Sexual concerns and problems have drawn increased attention from health care providers and the general public in the last decade, in part due to the publicity surrounding Viagra, approved in 1998. Most research in the area of assessment and treatment of sexual dysfunction has targeted men. A MEDLINE search of the term “sexual dysfunction” retrieves 9000 citations addressing female dysfunction as compared with 17,000 addressing male dysfunction. In contrast, according to the results of the National Health and Social Life Survey, 43% of American women reported having a sexual problem versus 31% of men [1].

There are a number of reasons why there is significantly less research addressing sexual dysfunction in women as compared with men. One of the most important reasons is the difficulty in measuring appropriate endpoints. Until recently, there have been few sensitive, specific, and validated outcome measures for assessing female sexual desire and arousal. In contrast, assessment of male arousal (ie, erections) is relatively straightforward. In addition, there is significant overlap among the female sexual dysfunction disorders, making diagnosis and treatment approaches more difficult.

Current models for understanding the female sexual response reflect its complicated and multifactorial nature. A model for female sexual response developed by Basson [2] acknowledges the importance of emotional intimacy, psychologic factors, and sexual stimuli in the female sexual cycle as well as posits that arousal often precedes desire (Figure). This model updates the traditional linear models of Masters and Johnson and Kaplan [3], in which desire precedes arousal. Levine’s [4] conceptualization of desire as comprised of drive (spontaneous biologically driven sexual interest), beliefs/values, and psychologic motivation further amplifies the complexity of desire.

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Research suggests that while both men and women experience a normal gradual decline in sexual interest and response with age, the majority of postmenopausal women consider sexuality to be an important aspect of their lives. However, many factors can affect women’s sexuality...
throughout life, including psychologic, social, and medical conditions. This article provides an overview of female sexual dysfunction and presents an approach for assessing, diagnosing, and managing sexual dysfunction in the postmenopausal woman.

**CASE STUDY**

**Initial Presentation**

A 50-year-old woman presents to her primary care physician for a checkup and with the complaint of irregular periods.

**History**

The patient reports that her periods are now lighter and inconsistent. Her last period was 4 months ago. She has no other complaints and says she feels well, although she has felt somewhat irritable lately.

The patient is a dance teacher with a 12-year-old daughter and a 16-year-old son. She has been married for 21 years to a successful business consultant who is 53 years of age. She maintains a healthy diet, does not smoke, and drinks 5 glasses of red wine per week. She takes a multivitamin and fish oil tablet daily but no medications. On review of systems, she reports a loss of interest in sex with her husband. She is not on birth control as her husband had a vasectomy. Review of systems is otherwise negative.

**Physical Examination**

Results of physical examination are unremarkable. There is no vulvar or vaginal atrophy. Laboratory testing results indicate a follicle-stimulating hormone level of 50 IU/L, total testosterone of 30 ng/dL, and bioavailable testosterone of 0.08 ng/dL.

- What further evaluation is needed in the patient who identifies a sexual issue?

If the patient suggests that she is having sexual problems, it is often helpful to pursue a more thorough sexual history. Components of a detailed sexual history are shown in **Table 1**. The sexual history and assessment should include a review of medical conditions (**Table 2**) [5] and medications (**Table 3**) [6] that can affect female sexuality. **Table 4** provides a list of questions to identify the specific components of the sexual problem and to aid the physician in diagnosing a dysfunction and identifying the etiology. These questions address the patient’s perceptions of the problem and the timeline, context, and other health problems that might contribute to a sexual complaint.

Special attention should be paid to some features in the physical examination that are relevant to sexual dysfunction (**Table 5**) [7]. The examination should include an inspection of the external genitalia, a monomanual and bimanual examination, a speculum examination, and a Papanicolaou test. In addition, the examination should include evaluation of blood pressure, heart rate, peripheral pulses, edema, and a neurologic screen to assess sensation [8]. The examination is also an opportunity for the patient to receive education about

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**Figure.** Basson’s cycle of female sexual response. A woman starts out desire-neutral. If the patient experiences adequate emotional intimacy with her partner, she may seek or be receptive to sexual stimuli. Receptivity to sexual stimuli allows the woman to move from sexual neutrality to arousal. If the mind continues to process the stimuli on to further arousal, sexual desire will encourage the woman to move forward to sexual satisfaction and orgasm. This positive outcome fosters intimacy and reinforces sexual motivation. (Adapted with permission from Basson R. Med Aspects Hum Sex 2001;1:41–2.)

**Table 1.** Components of a Detailed Sexual History

<table>
<thead>
<tr>
<th>First sexual encounter</th>
<th>Masturbation</th>
<th>Number and gender of current and lifetime partners</th>
<th>Sexually transmitted diseases</th>
<th>Sexual abuse or trauma</th>
<th>Specific sexual behaviors</th>
<th>Menstrual and obstetrical history</th>
<th>Medical and surgical history</th>
<th>Medications</th>
</tr>
</thead>
</table>

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**Table 4.** Questions to Identify Specific Components of the Sexual Problem

- Seeking out and being receptive to sexual stimuli
- Spontaneous sexual drive
- Sexual desire
- Sexual arousal
- Emotional and physical satisfaction
- Emotional intimacy
- Biologic
- Psychologic

---

**Table 5.** Features in the Physical Examination Relevant to Sexual Dysfunction

- Inspection of external genitalia
- Monomanual and bimanual examination
- Speculum examination
- Papanicolaou test
- Blood pressure
- Heart rate
- Peripheral pulses
- Edema
- Neurologic screen to assess sensation
female sexual dysfunction

anatomy and sexual function. Every step of the examination should be explained and agreed to by the patient, especially when there is a history of abuse, in an attempt to increase the patient’s sense of control and to reduce any risk of triggering a posttraumatic reaction of perceived violation.

Table 2. Medical Conditions That Can Affect Female Sexuality

<table>
<thead>
<tr>
<th>Neurologic disorders</th>
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</thead>
<tbody>
<tr>
<td>Head injury</td>
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<tr>
<td>Multiple sclerosis</td>
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<tr>
<td>Psychomotor epilepsy</td>
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<tr>
<td>Spinal cord injury</td>
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<tr>
<td>Stroke</td>
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<tr>
<td>Vascular disorders</td>
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<tr>
<td>Hypertension and other cardiovascular diseases</td>
</tr>
<tr>
<td>Leukemia</td>
</tr>
<tr>
<td>Sickle-cell disease</td>
</tr>
<tr>
<td>Endocrine disorders</td>
</tr>
<tr>
<td>Diabetes</td>
</tr>
<tr>
<td>Hepatitis</td>
</tr>
<tr>
<td>Debilitating disorders</td>
</tr>
<tr>
<td>Cancer</td>
</tr>
<tr>
<td>Degenerative disease</td>
</tr>
<tr>
<td>Lung disease</td>
</tr>
<tr>
<td>Psychiatric disorders</td>
</tr>
<tr>
<td>Anxiety</td>
</tr>
<tr>
<td>Depression</td>
</tr>
<tr>
<td>Voiding disorders</td>
</tr>
<tr>
<td>Overactive bladder</td>
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<tr>
<td>Stress urinary incontinence</td>
</tr>
</tbody>
</table>


Table 3. Medications That Cause Female Sexual Dysfunction

<table>
<thead>
<tr>
<th>Disorders of desire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychoactive medications</td>
</tr>
<tr>
<td>Antipsychotics</td>
</tr>
<tr>
<td>Barbiturates</td>
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<tr>
<td>Benzodiazepines</td>
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<tr>
<td>Lithium</td>
</tr>
<tr>
<td>Selective serotonin reuptake inhibitors</td>
</tr>
<tr>
<td>Tricyclic antidepressants</td>
</tr>
<tr>
<td>Cardiovascular and antihypertensive medications</td>
</tr>
<tr>
<td>Antilipid medications</td>
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<tr>
<td>β-Blockers</td>
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<tr>
<td>Clonidine</td>
</tr>
<tr>
<td>Digoxin</td>
</tr>
<tr>
<td>Spironolactone</td>
</tr>
<tr>
<td>Hormonal preparations</td>
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<tr>
<td>Danazol</td>
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<tr>
<td>Gonadotropin-releasing hormone agonists</td>
</tr>
<tr>
<td>Oral contraceptives</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Histamine₂-receptor blockers and promotility agents</td>
</tr>
<tr>
<td>Indomethacin</td>
</tr>
<tr>
<td>Ketoconazole</td>
</tr>
<tr>
<td>Phenytoin sodium</td>
</tr>
</tbody>
</table>

Adapted with permission from Drugs that cause sexual dysfunction: an update. Med Lett Drugs Ther 1992;34:73–8.

<table>
<thead>
<tr>
<th>Disorders of arousal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticholinergics</td>
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<tr>
<td>Antihistamines</td>
</tr>
<tr>
<td>Antihypertensives</td>
</tr>
<tr>
<td>Psychoactive medications</td>
</tr>
<tr>
<td>Benzodiazepines</td>
</tr>
<tr>
<td>Monoamine oxidase inhibitors</td>
</tr>
<tr>
<td>Selective serotonin reuptake inhibitors</td>
</tr>
<tr>
<td>Tricyclic antidepressants</td>
</tr>
<tr>
<td>Orgasmic disorders</td>
</tr>
<tr>
<td>Amphetamines and related anorexic drugs</td>
</tr>
<tr>
<td>Antipsychotics</td>
</tr>
<tr>
<td>Benzodiazepines</td>
</tr>
<tr>
<td>Methyldopa</td>
</tr>
<tr>
<td>Narcotics</td>
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<tr>
<td>Selective serotonin reuptake inhibitors</td>
</tr>
<tr>
<td>Trazodone</td>
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<tr>
<td>Tricyclic antidepressants</td>
</tr>
</tbody>
</table>

How often do physicians ask about sexual problems?

Physicians and patients alike are often uncomfortable discussing sexual concerns. In a survey conducted in 2005, only 14% of Americans aged 40 years or older reported that their physician has asked them about sexual difficulties for the past 3 years [9]. Besides discomfort, there are many reasons why doctors don’t ask their patients about sexual concerns, including insufficient medical training in sexual medicine that leads to a lack of confidence and mastery, a perceived lack of office time (associated with the misperception that a brief sexual assessment will require more than 2 to 3 minutes), and the lack of any U.S. Food and Drug Administration (FDA)–approved pharmacologic therapies [10].

Despite these barriers, it is the responsibility of the physician to take the lead in discussing sexuality with their
patients. In a study of 308 patients receiving selective serotonin reuptake inhibitors, Montejo et al [11] found that the incidence of sexual dysfunction was only 14% when based on spontaneous patient reports versus 55% when physicians posed direct questions. Similarly, a survey of over 800 visits in 1 gynecology practice found that only 3% spontaneously reported a sexual concern, but 19% reported a sexual concern when asked directly [12].

- What questions can facilitate identification of a sexual concern during a routine history?

Sexual problem identification should be regarded as a routine part of primary care. When to initiate a discussion of sexual concerns depends on the nature of the office visit. During the review of systems is often an ideal time to conduct a sexual history/assessment. A brief assessment can be accomplished by asking the following questions [10]:

- Are you currently involved in a sexual relationship? Are your sexual relationships typically with male partners, female partners, or both?
- Are you satisfied with your current sexual relationship or functioning?
- Do you have any sexual concerns you would like to discuss?


Table 4. Questions to Include in a Sexual Assessment

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does the patient describe the problem?</td>
</tr>
<tr>
<td>How long has the problem been present?</td>
</tr>
<tr>
<td>Was the onset sudden or gradual?</td>
</tr>
<tr>
<td>Is the problem specific to a situation/partner or is it generalized?</td>
</tr>
<tr>
<td>Were there precipitating events (biologic or situational)?</td>
</tr>
<tr>
<td>Are there problems in the patient's primary sexual relationship (or any relationship in which the sexual problem is occurring)?</td>
</tr>
<tr>
<td>Are there current life stressors that might be contributing to sexual concerns?</td>
</tr>
<tr>
<td>Is there some underlying guilt, depression, or anger that is not being directly acknowledged?</td>
</tr>
<tr>
<td>Are there physical problems such as pain?</td>
</tr>
<tr>
<td>Are there problems in desire, arousal, or orgasm, and can the patient determine the primary problem?</td>
</tr>
<tr>
<td>Is there a history of physical, emotional, or sexual abuse that may be contributing?</td>
</tr>
<tr>
<td>Does the partner have any sexual problems?</td>
</tr>
</tbody>
</table>


- When evaluating a menopausal patient, the following questions may be helpful to open a dialogue regarding sexual concerns [10]:
  - Menopausal women often experience vaginal dryness that can make intercourse uncomfortable. Has this been a problem for you?
  - Menopausal women sometimes experience change in sexual desire. Have you noticed any changes in sexual desire?
  - Since your ovaries were removed, have you experienced a change in your desire for sex or a decrease in your sexual activity?
2. How long have you been dissatisfied with your sexual function?

If No, please continue.

__ Y es __ No

1. Are you satisfied with your sexual function?

2. Have you been dissatisfied with your sexual function in the past 3 months or more?

__ Y es __ No

3a. The problem(s) with your sexual function is: (mark one or more)

__ 1 Problems with little or no interest in sex
__ 2 Problems with decreased genital sensation (feeling)
__ 3 Problems with decreased vaginal lubrication (dryness)
__ 4 Problems reaching orgasm
__ 5 Problems with pain during sex
__ 6 Other:

3b. Which problem is most bothersome (circle) 1  2  3  4  5  6

4. Would you like to talk about it with your doctor?

__ Y es __ No

5. How did you feel talking to your doctor about this?

6. Would you like to talk about it with your doctor again?

__ Y es __ No

7. How do you feel about talking to your doctor about this?

__ Y es __ No

---

Sexual History

Upon further questioning by the physician, the patient reports that her loss of interest became noticeable 6 months ago but may have been progressing over the past 2 years. She became acutely aware of her loss of desire when she and her husband went on their annual tropical vacation the previous month and she had no sexual interest. The patient reports that although she had always had a relatively low drive (her highest drive in young adulthood was 3 times a month), she could always rely on having interest in sex on that particular vacation and became concerned and distressed when she did not. She did enjoy sexual activities before her current presentation and she still finds her husband sexually attractive. She reports that her husband always had a higher drive and would wish to have sexual relations 3 to 4 times a week. He has had no decline in his erectile function. She also reports that when she had some drive, it was usually in the mornings. However, due to her husband’s work schedule, he would leave for work too early for her to awaken and make use of her interest.

She reports adequate subjective and objective arousal. That is, she experiences the sensations associated with arousal (she is aware that she is lubricated and her genitals feel heavier and more sensitive), and objective observation would indicate sufficient lubrication and genital swelling. However, she reports that in addition to her chief complaint of no desire, she also has difficulty in consistently reaching orgasm. However, this has been a lifelong problem for her and has not inhibited her enjoyment of sexual activity. She is most reliably orgasmic with manual stimulation of her clitoris.

She believes that sex is healthy and appropriate for a 50-year-old mother and that menopause does not mean loss of femininity and sexuality. In addition, although she believes she is definitely motivated to have sexual desire, she admits that she has recently become dissatisfied with the quality of her relationship due to her husband’s frequent absence for business travel. The patient has no other significant psychologic issues that might be implicated in her low desire and does not meet criteria for a depressive or anxiety disorder. She has no history of abuse or difficulties with sexuality in the past.

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Table 6. Brief Sexual Symptom Checklist for Women

<table>
<thead>
<tr>
<th>Problem</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of interest in sex</td>
<td>1</td>
</tr>
<tr>
<td>Decreased genital sensation</td>
<td>2</td>
</tr>
<tr>
<td>Decreased vaginal lubrication</td>
<td>3</td>
</tr>
<tr>
<td>Pain during sex</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
</tbody>
</table>

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Female Sexual Dysfunction

Regardless of how detailed the assessment, effective communication will improve the efficiency and decrease the discomfort in addressing sexuality. It is important to make the office setting conducive to addressing sexual concerns. Assuring confidentiality and privacy are critical first steps, as is making sure the discussion takes place in a consultation room with the patient clothed. The physician sets the tone for the discussion, and he/she must be comfortable using explicit sexual terminology. Practicing the use of sexual terms can be helpful to physicians who are otherwise uncomfortable to help desensitize to any embarrassment. Blushing, stammering, or other signs of discomfort will alert patients to the physician’s discomfort and inhibit open communication.
If a woman becomes sexually aroused, there is an increase in blood flow to the genitals mediated by several neurotransmitters (nitric oxide, acetylcholine, and vasoactive intestinal peptide). As a result, the labia swells exposing the introitus, the vagina lengthens and dilates, the outer third of the vagina tightens, the clitoris increases in length and diameter, and the uterus rises above the levator plate [16]. Lubrication occurs due to secretion from the uterine glands and transudate from the subepithelium of the vaginal walls.

Orgasm occurs with the release of contraction-producing agents (serotonin and oxytocin) leading to the contraction of the levator ani muscles 8 to 12 times, followed by the contraction of the uterus and vagina [17]. Multiple orgasms may occur if stimulation continues. During resolution, the anatomical structures return to the unstimulated state.

It is well known that there is a gradual, normative decline in sexual desire and activity with age and menopause. Aging has been found to decrease muscle tension, vaginal elasticity, perfusion, congestion and lubrication, clitoral shrinkage, and distention of the urethral meatus. However, aging appears to have a greater impact on sexuality in men. The results from the Massachusetts Male Aging Study indicate that by age 40, 40% of men will experience at least some mild erectile dysfunction, and by age 70, the probability increases to 67% [18]. In addition, in the Duke Longitudinal Study of 261 white men and 241 white women between the ages of 46 and 71 years [19], sexual interest declined significantly in men because they were unable to perform (40%). In contrast, for women, sexual activity decreased because of death of the spouse (36%), illness of the spouse (20%), and inability of the spouse to perform sexually (18%). Regression analysis showed that in women, marital status was the primary factor leading to a reduction in sexuality, followed by age and education. For men, age was the primary factor, followed by health. In women, postmenopausal status had a small effect on sexual interest and frequency but not on enjoyment.

Declining estrogen and testosterone levels that occur as a result of menopause may be associated with sexual dysfunction. Postmenopausal estrogen deficiency lead to genital atrophy, vaginal dryness, reduced clitoral blood flow, and decreased clitoral sensitivity. As a consequence of urogenital atrophy, dyspareunia and orgasmic dysfunction may occur. These symptoms can usually be alleviated by local estrogen therapy. The only FDA-approved medication for sexual dysfunction in women is estrogen therapy for dyspareunia related to genitourinary atrophy.

Women achieve peak androgen production in their mid 20s. Beginning in their early 30s, they gradually lose circulating testosterone and the adrenal androgens (androstenedione and dehydroepiandrosterone [DHEA] in an age-related fashion) [20]. By the time most women reach their 60s, testosterone levels are half of what they were before age 40. In contrast to the gradual decline in testosterone of naturally menopausal women, there is a sudden decline in testosterone following bilateral oophorectomy since the ovaries produce 40% of circulating testosterone. Testosterone, together with its metabolite dihydrotestosterone, is the most potent endogenous androgen in both men and women. Testosterone is bound to albumin and sex hormone–binding globulin (SHBG). During the time of the perimenopausal transition, as estrogen levels are declining, women also experience a decrease in SHBG, which binds both estrogen and testosterone and, in fact, tends to bind testosterone more than it does estrogen.

In a longitudinal study of Australian women aged 45 to 55 years, Dennerstein et al [21] found that sexual responsivity decreased over time, and desire and frequency of sexual activity declined significantly after menopause. Avis et al [22] analyzed data from 200 premenopausal, perimenopausal, and postmenopausal women from the Massachusetts Women's Health Study II and showed that menopause had less of an impact on sexual functioning than health, marital status, mental health, or smoking. This same analysis did not show any effect of vasomotor symptoms on any aspect of sexual function. Although postmenopausal women reported significantly less sexual desire than premenopausal (P < 0.05) and perimenopausal women and reported feeling less aroused than when they were in their 40s than premenopausal women (P < 0.05), satisfaction with sex life, frequency of intercourse, and dyspareunia did not vary by menopausal status. Hayes and Dennerstein [23] reviewed community-based studies investigating changes in women's sexual function and dysfunction with age and concluded that while sexual function declines with age, the prevalence of sexual dysfunction remains constant.

**Psychological Variables**

Although physiologic and hormonal changes impact sexual function, there are also a number of psychologic variables that can have a tremendous impact on a woman's sexuality and sexual response. These include the quality of her primary relationship, a history of sexual abuse or past negative sexual experiences, low sexual self-image, poor body image, lack of feeling safe, stress, fatigue, and mood or anxiety disorders [24]. The most important psychologic variable is the quality of the relationship with a sexual partner, and a decline in sexual desire for some women may be an adaptive response to their relationship with their partners or other life problems [25].

For some women, the physical changes in appearance due to aging may negatively alter body image, which impacts sexual desire. These women are bothered by aging changes, such as hair turning gray and thinning, wrinkles and sagging skin, and breasts. If a woman is uncomfortable with her body image, her
How are the sexual dysfunction disorders classified?

The Diagnostic and Statistical Manual of Mental Disorders 4th edition, text revision [26] provides the most commonly used classification scheme for the sexual dysfunction disorders. They are divided into 4 categories:

- Sexual desire disorders (including hypoactive sexual desire disorder and sexual aversion disorder)
- Sexual arousal disorders
- Orgasmic disorders
- Sexual pain disorders (including dyspareunia and vaginismus)

The patient meets criteria for hypoactive sexual desire disorder, which is characterized by distress due to the absence of feelings of sexual desire or interest, sexual thoughts, or fantasies. This would also include a lack of responsive desire to her partner’s initiation of a sexual encounter. Motivations to become sexually aroused or absent and this lack of interest is beyond the normal decrease that occurs with age, menopause, or duration of the relationship. Furthermore, although the patient reports that she has had lifelong low drive, it had been sufficient for her and did not become a dysfunction until recently when she lost all sexual drive, which has caused distress. One might also consider a secondary dysfunction, orgasmic disorder, given the patient’s report of lifelong difficulties reliably reaching orgasm. However, she was not distressed by the unreliability of her orgasms, and therefore does not meet criteria for orgasmic disorder.

Although there are no significant marital problems, her relationship with her husband is a primary factor in her sexuality (ie, the motivation component of desire). His busy schedule is preventing them from having adequate time for intimacy as he leaves for work before she is awake and returns late in the evening or not at all due to his work travel schedule. The patient may be feeling some neglect and resentment, which may translate into decreased desire. In addition, it would be important to determine if the patient were experiencing a mild depression or anxiety disorder.

What treatments are available for hypoactive sexual desire disorder?

Any treatment approach to manage a woman with sexual desire disorder will likely be multifaceted. As outlined above, sexuality has biologic, cultural, and psychologic components, and treatment should be tailored to the compromised component(s) of desire [10]. When assessing and treating female sexual dysfunction, one cannot separate organic/biologic causes from psychologic/interpersonal causes.

As an example, a woman might not experience perceived desire because she is not happy with her partner and has no motivation to be emotionally intimate with him despite a strong biologic drive to be sexual. This patient is better served with psychologic counseling and couples therapy. On the other hand, if a woman has lost some of her drive with age but remains motivated to be intimate with her partner, the physician can educate the patient that a decline in spontaneous drive is normal with age and strengthen her self-perception as a sexual being. In addition to discussing sexual health issues, providing brochures or books about sex and marital problems may help normalize false beliefs and misconceptions. The most effective treatment is often not geared solely providing adequate genital functioning but also appreciates the context in which the sexual relationship exists [27]. In addition, concomitant medical problems or mood or anxiety disorders (Table 2) should be assessed and treated. Given the number of medications that can cause sexual side effects, some medications (Table 3) may need to be changed (eg, selective serotonin reuptake inhibitors).

Currently there are no FDA-approved medications to treat women with hypoactive sexual desire disorder. However, there are a number of drugs being evaluated in clinical trials, including topical testosterone products (patches and gels), oral testosterone products, and some drugs acting on the central nervous system. Although not FDA-approved to treat hypoactive sexual desire disorder in women, when the clinician has determined that drive has been compromised, he/she might consider testosterone alone or in combination with estrogen/progesterone therapy. In 4 large randomized, double-blind, placebo-controlled multicenter trials of the 300-µg testosterone patch (2 parallel trials of surgically menopausal women with hypoactive sexual desire disorder, and 2 parallel trials of naturally menopausal women with hypoactive sexual desire disorder, all of which followed identical protocols varying only in duration), subjects on the testosterone patch significantly increased total satisfying sexual activity and sexual desire and decreased personal distress [28–30]. In all 4 trials, the androgenic effects (eg, hirsutism, acne) either were mild or comparable with placebo.
Testosterone products indicated for men are often used for women. In 2003, 21% of the total prescriptions for branded male testosterone products (145,000 prescriptions) were written for women. In 2002–2003, there were 1,315,000 prescriptions written for compounded or generic testosterone products for women [31].

Data to support the use of DHEA are not as robust. Even the randomized trials for women with adrenal insufficiency are inconsistent [32,33].

The American College of Obstetricians and Gynecologists advised caution in the use of testosterone and DHEA therapies to manage hypoactive sexual desire disorder in women [34]. In contrast, the North American Menopause Society’s position statement on testosterone use in postmenopausal women states that “postmenopausal women may be candidates for testosterone therapy if they present with symptoms of decreased sexual desire associated with personal distress and have no other identifiable cause for their sexual concerns” [35].

The specific loss of drive in our patient suggests a hormonal basis, which might indicate a trial of testosterone replacement. However, adding only testosterone without addressing the difficulties in the couple’s past sexual life might lead to more problems by focusing on only 1 component of desire. Thus, the patient might feel only partially improved, or might feel that hormones are not helping because, although they may be necessary, they are not sufficient. Therefore, a referral for brief psychotherapy/sex therapy, or at least some education by the physician should address the other impaired components of sexual desire. One goal of such therapy would be to help alter the patient’s negative self-perception about her sexual identity. Therapy would also redirect the patient’s focus from her lack of drive to her motivation to be intimate with her husband. In this context, the patient can work through her resentment regarding her husband’s travel and her sense of feeling neglected. Moreover, education about the female sexual response is quite simple and brief but crucial. For example, learning that many women are not reliably orgasmic with intercourse may relieve her sense of inadequacy. Brief education and encouraging the use of masturbation to discover the best stimulation is tremendously helpful to women with primary anorgasmia. Also, relaxation training may also help with performance anxiety regarding the ability to achieve an orgasm. Finally, therapy might also help the patient overcome her negative perception of sex as a chore or a burden. This perception developed over time as a result of the large discrepancy between her drive and her husband’s. The more frequently the patient felt pressured to have sex when she didn’t feel her own interest, the more it became a chore instead of a pleasure.

The decision to refer a patient with sexual dysfunction depends primarily on the physician’s level of expertise and the complexity of the sexual dysfunction [10]. It is always best to have a comprehensive approach with collaboration among specialists, such as mental health professionals, sex therapists, and gynecologist/urologists specializing in sexual disorders. These specialists will use treatment strategies that include couples therapy, cognitive behavioral therapy, sex therapy (eg, sensate focus), anxiety reduction, and treatment of underlying psychologic problems. The American Association of Sex Educators, Counselors and Therapists (www.aasect.org) is a useful resource and can help a clinician locate a local certified sex educator, counselor, or therapist.

CONCLUSION

Primary care providers can and should play a bigger role in addressing and managing women with sexual problems. Health care providers are not trained and are not expected to be sex therapists; however, they have a duty to promote well-being and are fully competent to manage most sexual complaints. Simply initiating a discussion of sexual concerns is often the most important component of treatment [10].

While relatively easy, the task of screening for sexual dysfunction requires that health care providers be knowledgeable about the complexity of the woman’s sexual response and the multiple variables that affect it.

Basic knowledge of the female sexual response and the dysfunctions reviewed here is sufficient for physicians to effectively address many of their patients’ sexual concerns if only by providing education and normalizing changes in sexual function that occur with age. For example, many couples are not aware that despite erectile dysfunction, men are still able to experience desire, arousal, and orgasm. In addition, many couples still hold restrictive views of what is “normal.” For example, it may be very satisfying for older couples to move away from the standard missionary position towards other positions or ways of stimulation [36]. Finally, health care providers will also be most helpful to their patients if they can learn to discuss sexual concerns with a nonjudgmental attitude to patient’s sexual disclosures and activities and increase their awareness of the varied cultural values held by patients.

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References


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CME EVALUATION: Evaluation and Treatment of Sexual Dysfunction in an Older Woman

1. According to Levine’s conceptualization, which of the following is NOT a component of desire?
   (A) Motivation
   (B) Arousal
   (C) Beliefs
   (D) Drive

2. In a 2005 survey, what proportion of U.S. women over age 40 said that their physicians had asked them about sexual difficulties?
   (A) 4%
   (B) 14%
   (C) 24%
   (D) 34%

3. Patients are more likely to report a sexual concern if physicians pose direct questions.
   (A) True
   (B) False

4. Factors that influence sexual function include:
   (A) Menopause
   (B) Marital status
   (C) Smoking
   (D) Body image
   (E) All of the above
   (F) A and D

5. Which of the following statements about treatment of sexual dysfunction disorders in women is FALSE?
   (A) Couples therapy can be helpful in a patient with a strong sexual drive who lacks desire to have sexual relations with her partner
   (B) A decline in sexual drive is adequately treated with hormones alone
   (C) There are no FDA-approved medications for treatment of hypoactive sexual desire disorder
   (D) The American College of Obstetricians and Gynecologists advise caution in the use of testosterone therapy for the management of hypoactive sexual desire disorder
EVALUATION FORM: Evaluation and Treatment of Sexual Dysfunction in an Older Woman

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