22 - 17 Human Sexuality and Sexual Dysfunctions

01 - 17.1 Normal Sexuality

17.1 Normal Sexuality

Human Sexuality and Sexual Dysfunctions 17.1 Normal Sexuality Sexuality has always been an area of interest to the medical community. In the classical era, Hippocrates cited the clitoris as the site of female sexual arousal, the first physician historically recorded to have made that assessment. In the middle ages, Islamic physicians recommended coitus interruptus as a form of birth control. At the end of the Renaissance and the beginning of the Reformation, a linen sheath was devised as a condom, not for purposes of birth control, but as protection against syphilis. During the Victorian era, sexologists such as Havelock Ellis (Fig. 17.1-1) and Richard von KrafftEbing (Fig. 17.1-2) presented diverging perspectives on sexual behavior. During that same period, Sigmund Freud developed his innovative theories on libido, childhood sexuality, and the effects of the sexual impulse on human behavior. In the modern era, the research of Alfred Kinsey, the work of William Masters and Virginia Johnson, and the development of drugs that prevent contraception, aid erection, and replace hormones that decrease with menopause and aging contributed to the development of an era of sexual liberality. Sex has also been a consistent focus of curiosity and interest to humankind in general. Depictions of sexual behavior have existed from the time of prehistoric cave drawings through Leonardo da Vinci’s anatomical illustrations of intercourse to current pornographic sites on the Internet.

FIGURE 17.1-1 Havelock Ellis. (Courtesy of NYU School of Medicine.) FIGURE 17.1-2 Richard von Krafft-Ebing. (Courtesy of NYU School of Medicine.) Sexuality is determined by anatomy, physiology, the culture in which a person lives, relationships with others, and developmental experiences throughout the life cycle. It

includes the perception of being male or female and private thoughts and fantasies as well as behavior. To the average person, sexual attraction to another person and the passion and love that follow are deeply associated with feelings of intimate happiness. Normal sexual behavior brings pleasure to oneself and one’s partner and involves stimulation of the primary sex organs including coitus; it is devoid of inappropriate feelings of guilt or anxiety and is not compulsive. Societal understanding of what defines normal sexual behavior is inconstant and varies from era to era, reflecting the cultural mores of the time. TERMS Sexuality and total personality are so entwined that to speak of sexuality as a separate entity is virtually impossible. The term psychosexual, therefore, is used to describe personality development and functioning as these are affected by sexuality. The term psychosexual applies to more than sexual feelings and behavior, and it is not synonymous with libido in the broad Freudian sense. Freud’s generalization that all pleasurable impulses and activities are originally sexual has given laypersons a somewhat distorted view of sexual concepts and has presented psychiatrists with a confused picture of motivation. For example, some oral activities are directed toward obtaining food, and others are directed toward

achieving sexual gratification. Both activities are pleasure seeking and use the same organ, but they are not, as Freud contended, both necessarily sexual. Labeling of all pleasure-seeking behaviors as sexual makes it impossible to specify precise motivations. Persons may also use sexual activities for gratification of nonsexual needs, such as dependency, aggression, power, and status. Although sexual and nonsexual impulses can jointly motivate behavior, the analysis of behavior depends on understanding the underlying individual motivations and their interactions. CHILDHOOD SEXUALITY Before Freud described the effects of childhood experiences on personalities of adults, the universality of sexual activity and sexual learning in children was unrecognized. Most sexual learning experiences in childhood occur without the parents' knowledge, but awareness of a child's sex does influence parental behavior. Male infants, for instance, tend to be handled more vigorously and female infants tend to be cuddled more. Fathers spend more time with their infant sons than with their daughters, and they also tend to be more aware of their sons' adolescent concerns than of their daughters' anxieties. Boys are more likely than girls to be physically disciplined. A child's sex affects parental tolerance for aggression and reinforcement or extinction of activity and of intellectual, aesthetic, and athletic interests. Observation of children reveals that genital play in infants is part of normal development. According to Harry Harlow, interaction with mothers and peers is necessary for the development of effective adult sexual behavior in monkeys, a finding that has relevance to the normal socialization of children. During a critical period in

development, infants are especially susceptible to certain stimuli; later, they may be immune to these stimuli. The detailed relation of critical periods to psychosexual development has yet to be established; Freud's stages of psychosexual development— oral, anal, phallic, latent, and genital—presumably provide a broad framework. PSYCHOSEXUAL FACTORS Sexuality depends on four interrelated psychosexual factors: sexual identity, gender identity, sexual orientation, and sexual behavior. These factors affect personality, growth, development, and functioning. Sexuality is something more than physical sex, coital or noncoital, and something less than all behaviors directed toward attaining pleasure. Sexual Identity and Gender Identity Sexual identity is the pattern of a person's biological sexual characteristics: chromosomes, external genitalia, internal genitalia, hormonal composition, gonads, and secondary sex characteristics. In normal development, these characteristics form a cohesive pattern that leaves a person in no doubt about his or her sex. Gender identity is a person's sense of maleness or femaleness. Sexual identity and gender identity are interactive. Genetic influences and hormones affect behavior, and the environment affects hormonal production and gene expression (Table 17.1-1). Table 17.1-1 Classification of Intersexual Disordersa Sexual Identity. Modern embryological studies have shown that all mammalian embryos, whether genetically male (XY genotype) or genetically female (XX genotype), are anatomically female during the early stages of fetal life. Differentiation of the male from the female results from the action of fetal androgens; the action begins about the sixth week of embryonic life and is completed by the end of the third month (Fig. 17.1-

3). Recent research has focused on the possible roles of key genes in fetal sexual development. A testis develops as a result of SRY and SOX9 action, and an ovary develops in the absence of such action. DAX1 plays a part in the fetal development of both sexes and WNT4 action is needed for the development of the mullerian ducts in the female fetus. Other studies have explained the effects of fetal hormones on the masculinization or feminization of the brain. In animals, prenatal hormonal stimulation of the brain is necessary for male and female reproductive and copulatory behavior.

The fetus is also vulnerable to exogenously administered androgens during that period. For instance, if a pregnant woman receives sufficient exogenous androgens, her female fetus that possesses ovaries can develop external genitalia resembling those of a male fetus (Fig. 17.1-4). FIGURE 17.1-3 Differentiation of male and female external genitalia from indifferent primordia. Male differentiation occurs only in the presence of androgenic stimulation during the first 12 weeks of fetal life. (Redrawn from van Wyk and Grumbach, 1968; from Brobeck JR, ed. Best & Taylor's Physiological Basis of Medical Practice. 9th ed. Baltimore: Williams & Wilkins; 1973, with permission.)

FIGURE 17.1-4 Twins born to a mother who received testosterone during pregnancy. Note the enlarged clitoris in each child. (Courtesy of Robert B. Greenblatt, M.D., and Virginia McNamarra, M.D.) In the past, newborns with ambiguous genitalia were assigned their sexual identity at birth. The theory underlying this action was that parents and child would feel less confusion, and that the child would accept the assigned sex and more easily develop a stable sense of being male or female. Although this worked for some children, others developed a gender identity at odds with their assigned sex. For example, an infant designated female at birth could feel itself to be male throughout childhood, and more emphatically at puberty. In some cases, this conflict led to depression and even suicide. Current practice usually allows the child to develop with the ambiguity, which permits a sense of gender identity to evolve as the child grows. The gender identity is then more congruent with the child's emotional sense of maleness or femaleness. Ideally, the family receives support from a medical team composed of a pediatrician, an endocrinologist, and a psychiatrist throughout this developmental process. Gender Identity. In infants with an unambiguous sexual identity, almost everyone has a firm conviction that "I am male" or "I am female" by 2 to 3 years of age. Yet, even if maleness and femaleness develop normally, persons must still develop a sense of masculinity or femininity. Gender identity, according to Robert Stoller, "connotes psychological aspects of behavior related to masculinity and femininity." Stoller considers gender social and sex biological: "Most often the two are relatively congruent, that is, males tend to be manly and females womanly." But sex and gender can develop in conflicting or even opposite

ways. Gender identity results from an almost infinite series of cues derived from experiences with family members, teachers, friends, and coworkers, and from cultural phenomena. Physical characteristics derived from a person's biological sex—such as physique, body shape, and physical dimensions—interrelate with an intricate system of stimuli, including rewards and punishment and parental gender labels, to establish gender identity. Thus, formation of gender identity arises from parental and cultural attitudes, the infant's external genitalia, and a genetic influence, which is physiologically active by the sixth week of fetal life. Although family, cultural, and biological influences may complicate establishment of a sense of masculinity or femininity, persons usually develop a relatively secure sense of identification with their biological sex—a stable gender identity. GENDER ROLE. Related to, and in part derived from, gender identity is gender role behavior. John Money and Anke Ehrhardt described gender role behavior as all those things that a person says or does to disclose himself or herself as having the status of boy or man, girl or woman, respectively. A gender role is not established at birth but is built up cumulatively through (1) experiences encountered and transacted through casual and unplanned learning, (2) explicit instruction and inculcation, and (3) spontaneously putting two and two together to make sometimes four and sometimes five. The usual outcome is a congruence of gender identity and

gender role. Although biological attributes are significant, the major factor in achieving the role appropriate to a person's sex is learning. Research on sex differences in children's behavior reveals more psychological similarities than differences. Girls, however, are found to be less susceptible to tantrums after the age of 18 months than are boys, and boys generally are more physically and verbally aggressive than are girls from age 2 onward. Little girls and little boys are similarly active, but boys are more easily stimulated to sudden bursts of activity when they are in groups. Some researchers speculate that, although aggression is a learned behavior, male hormones may have sensitized boys' neural organizations to absorb these lessons more easily than do girls. Persons' gender roles can seem to be opposed to their gender identities. Persons may identify with their own sex and yet adopt the dress, hairstyle, or other characteristics of the opposite sex. Or, they may identify with the opposite sex and yet for expediency adopt many behavioral characteristics of their own sex. A further discussion of gender issues appears in Chapter 18. Sexual Orientation Sexual orientation describes the object of a person's sexual impulses: heterosexual (opposite sex), homosexual (same sex), or bisexual (both sexes). A group of people have defined themselves as "asexual" and assert this as a positive identity. Some researchers believe this lack of attraction to any object is a manifestation of a desire disorder. Other people wish not to define their sexual orientation at all and avoid labels. Still others

describe themselves as polysexual or pansexual. Sexual Behavior The Central Nervous System and Sexual Behavior THE BRAIN Cortex. The cortex is involved both in controlling sexual impulses and in processing sexual stimuli that may lead to sexual activity. In studies of young men, some areas of the brain have been found to be more active during sexual stimulation than others. These include the orbitofrontal cortex, which is involved in emotions; the left anterior cingulate cortex, which is involved in hormone control and sexual arousal; and the right caudate nucleus, whose activity is a factor in whether sexual activity follows arousal. Limbic System. In all mammals, the limbic system is directly involved with elements of sexual functioning. Chemical or electrical stimulation of the lower part of the septum and the contiguous preoptic area, the fimbria of the hippocampus, the mammillary bodies, and the anterior thalamic nuclei have all elicited penile erections. Studies of the brain in women have revealed that those areas activated by emotions of fear or anxiety are notably quiescent when the woman experiences an orgasm. Brainstem. Brainstem sites exert inhibitory and excitatory control over spinal sexual reflexes. The nucleus paragigantocellularis projects directly to pelvic efferent neurons in the lumbosacral spinal cord, apparently causing them to secrete serotonin, which is known to inhibit orgasms. The lumbosacral cord also receives projections from other serotonergic nuclei in the brainstem. Brain Neurotransmitters. Many neurotransmitters, including dopamine, epinephrine, norepinephrine, and serotonin, are produced in the brain and affect sexual function. For example, an increase in dopamine is presumed to increase libido. Serotonin, produced in the upper pons and midbrain, exerts an inhibitory effect on sexual function. Oxytocin is released with orgasm and is believed to reinforce pleasurable activities. SPINAL CORD. Sexual arousal and climax are ultimately organized at the spinal level. Sensory stimuli related to sexual function are conveyed via afferents from the pudendal, pelvic, and hypogastric nerves. Several separate experiments suggest that sexual reflexes are mediated by spinal neurons in the central gray region of the lumbosacral segments. Physiological Responses. Sexual response is a true psychophysiological experience. Arousal is triggered by both psychological and physical stimuli; levels of tension are experienced both physiologically and emotionally; and, with orgasm, normally a subjective perception of a peak of physical reaction and release occurs along with a feeling of well-being. Psychosexual development,

psychological attitudes toward sexuality, and attitudes toward one's sexual partner are directly involved with, and

affect, the physiology of human sexual response. Normally, men and women experience a sequence of physiological responses to sexual stimulation. In the first detailed description of these responses, Masters and Johnson observed that the physiological process involves increasing levels of vasocongestion and myotonia (tumescence) and the subsequent release of the vascular activity and muscle tone as a result of orgasm (detumescence). Tables 17.1-2 and 17.1-3 describe the physiologic male and female sexual response cycles. It is important to remember that the sequence of responses can overlap and fluctuate. A sexual fantasy or the desire to have sex frequently precedes the physiological responses of excitement, orgasm and resolution, particularly in the male. In addition, a person's subjective experiences are as important to sexual satisfaction as the objective physiologic response. Figures 17.1-5 and 17.1-6 illustrate several possible patterns in the phases of the male sexual response and female sexual response, respectively. FIGURE 17.1-6 Female sexual response. An individual woman may experience any of these three patterns (A, B, or C) during a particular sexual experience. (From Walker JI, ed. Essentials of Clinical Psychiatry, Philadelphia: JB Lippincott; 1985:276. with permission.) FIGURE 17.1-5 Male sexual response. An individual man may experience any of these three patterns (A, B, or C) during a particular sexual experience. (From Walker JI, ed. Essentials of Clinical Psychiatry. Philadelphia: JB Lippincott; 1985:276, with permission.) Table 17.1-2

Male Sexual Response Cyclea Table 17.1-3 Female Sexual Response Cyclea

HORMONES AND SEXUAL BEHAVIOR In general, substances that increase dopamine levels in the brain increase desire, whereas substances that augment serotonin decrease desire. Testosterone increases libido in both men and women, although estrogen is a key factor in the lubrication involved in female arousal and may increase sensitivity in the woman to stimulation. Recent studies indicate that estrogen is also a factor in the male sexual response and that a decrease in estrogen in the middle-aged male results in greater fat accumulation just as it does in women. Progesterone mildly depresses desire in men and women as do excessive prolactin and cortisol. Oxytocin is involved in pleasurable sensations during sex and is found in higher levels in men and women following orgasm. GENDER DIFFERENCES IN DESIRE AND EROTIC STIMULI Sexual impulses and desire exist in men and women. In measuring desire by the frequency of spontaneous sexual thoughts, interest in participating in sexual activity, and alertness to sexual cues, males generally possess a higher baseline level of desire than do women, which may be biologically determined. Motivations for having sex,

other than desire, exist in both men and women, but seem to be more varied and prevalent in women. In women they may include a wish to reinforce the pair bond, the need for a feeling of closeness, a way of preventing the man from straying, or a desire to please the partner. Although explicit sexual fantasies are common to both sexes, the external stimuli for the fantasies frequently differ for men and women. Many men respond sexually to visual stimuli of nude or barely dressed women. Women report responding sexually to romantic stories such as a demonstrative hero whose passion for the heroine impels him toward a lifetime commitment to her. A complicating factor is that a woman's subjective sense of arousal is not always congruent with her physiological state of arousal. Specifically, her sense of excitement may reflect a readiness to be aroused rather

than physiological lubrication. Conversely, she may experience signs of arousal, including vaginal lubrication, without being aware of them. This situation rarely occurs in men. MASTURBATION Masturbation is usually a normal precursor of object-related sexual behavior. No other form of sexual activity has been more frequently discussed, more roundly condemned, and more universally practiced than masturbation. Research by Kinsey into the prevalence of masturbation indicated that nearly all men and three fourths of all women masturbate sometime during their lives. Longitudinal studies of development show that sexual self-stimulation is common in infancy and childhood. Just as infants learn to explore the functions of their fingers and mouths, they learn to do the same with their genitalia. At about 15 to 19 months of age, both sexes begin genital self-stimulation. Pleasurable sensations result from any gentle touch to the genital region. Those sensations, coupled with the ordinary desire for exploration of the body, produce a normal interest in masturbatory pleasure at that time. Children also develop an increased interest in the genitalia of others—parents, children, and even animals. As youngsters acquire playmates, the curiosity about their own and others' genitalia motivates episodes of exhibitionism or genital exploration. Such experiences, unless blocked by guilty fear, contribute to continued pleasure from sexual stimulation. With the approach of puberty, the upsurge of sex hormones, and the development of secondary sex characteristics, sexual curiosity intensifies, and masturbation increases. Adolescents are physically capable of coitus and orgasm, but are usually inhibited by social restraints. The dual and often conflicting pressures of establishing their sexual identities and controlling their sexual impulses produce a strong physiological sexual tension in teenagers that demands release, and masturbation is a normal way to reduce sexual tensions. In general, males learn to masturbate to orgasm earlier than females and masturbate more frequently. An important emotional difference between the adolescent and the youngster of earlier years is the presence of coital fantasies during masturbation in the adolescent. These fantasies are an important adjunct to the development of sexual identity; in the comparative safety of the imagination, the

adolescent learns to perform the adult sex role. This autoerotic activity is usually maintained into the young adult years, when it is normally replaced by coitus. Couples in a sexual relationship do not abandon masturbation entirely. When coitus is unsatisfactory or is unavailable because of illness or the absence of the partner, selfstimulation often serves an adaptive purpose, combining sensual pleasure and tension release. Kinsey reported that when women masturbate, most prefer clitoral stimulation. Masters and Johnson stated that women prefer the shaft of the clitoris to the glans because the glans is hypersensitive to intense stimulation. Most men masturbate by vigorously stroking the penile shaft and glans. Several studies found that in men, orgasm from masturbation raised the serum prostate-specific antigen (PSA) significantly. Male patients scheduled for PSA tests should be advised not to masturbate (or have coitus) for at least 7 days prior to the examination. Moral taboos against masturbation have generated myths that masturbation causes mental illness or decreased sexual potency. No scientific evidence supports such claims. Masturbation is a psychopathological symptom only when it becomes a compulsion beyond a person's willful control. Then, it is a symptom of emotional disturbance, not because it is sexual but because it is compulsive. Masturbation is probably a universal aspect of psychosexual development and, in most cases, it is adaptive. COITUS The first coitus is a rite of passage for both men and women. In the United Sates the overwhelming majority of people have experienced coitus by young adulthood, by their early 20s. In a study of persons ages 18 to 59, over 95 percent had included coitus in their last sexual interaction. The young man experiencing intercourse for the first time is vulnerable in his pride and self-esteem. Cultural myths still perpetuate the idea that he

should be able to have an erection with no, or little, stimulation, and that he should have an easy mastery over the situation, even though it is an act that he has never before experienced. Cultural pressure on the woman with her first coitus reflects remaining cultural ambivalence about her loss of virginity, despite the current era of sexual liberality. This is demonstrated in the statistic that only 50 percent of young women use contraception during their first coitus, and of that 50 percent, an even smaller number use it consistently thereafter. Young women with a history of masturbation are more likely to approach intercourse with positive anticipation and confidence. In the last decade, coitus has also been part of the sexual repertoire of elderly adults, due to the development of sildenafil type drugs, which facilitate erections in men, and hormonally enhanced creams or hormonal pills, which counteract vaginal atrophy in postmenopausal women. Prior to the development of these drugs, many elderly adults enjoyed gratifying sex play, exclusive of coitus.

HOMOSEXUALITY In 1973 homosexuality was eliminated as a diagnostic category by the American Psychiatric Association, and in 1980, it was removed from the Diagnostic and Statistical Manual of Mental Disorders (DSM). The 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) states: “Sexual orientation alone is not to be regarded as a disorder.” This change reflects a change in the understanding of homosexuality, which is now considered to occur with some regularity as a variant of human sexuality, not as a pathological disorder. As David Hawkins wrote, “The presence of homosexuality does not appear to be a matter of choice; the expression of it is a matter of choice.” Definition The term homosexuality often describes a person’s overt behavior, sexual orientation, and sense of personal or social identity. Many persons prefer to identify sexual orientation by using terms such as lesbians and gay men, rather than homosexual, which may imply pathology and etiology based on its origin as a medical term, and refer to sexual behavior with terms such as same sex and male–female. Hawkins wrote that the terms gay and lesbian refer to a combination of self-perceived identity and social identity; they reflect a person’s sense of belonging to a social group that is similarly labeled. Homophobia is a negative attitude toward, or fear of, homosexuality or homosexuals. Heterosexism is the belief that a heterosexual relationship is preferable to all others; it implies discrimination against those practicing other forms of sexuality. Prevalence Recent research reports rates of homosexuality in 2 to 4 percent of the population. A 1994 survey by the US Bureau of the Census concluded that the male prevalence rate for homosexuality is 2 to 3 percent. A 1989 University of Chicago study showed that less than 1 percent of both sexes are exclusively homosexual. The Alan Guttmacher Institute found in 1993 that 1 percent of men reported exclusively same-sex activity in the previous year and that 2 percent reported a lifetime history of homosexual experiences. Some lesbians and gay men, particularly the latter, report being aware of same-sex romantic attractions before puberty. According to Kinsey’s data, about half of all prepubertal boys have had some genital experience with a male partner. These experiences are often exploratory, particularly when shared with a peer, not an adult, and typically lack a strong affective component. Most gay men recall the onset of romantic and erotic attractions to same-sex partners during early adolescence. For women, the onset of romantic feelings toward same-sex partners may also be in preadolescence, but the clear recognition of a same-sex partner preference typically occurs in middle to late adolescence or in young adulthood. More lesbians than gay men appear to have engaged in heterosexual experiences. In one study, 56 percent of lesbians had experienced heterosexual intercourse before their first genital homosexual

experience, compared with 19 percent of gay men who had sampled heterosexual intercourse first. Nearly 40 percent of the lesbians had had heterosexual intercourse during the year preceding the survey. Theoretical Issues Psychological Factors. The determinants of homosexual behavior are enigmatic. Freud viewed homosexuality as an arrest of psychosexual development and mentioned castration fears and fears of maternal engulfment in the preoedipal phase of psychosexual development. According to psychodynamic theory, early life situations that can result in male homosexual behavior include a strong fixation on the mother; lack of effective fathering; inhibition of masculine development by the parents; fixation at, or regression to, the narcissistic stage of development; and losses when competing with brothers and sisters. Freud's views on the causes of female homosexuality included a lack of resolution of penis envy in association with unresolved oedipal conflicts. Freud did not consider homosexuality a mental illness. In "Three Essays on the Theory of Sexuality," he wrote that homosexuality "is found in persons who exhibit no other serious deviations from normal whose efficiency is unimpaired and who are indeed distinguished by especially high intellectual development and ethical culture." In "Letter to an American Mother," Freud wrote, "Homosexuality is assuredly no advantage, but it is nothing to be ashamed of, no vice, no degradation, it cannot be classified as an illness; we consider it to be a variation of the sexual functions produced by a certain arrest of sexual development." New Concepts of Psychoanalytic Factors. Some psychoanalysts have advanced new psychodynamic formulations that contrast with classic psychoanalytic theory. According to Richard Isay, gay men have described same-sex fantasies that occurred when they were 3 to 5 years of age, at about the same age that heterosexuals have male–female fantasies. Isay wrote that same-sex erotic fantasies in gay men center on the father or the father surrogate. The child's perception of, and exposure to, these erotic feelings may account for such "atypical" behavior as greater secretiveness than other boys, self-isolation, and excessive emotionality. Some "feminine" traits may also be caused by identification with the mother or a mother surrogate. Such characteristics usually develop as a way of attracting the father's love and attention in a manner similar to the way the heterosexual boy may pattern himself after his father to gain his mother's attention. The psychodynamics of homosexuality in women may be similar. The little girl does not give up her original fixation on the mother as a love object and continues to seek it in adulthood. Biological Factors. Recent studies indicate that genetic and biological components may contribute to sexual orientation. Gay men reportedly exhibit lower levels of circulatory androgens than do heterosexual men. Prenatal hormones appear to play a role in the organization of the central nervous system: The effective presence of

androgens in prenatal life is purported to contribute to a sexual orientation toward females, and a deficiency of prenatal androgens (or tissue insensitivity to them) may lead to a sexual orientation toward males. Preadolescent girls exposed to large amounts of androgens before birth are uncharacteristically aggressive, and boys exposed to excessive female hormones in utero are less athletic, less assertive, and less aggressive than other boys. Women with hyperadrenocorticalism are lesbian and bisexual in greater proportion than women in the general population. Genetic studies have shown a higher incidence of homosexual concordance among monozygotic twins than among dizygotic twins; these results suggest a genetic predisposition, but chromosome studies have been unable to differentiate homosexuals from heterosexuals. Gay men show a familial distribution; they have more brothers who are gay than do heterosexual men. One study found that 33 of 40 pairs of gay brothers shared a genetic marker on the bottom half of the X chromosome. Another study found that a group of cells in the hypothalamus was smaller in women and in gay

men than in heterosexual men. Neither of these studies has been replicated. Sexual Behavior Patterns. The behavioral features of gay men and lesbian women are as varied as those of heterosexuals. Gay men and lesbians engage in the same sexual practices as heterosexuals, with the obvious differences imposed by anatomy. Many ongoing relationship patterns occur among gay men and lesbians. Some same-sex pairs live in a common household in either a monogamous or a primary relationship for decades; other gay men and lesbians typically have only fleeting sexual contacts. Although many gay men form stable relationships, male–male relationships appear to be less stable and more fleeting than female–female relationships. Gay-male couples are subjected to civil and social discrimination and do not have the legal social support system of marriage or the biological capacity for childbearing that bonds some otherwise incompatible heterosexual couples. Lesbian couples appear to experience less social stigmatization and to have more enduring monogamous or primary relationships. However, opinion polls have found changes in American attitudes toward homosexuality, indicating a greater acceptance of homosexuals than in the past. This acceptance is reflected in laws in several states extending civil privileges routinely accorded to heterosexual spouses to homosexual partners, such as hospital visiting privileges or the ability to adopt children. As of 2014, eighteen states legalized marriage between homosexuals. A greater number of states recognize as legal a marriage performed in those eighteen states even if homosexual marriage is not legal in the partners' state of residence. Psychopathology. The range of psychopathology that may be found among distressed lesbians and gay men parallels that found among heterosexuals; some studies have reported a high suicide rate, however. Distress resulting only from conflict between gay men or lesbians and the societal value structure is not classifiable as a disorder. If the distress is sufficiently severe to warrant a diagnosis, adjustment disorder or a depressive disorder should be considered. Some gay men and lesbians with major depressive disorder may experience guilt and self-hatred that become directed toward their sexual orientation; then the desire for sexual reorientation is only a symptom of the depressive disorder.

Coming Out. According to Rochelle Klinger and Robert Cabaj, coming out is a "process by which an individual acknowledges his or her sexual orientation in the face of societal stigma and with successful resolution accepts himself or herself." The authors wrote: Successful coming out involves the individual accepting his or her sexual orientation and integrating it into all spheres (e.g., social, vocational, and familial). Another milestone that individuals and couples must eventually confront is the degree of disclosure of sexual orientation to the external world. Some degree of disclosure is probably necessary for successful coming out. Difficulty negotiating coming out and disclosure is a common cause of relationship difficulties. For each person, problems resolving the coming out process can contribute to poor self-esteem caused by internalized homophobia and lead to deleterious effects on the person's ability to function in the relationship. Conflict can also arise within a relationship when partners disagree on the degree of disclosure. LOVE AND INTIMACY Freud postulated that psychological health could be determined by a person's ability to function well in two spheres, work and love. A person able to give and receive love with a minimum of fear and conflict has the capacity to develop genuinely intimate relationships with others. A desire to maintain closeness to the love object typifies being in love. Mature love is marked by the intimacy that is a special attribute of the relationship between two persons. When involved in an intimate relationship, the person actively strives for the growth and happiness of the loved person. Sex frequently acts as a catalyst in forming and maintaining intimate relationships. The quality of intimacy in a mature sexual relationship is what Rollo May called "active receiving," in which a person, while loving, permits himself or herself to be loved. May describes the value of

sexual love as an expansion of self-awareness, the experience of tenderness, an increase of self-affirmation and pride, and sometimes, at the moment of orgasm, loss of feeling of separateness. In that setting, sex and love are reciprocally enhancing and healthily fused. Some persons experience conflicts that prevent them from fusing tender and passionate impulses. This can inhibit the expression of sexuality in a relationship, interfere with feelings of closeness to another person, and diminish a person's sense of adequacy and self-esteem. When these problems are severe, they may prevent the formation of, or commitment to, an intimate relationship. SEX AND THE LAW Medicine and the law both assess the impact of sexuality on the individual and society and determine what is healthy or legal behavior. Appropriateness or legality of sexual behavior, however, is not always viewed the same way by professionals in both disciplines. The issues at the interface of sexual science and the law often are

emotionally charged and reflect cultural divisions about acceptable sexual mores. They include abortion, pornography, prostitution, sex education, the treatment of sex offenders, and the right to sexual privacy, among other issues. Laws regarding these issues (e.g., criminalization of oral or anal sex by consenting adults, or the need for parental permission by minors who are requesting an abortion) vary from state to state. TAKING A SEX HISTORY A sex history provides important information about patients, regardless of the presence of a sexual disorder or whether that is the patient's chief complaint. The information can be obtained gradually, through open-ended questions. The outline in Table 17.1-4 provides a guide to the topics to be covered and a structure that can be used when time is limited. Table 17.1-4 Taking a Sex History

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substance use, or adverse effects of medication, then sexual dysfunction due to a general medical condition or substance-induced sexual dysfunction is diagnosed. In DSM-5, specification of the severity of the dysfunction is indicated by noting whether the patient's distress is mild, moderate, or severe.

Sexual dysfunctions are frequently associated with other mental disorders, such as depressive disorders, anxiety disorders, personality disorders, and schizophrenia. In many instances, a sexual dysfunction may be diagnosed in conjunction with another psychiatric disorder. If the dysfunction is largely attributable to an underlying psychiatric disorder, only the underlying disorder should be diagnosed. Sexual dysfunctions are usually self-perpetuating, with the patients increasingly subjected to ongoing performance anxiety and a concomitant inability to experience pleasure. In relationships, the sexually functional partner often reacts with distress or anger due to feelings of deprivation or a sense that he or she is an insufficiently attractive or adequate sexual partner. In such cases, the clinician must consider whether the sexual problem preceded or arose from relationship difficulties and weigh whether a diagnosis of sexual dysfunction relevant to relationship issues is more appropriate. DESIRE, INTEREST, AND AROUSAL DISORDERS Male Hypoactive Sexual Desire Disorder This dysfunction is characterized by a deficiency or absence of sexual fantasies and desire for sexual activity for a minimum duration of approximately 6 months (Table 17.2-1). Men for whom this is a lifelong condition have never experienced many spontaneous erotic/sexual thoughts. Minimal spontaneous sexual thinking or minimal desire for sex ahead of sexual experiences is not considered a diagnosable disorder in women, particularly if desire is triggered during the sexual encounter. The reported prevalence of low desire is greatest at the younger and older ends of the age spectrum, with only 2 percent of men ages 16 to 44 affected by this disorder. A reported 6 percent of men ages 18 to 24, and 40 percent of men ages 66 to 74, have problems with sexual desire. Some men may confuse decreased desire with decreased activity. Their erotic thoughts and fantasies are undiminished, but they no longer act on them due to health issues, unavailability of a partner, or another sexual dysfunction such as erectile disorder. Table 17.2-1 DSM-5 Diagnostic Criteria for Male Hypoactive Sexual Desire Disorder

A variety of causative factors are associated with low sexual desire. Patients with desire problems often use inhibition of desire defensively, to protect against unconscious fears about sex. Sigmund Freud conceptualized low sexual desire as the result of inhibition during the phallic psychosexual phase of development and of unresolved oedipal conflicts. Some men, fixated at the phallic state of development, are fearful of the vagina and believe that they will be castrated if they approach it. Freud called this concept vagina dentata; he theorized that men avoid contact with the vagina when they unconsciously believe that the vagina has teeth. Lack of desire can also result from chronic stress, anxiety, or depression. Abstinence from sex for a prolonged period sometimes results in suppression of sexual impulses. Loss of desire may also be an expression of hostility to a partner or the sign of a deteriorating relationship. The presence of desire depends on several factors: biological drive, adequate self-esteem, the ability to accept oneself as a sexual person, the availability of an appropriate partner, and a good relationship in nonsexual areas with a partner. Damage to, or absence of, any of these factors can diminish desire. In making the diagnosis, clinicians must evaluate a patient's age, general health, any medication regimen, and life stresses. The clinician must attempt to establish a baseline of sexual interest before the disorder began. The need for sexual contact and satisfaction varies among persons and over time in any given person.

The diagnosis should not be made unless the lack of desire is a source of distress to a patient. Female Sexual Interest/Arousal Disorder The combination of interest (or desire) and arousal into one dysfunction category

reflects the recognition that women do not necessarily move stepwise from desire to arousal, but often experience desire synchronously with, or even following, beginning feelings of arousal. This is particularly true for women in long-term relationships. As a corollary, women experiencing sexual dysfunction may experience either/or both inability to feel interest or arousal, and they may often have difficulty achieving orgasm or experience pain in addition. Some may experience dysfunction across the entire range of sexual response/pleasure. Complaints in this dysfunction category present variously as a decrease or paucity of erotic feelings, thoughts, or fantasies; a decreased impulse to initiate sex; a decreased or absent receptivity to partner overtures; or an inability to respond to partner stimulation (Table 17.2-2). Table 17.2-2 DSM-5 Diagnostic Criteria for Female Sexual Interest/Arousal Disorder A complicating factor in this diagnosis is that a subjective sense of arousal is often poorly correlated with genital

lubrication in both normal and dysfunctional women. Therefore, complaints of lack of pleasure are sufficient for this diagnosis even when vaginal lubrication and congestion are present. A woman complaining of lack of arousal may lubricate vaginally, but may not experience a subjective sense of excitement. Some studies using functional magnetic resonance imaging (fMRI) have revealed a low correlation between brain activation in areas controlling genital response and simultaneous ratings of subjective arousal. Physiological studies of sexual dysfunctions indicate that a hormonal pattern may contribute to responsiveness in women who have arousal dysfunction. William Masters and Virginia Johnson found that women are particularly desirous of sex before the onset of the menses. Other women report feeling the greatest sexual excitement immediately after the menses or at the time of ovulation. Alterations in testosterone, estrogen, prolactin, and thyroxin levels have been implicated in female sexual arousal disorder. In addition, medications with antihistaminic or anticholinergic properties cause a decrease in vaginal lubrication. Factors such as life stresses, aging, menopause, adequate sexual stimulation, general health, and medication regimen must be evaluated before making this diagnosis. Relationship problems are particularly relevant to acquired interest/arousal disorder. In one study of couples with markedly decreased sexual interaction, the most prevalent etiology was marital discord. Male Erectile Disorder Male erectile disorder was historically called impotence. The term was dropped for a more medical designation, but also because it was considered derogatory and had negative connotations for the man with the problem. However, it describes with accuracy the feelings of powerlessness, helplessness, and resultant low self-esteem men with this dysfunction frequently suffer (Table 17.2-3). A man with lifelong male erectile disorder has never been able to obtain an erection sufficient for insertion. In acquired male erectile disorder, a man has successfully achieved penetration at some time in his sexual life but is later unable to do so. In situational male erectile disorder, a man is able to have coitus in certain circumstances but not in others; for example, he may function effectively with a prostitute but be unable to have an erection when with his partner. Table 17.2-3 DSM-5 Diagnostic Criteria for Male Erectile Disorder

Acquired male erectile disorder has been reported in 10 to 20 percent of all men. Freud declared it common among his patients. Erectile disorder is the chief complaint of more than 50 percent of all men treated for sexual disorders. Lifelong male erectile disorder is rare; it occurs in about 1

percent of men younger than age 35. The incidence of erectile disorder increases with age. It has been reported variously as 2 to 8 percent of the young adult population. Alfred Kinsey reported that 75 percent of all men were impotent at age 80. There is a reported incidence of 40 to 50 percent in men between ages of 60 and 70. All men older than 40, Masters and Johnson claimed, have a fear of impotence, which the researchers believed reflected the masculine fear of loss of virility with advancing age. Male erectile disorder, however, is not universal in aging men; having an available sex partner is related to continuing potency, as is a history of consistent sexual activity and the absence of vascular, neurologic, or endocrine disease. Twenty percent of men fear erectile dysfunction prior to their first coitus; the reported incidence of actual erectile dysfunction during first coitus is 8 percent. As Stephen Levine has stated, the first sexual encounter “is a horse race between excitement and anxiety.” Male erectile disorder can be organic or psychological, or a combination of both, but in young and middle-aged men the cause is usually psychological. A good history is of primary importance in determining the cause of the dysfunction. If a man reports

having spontaneous erections at times when he does not plan to have intercourse, having morning erections, or having good erections with masturbation or with partners other than his usual one, the organic causes of his erectile disorder can be considered negligible, and costly diagnostic procedures can be avoided. Male erectile disorder caused by a general medical condition or a pharmacological substance is discussed later in this section. Freud ascribed one type of erectile disorder to an inability to reconcile feelings of affection toward a woman with feelings of desire for her. Men with such conflicting feelings can function only with women whom they see as degraded (Madonna–Putana complex). Other factors that have been cited as contributing to impotence include a punitive superego, an inability to trust, and feelings of inadequacy or a sense of being undesirable as a partner. A man may be unable to express a sexual impulse because of fear, anxiety, anger, or moral prohibition. In an ongoing relationship, the disorder may reflect difficulties between the partners, particularly when a man cannot communicate his needs or his anger in a direct and constructive way. In addition, episodes of erectile disorder are reinforcing, with the man becoming increasingly anxious before each sexual encounter. Mr. Y came for therapy after his wife complained about their lack of sexual interaction. The patient avoided sex because of his frequent erectile dysfunction and the painful feelings of inadequacy he suffered after his “failures.” He presented as an articulate, gentle, and self-blaming man. He was faithful to his wife but masturbated frequently. His fantasies involved explicit sadistic components, including hanging and biting women. The contrast between his angry, aggressive fantasies and his loving, considerate behavior toward his wife symbolized his conflicts about his sexuality, his masculinity, and his mixed feelings about women. He was diagnosed with erectile disorder, situational type. ORGASM DISORDERS Female Orgasmic Disorder Female orgasmic disorder, sometimes called inhibited female orgasm or anorgasmia, is defined as the recurrent or persistent inhibition of female orgasm, as manifested by the recurrent delay in, or absence of orgasm after a normal sexual excitement phase that a clinician judges to be adequate in focus, intensity, and duration—in short, a woman’s inability to achieve orgasm by masturbation or coitus (Table 17.2-4). Women who can achieve orgasm by one of these methods are not necessarily categorized as anorgasmic, although some sexual inhibition may be postulated. The complaint is reported by the woman, herself. However, some anorgasmic women are not distressed by the lack of climax and derive pleasure from sexual activity. In the latter instance, a woman may present with this complaint because her partner is troubled by her lack of orgasm. Table 17.2-4

DSM-5 Diagnostic Criteria for Female Orgasmic Disorder Research on the physiology of the female sexual response has shown that orgasms caused by clitoral stimulation and those caused by vaginal stimulation are physiologically identical. Freud's theory that women must give up clitoral sensitivity for vaginal sensitivity to achieve sexual maturity is now considered misleading, but some women report that they gain a special sense of satisfaction from an orgasm precipitated by coitus. Some researchers attribute this satisfaction to the psychological feeling of closeness engendered by the act of coitus, but others maintain that the coital orgasm is a physiologically different experience. Many women achieve orgasm during coitus by a combination of manual clitoral stimulation and penile vaginal stimulation. A woman with lifelong female orgasmic disorder has never experienced orgasm by any kind of stimulation. A woman with acquired orgasmic disorder has previously experienced at least one orgasm, regardless of the circumstances or means of stimulation, whether by masturbation or while dreaming during sleep. Studies have shown that women achieve orgasm more consistently with masturbation than with partnered sex. Kinsey found that 5 percent of married women older than age 35 years had never achieved orgasm by any means. The incidence of never having experienced orgasm is reported as 10 percent among all women. The incidence of orgasm increases

with age. According to Kinsey, the first orgasm occurs during adolescence in about 50 percent of women as a result of masturbation or genital caressing with a partner; the rest usually experience orgasm as they get older. Lifelong female orgasmic disorder is more common among unmarried women than married women. Increased orgasmic potential in women older than 35 years of age has been explained on the basis of less psychological inhibition, greater sexual experience, or both. Acquired female orgasmic disorder is a common complaint in clinical populations. One clinical treatment facility reported having about four times as many nonorgasmic women in its practice as female patients with all other sexual disorders. In another study, 46 percent of women complained of difficulty reaching orgasm. Inhibition of arousal and orgasmic problems often occur together. The overall prevalence of female orgasmic disorder from all causes is estimated to be 30 percent. A recent twin study suggests that orgasmic dysfunction in some females has a genetic basis and cannot be attributed solely to psychological differences. That study demonstrated an estimated heritability for difficulty reaching orgasm with intercourse of 34 percent and an estimated heritability in women who could not climax with masturbation of 45 percent. Numerous psychological factors are associated with female orgasmic disorder. They include fears of impregnation, rejection by a sex partner, and damage to the vagina; hostility toward men; poor body image; and feelings of guilt about sexual impulses. Some women equate orgasm with loss of control or with aggressive, destructive, or violent impulses; their fear of these impulses may be expressed through inhibition of arousal or orgasm. Cultural expectations and social restrictions on women are also relevant. Many women have grown up to believe that sexual pleasure is not a natural entitlement for so-called decent women. Nonorgasmic women may be otherwise symptom free or may experience frustration in a variety of ways; they may have such pelvic complaints as lower abdominal pain, itching, and vaginal discharge, as well as increased tension, irritability, and fatigue. Delayed Ejaculation In male delayed ejaculation, sometimes called retarded ejaculation, a man achieves ejaculation during coitus with great difficulty, if at all (Table 17.2-5). The problem is rarely present with masturbation, but appears as a problem during partnered sex. A man with lifelong delayed ejaculation has never been able to ejaculate during partnered sexual activity. The problem is usually most pronounced during coital activity. The disorder is diagnosed as acquired if it develops after previously normal functioning. Some researchers think that orgasm and

ejaculation should be differentiated, especially in the case of men who ejaculate but complain of a decreased or absent subjective sense of pleasure during the orgasmic experience (orgasmic anhedonia). Table 17.2-5 DSM-5 Diagnostic Criteria for Delayed Ejaculation

The incidence of male orgasmic disorder is much lower than the incidence of premature ejaculation or erectile disorder. Masters and Johnson reported an incidence of delayed ejaculation of only 3.8 percent in one group of 447 men with sexual dysfunctions. A general prevalence of 5 percent has been reported. However, an increase in the presentation of this disorder in sex therapy programs has been seen in the last decade. This has been attributed to the increasing use of antidepressants, which can have a side effect of delayed ejaculation, as well as a high use of Internet pornography sites. These sites offer a level of stimulation involving such variety of people and acts that they may inure the man to the stimulation of more typical partnered activity. Recent studies of adolescent males who use these sites frequently, prior to live sexual interaction, have reported that these teens do not develop neuronal synapses that will enable them to respond to usual partnered interactions with sufficient pleasure to allow them to achieve climax. Lifelong delayed ejaculation indicates severe psychopathology. A man may come from a rigid, puritanical background; he may perceive sex as sinful and the genitals as dirty; and he may have conscious or unconscious incest wishes and guilt. He usually has difficulty with closeness in areas beyond those of sexual relations. In a few cases, the condition is aggravated by an attention-deficit/hyperactivity disorder. A man’s distractibility prevents sufficient arousal for climax to occur. In an ongoing relationship, acquired male delayed ejaculation disorder frequently reflects interpersonal difficulties. The

disorder may be a man’s way of coping with real or fantasized changes in a relationship, such as plans for pregnancy about which the man is ambivalent, the loss of sexual attraction to the partner, or demands by the partner for greater commitment as expressed by sexual performance. In some men, the inability to ejaculate reflects unexpressed hostility toward a woman. The problem is more common among men with obsessive-compulsive disorder (OCD) than among others. A couple presented with the man as the identified patient; he was unable to ejaculate with intercourse. He had always had difficulty reaching climax, except in rare circumstances. He ejaculated once when he was with two women at the same time and once when he was experimenting with cocaine. He currently was not using any substances except for a moderate use of alcohol. This patient was committed to his marriage, although he had extramarital sexual experiences. He did not ejaculate with coitus in those situations either, although he could climax with oral sex. He stated he was more interested in “the conquest” than in the sex itself. He could climax with masturbation, although he rarely masturbated himself, but went to massage parlors. He had issues with anger at women and considered his wife to be excessively critical. He had difficulty doing any of the exercises that required him to pleasure his wife. His difficulty giving also made it hard for him to enjoy mutual pleasuring. It was easier for him to be the recipient of stimulation. Because of this patient’s problems with impulsiveness, narcissism, and dependency, it was necessary to combine introspective psychotherapy with a regimen of behavioral exercises. The patient was diagnosed with delayed ejaculation, lifelong type. Premature (Early) Ejaculation In premature ejaculation, men persistently or recurrently achieve orgasm and ejaculation before they wish to. The diagnosis is made when a man regularly ejaculates before or within approximately 1 minute after penetration. DSM-5 refers only to “vaginal penetration” in its diagnostic criteria, even though it is entirely possible for the disorder to occur in men who are homosexual and do not

engage in vaginal penetration. DSM-5 defines the disorder as mild if ejaculation occurs within approximately 30 seconds to 1 minute of vaginal penetration, moderate if ejaculation occurs within approximately 15 to 30 seconds of vaginal penetration, and severe when ejaculation occurs at the start of sexual activity or within approximately 15 seconds of vaginal penetration. A difficulty with these specifiers involves time distortions, which patients make in both overestimating and underestimating time from penetration to climax. Clinicians need to consider factors that affect the duration of the excitement phase of the sexual response, such as age, the novelty of the sex partner, and the frequency of coitus (Table 17.2-6). As with the other sexual dysfunctions, premature ejaculation is not diagnosed when it is caused exclusively by organic factors or when it is symptomatic of another clinical psychiatric syndrome.

Table 17.2-6 DSM-5 Diagnostic Criteria for Premature (Early) Ejaculation Premature ejaculation is more commonly reported among college-educated men than among men with less education. The complaint is thought to be related to their concern for partner satisfaction, but the true cause of this increased frequency has not been determined. Premature ejaculation is the chief complaint of about 35 to 40 percent of men treated for sexual disorders. In DSM-5, the writers state that the disorder, with its newly defined time parameter, would now be an accurate diagnosis for only 1 to 3 percent of men. Some researchers divide men who experience premature ejaculation into two groups: those who are physiologically predisposed to climax quickly because of shorter nerve latency time and those with a psychogenic or behaviorally conditioned cause. Difficulty in ejaculatory control can be associated with anxiety regarding the sex act, with unconscious fears about the vagina, or with negative cultural conditioning. Men whose early sexual contacts occurred largely with prostitutes who demanded that the sex act proceed quickly or whose sexual contacts took place in situations in which discovery would be embarrassing (e.g., in a shared dormitory room or in the parental

home) might have been conditioned to achieve orgasm rapidly. With young, inexperienced men, who have the problem, it may resolve in time. In ongoing relationships, the partner has a great influence on a premature ejaculator, and a stressful marriage exacerbates the disorder. The developmental background and the psychodynamics found in premature ejaculation and in erectile disorder are similar. SEXUAL PAIN DISORDERS Genito-Pelvic Pain/Penetration Disorder In DSM-5, this disorder refers to one or more of the following complaints, of which any two or more may occur together: difficulty having intercourse; genito-pelvic pain; fear of pain or penetration; and tension of the pelvic floor muscles. Previously, these pain disorders were diagnosed as dyspareunia or vaginismus. These former diagnoses could coexist or one could lead to the other and could understandably lead to fear of pain with sex. Thus, it is reasonable to gather these diagnoses into one diagnostic category. For the purposes of clinical discussion, however, the distinct categories of dyspareunia and vaginismus remain clinically useful. Dyspareunia. Dyspareunia is recurrent or persistent genital pain occurring before, during, or after intercourse. Dyspareunia is related to, and often coincides with, vaginismus. Repeated episodes of vaginismus can lead to dyspareunia and vice versa; in either case, somatic causes must be ruled out. A pain disorder should not be diagnosed when an organic basis for pain is found or when it is caused by a lack of lubrication. DSM-5 cites that 15 percent of women in North America report recurrent pain during intercourse. In most cases, dynamic factors are considered causative. Chronic pelvic pain is a common complaint in women with a history of rape or childhood sexual abuse. Painful coitus can result from tension and anxiety about the sex act that cause women to involuntarily contract their pelvic floor muscles.

The pain is real and makes intercourse unpleasant or unbearable. Anticipation of further pain may cause women to avoid coitus altogether. If a partner proceeds with intercourse regardless of a woman’s state of readiness, the condition is aggravated. There is an increase in reported dyspareunia postmenopausally due to hormonally induced physiological changes in the vagina; however, specific complaints of difficulty having intercourse occur more often in premenopausal women. There is some increase in dyspareunia in the immediate postpartum population, but it is usually temporary. Dyspareunia may present as any of the four complaints listed under genito-pelvic pain/penetration disorder and should be diagnosed as genito-pelvic pain/penetration disorder. Vaginismus. Defined as a constriction of the outer third of the vagina due to involuntary pelvic floor muscle tightening or spasm, vaginismus interferes with penile insertion and intercourse. This response may occur during a gynecological examination when involuntary vaginal constriction prevents the introduction of the speculum into

the vagina. The diagnosis is not made when the dysfunction is caused exclusively by organic factors or when it is symptomatic of another mental disorder. Vaginismus may be complete, that is no penetration of the vagina is possible, whether by the penis, fingers, a speculum during gynecologic exam, or even if the woman tries to use the smallest size tampon. Many women who discover this complaint when they become sexually active have avoided the use of tampons previously. In a less severe form of vaginismus, pelvic floor muscle tightening due to pain or fear of pain makes penetration difficult, but not impossible. Penetration may be achieved with the smallest size speculum or little fingers. In mild cases, the muscles relax after the initial difficulty with penetration and the woman can continue with sexual play, sometimes even with coitus. Miss B was a 27-year-old single woman who presented for therapy because of an inability to have intercourse. She described episodes with a recent boyfriend in which he had tried vaginal penetration but had been unable to enter. The boyfriend did not have erectile dysfunction. Miss B experienced desire and was able to achieve orgasm through manual or oral stimulation. For almost a year, she and her boyfriend had sex play without intercourse. However, he complained increasingly about his frustration at the lack of coitus, which he had enjoyed in previous relationships. Miss B had a conscious fear of penetration and dreaded going to the gynecologist, although she was able to use tampons when she menstruated. She was diagnosed with genito-pelvic pain/penetration disorder, lifelong type. Vaginismus is less prevalent than female orgasmic disorder. It most often afflicts highly educated women and those in high socioeconomic groups. Women with vaginismus may consciously wish to have coitus, but unconsciously wish to keep a penis from entering their bodies. A sexual trauma, such as rape, may cause vaginismus. Anticipation of pain at the first coital experience may cause vaginismus. Clinicians have noted that a strict religious upbringing in which sex is associated with sin is frequent in these patients. Other women have problems in dyadic relationships; if women feel emotionally abused by their partners, they may protest in this nonverbal fashion. Some women who have experienced significant pain in childhood due to surgical or dental interventions become guarded about any breach of body integrity and develop vaginismus. Vaginismus may present as any of the four complaints under genito-pelvic pain/penetration disorder and should be diagnosed as genito-pelvic pain/penetration disorder. SEXUAL DYSFUNCTION DUE TO A GENERAL MEDICAL CONDITION Male Erectile Disorder Due to a General Medical Condition The incidence of psychological, as opposed to organic, male erectile disorder has been the focus of many studies. Statistics indicate that 20 to 50 percent of men with erectile

disorder have an organic basis for the disorder. A physiologic etiology is more likely in men older than 50 and the most likely cause in men older than age 60. The organic causes of male erectile disorder are listed in Table 17.2-7. Side effects of medication can impair male sexual functioning in a variety of ways (Table 17.2-8). Castration (removal of the testes) does not always lead to sexual dysfunction, because erection may still occur. A reflex arc, fired when the inner thigh is stimulated, passes through the sacral cord erectile center to account for the phenomenon. Table 17.2-7 Diseases and Other Medical Conditions Implicated in Male Erectile Disorder Table 17.2-8 Some Pharmacological Agents Implicated in Male Sexual Dysfunctions

A number of procedures, benign and invasive, are used to help differentiate organically caused erectile disorder from functional erectile disorder. The procedures include monitoring nocturnal penile tumescence (erections that occur during sleep), normally associated with rapid eye movement; monitoring tumescence with a strain gauge; measuring blood pressure in the penis with a penile plethysmograph or an ultrasound (Doppler) flowmeter, both of which assess blood

flow in the internal pudendal artery; and measuring pudendal nerve latency time. Other diagnostic tests that delineate organic bases for impotence include glucose tolerance tests, plasma hormone assays, liver and thyroid function tests, prolactin and follicle-stimulating hormone (FHS) determinations, and cystometric examinations. Invasive diagnostic studies include penile arteriography, infusion cavernosonography, and radioactive xenon penography. Invasive procedures require expert interpretation and are used only for patients who are candidates for vascular reconstructive procedures. Dyspareunia Due to a General Medical Condition An estimated 30 percent of all surgical procedures on the female genital area result in temporary dyspareunia. In addition, 30 to 40 percent of women with the complaint who are seen in sex therapy clinics have pelvic pathology. Organic abnormalities leading to dyspareunia and vaginismus include irritated or infected hymenal remnants, episiotomy scars, Bartholin’s gland infection, various forms of vaginitis and cervicitis, endometriosis, and adenomyosis. Postcoital pain has been reported by women with myomata, endometriosis, and adenomyosis, and is attributed to the uterine contractions during orgasm. Postmenopausal women may have dyspareunia resulting from thinning of the vaginal mucosa and reduced lubrication. Two conditions not readily apparent on physical examination that produce dyspareunia are vulvar vestibulitis and interstitial cystitis. The former may present with chronic vulvar pain and the latter produces pain most intensely following orgasm. Dyspareunia can also occur in men, but it is uncommon and is usually associated with an organic condition, such as Peyronie’s disease, which consists of sclerotic plaques on the penis that cause penile curvature. Male Hypoactive Sexual Desire Disorder and Female Interest/Arousal Disorder Due to a General Medical Condition Sexual desire commonly decreases after major illness or surgery, particularly when the body image is affected after such procedures as mastectomy, ileostomy, hysterectomy, and prostatectomy. Illnesses that deplete a person’s energy, chronic conditions that require physical and psychological adaptation, and serious illnesses that can cause a person to become depressed can all markedly lessen sexual desire. In some cases, biochemical correlates are associated with hypoactive sexual desire disorder (Table 17.2-9). A recent study found markedly lower levels of serum testosterone in men complaining of low desire than in normal controls in a sleep-laboratory situation. Drugs that depress the central nervous system (CNS) or decrease testosterone production can decrease desire. Table 17.2-9 Neurophysiology of Sexual Dysfunction

Other Male Sexual Dysfunction Due to a General Medical Condition Delayed ejaculation can have physiological causes and can occur after surgery on the genitourinary tract, such as prostatectomy. It may also be associated with Parkinson's disease and other neurological disorders involving the lumbar or sacral sections of the spinal cord. The antihypertensive drug guanethidine monosulfate (Ismelin), methyldopa (Aldomet), the phenothiazines, the tricyclic drugs, and the selective serotonin reuptake inhibitors (SSRIs), among others, have been implicated in retarded ejaculation. In addition, delayed ejaculation must be differentiated from retrograde ejaculation, in which ejaculation occurs but the seminal fluid passes backward into the bladder. Retrograde ejaculation always has an organic cause. It can develop after genitourinary surgery and it is also associated with medications that have anticholinergic adverse effects, such as the phenothiazines. Other Female Sexual Dysfunction Due to a General Medical Condition Some medical conditions—specifically, endocrine diseases such as hypothyroidism, diabetes mellitus, and primary hyperprolactinemia—can affect a woman's ability to have orgasms. Several drugs also affect some women's capacity to have orgasms (Table 17.2-10) Antihypertensive medications, CNS stimulants, tricyclic drugs, SSRIs, and, frequently, monoamine oxidase inhibitors (MAOIs) have interfered with female orgasmic capacity. One study of women taking MAOIs, however, found that after 16 to 18 weeks of pharmacotherapy, the adverse effect of the medication disappeared and the women were able to re-experience orgasms, although they continued taking an undiminished dose of the drug. Table 17.2-10 Some Antipsychotic Drugs Implemented in Inhibited Female Orgasma

Substance/Medication-Induced Sexual Dysfunction The diagnosis of substance-induced sexual dysfunction is used when evidence of substance intoxication or withdrawal is apparent from the history, physical examination, or laboratory findings. The disturbance in sexual function must be predominant in the clinical picture. Distressing sexual dysfunction occurs soon after significant substance intoxication or withdrawal, or after exposure to a medication or a change in medication use. Specified substances include alcohol, amphetamines or related substances, cocaine, opioids, sedatives, hypnotics, or anxiolytics, and other or unknown substances. Abused recreational substances affect sexual function in various ways. In small doses, many substances enhance sexual performance by decreasing inhibition or anxiety or by causing a temporary elevation of mood. With continued use, however, erectile engorgement and orgasmic and ejaculatory capacities become impaired. The abuse of sedatives, anxiolytics, hypnotics, and particularly opiates and opioids nearly always depresses desire. Alcohol may foster the initiation of sexual activity by removing inhibition, but it also impairs performance. Cocaine and amphetamines produce the following similar effects: Although no direct evidence indicates that sexual drive is enhanced, users initially have feelings of increased energy and may become sexually active; ultimately, dysfunction occurs. Men usually go through two stages: an experience of prolonged erection without ejaculation, and then a gradual loss of erectile capability. Patients recovering from substance dependency may need therapy to regain sexual function, partly because of psychological readjustment to a nondependent state. Many substance abusers have always had difficulty with intimate interactions. Others who spent their crucial developmental years under the influence of a substance have missed the experiences that would have enabled them to learn social and sexual skills.

Pharmacological Agents Implicated In Sexual Dysfunction Almost every pharmacological agent, particularly those used in psychiatry, has been associated with an effect on sexuality. In men, these effects include decreased sex drive, erectile failure, decreased volume of ejaculate, and

delayed or retrograde ejaculation. In women, decreased sex drive, decreased vaginal lubrication, inhibited or delayed orgasm, and decreased or absent vaginal contractions may occur. Drugs may also enhance the sexual responses and increase the sex drive, but this is less common than adverse effects. The effects of psychoactive drugs are detailed later in this section. Antipsychotic Drugs. Most antipsychotic drugs are dopamine receptor antagonists that also block adrenergic and cholinergic receptors, thus accounting for the adverse sexual effects (Table 17.2-11). Chlorpromazine (Thorazine) and trifluoperazine (Stelazine) are potent anticholinergics, and they impair erection and ejaculation. With some drugs, the seminal fluid backs up into the bladder rather than being propelled through the penile urethra. Patients still have a pleasurable sensation, but the orgasm is dry. When urinating after orgasm, the urine may be milky white because it contains the ejaculate. The condition is startling but harmless. Paradoxically, some rare cases of priapism have been reported with antipsychotics. Table 17.2-11 Diagnostic Issues with Sex and Some Antipsychotic Drugs Antidepressant Drugs. The tricyclic and tetracyclic antidepressants have anticholinergic effects that interfere with erection and delay ejaculation. Because the anticholinergic effects vary among the cyclic antidepressants, those with the fewest effects (e.g., desipramine [Norpramin]) produce the fewest sexual adverse effects. The effects of the tricyclics and tetracyclics have not been documented sufficiently in

women; however, few women seem to complain of any effects. Some men report increased sensitivity of the glans that is pleasurable and that does not interfere with erection, although it delays ejaculation. In some cases, however, the tricyclic causes painful ejaculation, perhaps as the result of interference with seminal propulsion caused by interference with, in turn, urethral, prostatic, vas, and epididymal smooth muscle contractions. Clomipramine (Anafranil) has been reported to increase sex drive in some persons. Selegiline (Deprenyl), a selective MAO type B (MAOB) inhibitor, and bupropion (Wellbutrin) have also been reported to increase sex drive, possibly by dopaminergic activity and increased production of norepinephrine. Venlafaxine (Effexor) and the SSRIs most often have adverse effects because of the rise in serotonin levels. A lowering of the sex drive and difficulty reaching orgasm occur in both sexes. Reversal of those negative effects has been achieved with cyproheptadine (Periactin), an antihistamine with antiserotonergic effects, and with methylphenidate (Ritalin), which has adrenergic effects. Trazodone (Desyrel) is associated with the rare occurrence of priapism, the symptom of prolonged erection in the absence of sexual stimuli. That symptom appears to result from the α2-adrenergic antagonism of trazodone. The MAOIs affect biogenic amines broadly. Accordingly, they produce impaired erection, delayed or retrograde ejaculation, vaginal dryness, and inhibited orgasm. Tranylcypromine (Parnate) has a paradoxical sexually stimulating effect in some persons, possibly as a result of its amphetamine-like properties. Mr. W presented with the complaint of inability to achieve orgasm. His problem dated from the time, 18 months previously, when he had been placed on fluoxetine (Prozac). Before that time, he had been able to achieve orgasm through masturbation and through coitus with his wife. Mr. W tried several other SSRIs, as well as venlafaxine, but the side effect of delayed ejaculation persisted. None of the usual antidotes to SSRI-induced anorgasmia proved effective, and the patient then was tried on antidepressants of other categories. Mr. W was able to respond to bupropion and clonazepam (Klonopin). This combination treated his depression and anxiety, and his delayed ejaculation resolved. He was diagnosed with pharmacologically induced delayed ejaculation. GENERAL EFFECTS. Because depression is associated with a decreased libido, varying levels of sexual dysfunction and anhedonia are part of the disease process. Some patients report improved sexual functioning as their depression

improves as a result of antidepressant medication. The phenomenon makes the evaluation of sexual side effects difficult; also, the side effects may disappear with time, perhaps because a biogenic amine homeostatic mechanism comes into play. Lithium. Lithium (Eskalith) regulates mood and, in the manic state, may reduce

hypersexuality, possibly by a dopamine antagonist activity. In some patients, impaired erection has been reported. Sympathomimetics. Psychostimulants, which are sometimes used in the treatment of depression, include amphetamines, methylphenidate, and pemoline (Cylert), which raise the plasma levels of norepinephrine and dopamine. Libido is increased; however, with prolonged use, men may experience a loss of desire and erections. α-Adrenergic and β-Adrenergic Receptor Antagonists. α-Adrenergic and βadrenergic receptor antagonists are used in the treatment of hypertension, angina, and certain cardiac arrhythmias. They diminish tonic sympathetic nerve outflow from vasomotor centers in the brain. As a result, they can cause impotence, decrease the volume of ejaculate, and produce retrograde ejaculation. Changes in libido have been reported in both sexes. Suggestions have been made to use the side effects of drugs therapeutically. Thus, a drug that delays or interferes with ejaculation (e.g., fluoxetine) might be used to treat premature ejaculation. Anticholinergics. The anticholinergics block cholinergic receptors and include such drugs as amantadine (Symmetrel) and benztropine (Cogentin). They produce dryness of the mucous membranes (including those of the vagina) and erectile disorder. However, amantadine may reverse SSRI-induced orgasmic dysfunction through its dopaminergic effect. Antihistamines. Drugs such as diphenhydramine (Benadryl) have anticholinergic activity and are mildly hypnotic. They may inhibit sexual function as a result. Cyproheptadine, although an antihistamine, also has potent activity as a serotonin antagonist. It is used to block the serotonergic sexual adverse effects produced by SSRIs, such as delayed orgasm. Antianxiety Agents. The major class of anxiolytics is the benzodiazepines (e.g., diazepam [Valium]). They act on the γ-aminobutyric acid (GABA) receptors, which are believed to be involved in cognition, memory, and motor control. Because benzodiazepines decrease plasma epinephrine concentrations, they diminish anxiety, and as a result they improve sexual function in persons inhibited by anxiety. Alcohol. Alcohol suppresses CNS activity generally and can produce erectile disorders in men as a result. Alcohol has a direct gonadal effect that decreases testosterone levels in men; paradoxically, it can produce a slight rise in testosterone levels in women. The latter finding may account for women who report increased libido after drinking small amounts of alcohol. The long-term use of alcohol reduces the ability of the liver to metabolize estrogenic compounds. In men, that produces signs of feminization (such as gynecomastia as a result of testicular atrophy).

Opioids. Opioids, such as heroin, have adverse sexual effects, such as erectile failure and decreased libido. The alteration of consciousness may enhance the sexual experience in occasional users. Hallucinogens. The hallucinogens include lysergic acid diethylamide (LSD), phencyclidine (PCP), psilocybin (from some mushrooms), and mescaline (from peyote cactus). In addition to inducing hallucinations, the drugs cause loss of contact with reality and an expanding and heightening of consciousness. Some users report that the sexual experience is similarly enhanced, but others experience anxiety, delirium, or psychosis, which clearly interfere with sexual function. Cannabis. The altered state of consciousness produced by cannabis may enhance sexual pleasure for some persons. Its prolonged use depresses testosterone levels. Barbiturates and Similarly Acting Drugs. Barbiturates and similarly acting sedative-hypnotic drugs may enhance sexual responsiveness in persons who are sexually unresponsive as a result of anxiety. They have no

direct effect on the sex organs; however, they do produce an alteration in consciousness that some persons find pleasurable. These drugs are subject to abuse, and use can be fatal when combined with alcohol or other CNS depressants. Methaqualone (Quaalude) acquired a reputation as a sexual enhancer, which had no biological basis in fact. It is no longer marketed in the United States. TREATMENT Before 1970, the most common treatment of sexual dysfunctions was individual psychotherapy. Classic psychodynamic theory holds that sexual inadequacy has its roots in early developmental conflicts, and the sexual disorder is treated as part of a pervasive emotional disturbance. Treatment focuses on the exploration of unconscious conflicts, motivation, fantasy, and various interpersonal difficulties. One of the assumptions of therapy is that removal of the conflicts allows the sexual impulse to become structurally acceptable to the ego, and thereby the patient finds appropriate means of satisfaction in the environment. The symptoms of sexual dysfunctions, however, frequently become secondarily autonomous and continue to persist, even when other problems evolving from the patients' pathology have been resolved. The addition of behavioral techniques is often necessary to cure the sexual problem. Dual-Sex Therapy The theoretical basis of dual-sex therapy is the concept of the marital unit or dyad as the object of therapy; the approach represented the major advance in the diagnosis and treatment of sexual disorders in the 20th century. The methodology was originated and developed by Masters and Johnson. In dual-sex therapy, treatment is based on a concept

that the couple must be treated when a dysfunctional person is in a relationship. Because both are involved in a sexually distressing situation, both must participate in the therapy program. The sexual problem often reflects other areas of disharmony or misunderstanding in the relationship so that the entire relationship is treated, with emphasis on the sexual functioning of the partners. The keystone of the program is the roundtable session in which a male and female therapy team clarifies, discusses, and works through problems with the couple. The fourway sessions require active participation by the patients. Therapists and patients discuss the psychological and physiological aspects of sexual functioning, and therapists have an educative attitude. Therapists suggest specific sexual activities for the couple to follow in the privacy of their home. The aim of the therapy is to establish or reestablish communication within the partner unit. Sex is emphasized as a natural function that flourishes in the appropriate domestic climate, and improved communication is encouraged toward that end. In a variation of this therapy that has proved effective, one therapist may treat the couple. Treatment is short term and is behaviorally oriented. The therapists attempt to reflect the situation as they see it, rather than interpret underlying dynamics. An undistorted picture of the relationship presented by the therapists often corrects the myopic, narrow view held by each partner. This new perspective can interrupt the couple's destructive pattern of relating and can encourage improved, more effective communication. Specific exercises are prescribed for the couple to treat their particular problems. Sexual inadequacy often involves lack of information, misinformation, and performance fear. Therefore, the couple is specifically prohibited from any sexual play other than that prescribed by the therapists. Beginning exercises usually focus on heightening sensory awareness to touch, sight, sound, and smell. Initially, intercourse is interdicted, and the couple learn to give and receive bodily pleasure without the pressure of performance or penetration. At the same time, they learn how to communicate nonverbally in a mutually satisfactory way, and they learn that sexual foreplay is an enjoyable alternative to intercourse and orgasm. During the sensate focus exercises, the couple receives much reinforcement to reduce anxiety. They are urged to use fantasies to distract them from obsessive concerns about performance (spectatoring). The needs of both the

dysfunctional partner and the nondysfunctional partner are considered. If either partner becomes sexually excited by the exercises, the other is encouraged to bring him or her to orgasm by manual or oral means. Open communication between the partners is urged, and the expression of mutual needs is encouraged. Resistances, such as claims of fatigue or not enough time to complete the exercises, are common and must be dealt with by the therapists. Issues of body image, fear of being touched, and difficulty touching oneself arise frequently. Genital stimulation is eventually added to general body stimulation. The couple is instructed sequentially to try various positions for intercourse, without necessarily completing the act, and to use varieties of stimulating techniques before they are instructed to proceed with intercourse. Psychotherapy sessions follow each new exercise period, and problems and satisfactions, both sexual and in other areas of the couple's lives, are discussed. Specific

instructions and the introduction of new exercises geared to the individual couple's progress are reviewed in each session. Gradually, the couple gains confidence and learns to communicate, verbally and sexually. Dual-sex therapy is most effective when the sexual dysfunction exists apart from other psychopathology. Specific Techniques and Exercises Various techniques are used to treat the various sexual dysfunctions. In cases of vaginismus, a woman is advised to dilate her vaginal opening with her fingers or with size-graduated dilators. Dilators are also used to treat cases of dyspareunia. Sometimes, treatment is coordinated with specially trained physiotherapists who work with the patients to help them relax their perineal muscles. In cases of premature ejaculation, an exercise known as the squeeze technique is used to raise the threshold of penile excitability. In this exercise, the man or the woman stimulates the erect penis until the earliest sensations of impending ejaculation are felt. At this point, the woman forcefully squeezes the coronal ridge of the glans, the erection is diminished, and ejaculation is inhibited. The exercise program eventually raises the threshold of the sensation of ejaculatory inevitability and allows the man to focus on sensations of arousal without anxiety and develop confidence in his sexual performance. A variant of the exercise is the stop–start technique developed by James H. Semans, in which the woman stops all stimulation of the penis when the man first senses an impending ejaculation. No squeeze is used. Research has shown that the presence or absence of circumcision has no bearing on a man's ejaculatory control; the glans is equally sensitive in the two states. Sex therapy has been most successful in the treatment of premature ejaculation. A man with a sexual desire disorder or male erectile disorder is sometimes told to masturbate to prove that full erection and ejaculation are possible. Delayed ejaculation is managed initially by extravaginal ejaculation and then by gradual vaginal entry after stimulation to a point near ejaculation. Most importantly, the early exercises forbid ejaculation to remove the pressure to climax and allow the man to immerse himself in sexual pleasuring. In cases of lifelong female orgasmic disorder, the woman is directed to masturbate, sometimes using a vibrator. The shaft of the clitoris is the masturbatory site most preferred by women, and orgasm depends on adequate clitoral stimulation. An area on the anterior wall of the vagina has been identified in some women as a site of sexual excitation, known as the G-spot; but reports of an ejaculatory phenomenon at orgasm in women following the stimulation of the G-spot have not been satisfactorily verified. Hypnotherapy Hypnotherapists focus specifically on the anxiety-producing situation—that is, the sexual interaction that results in dysfunction. The successful use of hypnosis enables patients to gain control over the symptom that has been lowering self-esteem and disrupting psychological homeostasis. The patient's cooperation is first obtained and

encouraged during a series of nonhypnotic sessions with the therapist. Those discussions permit the development of a secure doctor–patient relationship, a sense of physical and psychological comfort on the part of the patient, and the establishment of mutually desired treatment goals. During this time, the therapist assesses the patient's capacity for the trance experience. The nonhypnotic sessions also permit the clinician to take a psychiatric history and perform a mental status examination before beginning hypnotherapy. The focus of treatment is on symptom removal and attitude alteration. The patient is instructed in developing alternative means of dealing with the anxietyprovoking situation, the sexual encounter. In addition, patients are taught relaxation techniques to use on themselves before sexual relations. With these methods to alleviate anxiety, the physiological responses to sexual stimulation can more readily result in pleasurable excitation and discharge. Psychological impediments to vaginal lubrication, erection, and orgasms are removed, and normal sexual functioning ensues. Hypnosis may be added to a basic individual psychotherapy program to accelerate the effects of psychotherapeutic intervention. Behavior Therapy Behavioral approaches were initially designed for the treatment of phobias but are now used to treat other problems as well. Behavior therapists assume that sexual dysfunction is learned maladaptive behavior, which causes patients to be fearful of sexual interaction. Using traditional techniques, therapists set up a hierarchy of anxietyprovoking situations, ranging from least threatening (e.g., the thought of kissing) to most threatening (e.g., the thought of penile penetration). The behavior therapist enables the patient to master the anxiety through a standard program of systematic desensitization, which is designed to inhibit the learned anxious response by encouraging behaviors antithetical to anxiety. The patient first deals with the least anxiety-producing situation in fantasy and progresses by steps to the most anxietyproducing situation. Medication, hypnosis, and special training in deep muscle relaxation are sometimes used to help with the initial mastery of anxiety. Assertiveness training is helpful in teaching patients to express sexual needs openly and without fear. Exercises in assertiveness are given in conjunction with sex therapy; patients are encouraged to make sexual requests and to refuse to comply with requests perceived as unreasonable. Sexual exercises may be prescribed for patients to perform at home, and a hierarchy may be established, starting with those activities that have proved most pleasurable and successful in the past. One treatment variation involves the participation of the patient's sexual partner in the desensitization program. The partner, rather than the therapist, presents items of increasing stimulation value to the patient. A cooperative partner is necessary to help the patient carry gains made during treatment sessions to sexual activity at home. Mindfulness Mindfulness is a cognitive technique that has been helpful in the treatment of sexual dysfunction. The patient is directed to focus on the moment and maintain an awareness of sensations—visual, tactile, auditory, and olfactory—that he or she experiences in the

moment. The aim is to distract the patient from spectatoring (watching him or herself) and center the person on the sensations that lead to arousal and/or orgasm. Hopefully, this shift in focus allows patients to become immersed in the pleasure of the experience and remove themselves from self-judgment and performance anxiety. Group Therapy Group therapy has been used to examine both intrapsychic and interpersonal problems in patients with sexual disorders. A therapy group provides a strong support system for a patient who feels ashamed, anxious, or guilty about a particular sexual problem. It is a useful forum in which to counteract sexual myths, correct misconceptions, and provide accurate information about sexual anatomy, physiology, and varieties of behavior. Groups for the treatment of sexual disorders can be organized in several ways. Members may all share the same problem, such as premature ejaculation; members may all be of

the same sex with different sexual problems; or groups may be composed of both men and women who are experiencing a variety of sexual problems. Group therapy can be an adjunct to other forms of therapy or the prime mode of treatment. Groups organized to treat a particular dysfunction are usually behavioral in approach. Groups composed of married couples with sexual dysfunctions have also been effective. A group provides the opportunity to gather accurate information, offers consensual validation of individual preferences, and enhances selfesteem and self-acceptance. Techniques, such as role playing and psychodrama, may be used in treatment. Such groups are not indicated for couples when one partner is uncooperative, when a patient has a severe depressive disorder or psychosis, when a patient finds explicit sexual audiovisual material repugnant, or when a patient fears or dislikes groups. Analytically Oriented Sex Therapy One of the most effective treatment modalities is the use of sex therapy integrated with psychodynamic and psychoanalytically oriented psychotherapy. The sex therapy is conducted over a longer period than usual, which allows learning or relearning of sexual satisfaction under the realities of patients' day-to-day lives. The addition of psychodynamic conceptualizations to behavioral techniques used to treat sexual dysfunctions allows the treatment of patients with sexual disorders associated with other psychopathology. The material and dynamics that emerge in patients in analytically oriented sex therapy are the same as those in psychoanalytic therapy, such as dreams, fear of punishment, aggressive feelings, difficulty trusting a partner, fear of intimacy, oedipal feelings, and fear of genital mutilation. The combined approach of analytically oriented sex therapy is used by the general psychiatrist who carefully judges the optimal timing of sex therapy and the ability of patients to tolerate the directive approach that focuses on their sexual difficulties. Biological Treatments

Biological treatments, including pharmacotherapy, surgery, and mechanical devices, are used to treat specific cases of sexual disorder. Most of the recent advances involve male sexual dysfunction. Current studies are under way to test biological treatment of sexual dysfunction in women. Pharmacotherapy. The major new medications to treat sexual dysfunction are sildenafil (Viagra) and its congeners (Table 17.2-12); oral phentolamine (Vasomax); alprostadil (Caverject), and injectable medications; papaverine, prostaglandin E1, phentolamine, or some combination of these (Edex); and a transurethral alprostadil (MUSE), all used to treat erectile disorder. Table 17.2-12 Pharmacokinetics of the PDE-5 Inhibitors Sildenafil is a nitric oxide enhancer that facilitates the inflow of blood to the penis necessary for an erection. The drug takes effect about 1 hour after ingestion, and its effect can last up to 4 hours. Sildenafil is not effective in the absence of sexual stimulation. The most common adverse events associated with its use are headaches, flushing, and dyspepsia. The use of sildenafil is contraindicated for persons taking organic nitrates. The concomitant action of the two drugs can result in large, sudden, and sometimes fatal drops in systemic blood pressure. Sildenafil is not effective in all cases of erectile dysfunction. It fails to produce an erection that is sufficiently rigid for penetration in about 50 percent of men who have had radical prostate surgery or in those with long-standing insulin-dependent diabetes. It is also ineffective in certain cases of nerve damage. A small number of patients developed nonarteritic ischemic optic neuropathy (NAION) soon after use of sildenafil. Six patients had vision loss within 24 hours after use of the agent. Both eyes were affected in one individual. All affected individuals had preexisting hypertension, diabetes, elevated cholesterol, or hyperlipidemia. Although very rare, sildenafil may provoke NAION in individuals with an arteriosclerotic risk profile. Very rare cases of hearing loss have also been reported. Sildenafil use in women results in vaginal lubrication, but not in increased desire. Anecdotal reports, however, describe individual women

who have experienced

intensified excitement with sildenafil. Oral phentolamine and apomorphine are not US Food and Drug Administration (FDA) approved at present, but have proved effective as potency enhancers in men with minimal erectile dysfunction. Phentolamine reduces sympathetic tone and relaxes corporeal smooth muscle. Adverse events include hypotension, tachycardia, and dizziness. Apomorphine effects are mediated by the autonomic nervous system and result in vasodilation that facilitates the inflow of blood to the penis. Adverse events include nausea and sweating. In contrast to the oral medications, injectable and transurethral forms of alprostadil act locally on the penis and can produce erections in the absence of sexual stimulation. Alprostadil contains a naturally occurring form of prostaglandin E, a vasodilating agent. Alprostadil may be administered by direct injection into the corpora cavernosa or by intraurethral insertion of a pellet through a canula. The firm erection produced within 2 to 3 minutes after administration of the drug may last as long as 1 hour. Infrequent and reversible adverse effects of injections include penile bruising and changes in liver function test results. Possible hazardous sequelae exist, including priapism and sclerosis of the small veins of the penis. Users of transurethral alprostadil sometimes complain of burning sensations in the penis. Two small trials found different topical agents effective in alleviating erectile dysfunction. One cream consists of three vasoactive substances known to be absorbed through the skin: aminophylline, isosorbide dinitrate, and co-dergocrine mesylate, which is a mixture of ergot alkaloids. The other is a gel containing alprostadil and an additional ingredient, which temporarily makes the outer layer of the skin more permeable. In addition, a cream incorporating alprostadil has been developed to treat female sexual arousal disorder; the initial results are promising. In a trial of postmenopausal women with arousal problems who were already on hormonal therapy, vaginally applied phentolamine mesylate, an α-receptor antagonist, significantly increased vasocongestion and a subjective sense of arousal. A drug to increase desire in women, flibanserin, has been resubmitted for approval to the FDA. It was previously denied approval. The pharmacological treatments described in the preceding text are useful in the treatment of arousal dysfunction of various causes: neurogenic, arterial insufficiency, venous leakage, psychogenic, and mixed. When coupled with insight-oriented or behavioral sex therapy, the use of medications can reverse psychogenic arousal disorder that is resistant to psychotherapy alone, the ultimate goal being pharmacologically unassisted sexual functioning. Other Pharmacological Agents. Numerous other pharmacological agents have been used to treat the various sexual disorders. Intravenous methohexital sodium (Brevital) has been used in desensitization therapy. Antianxiety agents may have some application in tense patients, although these drugs can interfere with the sexual response. The side effects of antidepressants, in particular the SSRIs and tricyclic drugs, have been used to prolong the sexual response in patients with premature ejaculation. This approach is particularly useful in patients who are refractory to behavioral

techniques who may fall into the category of physiologically disposed premature ejaculators. Topical anesthetic creams are also reported to be helpful in decreasing the intravaginal ejaculation latency time (IELT) in cases of premature ejaculation. Antidepressants are advocated in treatment of patients who are phobic of sex and in those with posttraumatic stress disorder following rape. Trazodone is an antidepressant that improves nocturnal erections. The risks of taking such medications must be carefully weighed against their possible benefits. Bromocriptine (Parlodel) is used in the treatment of hyperprolactinemia, which is frequently associated with hypogonadism. In

such patients, it is necessary to rule out pituitary tumors. Bromocriptine, a dopamine agonist, may improve sexual function impaired by hyperprolactinemia. A number of substances have popular standing as aphrodisiacs; for example, ginseng root and yohimbine (Yocon). Studies, however, have not confirmed any aphrodisiac properties. Yohimbine, an α-receptor antagonist, may cause dilation of the penile artery; however, the American Urologic Association does not recommend its use to treat organic erectile dysfunction. Many recreational drugs, including cocaine, amphetamines, alcohol, and cannabis, are considered enhancers of sexual performance. Although they may provide the user with an initial benefit because of their tranquilizing, disinhibiting, or mood-elevating effects, consistent or prolonged use of any of these substances impairs sexual functioning. Dopaminergic agents have been reported to increase libido and improve sex function. Those drugs include L-dopa, a dopamine precursor, and bromocriptine, a dopamine agonist. The antidepressant bupropion has dopaminergic effects and has increased sex drive in some patients. Selegiline, an MAOI, is selective for MAOB and is dopaminergic. It improves sexual functioning in older persons. HORMONE THERAPY. Androgens increase the sex drive in women and in men with low testosterone concentrations. Women may experience virilizing effects, some of which are irreversible (e.g., deepening of the voice). In men, prolonged use of androgens produces hypertension and prostatic enlargement. Testosterone is most effective when given parenterally; however, effective oral and transdermal preparations are available. Women who use estrogens for replacement therapy or for contraception may report decreased libido; in such cases, a combined preparation of estrogen and testosterone has been used effectively. Estrogen itself prevents thinning of the vaginal mucous membrane and facilitates lubrication. Several forms of locally delivered estrogen— vaginal rings, vaginal creams, and vaginal tablets—provide alternate administration routes to treat women with arousal problems or genital atrophy. Because tablets, creams, and rings do not significantly increase circulating estrogen levels, these devices may be considered for patients with breast cancer with arousal problems. ANTIANDROGENS AND ANTIESTROGENS. Estrogens and progesterone are antiandrogens that have been used to treat compulsive sexual behavior in men, usually in sex offenders. Clomiphene (Clomid) and tamoxifen (Nolvadex) are both antiestrogens, and both stimulate gonadotropin-releasing hormone (GnRH) secretion and increase testosterone concentrations, thereby increasing libido. Women being treated for breast cancer with tamoxifen report an increased libido. However, tamoxifen may cause uterine cancer. MECHANICAL TREATMENT APPROACHES. In male patients with arteriosclerosis (especially of

the distal aorta, known as Leriche’s syndrome), the erection may be lost during active pelvic thrusting. The need for increased blood in the gluteal muscles and others served by the ilial or hypogastric arteries takes blood away (steals) from the pudendal artery and, thus, interferes with penile blood flow. Relief may be obtained by decreasing pelvic thrusting, which is also aided by the woman’s superior coital position. VACUUM PUMP. Vacuum pumps are mechanical devices that patients without vascular disease can use to obtain erections. The blood drawn into the penis following the creation of the vacuum is kept there by a ring placed around the base of the penis. This device has no adverse effects, but it is cumbersome, and partners must be willing to accept its use. Some women complain that the penis is redder and cooler than when erection is produced by natural circumstances, and they find the process and the result objectionable. A similar device, called EROS, has been developed to create clitoral erections in women. EROS is a small suction cup that fits over the clitoral region and draws blood into the clitoris. Studies have reported its success in treating female sexual arousal disorder. Vibrators used to stimulate the clitoral area have been

successful in treating anorgasmic women. Surgical Treatment MALE PROSTHESES. Surgical treatment is infrequently advocated, but penile prosthetic devices are available for men with inadequate erectile responses who are resistant to other treatment methods or who have medically caused deficiencies. The two main types of prostheses are (1) a semi-rigid rod prosthesis that produces a permanent erection that can be positioned close to the body for concealment and (2) an inflatable type that is implanted with its own reservoir and pump for inflation and deflation. The latter type is designed to mimic normal physiological functioning. VASCULAR SURGERY. When vascular insufficiency is present due to atherosclerosis or other blockage, bypass surgery of penile arteries has been attempted in selected cases with some success. Outcome Demonstrating the effectiveness of traditional outpatient psychotherapy is just as difficult when therapy is oriented to sexual problems as it is in general. The more severe the psychopathology associated with a problem of long duration, the more adverse the outcome is likely to be. The results of different treatment methods have varied considerably since Masters and Johnson first reported positive results for their treatment approach in 1970. Masters and Johnson studied the failure rates of their patients (defined as the failure to initiate reversal of the basic symptom of the presenting dysfunction). They compared initial failure rates with 5-year follow-up findings for the same couples. Although some have criticized their definition of the percentage of presumed successes, other studies have confirmed the effectiveness of their approach.

The more difficult treatment cases involve couples with severe marital discord. Desire disorders are particularly difficult to treat. They require longer, more intensive therapy than some other disorders, and their outcomes vary greatly. When behavioral approaches are used, empirical criteria that predict outcome are more easily isolated. Using these criteria, for instance, couples who regularly practice assigned exercises appear to have a much greater likelihood of success than do more resistant couples or those whose interaction involves sadomasochistic or depressive features or mechanisms of blame and projection. Attitude flexibility is also a positive prognostic factor. Overall, younger couples tend to complete sex therapy more often than older couples. Couples whose interactional difficulties center on their sex problems, such as inhibition, frustration, or fear of performance failure, are also likely to respond well to therapy. Although most therapists prefer to treat a couple for sexual dysfunction, treatment of individual persons has also been successful. In general, methods that have proved effective singly or in combination include training in behavioral sexual skills, systematic desensitization, directive marital counseling, traditional psychodynamic approaches, group therapy, and pharmacotherapy. OTHER SPECIFIED SEXUAL DYSFUNCTIONS Many sexual disorders are not classifiable as sexual dysfunctions or as paraphilias. These unclassified disorders are rare, poorly documented, not easily classified, or not specifically described in DSM-5. ICD-10 has a similar residual category for problems related to sexual development or preference. Postcoital Dysphoria Postcoital dysphoria occurs during the resolution phase of sexual activity, when persons normally experience a sense of general well-being and muscular and psychological relaxation. Some persons, however, undergo postcoital dysphoria at this time and, after an otherwise satisfactory sexual experience, become depressed, tense, anxious, and irritable, and show psychomotor agitation. They often want to get away from their partners and may become verbally or even physically abusive. The incidence of the disorder is unknown, but it is more common in men than in women. The causes relate to the person’s attitude toward sex in general and toward the partner in particular. The disorder may occur in adulterous sex and in contacts with prostitutes. The fear of acquired immunodeficiency syndrome (AIDS) causes some persons to experience postcoital dysphoria. Treatment requires insight-oriented

psychotherapy to help patients understand the unconscious antecedents to their behavior and attitudes. Couple Problems At times, a complaint arises from the spousal unit or the couple, rather than from an individual dysfunction. For example, one partner may prefer morning sex, but the other

functions more readily at night, or the partners have unequal frequencies of desire. Unconsummated Marriage A couple involved in an unconsummated marriage has never had coitus and is typically uninformed and inhibited about sexuality. The partners' feelings of guilt, shame, or inadequacy are increased by their problem, and they experience conflict between their need to seek help and their need to conceal their difficulty. Couples may seek help for the problem after having been married several months or several years. Masters and Johnson reported one unconsummated marriage of 17 years' duration. Frequently, the couple does not seek help directly; the woman may reveal the problem to her gynecologist on a visit ostensibly concerned with vague vaginal or other somatic complaints. On examining her, the gynecologist may find an intact hymen. In some cases, however, the wife may have undergone a hymenectomy to resolve the problem, but the surgery may aggravate the situation without solving the basic problem. The surgical procedure is another stress and often increases the couple's feelings of inadequacy. The wife may feel put upon, abused, or mutilated, and the husband's concern about his manliness may increase. An inquiry by a physician who is comfortable dealing with sexual problems may be the first opening to a frank discussion of the couple's distress. Often, the pretext of the medical visit is a discussion of contraceptive methods or—even more ironically—a request for an infertility workup. Once presented, the complaint can often be treated successfully. The duration of the problem does not significantly affect the prognosis or the outcome of the case. The causes of unconsummated marriage are varied: lack of sex education, sexual prohibitions overly stressed by parents or society, problems of an oedipal nature, immaturity in both partners, overdependence on primary families, and problems in sexual identification. Religious orthodoxy, with severe control of sexual and social development, and equating sexuality with sin or uncleanliness has also been cited as a dominant cause. Many women involved in an unconsummated marriage have distorted concepts about their vaginas. They may fear that it is too small or too soft, or they may confuse the vagina with the rectum and thus feel unclean. Men may share these distortions about the vagina and perceive it as dangerous to themselves. Similarly, both partners may have distortions about the man's penis and perceive it as a weapon, as too large, or as too small. Many patients can be helped by simple education about genital anatomy and physiology, by suggestions for self-exploration, and by correct information from a physician. The problem of unconsummated marriage is best treated by seeing both members of the couple. Dual-sex therapy involving a male-female cotherapist team has been markedly effective. Other forms of conjoint therapy, marital counseling, traditional psychotherapy on a one-to-one basis, and counseling from a sensitive family physician, gynecologist, or urologist are also helpful. Body Image Problems Some persons are ashamed of their bodies and experience feelings of inadequacy related

to self-imposed standards of masculinity or femininity. They may insist on sex only during total darkness, not allow certain body parts to be seen or touched, or seek unnecessary operative procedures to deal with their imagined inadequacies. Body dysmorphic disorder should be ruled out. Sex Addiction and Compulsivity The concept of sex addiction developed over the last two decades to refer to persons who compulsively seek out sexual experiences and whose behavior becomes impaired if they are unable to gratify their sexual impulses. The concept of sex addiction

derived from the model of addiction to such drugs as heroin or addiction to behavioral patterns, such as gambling. Addiction implies psychological dependence, physical dependence, and the presence of a withdrawal syndrome if the substance (e.g., the drug) is unavailable or the behavior (e.g., gambling) is frustrated. In DSM-5 the terms sex addiction or compulsive sexuality are not used, nor is it a disorder that is universally recognized or accepted. Nevertheless, the phenomenon of a person whose life revolves around sex-seeking behavior and activities, who spends an excessive amount of time in such behavior, and who often tries to stop such behavior but is unable to do so is well known to clinicians. Such persons show repeated and increasingly frequent attempts to have a sexual experience, deprivation of which gives rise to symptoms of distress. Sex addiction is a useful concept heuristically, in that it can alert the clinician to seek an underlying cause for the manifest behavior. There is interest in making it a new official diagnostic category, which the authors support. Diagnosis. Sex addicts are unable to control their sexual impulses, which can involve the entire spectrum of sexual fantasy or behavior. Eventually, the need for sexual activity increases, and the person’s behavior is motivated largely by the persistent desire to experience the sex act. The history usually reveals a long-standing pattern of such behavior, which the person repeatedly has tried to stop, but without success. Although a patient may have feelings of guilt and remorse after the act, these feelings do not suffice to prevent its recurrence. The patient may report that the need to act out is most severe during stressful periods or when angry, depressed, anxious, or otherwise dysphoric. Most acts culminate in a sexual orgasm. Eventually, the sexual activity interferes with the person’s social, vocational, or marital life, which begins to deteriorate. The signs of sexual addiction are listed in Table 17.2-13. Table 17.2-13 Signs of Sexual Addiction

Types of Behavioral Patterns. The paraphilias constitute the behavioral patterns most often found in the sex addict. The essential features of a paraphilia are recurrent, intense sexual urges or behaviors, including exhibitionism, fetishism, frotteurism, sadomasochism, cross-dressing, voyeurism, and pedophilia. Paraphilias are associated with clinically significant distress and almost invariably interfere with interpersonal relationships, and they often lead to legal complications. In addition to the paraphilias, however, sex addiction can also include behavior that is considered normal, such as coitus and masturbation, except that it is promiscuous and uncontrolled. In the 19th century, Krafft-Ebing reported on several cases of abnormally increased sexual desire. One involved a 36year-old married teacher, the father of seven children, who masturbated repeatedly while sitting at his desk in front of his pupils, after which he was “penitent and filled with shame.” He indulged in coitus three or four times a day in addition to his repeated masturbatory act. In another case, a young woman masturbated almost incessantly and was unable to control her impulses. She had frequent coitus with many men, but neither coitus nor masturbation sufficed, and she eventually was placed in an institution. Krafft-Ebing referred to the condition as “sexual hyperaesthesia,” which he believed could occur in otherwise normal persons. In this case, the clinician would have to differentiate between a diagnosis of sex addiction or Persistent Genital Arousal Disorder (PGAD). This is not a diagnostic category in DSM-5, but has received attention by sex therapists. Women with PGAD complain that their sense of arousal is not satisfied by orgasm or multiple orgasms. The ongoing sense of arousal is distressing, intensely uncomfortable, and has led to one reported case of suicide. In contrast to sex addicts, women with PGAD are not even temporarily satisfied, physically or emotionally, by orgasm. Some theorists suspect a neurologic etiology. In many cases, sex addiction is the final common pathway of a variety of other disorders. In addition to the paraphilias that are often present, the patient may have an associated major

mood disorder or schizophrenia. Antisocial personality disorder and borderline personality disorder are common. DON JUANISM. Some men who appear to be hypersexual, as manifested by their need to have many sexual encounters or conquests, use their sexual activities to mask deep feelings of inferiority. Some have unconscious homosexual impulses, which they deny by compulsive sexual contacts with women. After having sex, most Don Juans are no

longer interested in the woman. The condition is sometimes referred to as satyriasis or sex addiction. NYMPHOMANIA. Nymphomania signifies a woman's excessive or pathological desire for coitus. Of the few scientific studies of the condition, those patients who were studied usually have had one or more sexual disorders, often including female orgasmic disorder. The woman often has an intense fear of losing love and, through her actions, attempts to satisfy her dependence needs rather than gratify her sexual impulses. This disorder is a form of sex addiction. Comorbidity. Comorbidity (dual diagnosis) refers to the presence of an addiction that coexists with another psychiatric disorder. For example, about 50 percent of patients with substance-use disorder also have an additional psychiatric disorder. Similarly, many sex addicts have an associated psychiatric disorder. Dual diagnosis implies that the psychiatric illness and the addiction are separate disorders; one does not cause the other. The diagnosis of comorbidity is often difficult to make because addictive behavior (of all types) can produce extreme anxiety and severe disturbances in mood and affect, especially while the addictive behavior is treated. If, after a period of abstinence, symptoms of a psychiatric disorder remain, the comorbid condition is more easily recognized and diagnosed than during the addictive period. Finally, a high correlation is found between sex addiction and substance-use disorders (up to 80 percent in some studies), which not only complicates the task of diagnosis, but also complicates treatment. Treatment. Self-help groups based on the 12-step concept used in Alcoholics Anonymous (AA) have been used successfully with many sex addicts. They include such groups as Sexaholics Anonymous (SA), Sex and Love Addicts Anonymous (SLAA), and Sex Addicts Anonymous (SAA). The groups differ in that some are for men or women, or for married persons or couples. All advocate some abstinence from either the addictive behavior or sex in general. Should a substance-use disorder also be present, the patient often requires referral to AA or Narcotics Anonymous (NA) as well. Patients may enter an inpatient treatment unit when they lack sufficient motivation to control their behavior on an outpatient basis or may be a danger to themselves or others. In addition, severe medical or psychiatric symptoms may require careful supervision and treatment best carried out in a hospital. A 42-year-old married businessman with two children was considered a model of virtue in his community. He was active in his church and on the boards of several charitable organizations. He was living a secret life, however, and would lie to his wife, telling her that he was at a board meeting when he was actually visiting massage parlors for paid sex. He eventually was engaging in the behavior four to five times a day, and although he tried to quit many times, he was unable to do so. He knew that he was harming himself by putting his reputation and marriage at risk.

The patient presented himself to the psychiatric emergency room, stating that he would prefer to be dead rather than continue the behavior described. He was admitted with a diagnosis of major depressive disorder and started on a daily dose of 20 mg of fluoxetine. In addition, he received 100 mg of medroxyprogesterone intramuscularly once a day. His need to masturbate diminished markedly and ceased entirely on the third hospital day, as did his mental preoccupation with sex. The medroxyprogesterone was discontinued on the sixth day, when he was discharged. He continued to take fluoxetine, enrolled in a local SA group, and entered individual and couples

psychotherapy. His addictive behavior eventually stopped, he was having satisfactory sexual relations with his wife, and he was no longer suicidal or depressed. Psychotherapy. Insight-oriented psychotherapy may help patients understand the dynamics of their behavioral patterns. Supportive psychotherapy can help repair the interpersonal, social, or occupational damage that occurs. Cognitive behavioral therapy helps the patient recognize dysphoric states that precipitate sexual acting out. Marital therapy or couples therapy can help the patient regain self-esteem, which is severely impaired by the time a treatment program is begun. It is also helpful to the partners who need assistance in understanding the disease and dealing with their own complex reactions to the situation. Finally, psychotherapy may be of help in the treatment of any associated psychiatric disorder. Pharmacotherapy. Most specialists in general addiction avoid the use of psychotropic agents, especially in the early stages of treatment. Substance-dependent persons have a tendency to abuse those agents, especially agents with a high abuse potential, such as the benzodiazepines. Pharmacotherapy is of use in the treatment of associated psychiatric disorders, such as major depressive disorders and schizophrenia. Certain medications may be of use in treating sex addiction, however, because of their specific effects on reducing the sex drive. SSRIs reduce libido in some persons, a side effect that is used therapeutically. Compulsive masturbation is an example of a behavioral pattern that may benefit from such medication. Medroxyprogesterone acetate diminishes libido in men and, thus, makes it easier to control sexually addictive behavior. The use of antiandrogens in women to control hypersexuality has not been tested sufficiently, but because androgenic compounds contribute to the sex drive in women, antiandrogens could be of benefit. Antiandrogenic agents (cyproterone acetate) are not available in the United States but are used in Europe with varying success. Use of the antiandrogenic medications is controversial, and objected to by clinicians who see it a chemical castration and believe that is an inappropriate treatment approach. Persistent and Marked Distress about Sexual Orientation Distress about sexual orientation is characterized by dissatisfaction with sexual arousal

patterns, and it is usually applied to dissatisfaction with homosexual arousal patterns, a desire to increase heterosexual arousal, and strong negative feelings about being homosexual. Occasional statements to the effect that life would be easier if the speaker were not homosexual do not constitute persistent and marked distress about sexual orientation. Treatment of sexual orientation distress is controversial. One study reported that with a minimum of 350 hours of psychoanalytic therapy, about a third of 100 bisexual and gay men achieved a heterosexual reorientation at a 5-year follow-up; this study has been challenged, however. Behavior therapy and avoidance conditioning techniques have also been used, but these techniques may change behavior only in the laboratory setting. Prognostic factors weighing in favor of heterosexual reorientation for men include being younger than 35 years of age, having some experience of heterosexual arousal, and feeling highly motivated to reorient. Another and more prevalent style of intervention is directed at enabling persons with persistent and marked distress about sexual orientation to live comfortably with homosexuality without shame, guilt, anxiety, or depression. Gay counseling centers are engaged with patients in such treatment programs. At present, outcome studies of such centers have not been reported in detail. Few data are available about the treatment of women with persistent and marked distress about sexual orientation, and these are primarily from single-case studies with variable outcomes. Persistent Genital Arousal Disorder Persistent genital arousal disorder (PGAD) has previously been called persistent sexual arousal syndrome. It has been diagnosed in women who complain of a continual feeling of sexual arousal, which is uncomfortable, demands release, and interferes with life pleasures and activities. These women masturbate

frequently, sometimes incessantly, because climax provides relief. However, the relief is temporary and the sense of arousal returns rapidly and remains. The sense of arousal in these cases is neither pleasurable nor exciting, and the women are not interested in a sexual experience but in relief from their symptoms. Some women have reported masturbating so frequently to alleviate the arousal that they have irritated their genitalia severely. One case of attempted suicide has been reported with this syndrome, with the woman stating that she could no longer tolerate the sensations and that she had masturbated so often that her vulva was raw. Krafft-Ebing reported a case of a young woman who masturbated almost incessantly and was unable to control her impulses. She had frequent coitus with many men, but neither coitus nor masturbation sufficed, and she was eventually placed in an institution. Krafft-Ebing referred to the condition as “sexual hyperaesthesia,” which he believed could occur in otherwise normal persons. This case would have to be differentiated from sexual addiction (discussed earlier). The differentiating factor would be whether the woman desired an orgasm for itself, and

looked forward to having sex, or whether she was seeking relief from incessant and intolerable stimulation. There is some speculation that this disorder is due to nerve damage or anomaly, but the etiology is unknown. Female Premature Orgasm Data on female premature orgasm are lacking. A case of multiple spontaneous orgasms without sexual stimulation was seen in a woman; the cause was an epileptogenic focus in the temporal lobe. Instances have been reported of women taking antidepressants (e.g., fluoxetine and clomipramine) who experience spontaneous orgasm associated with yawning. Postcoital Headache Postcoital headache, characterized by headache immediately after coitus, may last for several hours. It is usually described as throbbing and is localized in the occipital or frontal area. The cause is unknown. There may be vascular, muscle-contraction (tension), or psychogenic causes. Coitus may precipitate migraine or cluster headaches in predisposed persons. Orgasmic Anhedonia Orgasmic anhedonia is a condition in which a person has no physical sensation of orgasm, even though the physiological component (e.g., ejaculation) remains intact. Organic causes, such as sacral and cephalic lesions that interfere with afferent pathways from the genitalia to the cortex, must be ruled out. Psychiatric causes usually relate to extreme guilt about experiencing sexual pleasure. These feelings produce a dissociative response that isolates the affective component of the orgasmic experience from consciousness. Masturbatory Pain Persons may experience pain during masturbation. Organic causes should always be ruled out; a small vaginal tear or early Peyronie’s disease can produce a painful sensation. The condition should be differentiated from compulsive masturbation. Persons may masturbate to the extent that they do physical damage to their genitals and eventually experience pain during subsequent masturbatory acts. Such cases constitute a separate sexual disorder and should be so classified. Certain masturbatory practices have resulted in what has been called autoerotic asphyxiation. The practices involve persons masturbating while hanging by the neck to heighten the erotic sensations and the orgasm’s intensity through the mechanism of mild hypoxia. Although the persons intend to release themselves from the noose after orgasm, an estimated 500 to 1,000 persons a year accidentally kill themselves by hanging. Most who indulge in the practice are male; transvestism is often associated with the habit, and most deaths occur among adolescents. Such masochistic practices are usually

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activation patterns in women with acquired hypoactive desire disorder and women with normal function: A cross-sectional pilot study. Fertil Steril. 2013;100:1068–1076. 17.3 Paraphilic Disorders

Paraphilias or perversions are sexual stimuli or acts that are deviations from normal sexual behaviors, but are necessary for some persons to experience arousal and orgasm. According to the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5), the term paraphilic disorder is reserved for those cases in which a sexually deviant fantasy or impulse has been expressed behaviorally. Individuals with paraphilic interests can experience sexual pleasure, but they are inhibited from responding to stimuli that are normally considered erotic. The paraphiliac person's sexuality is mainly restricted to specific deviant stimuli or acts. Persons that occasionally experiment with paraphilic behavior (e.g., infrequent episode of bondage or dressing in costumes), but are capable of responding to more typical erotic stimuli, are not seen ashaving paraphilic disorders. Paraphilic disorders can range from nearly normal behavior to behavior that is destructive or hurtful only to a person's self or to a person's self and partner, and finally to behavior that is deemed destructive or threatening to the community at large. DSM-5 lists pedophilia, frotteurism, voyeurism, exhibitionism, sexual sadism, sexual masochism, fetishism, and transvestism with explicit diagnostic criteria because of their threat to others and/or because they are relatively common paraphilias. There are many other paraphilias that may be diagnosed. A paraphilia is clinically significant if the person has acted on these fantasies or if these fantasies cause marked distress or interpersonal difficulty or job-related difficulty. However, when the fantasy has not been acted upon, the term paraphilic disorder should not be applied. In the paraphilias listed earlier,with the exception of pedophilia, the specifiers, "in a controlled environment" (where the fantasy cannot easily be acted upon due to circumstances, such as being in an institution) and "in full remission" (when the patient has not acted on the fantasies for 5 years and there has been no impairment in interpersonal or occupational functioning in an uncontrolled environment for 5 years) are added. A special fantasy with its unconscious and conscious components is the pathognomonic element of the paraphilia, with sexual arousal and orgasm being associated phenomena that reinforce the fantasy or impulse. The influence of these fantasies and their behavioral manifestations often extend beyond the sexual sphere to pervade people's lives. The major functions of human sexual behavior are to assist in bonding, to create mutual pleasure in cooperation with a partner, to express and enhance love between two persons, and to procreate. Paraphilic disorders entail divergent behaviors in that those acts involve aggression, victimization, and extreme one-sidedness. The behaviors exclude or harm others and disrupt the potential for bonding between persons. Moreover, paraphilic sexual scripts often serve other vital psychic functions. They may assuage anxiety, bind aggression, or stabilize identity. EPIDEMIOLOGY Paraphilias are practiced by only a small percentage of the population, but the insistent, repetitive nature of the disorders results in a high frequency of such acts. Thus, a large proportion of the population has been victimized by persons with paraphilic disorders.

It has been suggested that the prevalence of paraphilias is significantly higher than the number of cases diagnosed in general clinical facilities, based on the large commercial market in paraphilic pornography and paraphernalia. Is not known how many of the consumers of this material act on paraphilic fantasies or cannot respond to typical erotic stimuli. Among legally identified cases of paraphilic disorders, pedophilia is most common. Of all children, 10 to 20 percent have been molested by age 18. Because a child is the object, the act is taken more seriously, and greater effort is spent tracking down the culprit than in other paraphilic disorders. Persons with

exhibitionism who publicly display themselves to young children are also commonly apprehended. Those with voyeurism may be apprehended, but their risk is not great. Of adult females, 20 percent have been the targets of persons with exhibitionism and voyeurism. Sexual masochism and sexual sadism are underrepresented in any prevalence estimates. Sexual sadism usually comes to attention only in sensational cases of rape, brutality, and lust murder. The excretory paraphilic disorders are scarcely reported, because activity usually takes place between consenting adults or between prostitute and client. Persons with fetishism rarely become entangled in the legal system. Those with transvestism may be arrested occasionally for disturbing the peace or on other misdemeanor charges if they are obviously men dressed in women's clothes, but arrest is more common among those with gender identity disorders. Zoophilia as a true paraphilic disorder is rare (Table 17.3-1). Table 17.3-1 Frequency of Paraphilic Acts Committed by Patients with Paraphilia Seeking Outpatient Treatment As usually defined, the paraphilias seem to be largely male conditions. Fetishism almost always occurs in men. More than 50 percent of all paraphilias have their onset before age 18. Patients with paraphilia frequently have three to five paraphilias, either concurrently or at different times in their lives. This pattern of occurrence is especially the case with exhibitionism, fetishism, sexual masochism, sexual sadism, transvestic fetishism, voyeurism, and zoophilia (see Table 17.3-1). The occurrence of paraphilic behavior peaks between ages 15 and 25 and gradually declines. DSM-5 suggests the

paraphilia designation be reserved for those ages 18 and older to avoid pathologizing normal sexual curiosity and occasional experimentation in adolescence. In men older than 50, criminal paraphilic acts are rare. Those that occur are practiced in isolation or with a cooperative partner. ETIOLOGY Psychosocial Factors In the classic psychoanalytic model, persons with a paraphilia have failed to complete the normal developmental process toward sexual adjustment, but the model has been modified by new psychoanalytic approaches. What distinguishes one paraphilia from another is the method chosen by a person (usually male) to cope with the anxiety caused by the threat of castration by the father and separation from the mother. However bizarre its manifestation, the resulting behavior provides an outlet for the sexual and aggressive drives that would otherwise have been channeled into normal sexual behavior. Failure to resolve the oedipal crisis by identifying with the father-aggressor (for boys) or mother-aggressor (for girls) results either in improper identification with the opposite-sex parent or in an improper choice of object for libido cathexis. Classic psychoanalytic theory holds that transsexualism and transvestic fetishism are disorders because each involves identification with the opposite-sex parent instead of the same-sex parent; for instance, a man dressing in women's clothes is believed to identify with his mother. Exhibitionism and voyeurism may be attempts to calm anxiety about castration because the reaction of the victim or the arousal of the voyeur reassures the paraphilic person that the penis is intact. Fetishism is an attempt to avoid anxiety by displacing libidinal impulses to inappropriate objects. A person with a shoe fetish unconsciously denies that women have lost their penises through castration by attaching libido to a phallic object, the shoe, which symbolizes the female penis. Persons with pedophilia and sexual sadism have a need to dominate and control their victims to compensate for their feelings of powerlessness during the oedipal crisis. Some theorists believe that choosing a child as a love object is a narcissistic act. Persons with sexual masochism overcome their fear of injury and their sense of powerlessness by showing that they are impervious to harm. Another theory proposes that the masochist directs the aggression inherent in all paraphilias toward herself or himself. Although recent developments in psychoanalysis place more emphasis on treating defense mechanisms than on oedipal traumas, psychoanalytic therapy for

patients with a paraphilia remains consistent with Sigmund Freud's theory. Other theories attribute the development of a paraphilia to early experiences that condition or socialize children into committing a paraphilic act. The first shared sexual experience can be important in that regard. Molestation as a child can predispose a person to accept continued abuse as an adult or, conversely, to become an abuser of others. Also, early experiences of abuse that are not specifically sexual, such as spanking, enemas, or verbal humiliation, can be sexualized by a child and can form the

basis for a paraphilia. Such experiences can result in the development of an eroticized child. A 34-year-old man presented for treatment with a chief complaint of erectile disorder. He was frequently unable to obtain an erection sufficient for coitus with his wife. The problem disappeared whenever she was willing to act out his bondage fantasy and tie him up with ropes, a scenario he intensely desired. He explained that he felt free to be sexual when he was tied up because it reassured him that he could move vigorously and not hurt the woman. In addition, he gave a history of being tied up "in fun" when he was a child by a babysitter who would then tickle him until he begged her to stop. The onset of paraphilic acts can result from persons' modeling their behavior on the behavior of others who have carried out paraphilic acts, mimicking sexual behavior depicted in the media, or recalling emotionally laden events from the past, such as their own molestation. Learning theory indicates that because the fantasizing of paraphilic interests begins at an early age and because personal fantasies and thoughts are not shared with others (who could block or discourage them), the use and misuse of paraphilic fantasies and urges continue uninhibited until late in life. Only then do persons begin to realize that such paraphilic interests and urges are inconsistent with societal norms. By that time, however, the repetitive use of such fantasies has become ingrained, and the sexual thoughts and behaviors have become associated with, or conditioned to, paraphilic fantasies. Biological Factors Several studies have identified abnormal organic findings in persons with paraphilias. None has used random samples of such persons; instead, they have extensively investigated patients with paraphilia who were referred to large medical centers. Among these patients, those with positive organic findings included 74 percent with abnormal hormone levels, 27 percent with hard or soft neurological signs, 24 percent with chromosomal abnormalities, 9 percent with seizures, 9 percent with dyslexia, 4 percent with abnormal electroencephalography (EEG) studies, 4 percent with major mental disorders, and 4 percent with mental handicaps. The question is whether these abnormalities are causally related to paraphilic interests or are incidental findings that bear no relevance to the development of paraphilia. Psychophysiological tests have been developed to measure penile volumetric size in response to paraphilic and nonparaphilic stimuli. The procedures may be of use in diagnosis and treatment, but are of questionable diagnostic validity because some men are able to suppress their erectile responses. DIAGNOSIS AND CLINICAL FEATURES In DSM-5, the criteria for paraphilic disorder requires the patient to have experienced intense and recurrent arousal from their deviant fantasy for at least 6 months and to have acted on the paraphilic impulse. The presence of a paraphilic fantasy, however,

may still distress a patient even if there has been no behavioral elaboration. The fantasy distressing the patient contains unusual sexual material that is relatively fixed and shows only minor variations. Arousal and orgasm depend on the mental elaboration, if not the behavioral playing out of the fantasy. Sexual activity is ritualized or stereotyped and makes use of degraded, reduced, or dehumanized objects. Exhibitionism Exhibitionism is the recurrent urge to expose the genitals to a stranger or to an unsuspecting person. Sexual excitement occurs in anticipation of the

exposure, and orgasm is brought about by masturbation during or after the event. In almost 100 percent of cases, those with exhibitionism are men exposing themselves to women. The dynamic of men with exhibitionism is to assert their masculinity by showing their penises and by watching the victims' reactions—fright, surprise, and disgust. In this paraphilic disorder, men unconsciously feel castrated and impotent. Wives of men with exhibitionism often substitute for the mothers to whom the men were excessively attached during childhood, or conversely, by whom they were rejected. In other related paraphilias, the central themes involve derivatives of looking or showing. A substance-abusing professional was finally able to attain sobriety at age 33 years. With this accomplishment, he met a woman and got married, began to work steadily for the first time in his life, and was able to impregnate his new wife. His preferred sexual activity had been masturbation in semi-public places. The patient had a strong sense that his mother had always thought him to be inadequate, did not like to spend time with him, and constantly made negative comparisons between him and his "allboy" younger brother. He recalled several times when his father had tried to explain his mother's antipathy: "It is just one of those things son: your mother does not seem to like you." Without substance abuse, he gave up his exhibitionism, but he quickly developed sexual incapacity with his wife and became "addicted" to phone sex. (Courtesy of Stephen B. Levine, M.D.) Specifiers added to exhibitionistic disorder by DSM-5 differentiate arousal from exposing genitals to prepubertal children, to physically mature individuals, or to both prepubertal children and physically mature individuals. Fetishism In fetishism the sexual focus is on objects (e.g., shoes, gloves, pantyhose, and stockings) that are intimately associated with the human body, or on nongenital body parts. The latter focus is sometimes called partialism and is discussed later. DSM-5 applies the diagnosis fetishistic disorder to partialism and attaches the following specifiers to fetishistic disorder: body part(s); non-living parts; other. The particular fetish used is linked to someone closely involved with a patient during childhood and has a quality

associated with this loved, needed, or even traumatizing person. Usually, the disorder begins by adolescence, although the fetish may have been established in childhood. Once established, the disorder tends to be chronic. Sexual activity may be directed toward the fetish itself (e.g., masturbation with or into a shoe), or the fetish may be incorporated into sexual intercourse (e.g., the demand that high-heeled shoes be worn). The disorder is almost exclusively found in men. According to Freud, the fetish serves as a symbol of the phallus to persons with unconscious castration fears. Learning theorists believe that the object was associated with sexual stimulation at an early age. A 50-year-old man entered treatment with a chief complaint of erectile disorder experienced primarily with his wife. He was suffering from a moderate depression that related to both his marital issues and business problems. He had no erectile problems with women he picked up in bars or knew and arranged to meet in bars. Bars were his chosen venue in part because smoking had been prohibited in other public areas in his city and a woman's act of smoking a cigarette was necessary to his sexual arousal. His family history included an alcoholic mother and an emotionally abusive father who was a chain smoker. On family car trips the father would smoke, with all the car windows up. If the patient complained of feeling nauseous the father would tell him to "shut up." He recalled being very attracted to a Sunday school teacher who smoked when he was 6 years old. He first smoked when he was 13, sneaking and hiding behind his house. His first cigarette was one he stole from a pack on his mother's night table. Frotteurism Frotteurism is usually characterized by a man's rubbing his penis against the buttocks or other body parts of a fully clothed woman to achieve orgasm. At other times, he may use his hands to rub an unsuspecting victim. The acts usually occur in crowded places, particularly in subways and buses.

Those with frotteurism are extremely passive and isolated, and frottage is often their only source of sexual gratification. The expression of aggression in this paraphilia is readily apparent. Pedophilia Pedophilia involves recurrent intense sexual urges toward, or arousal by, children 13 years of age or younger, over a period of at least 6 months. Persons with pedophilia are at least 16 years of age and at least 5 years older than the victims. When a perpetrator is a late adolescent involved in an ongoing sexual relationship with a 12- or 13-year-old, the diagnosis is not warranted. Most child molestations involve genital fondling or oral sex. Vaginal or anal penetration of children occurs infrequently, except in cases of incest. Although most

child victims coming to public attention are girls, this finding appears to be a product of the referral process. Offenders report that when they touch a child, most (60 percent) of the victims are boys. This figure is in sharp contrast to the figure for nontouching victimization of children, such as window peeping and exhibitionism; 99 percent of all such cases are perpetrated against girls. DSM-5 adds the following specifiers to a diagnosis of pedophilic disorder: sexually attracted to males; sexually attracted to females; or sexually attracted to both. Of persons with pedophilia, 95 percent are heterosexual, and 50 percent have consumed alcohol to excess at the time of the incident. In addition to their pedophilia, a significant number of the perpetrators are concomitantly or have previously been involved in exhibitionism, voyeurism, or rape. Incest is related to pedophilia by the frequent selection of an immature child as a sex object, the subtle or overt element of coercion, and occasionally the preferential nature of the adult–child liaison. A 62-year-old married janitor had worked as a fourth-grade school teacher for 26 years before he transferred school districts, and finally several years later mysteriously lost his second job. He was referred for help after his family discovered that he had repeatedly fondled the genitals of his 4- and 6-year-old granddaughters. A father of five who had not had sex with his wife for 30 years after strenuously objecting to her cigarette smoking, he was generous, helpful, and cooperative with his children and grandchildren. Intellectually slow, he preferred comic books and had a charming manner of playing with young children “like he was one himself.” By his estimate he had touched the buttocks and genitals of at least 300 girl students, thinking only of how they did not know what he was doing because he was being affectionate and they were too young to realize what was happening. He loved the anticipation and excitement of this behavior. His teaching career ended when parents complained to a principal. The principal discovered that the new teacher had been transferred, not fired from his longstanding teaching job for the same reason. The patient had tried to touch his 12-year-old daughter who angrily warned him to stay away from her, but he had also managed to touch her friends and his best friend’s daughters as they neared puberty. (Courtesy of Stephen B. Levine, M.D.) Sexual Masochism Masochism takes its name from the activities of Leopold von Sacher-Masoch, a 19th century Austrian novelist whose characters derived sexual pleasure from being abused and dominated by women. According to the DSM-5, persons with sexual masochism have a recurrent preoccupation with sexual urges and fantasies involving the act of being humiliated, beaten, bound, or otherwise made to suffer. A specifier added to this disorder diagnosis is: with asphyxiophilia; also called autoerotic asphyxiation, this is the practice of achieving or heightening sexual arousal with restriction of breathing. Sexual

masochistic practices are more common among men than among women. Freud believed masochism resulted from destructive fantasies turned against the self. In some cases, persons can allow themselves to experience sexual feelings only when punishment for the feelings follows. Persons with sexual masochism may have had childhood experiences that convinced them that

pain is a prerequisite for sexual pleasure. About 30 percent of those with sexual masochism also have sadistic fantasies. Moral masochism involves a need to suffer, but is not accompanied by sexual fantasies. A 27-year-old woman presented for an interview with the director of a course to which she had applied and which she was eager to take. She appeared at the interview in the company of a man whom she introduced to the director, saying, “This is my lover.” When asked about this unusual behavior during the interview, the applicant stated that her companion had ordered her to bring him and make that introduction. She further explained that she was part of a group that utilized sadomasochistic techniques in their sexual play. Sexual Sadism DSM-5 defines sexual sadism as the recurrent and intense sexual arousal from the physical and psychological suffering of another person. A person must have experienced these feelings for at least 6 months, and must have acted on sadistic fantasies to receive a diagnosis of sexual sadism disorder. Persons who deny behavioral elaboration of their paraphilic fantasies and who say they suffer no distress, or interpersonal or social difficulties, as a consequence of their paraphilias are designated as having an ascertained sexual sadism interest. The onset of the disorder is usually before the age of 18 years, and most persons with sexual sadism are male. According to psychoanalytic theory, sadism is a defense against fears of castration; persons with sexual sadism do to others what they fear will happen to them and derive pleasure from expressing their aggressive instincts. The disorder was named after the Marquis de Sade, an 18th century French author and military officer who was repeatedly imprisoned for his violent sexual acts against women. Sexual sadism is related to rape, although rape is more aptly considered an expression of power. Some sadistic rapists, however, kill their victims after having sex (so-called lust murders). In many cases, these persons have underlying schizophrenia. John Money believes that lust murderers suffer from dissociative disorder and perhaps have a history of head trauma. He lists five contributory causes of sexual sadism: hereditary predisposition, hormonal malfunctioning, pathological relationships, a history of sexual abuse, and the presence of other mental disorders. Voyeurism Voyeurism, also known as scopophilia, is the recurrent preoccupation with fantasies and

acts that involve observing unsuspecting persons who are naked or engaged in grooming or sexual activity. Masturbation to orgasm usually accompanies or follows the event. The first voyeuristic act usually occurs during childhood, and the paraphilia is most common in men. When persons with voyeurism are apprehended, the charge is usually loitering. Transvestism Transvestism, formerly called transvestic fetishism, is described as fantasies and sexual urges to dress in opposite gender clothing as a means of arousal and as an adjunct to masturbation or coitus. The diagnosis is given when the transvestic fantasies have been acted upon for at least 6 months. DSM-5 requires specifiers with a diagnosis of transvestic disorder: with fetishism is added if the patient is aroused by fabrics, materials, or garments; with autogynephilia is added if the patient is sexually aroused by thoughts or images of himself as a female. Transvestism typically begins in childhood or early adolescence. As years pass, some men with transvestism want to dress and live permanently as women. Very rarely, women want to dress and live as men. These persons are classified in DSM-5 as persons with transvestic disorder and gender dysphoria. Usually, a person wears more than one article of opposite sex clothing; frequently, an entire wardrobe is involved. When a man with transvestism is cross-dressed, the appearance of femininity may be striking, although not usually to the degree found in transsexualism. When not dressed in women’s clothes, men with transvestism may be hypermasculine in appearance and occupation. Cross-dressing can be graded from solitary, depressed, guilt-ridden dressing to ego-syntonic, social membership in a transvestite subculture. The overt clinical syndrome of transvestism may begin in latency, but is more often

seen around pubescence or in adolescence. Frank dressing in opposite sex clothing usually does not begin until mobility and relative independence from parents are well established. Other Specified Paraphilic Disorder This classification includes various paraphilias that cause personal distress and that have been acted upon for 6 months that do not meet the criteria for any of the aforementioned categories. The same definition applies to Unspecified Paraphilic Disorder, with the difference that the clinician does not wish to specify the particular paraphilia for reasons that may include not having sufficient information. TELEPHONE AND COMPUTER SCATOLOGIA. Telephone scatologia is characterized by obscene phone calling and involves an unsuspecting partner. Tension and arousal begin in anticipation of phoning; the recipient of the call listens while the telephoner (usually male) verbally exposes his preoccupations or induces her to talk about her sexual activity. The conversation is accompanied by masturbation, which is often completed after the contact is interrupted. Persons also use interactive computer networks, sometimes compulsively, to send obscene messages by electronic mail

and to transmit sexually explicit messages and video images. Because of the anonymity of the users in chat rooms who use aliases, on-line or computer sex (cybersex) allows some persons to play the role of the opposite sex (“genderbending”), which represents an alternative method of expressing transvestic or transsexual fantasies. A danger of on-line cybersex is that pedophiles often make contact with children or adolescents who are lured into meeting them and are then molested. Many on-line contacts develop into off-line liaisons. Although some persons report that the off-line encounters develop into meaningful relationships, most such meetings are filled with disappointment and disillusionment, as the fantasized person fails to meet unconscious expectations of the ideal partner. In other situations, when adults meet, rape or even homicide may occur. NECROPHILIA. Necrophilia is an obsession with obtaining sexual gratification from cadavers. Most persons with this disorder find corpses in morgues, but some have been known to rob graves or even to murder to satisfy their sexual urges. In the few cases studied, those with necrophilia believed that they were inflicting the greatest conceivable humiliation on their lifeless victims. According to Richard von Krafft-Ebing, the diagnosis of psychosis is, under all circumstances, justified. PARTIALISM. Persons with the disorder of partialism concentrate their sexual activity on one part of the body to the exclusion of all others. Mouth–genital contact—such as cunnilingus (oral contact with a woman’s external genitals), fellatio (oral contact with the penis), and anilingus (oral contact with the anus)—is normally associated with foreplay; Freud recognized the mucosal surfaces of the body as erotogenic and capable of producing pleasurable sensation. But when a person uses these activities as the sole source of sexual gratification and cannot have or refuses to have coitus, a paraphilia exists. It is also known as oralism. ZOOPHILIA. In zoophilia, animals—which may be trained to participate—are preferentially incorporated into arousal fantasies or sexual activities, including intercourse, masturbation, and oral–genital contact. Zoophilia as an organized paraphilia is rare. For many persons, animals are the major source of relatedness, so it is not surprising that a broad variety of domestic animals are used sensually or sexually. Sexual relations with animals may occasionally be an outgrowth of availability or convenience, especially in parts of the world where rigid convention precludes premarital sexuality and in situations of enforced isolation. Because masturbation is also available in such situations, however, a predilection for animal contact is probably present in opportunistic zoophilia. COPROPHILIA AND KLISMAPHILIA. Coprophilia is sexual pleasure associated with the desire to defecate on a partner, to be defecated on, or to eat feces (coprophagia). A variant is the compulsive utterance of obscene words (coprolalia). These paraphilias are associated with fixation

at the anal stage of psychosexual development. Similarly, klismaphilia, the use of enemas as part of sexual stimulation, is related to anal fixation. UROPHILIA. Urophilia, a form of urethral eroticism, is interest in sexual pleasure associated with the desire to urinate on a partner or to be urinated on. In both men and women, the disorder may be associated with masturbatory techniques involving the

insertion of foreign objects into the urethra for sexual stimulation. MASTURBATION. Masturbation is a normal activity that is common in all stages of life from infancy to old age, but this viewpoint was not always accepted. Freud believed that neurasthenia was caused by excessive masturbation. In the early 1900s, masturbatory insanity was a common diagnosis in hospitals for the criminally insane in the United States. Masturbation can be defined as a person's achieving sexual pleasure —which usually results in orgasm—by himself or herself (autoeroticism). Alfred Kinsey found it to be more prevalent in males than in females, but this difference may no longer exist. The frequency of masturbation varies from three to four times a week in adolescence to one to two times a week in adulthood. It is common among married persons; Kinsey reported that it occurred on the average of once a month among married couples. The techniques of masturbation vary in both sexes and among persons. The most common technique is direct stimulation of the clitoris or penis with the hand or the fingers. Indirect stimulation can also be used, such as rubbing against a pillow or squeezing the thighs. Kinsey found that 2 percent of women are capable of achieving orgasm through fantasy alone. Men and women have been known to insert objects in the urethra to achieve orgasm. The hand vibrator is now used as a masturbatory device by both sexes. Masturbation is abnormal when it is the only type of sexual activity performed in adulthood if a partner is or might be available, when its frequency indicates a compulsion or sexual dysfunction, or when it is consistently preferred to sex with a partner (Fig. 17.3-1).

FIGURE 17.3-1 A man who masturbated compulsively with a large electrically powered vibrator by inserting the head of the instrument into his anus was unable to retrieve it when it was inserted too far into the anal canal. (Courtesy of Stephen Baker, M.D.) HYPOXYPHILIA. Hypoxyphilia is the desire to achieve an altered state of consciousness secondary to hypoxia while experiencing orgasm. Persons may use a drug (e.g., a volatile nitrite or nitrous oxide) to produce hypoxia. Autoerotic asphyxiation is also associated with hypoxic states, but it should be classified as a form of sexual masochism. DIFFERENTIAL DIAGNOSIS Clinicians must differentiate a paraphilia from an experimental act that is not recurrent or compulsive and that is done for its novelty. Paraphilic activity most likely begins during adolescence. Some paraphilias (especially the bizarre types) are associated with other mental disorders, such as schizophrenia. Brain diseases can also release perverse impulses. COURSE AND PROGNOSIS The difficulty in controlling or curing paraphilic disorders rests in the fact that it is hard for people to give up sexual pleasure with no assurance that new routes to sexual gratification will be secured. A poor prognosis for paraphilic disorder is associated with an early age of onset, a high frequency of acts, no guilt or shame about the act, and substance abuse. The course and the prognosis are better when patients have a history of coitus in addition to the paraphilia, and when they are self-referred rather than referred by a legal agency. TREATMENT Five types of psychiatric interventions are used to treat persons with paraphilic disorder and paraphilic interests: external control, reduction of sexual drives, treatment of comorbid conditions (e.g., depression or anxiety), cognitive-behavioral therapy, and dynamic psychotherapy. Prison is an external control mechanism for sexual crimes that usually does not contain a treatment element. When victimization occurs in a family or work setting, the external

control comes from informing supervisors, peers, or other adult family members of the problem and advising them about eliminating opportunities for the perpetrator to act on urges. Drug therapy, including antipsychotic or antidepressant medication, is indicated for the treatment of schizophrenia or depressive disorders if the paraphilia is associated with these disorders. Antiandrogens, such as cyproterone acetate in Europe and medroxyprogesterone acetate (Depo-Provera) in the United States, may reduce the drive to behave sexually by decreasing serum testosterone levels to subnormal concentrations.

Serotonergic agents, such as fluoxetine (Prozac), have been used with limited success in some patients with paraphilia. Cognitive-behavioral therapy is used to disrupt learned paraphilic patterns and modify behavior to make it socially acceptable. The interventions include social skills training, sex education, cognitive restructuring (confronting and destroying the rationalizations used to support victimization of others), and development of victim empathy. Imaginal desensitization, relaxation technique, and learning what triggers the paraphilic impulse so that such stimuli can be avoided are also taught. In modified aversive behavior rehearsal, perpetrators are videotaped acting out their paraphilia with a mannequin. Then the patient with paraphilic disorder is confronted by a therapist and a group of other offenders who ask questions about feelings, thoughts, motives associated with the act and repeatedly try to correct cognitive distortions and point out lack of victim empathy to the patient. Insight-oriented psychotherapy is a long-standing treatment approach. Patients have the opportunity to understand their dynamics and the events that caused the paraphilia to develop. In particular, they become aware of the daily events that cause them to act on their impulses (e.g., a real or fantasized rejection). Treatment helps them deal more effectively with life stresses and enhances their capacity to relate to a life partner. In addition, psychotherapy allows patients to regain self-esteem, which in turn allows them to approach a partner in a more normal sexual manner. Sex therapy is an appropriate adjunct to the treatment of patients with specific sexual dysfunctions when they attempt nondeviant sexual activities. Good prognostic indicators include the presence of only one paraphilia, normal intelligence, the absence of substance abuse, the absence of nonsexual antisocial personality traits, and the presence of a successful adult attachment. Paraphilic disorders, however, remain significant treatment challenges even under these circumstances. REFERENCES Carnes PJ, Murray R, Charpantier L. Addiction interaction disorder. In: Combs RH, ed. Handbook of Addictive Disorders: A Practical Guide to Diagnosis and Treatment. Hoboken, NJ: John Wiley & Sons; 2004:31. Ceccarelli P. Perversion on the other side of the couch. International Forum of Psychoanalysis. 2005;14:176–182. Charnigo R, Noar SM, Garnett C, Crosby R, Palmgreen P, Zimmerman RS. Sensation seeking and impulsivity. J Sex Res. 2013;50:480–488. Chirban JT. Integrative strategies for treating internet sexuality: A case study of paraphilias. Clinical Case Studies. 2006;5:126–141. Dimen M. Perversion is us? Eight notes. In: Sexuality, Intimacy, Power. Hillsdale, NJ: The Analytic Press; 2003:257–291. Egan V, Parmar R. Dirty habits? Online pornography use, personality, obsessionality, and compulsivity. J Sex Marital Ther. 2013;39:394–409. Jacobson L. On the use of “sexual addiction”: The case for “perversion.” Contemp Psychoanal. 2003;39:107–113. Kafka MP. The monoamine hypothesis for the pathophysiology of paraphilic disorders: An update. Ann N Y Acad Sci. 2003;989:86. Kafka MP, Hennen J. Hypersexual desire in males: Are males with paraphilias different from males with paraphilia-related

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