

# Special focus:

## Sexual Dysfunction

Since 1948, when sex researcher Alfred C. Kinsey, PhD, began publishing his seminal works on human sexual behavior, scientists have followed Dr. Kinsey's lead into people's bedrooms, hoping to learn what prevents them from thoroughly enjoying sexual encounters.

It might, however, be easier to eliminate the factors that do not influence sexual satisfaction, rather than encompass all the ones that do. Besides the physical issues, sexual response (or the lack thereof) is closely tied to emotional and relational factors, as well as to cultural and religious values.

Various diseases, including diabetes, heart disease, multiple sclerosis and alcoholism, affect sexual performance in both men and women. And medical treatments can have a pronounced impact on the quality of a patient's sex life: As many as 80% of men treated for prostate cancer, for instance, experience erectile dysfunction—a condition that also has been linked to the use of more than 300 prescription medications, including antidepressants and antihypertensives.

Men, at least, have a clear-cut definition of sexual dysfunction, as well as new drug therapy options. For women, "(t)he word 'dysfunction' ... suggests that there is an acknowledged norm of female sexual function," according to a May 2004 article in the "Harvard Health Publications" series. "That norm has never been established. Unlike penile erection, which is a quantifiable physical event, a woman's sexual response is qualitative." ([www.health.harvard.edu/hhp/article/content.do?name=WN0504f](http://www.health.harvard.edu/hhp/article/content.do?name=WN0504f))

What is clear is that sexual dysfunction can impair patients' mental and physical health, as well as their quality of life. "Sexual dysfunction," wrote Abraham Morgentaler, MD, in the June 23/30, 2004, *Journal of the American Medical Association* (JAMA), "can lead to depression and a profoundly altered sense of self-esteem that negatively affects many relationships" (<http://jama.ama-assn.org/cgi/content/extract/291/24/2994>). And sexual dysfunction frequently is brought on or aggravated by advanced age, a key concern for internists who treat older patients.

Despite the fact that physicians now routinely take patients' sexual history in attempts to diagnose sexually transmitted diseases, doctors often fail to ask patients about sexual function. A study published in the Aug. 23, 2003, *British Medical Journal*, for instance, found that 40% of female patients and 22% of male patients in 13 British general practices had a sexual dysfunction diagnosis—but only 4% had that diagnosis noted in their medical chart.

Some patients diagnosed with sexual dysfunction will need to be referred to a subspecialist, but many won't. According to the JAMA article, primary physicians can treat most men with erectile dysfunction.

And they can treat their female patients as well. "Acknowledgement of sexual concerns is very important for women," said Kathleen Walsh, DO, a, clinical assistant professor at the University of Wisconsin Medical School in Madison. "Physicians should address the physical and psychological issues that may affect sexual dysfunction, such as hypertension, peripheral vascular disease, depression and anxiety. If it is a gynecological issue, such as vaginal dryness, the treatment is more direct."

### PREVENTION AND SCREENING

The robust promotion of erectile dysfunction medications has perhaps made it easier for patients to broach the subject of sexual dysfunction. But experts say that, for most patients, it's up to physicians to "break the ice" and actively screen for sexual dysfunction. (See also "Sex talks dos and don'ts," page 15.)

A few questions can help guide your initial discussion. Ask patients, for instance, if they are happy with their sexual performance and response. If patients are in a committed relationship—regardless of whether it's heterosexual or homosexual—ask if any aspects of their sexual life have changed.

Talk about displays of affection and whether any health problems, the patients' or their partners', have interfered with sexual expression. Studies have shown, for instance, that the majority of men who suffer myocardial infarction are afraid that sex will bring on another heart attack.

Ask patients who are single what their needs are for an intimate relationship, how they achieve sexual satisfaction, and what changes, if any, they have experienced in sexual desire.

Encourage all patients who have modifiable risk factors for sexual dysfunction to try and change that risk. Both men and women should be urged to quit smoking, moderate alcohol use, discontinue recreational drug use, and achieve blood pressure control for hypertension and hyperglycemic control for diabetes.

Make sure patients with chronic conditions—including rheumatoid arthritis, irritable bowel syndrome, low back pain or migraines—have adequate pain control, because chronic pain can interfere with sexual function. But remember that these patients also present a dilemma: While they need pain control, their medications can often lead to further sexual dysfunction. You may need to advise sex therapy for these patients.

And see that patients receive appropriate treatment for psychosocial issues such as depression, anxiety and any history of sexual abuse.

Screen for sexual dysfunction in men with identifiable risk factors. These include chronic illnesses such as diabetes, heart disease, hypertension and decreased HDL cholesterol levels; medications for those conditions; pelvic trauma or surgery; neurological disease or injury; and depression.

All women should be screened for sexual dysfunction during a routine health maintenance exam. In addition to having the same risk factors as men, women also may be at high risk because of genital pain caused by endometriosis, vaginismus, vulvodynia or interstitial cystitis, or by infections, such as candidiasis, bacterial vaginosis or chlamydia.

### DIAGNOSIS

For both men and women, use a comprehensive history and physical exam to look for common causes of sexual dysfunction, which include cardiovascular, endocrine, neurological and urogenital disorders, and medication use.

Identifying the cause of sexual dysfunction will directly affect your choice of treatment.

#### For men:

You can make an erectile dysfunction diagnosis when patients have a consistent inability over the course of three months to attain and maintain an erection sufficient for sexual intercourse. The International Index of Erectile Function-5 questionnaire may help you determine the severity (mild, moderate or severe) of that dysfunction.

You also need to categorize the dysfunction's cause as psychogenic (psychological or interpersonal factors); organic, resulting from endocrinological, neurological or vascular disorders; or a combination of both. You can tailor laboratory testing to a patient's clinical situation, keeping in mind that extensive testing—including specialized endocrinological assessment—shouldn't be performed routinely.

For patients with a history of cardiac disease, assign them to a low, intermediate or high risk category, and manage that risk before recommending sexual dysfunction treatment or resumption of sexual activity.

Those with low risk have, among other issues, confirmed hypertension, mild stable angina and fewer than three cardiovascular risk factors. Those in the second tier have, among other factors, moderate angina, left ventricular dysfunction and/or class II congestive heart failure, and have experienced a heart attack within the last six weeks. The high-risk category includes patients with unstable or refractory angina, congestive heart failure (class III or IV), obstructive cardiomyopathies and moderate to severe valvular disease.

### Treating FSD

Kathleen Walsh, DO, a clinical assistant professor at the University of Wisconsin Medical School in Madison, specializes in treating sexual dysfunction in women.

**On primary care physicians' ability to diagnose and treat FSD:** "They are very competent if they read articles, know how to ask the important questions and determine the baseline evaluation. But very few do.

"At the same time, we assume that patients are sexually knowledgeable and competent, but many aren't. Physicians have to ask questions in such a nonjudgmental way and setting—with the patient fully clothed, and face to face—and that helps a patient feel comfortable enough to discuss their sexual concerns. If they don't approach the patient the right way the first time, their patient will unlikely bring it up again."

**On whether female sexual dysfunction is now more widely treated:** "Over the last six years, I've seen a very significant rise in physicians' interest about sexual dysfunction and how to treat it. It takes only one or two patients to bring up the topic of sexual dysfunction, and the physician usually tries to locate the literature or another clinician in the community to help. Many physicians are frightened to talk about sexual dysfunction with their female patients, because they don't know how

to treat it. But they don't always have to treat it—just acknowledging the problem can make a huge difference."

**On choosing between estrogen and testosterone treatments:** "I lean toward prescribing testosterone for treating the libido and estrogen for perimenopausal dryness. But you have to be careful treating perimenopausal women with estrogen because of their fluctuating hormone levels. I start off prescribing low dosages until I see how they feel.

"Most physicians working in the area of sexual dysfunction believe a certain level of estrogen is necessary in the body for testosterone to be effective."

**On classifying sexual dysfunction among women:** "In my practice, a conservative estimate among premenopausal women is 20%-30%, which includes low libido, anorgasmia, diminished arousal and genital pain. Among perimenopausal women, it increases to 50%, primarily because of hormonal fluctuations. It could also be that, after they've had sexual problems for years, women finally admit to them and seek help. In the postmenopausal group, it drops down to 30%. Why? They don't have to worry about getting pregnant, and they have figured out what type of sexual stimulation works for them."

### For women:

As part of your clinical history, assess patients' sexual history for issues affecting desire, arousal, orgasm and pain. Using a diagnostic questionnaire—such as the Female Sexual Function Index ([www.fsfi-questionnaire.com/](http://www.fsfi-questionnaire.com/)) or the Brief Index of Sexual Functioning for Women—can help qualify patient information about dysfunction. You also should explore the content of patients' key emotional relationships.

As with male patients, consider lab testing as part of a systematic evaluation, and refer patients who need a specialized diagnostic evaluation.

## TREATMENT

### For men:

Use non-drug therapies for all male patients, including:

- Changing or discontinuing medications that adversely affect erectile function.
- Treating any underlying medical condition.
- Recommending lifestyle changes. One study found that more than 30% of obese men who lost weight and began exercising regained their ability to have an erection, compared to only 5% in the control group.
- Consider corrective surgery for pelvic or perineal trauma.

Other treatment strategies for erectile dysfunction follow a stepwise approach.

**First-line therapy** consists of oral erectogenic agents, vacuum constriction devices and psychosexual therapy. Drug therapy—with sildenafil, vardenafil or tadalafil—is an important element in a comprehensive approach to erectile dysfunction. One randomized controlled trial of oral sildenafil in antidepressant-associated sexual dysfunction found that 54% of participants reported sexual function, compared to only 4.4% on placebo.

All three drugs are contraindicated in patients taking nitrates. Experts point out that sildenafil does not have any contraindication with alpha blockers, while tadalafil is contraindicated in patients taking terazosin-like drugs (except tamsulosin hydrochloride), and vardenafil is contraindicated in patients taking all forms of alpha blockers. All three drugs have essentially the same side effects, which include headaches and flushing.

**Second- and third-line therapies** are reserved for patients who don't respond to one or more first-line treatments, or for whom first-line therapies are contraindicated. Second-line therapy consists of intraurethral suppositories (alprostadil) and intracavernous injections (alprostadil). Third-line therapy consists of surgical prostheses.

## Treating ED

Arthur L. Burnett, MD, professor of urology and director of the Male Consultation Clinic at Baltimore's Johns Hopkins Medical Institutions, spoke with *ACP Observer* about treating erectile dysfunction. He primarily treats patients who have undergone radical prostatectomies.

**On differentiating among erectile dysfunction drugs:** "They are mostly interchangeable, they all work by the same mechanism and action. Tadalafil has a longer half life of degradation and is being billed as the "weekend drug"—take it once and you're good all weekend. Sildenafil and vardenafil have four hours before they are degraded by 50%; tadalafil has 17."

**On drug dosing:** "Physicians should use a midrange dose. Sildenafil, 50 mg; tadalafil and vardenafil, 10 mg. Then just escalate the dosing."

Treatment efficacy estimates range from 50%-70% with sildenafil; 98% for vacuum constriction devices; 30% for intraurethral therapy; 90% for intracavernous therapy; and 99% for prostheses.

### For women:

Advise female patients to correct reversible causes of sexual dysfunction by making any necessary lifestyle or medication changes.

Adjunctive non-drug therapies—including stimulation devices, biofeedback and psychotherapy—can help treat identifiable disorders. For pain disorders, you can recommend that patients vary sexual positions, use lubricants and pursue pelvic floor physical therapy.

While researchers have not found a "little blue pill" that can address female sexual dysfunction, drug therapy can play a significant role in treating women's low desire, decreased arousal, anorgasmia and pain disorder.

Consider estrogen therapy, including an estrogen ring, estradiol tablets, transdermal patches or topical creams, for women who complain of vaginal dryness, burning, and urinary frequency and urgency.

Testosterone therapy remains controversial, but should be considered alone or in combination with estrogen in peri- and postmenopausal women with decreased desire, dyspareunia or lack of vaginal lubrication. (When prescribing testosterone, periodically obtain liver function tests and lipid panels to monitor for side effects.) Choosing between estrogen and testosterone treatment is primarily based on symptoms, like low libido. Many physicians don't obtain specific hormone

"The medications require some lead time. We know they typically have efficacy within one half hour or one hour, and the less food, the better. However, food does not affect the maximal serum concentration of tadalafil after it is taken because of the two-hour duration to achieve this level."

**On the impact of direct-to-consumer advertising:** "All the media events and societal changes have helped. At the same time, only a minority of men are getting treated. We know that only 10%-25% of men with ED get treatment. Treatment barriers include the absence of sexual activity for many years, fears of starting relationships and other interpersonal issues. The interpersonal relationship looms over everything, and you just can't take a pill."

levels before prescribing hormone supplements but monitor symptoms instead.

There are also two dozen different investigational medications and devices being tested for female sexual dysfunction that include nasal sprays, creams, patches and devices. Before prescribing non-hormonal or investigational treatments, thoroughly discuss potential benefits and side effects with patients.

### Follow-up

- Reevaluate the patient's medical and psychosocial situations.
- Assess any possible adverse drug reactions or interaction effects.
- Consider titrating the dosage or substituting another intervention.
- Talk to patients about their treatment or any factors that contributed to the sexual dysfunction.

### When to refer

For tips on when to refer patients with sexual dysfunction to urologists, gynecologists, sex therapists or other specialists, see the online version of **Special Focus: Sexual Dysfunction** at [www.acponline.org/journals/news/march05/sexualdysfunction.htm?hp](http://www.acponline.org/journals/news/march05/sexualdysfunction.htm?hp).

You can access PIER's Erectile Dysfunction (<http://pier.acponline.org/physicians/diseases/d242/d242.html>) and Sexual Dysfunction in Women (<http://pier.acponline.org/physicians/diseases/d664/d664.html>) modules online.

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*The information included herein should never be used as a substitute for clinical judgment and does not represent an official position of ACP.*

## Sex talk dos and don'ts

### DO:

- Raise the issue of sexual function, instead of waiting for patients to mention it.
- Be aware of your own attitudes and beliefs about sexuality.
- Stay conscious of your own body language and of what it may convey to patients.
- Keep information about sexuality available in the waiting room and exam rooms.
- Normalize patients' problems and let them know they are not alone.
- Use the same terminology as the patient.
- Refer patients to a sex therapist if they need specialized therapy.

### DON'T:

- Assume that a patient of a different race or gender is comfortable discussing sex with you, just because you're a physician.
- Ask only yes/no questions. Frame questions so patients will be invited to share their experiences.
- Assume that just because patients are older, they are no longer sexually active.
- Make light of or joke about patients' sexual complaints.
- Assume that all patients are heterosexual.
- Share your own personal sexual attitudes or experiences.

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