Female Sexual Dysfunctions: What Controversy?

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Some press has recently surfaced regarding a controversy about the existence of female sexual dysfunctions. However, this purported controversy does not exist among sexual health experts or among physicians/psychiatrists. *Female sexual dysfunctions* is an overarching term used to encompass specific sexual disorders among women, including hypoactive sexual desire disorder, sexual aversion disorder, female sexual arousal disorder, female orgasmic disorder, and sexual pain disorders of dyspareunia and vaginismus.[1] This term is used in a way that is similar to the use of the term *mood/affective disorders* to describe related disorders such as major depressive disorder, bipolar disorder, dysthymia, and premenstrual dysphoric disorder. In addition, these sexual disorders have been recognized and listed in the *Diagnostic and Statistical Manual* (DSM) through several iterations. Recent research has contributed to some mild modifications of the criteria, but large-scale changes have not been supported by the scientific literature.[2]

Each disorder is associated with a specific phase of the sexual response cycle (desire, arousal, orgasm) or is related to pain with sexual activity or a posttraumatic response manifested by aversion to sexual activity.[1] Disorders may be primary or acquired, representing a lifelong condition or denoting a significant change from baseline sexual desire or functioning. They may have no identifiable cause, may be related to a medical illness or change in hormones, or may be substance-induced.

Substances that can potentially cause sexual dysfunction include alcohol, antidepressant medications, antipsychotics, benzodiazepines, opioids, oral contraceptives, antihypertensives, histamine H_2 blockers,[3] and the list goes on. Psychotropic medication–associated sexual dysfunction was addressed in Dr. Balon's ASCP Corner column in November 2005[4] and is a frequent cause of sexual dysfunction in clinical practice. In addition to the sexual dysfunction, marked distress or interpersonal conflict must be present for diagnosis.[1] Distress is much more likely to be associated with a change in sexual interest or function but can be seen in individuals with poor lifelong psychosexual adjustment.

Some of the alleged controversy may stem from the fact that erectile dysfunction (one of the male sexual dysfunctions) represents a visible physical problem with inability to attain or maintain an erection. Without an erection, sexual intercourse is difficult at best, and it does not require a stretch of the imagination to understand the associated distress. In addition, physiologic measurements of penis circumference and turgor provide numerical information about the sexual dysfunction.

For women, all aspects of sexual interest and function occur internally, and measures of physiologic parameters, even of arousal, have not been found to correspond to the subjective experience of excitement (either cognitive or genital).[5] For example, vaginal photoplethsmography, a measure of vaginal blood flow/vasocongestion (and by extension, genital arousal), often does not indicate dysfunction in women reporting significant decline in genital sensitivity, vaginal lubrication, and sexual excitement.[5] This lack of corroboration does not mean that the woman's report of diminished and unsatisfying sexual arousal is incorrect but rather that accurate measures of female sexual functioning are not currently available, and we must rely on patient report. This lack of reliable measures also corresponds to the mood disorders, which currently have no diagnostic laboratory measure or procedure existing to make the diagnosis. Instead, the diagnosis of an affective disorder is made by eliciting a report of symptoms or complaints that satisfies DSM-IV criteria. In clinical research studies, rating scales help screen for depression or quantify severity (e.g., the Center for Epidemiologic Studies Depression Scale, the Hamilton Rating Scale for Depression).

Similar validated screening instruments are available for female sexual dysfunction. The Changes in Sexual Functioning Questionnaire (CSFQ)[6,7] has been used to assess global and phase-specific sexual dysfunction associated with depression and its treatment, while the Female Sexual Function Index (FSFI)[8,9] has been used to indicate severity of sexual dysfunction, particularly affecting arousal. Both have been validated in specific populations, and their use is supported by the 2nd International Consultation to the World Health Organization, Committee on Assessment.[10] Other instruments have also been evaluated for use in assessing severity of specific sexual disorders, such as the Sexual Interest and Desire Inventory (SIDI) in studies involving women with hypoactive sexual desire disorder (HSDD).[11]

Unfortunately, epidemiologic data regarding the prevalence of female sexual dysfunctions or disorders is lacking. In a survey of U.S. women who had been sexually active in the previous year, 43% of women reported sexual dysfunction, the most common complaint being low sexual desire.[12] The prevalence of specific sexual disorders is less clear, although a review of 10 studies conducted between 1978 and 1999 of HSDD suggests an estimated prevalence of 10% to 20% in the general population, increasing gradually with age.[13] Further research on the prevalence of sexual disorders in the general population is sorely needed.

In general, in men reporting erectile dysfunction, the chief complaint is accepted without question, and assessment of the cause of the erectile dysfunction proceeds. Going to a physician with a complaint of sexual dysfunction usually suggests that the individual is distressed, as most patients do not feel comfortable bringing up the subject of sexual functioning with their physician. Also, many patients believe their physicians would be embarrassed if the topic is initiated by the patient, so many patients with sexual dysfunctions suffer in silence.[14] In fact, only 25% of physicians routinely take a sexual history.[15]

However, once a patient has broached the subject of sexual dysfunction, or if the patient has responded in the affirmative to specific questions about sexual dysfunctions from a physician, a complete sexual history is indicated.[3] This should include an assessment of desire, arousal, and orgasm as well as duration and severity of change from baseline in function of any phase. Pain with sexual activity may represent a sexual disorder and may contribute to subsequent phase-specific sexual dysfunction.

Contextual assessment is particularly important for women and should include the quality of the relationship, notation of significant hormonal changes (e.g., the menopausal transition) and current reproductive status (e.g., taking hormonal contraceptives), comorbid medical or psychiatric conditions (e.g., diabetes mellitus, major depressive disorder), current medications, substance use (e.g., alcohol, illicit substances), body image (e.g., obesity, surgery), and cultural factors. The history should determine age at onset of puberty, past pregnancies, prior psychosexual adjustment, past sexual trauma or abuse, and

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any genitourinary infection, surgery, or trauma. A history of sexual partners; nature, quality and duration of relationships; frequency of sexual activity; and the level of satisfaction with prior and current sexual activity is important.

In addition, an assessment of the level of distress is critical for making the diagnosis of a sexual disorder. A scale to measure sexual distress has recently been demonstrated to be valid and reliable[16] and is currently being used in clinical trials to assess the baseline level of distress and change in distress level in response to an intervention. In clinical practice, spontaneous complaint of a sexual problem usually indicates distress, either related to loss of a valued activity or concern about effects on the relationship with the sexual partner. Either of these concerns could meet the DSM-IV criteria for distress.

In women more than men, and again like mood disorders, sexual disorders are frequently comorbid, both with other sexual disorders and with other psychiatric and medical conditions.[1] The frequency of comorbidity may be due to similar physiologic mechanisms being affected (e.g., hormones, neurotransmitters), may be related to the overlap of the phases of the sexual response cycle, and/or may be secondary to feedback from one phase to another (e.g., with anorgasmia, sexual desire may be reduced).

Once a diagnosis of a sexual disorder is made, just as in men, an assessment for the cause of the condition should be initiated. Laboratory measurements might include hormone levels such as estradiol, testosterone, dehydroepiandrosterone sulfate (DHEA-S), and thyroid-stimulating hormone (TSH); prolactin, hemoglobin A1C, lipids, and sex hormone binding globulin levels; and liver function tests. A neurologic examination and a genitourinary exam by the woman's primary care physician or obstetrician/gynecologist might also be indicated.

Interventions consist of therapy (e.g., sexual therapy, cognitive behavioral therapy, relaxation therapy, physical therapy), treatment of associated medical and/or psychiatric conditions, and reduction of medications and/or substances that reduce sexual functioning. Currently no medication in the United States has an indication for the treatment of a sexual disorder in women. Over-the-counter supplements purported to be of use in female sexual dysfunction include DHEA-S,[17] botanical massage oil,[18] and herbs plus phytoestrogens.[19] Several drugs are in development for the treatment of specific sexual disorders. Such potential treatments include testosterone (patch, gel),[20] dopaminergic drugs,[21] and other centrally-acting medications (e.g., specific serotonin-2 antagonists). Development of phosphodiesterase-5 inhibitors for use in women has currently been abandoned, primarily due to difficulty measuring change and a high placebo-response rate.

No controversy exists about female sexual dysfunctions. *Female sexual dysfunction* is a general term that includes the primary and secondary sexual disorders. In women, few treatments are available, and further research to develop interventions with the potential to relieve suffering and restore quality of life is indicated.

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