the testes.
Sensate focus	A form of sexual therapy that enhances sexual pleasure and reduces performance pressure through a process of touching and communication.
Sexual anaesthesia	Lack of pleasure from sexual stimulation.
Sexual apathy	Lack of sexual motivation.
Sexual health	The integration of the somatic, emotional, intellectual and social aspects of sexual being, in ways that are positively enriching and that enhance personality, communication and love.
Sexually transmitted diseases (STD)	Diseases that are transmitted through sexual activity.

[2] Kaplan HS. *Disorders of sexual desire and other new concepts and techniques in sex therapy.* Brunner-Mazel,1979

Sodomy	Usually a derogatory term for anal penetrative intercourse (whether man-to-woman or man-to-man}. In some countries, this term is accepted as the legal terminology for anal intercourse. The term's origins stem from the Hebrew Scriptures/ Christian Old Testament's references to the inhospitality shown to guests in a certain town (Sodom), but which has traditionally been interpreted in many cultures as the aggressive town leaders wanting to humiliate the visiting strangers by raping them. Buggery is another term often used in a derogatory fashion, for the same act of anal penetration, originating from the violent rape of conquered soldiers by certain tribes in medieval Bulgaria (Europe).
Spermatic cord	A cord attached to the testicle that contains the vas deferens, blood vessels, nerves, and cremasteric muscle fibres.
Spermatogenesis	Sperm production.
Spermicide	Chemical substance that kills sperm.
Spongy body	Erectile tissue in the male that surrounds the urethra and extends from a bulb at the base of the penis to the glans.
Spontaneous abortion	See Miscarriage.
Squeeze technique	A technique for treating premature ejaculation by squeezing the penis at the base of the glans.
Statutory rape	Sexual intercourse with a person below the legal age of consent.
Swinging	An interchange of sexual partners or spouses for the purpose of sex, e.g. "wife" or "husband swapping".
Syphilis	A sexually transmitted disease caused by *Treponema pallidum* or *Spirochaeta pallida.*

Target organs	Organs and cells that are influenced by hormones.
Testis	Male gonad, also known as the testicle. Normally, a pair are located in the scrotum. They produce sperm and hormones.
Testosterone	A hormone produced by the testes.
Transsexual	A person whose psychological gender identity is opposite to their biological sex.
Transvestism	Wearing clothing of the opposite sex for sexual gratification.
Trichomoniasis	A form of vaginitis caused by a single-celled protozoan called *Trichomonas vaginalis.*
Tyson's glands	Small glands on either side of the frenum.
Urethra	The tube which conducts urine out of the body in males and females, and through which the ejaculate passes in males.
Urethral bulb	The portion of the urethra between the urethral sphincters in the male.
Urethral sphincter	Muscle that surrounds and closes the urethra.
Urology	The medical speciality concerned with the urinary system.
Uterus	The organ in the female pelvis where the fetus develops.
Vagina	The canal that connects the cervix to the opening of the vulva.
Vaginismus	Involuntary spasms of the muscles of the vagina.
Vaginitis	Inflammation of the vaginal walls.
Vasa deferentia	Two tubes that transport sperm from the testes to the urethra (vas deferens -singular).
Vasectomy	Male sterilization by removal of sections from each vas deferens.

Vasocongestion The engorgement of blood vessels.

Venereal disease	Diseases transmitted by sexual contact.
Vestibular bulbs	Two areas of erectile tissue inside the vaginal opening that become engorged with blood during sexual arousal.
Vestibule of the vagina	The area between the labia minora.
Virgin	A person who has not experienced sexual intercourse.
Voyeurism	Literally, obtaining sexual gratification by observing other people's sexual behaviours, with or without their consent, e.g. being sexually aroused and stimulating oneself whilst looking at pornography; being with other people as they have sex, but not physically interacting with them (simply watching and possibly masturbating oneself), or peeping at (spying on) people having sex, who are unaware of the voyeur's presence or actions, hence, an invasion of privacy.
Vulva	The external female genitalia, including the mons veneris, labia majora, labia minora, clitoris, and urinary and vaginal openings.
Water sports	A popular term in sexual slang for playing with urine, e.g. urinating over one's sexual partner. To some people, it can also mean a man urinating inside his partner's vagina or rectum (this would be indicative of unprotected intercourse).
Withdrawal	See coitus interruptus.
Wolffian ducts	The parts of the embryo that develop into the male reproductive structures.

FURTHER READING

Avis P. *Eros and the sacred.* London: SPCK, 1989.

Bancroft J. *Human sexuality and its problems,* Second Edition. Edinburgh: Churchill Livingstone, 1989.

Balka C, Rose A, eds. *Twice blessed. On being lesbian or gay and Jewish.* Boston: Beacon Press, 1989.

Bennion F. The *sex code, Morals for moderns.* London: Weidenfeld & Nicolson, 1991.

Beme E. *Sex in human loving.* London: Penguin Books, 1973.

Boswell J. *Christianity, social tolerance, and homosexuality. Gay people in Western Europe from the beginning of the Christian era to the fourth century.* Chicago and London: University of Chicago Press, 1980.

Boughner T. *Out of all time. A gay and lesbian history with illustrations by Michael Willhoite.* Boston: Alyson Publications, 1988.

Brake M, ed. *Human sexual relations. A reader in human sexuality.* London: Penguin Books, 1982.

Colvin, M with Hawksley, J. *Section* 28, *A practical guide to the law and its implications.* London: National Council for Civil Liberties, 1989.

Davenport-Hines R. *Sex, death and punishment. Attitudes to sex and sexuality in Britain since the Renaissance.* London: Fontana Press, 1990.

Dickson A. *A woman in your own right.* London: Quartet Books, 1982.

Dickson A. The *mirror within. A new look at sexuality.* London: Quartet Books, 1985.

Dollimore J. *Sexual dissidence. Augustine to Wilde, Freud to Foucoult.* Oxford: Clarendon Press, 1992.

Dominian J. *Sexual integrity. The answer to AIDS.* London: Darton, Longman and Todd, 1987.

Dover KJ. *Greek homosexuality.* London: Duckworth, 1979.

Dynes W, ed. *Encyclopaedia of homosexuality.* Chicago & London: St. James Press, 1990. [N. B. This work, of two volumes, has many excellent articles with global relevance.]

Freedman M. *Exile in the promised land. A memoir.* New York: Firebrand Books, 1990.

Furniss T. *The multi-professional handbook of child sexual abuse, integrated management, therapy and legal intervention.* London: Routledge, 1991.

Goergen D. *The sexual celibate.* London: SPCK, 1979.

Gordon P, Mitchell, L. *Safer sex. A new look at sexual pleasure,* London: Cassell, 1988.

Great Britain. *The health of the nation. Key area handbook HIV/AIDS and sexual health.* London: HMSO, 1993.

Great Britain. *Sexual health education. Breaking down the barriers.* London: English National Board for Nursing, Midwifery and Health Visiting, 1993.

Grey A. *Speaking of sex. The limits of language.* London: Cassell, 1993.

Kaplan HS. *Disorders of sexual desire and other new concepts and techniques in sex therapy.* Brunner-Mazel, 1979.

King E. *Safely in numbers. Safer sex and gay men.* London: Cassell, 1993.

Kippax S, et at. *Social aspects of AIDS. Sustaining safer sex. Gay Communities Respond to AIDS.* London: Falmer Press.

Knox EG, MacArthur C, Simmons KJ. *Sexual behavior and AIDS in Britain.* London: HMSO / University of Birmingham, 1993.

Lewis, K, Ph.D. *The psychoanalytic theory of male homosexuality.* London & New York, Quartet Books, 1993.

Masters WH, Johnson YE. *Human sexual response.* Bantam, 1981.

Miles, R. *Love, sex, death and the making of the male.* New York & London: Summit Books, 1991.

Preston J, ed. *Hot loving. Erotic stories about safer sex.* Boston: Alyson Publications, 1989.

Ranke-Heinemann U. *Eunuchs for the kingdom of heaven. Women, sexuality and the Catholic Church.* Translated by Peter Heinegg, England: Penguin Books, 1991.

Tielman RAP, Carballo M, Hendriks AC, eds. *Bisexuality and HIV/AIDS, A global perspective.* New York: Prometheus Books, 1991.

Tunnadine P. *Insights into troubled sexuality, A case profile anthology,* revised edition (psychosexual Medicine Series 5). London: Chapman & Hall, 1992.

Ussher JM, Baker CD, eds. *Psychological perspectives on sexual problems. New directions in theory and practice.* London: Routledge, 1993.

Webb C. *Sexuality, nursing and health.* London: John Wiley & Sons, 1985.

Webb C. ed. *Living sexuality. Issues for nursing and health.* London: Scutari Press, 1994.

Wellings K, Field J, Johnson AM, Wadsworth J. *Sexual behaviour in Britain, The national survey of sexual attitudes and lifestyles.* London: Penguin Books, 1994.