



The International Society for the Study of Women's Sexual Health Process of Care for the Identification of Sexual Concerns and Problems in Women

Sharon J. Parish, MD; Steven R. Hahn, MD; Sue W. Goldstein, BA; Annamaria Giraldi, MD, PhD; Sheryl A. Kingsberg, PhD; Lisa Larkin, MD; Mary Jane Minkin, MD; Vivien Brown, MDCM; Kristin Christiansen, MD; Rose Hartzell-Cushanick, PhD; Alyse Kelly-Jones, MD; Jordan Rullo, PhD; Richard Sadovsky, MD; and Stephanie S. Faubion, MD

Abstract

Sexual problems are common in women of all ages. Despite their frequency and impact, female sexual dysfunctions (FSDs) are often unrecognized and untreated in clinical settings. In response, the International Society for the Study of Women's Sexual Health convened a multidisciplinary, international expert panel to develop a process of care (POC) that outlines recommendations for identification of sexual problems in women. This POC describes core and advanced competencies in FSD for clinicians who are not sexual medicine specialists and serve as caregivers of women and, therefore, is useful for clinicians with any level of competence in sexual medicine. The POC begins with the expectation of universal screening for sexual concerns, proceeds with a 4-step model (eliciting the story, naming/reframing attention to the problem, empathic witnessing of the patient's distress and the problem's impact, and referral or assessment and treatment) that accommodates all levels of engagement, and delineates a process for referral when patients' needs exceed clinician expertise. Distressing problems related to desire, arousal, and orgasm affect 12% of women across the lifespan. Low desire is the most common sexual problem, but sexual pain and other less common disorders of arousal and orgasm are also seen in clinical practice. Screening is best initiated by a ubiquity statement that assures the patient that sexual concerns are common and can be revealed. Patient-centered communication skills facilitate and optimize the discussion. The goal of the POC is to provide guidance to clinicians regarding screening, education, management, and referral for women with sexual problems.

© 2019 Mayo Foundation for Medical Education and Research. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>) ■ Mayo Clin Proc. 2019;94(5):842-856



For editorial
comment, see
page 739

From the Department of
Medicine and Department of
Psychiatry, Weill Cornell

*Affiliations continued at
the end of this article.*

Sexual health concerns are common among women. When a sexual problem causes significant distress and impairment, this may be diagnosed as a sexual dysfunction. Female sexual dysfunctions (FSDs) are substantially undetected and unaddressed in primary care settings and are often undertreated even when they are recognized. Clinicians who do not specialize in sexual medicine may not feel comfortable

detecting, managing, and referring women for sexual health concerns. Reasons for the failure to detect and treat FSDs include deficits in specific knowledge and skills, such as those required to engage women in effective and efficient discussion about their sexual health, and awareness of the availability and efficacy of treatments.¹

These recommendations represent the consensus of experts on the competencies

needed by clinicians who serve as primary caregivers for women (eg, gynecology, family medicine, internal medicine), as well as any nonsexual medicine specialists (eg, cardiology, rheumatology, dermatology). The recommendations describe a process of care (POC) for clinicians at any level of competence in sexual medicine by delineating a strategy for referral when patients' needs exceed the clinician's level of expertise or engagement. The POC begins with the expectation of universal screening for sexual concerns and problems and proceeds with a 4-step model that accommodates all levels of engagement. This consensus recommendation consists of a succinct presentation of the scope and nature of FSDs, and the skills and knowledge required to screen for sexual problems in women and to execute the 4-step model of care.

METHODS

The International Society for the Study of Women's Sexual Health (ISSWSH) assembled an international, multidisciplinary panel consisting of experts in sexual medicine, women's health, gynecology, internal medicine, and family medicine. The expert panel reviewed and discussed strategies to define the basic competencies for identification and management of FSD and to describe more advanced competencies for clinicians with particular interest in sexual medicine. Consensus was developed for recommendations for identification of sexual health problems in women. There was no industry involvement in any part of the process.

MANAGEMENT OF SEXUAL DYSFUNCTION IN WOMEN IS A PRIORITY

Primary care is characterized by longitudinal relationships that provide an ideal opportunity to discuss and resolve the multifactorial issues that may affect sexual health.^{2,3} A clinician who has spent time getting to know the patient in the context of their family and social environment can evaluate the many potential causes of sexual dysfunction and provide the follow-up needed to ensure resolution of problems.

Most patients want the opportunity to discuss sexual health concerns with their clinician,^{4,5} and they prefer that the clinician bring up the topic.^{1,6-8} When sexual health issues are discussed, especially in a patient-centered style that demonstrates interest, empathy, and a nonjudgmental attitude, patient satisfaction with the interaction can increase, and the relationship between the patient and the clinician is strengthened.^{9,10}

The value of discussions about sexual health is high for patients throughout the lifespan. A survey showing women's engagement in sexual activity over the previous 3 months revealed 65% to 70% at ages 18 to 49 years, 46% at ages 50 to 59 years, and 20% at ages 60 to 94 years.¹¹ Married women are more likely to be sexually active, especially with increasing age.¹¹ Satisfaction with sex is a major quality of life indicator.¹²

NOMENCLATURE

Female sexual dysfunctions have distinct classifications, definitions, and diagnostic criteria, as described in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*,¹³ the Fourth International Consultation on Sexual Medicine (ICSM),¹⁴ the ISSWSH nomenclature,¹⁵ and the *International Classification of Diseases and Related Health Problems (ICD)*. The *11th Revision of the ICD* contains a new chapter on conditions related to sexual health.¹⁶ The ICSM and the ICD classify these issues as *sexual dysfunctions*, and the ISSWSH uses the term *sexual disorders*, consistent with the DSM schema.¹⁵ In this POC, the term *female sexual dysfunction* is used.

Sexual dysfunctions manifest as chronic sexual symptoms related to sexual pain and the 3 phases of the sexual response cycle: desire, arousal, and orgasm. The FSDs are defined in [Table 1](#).^{14,15,17} Normal variations in sexual function are distinguished from FSDs by their persistence for a minimum of 3 months, occurrence with at least 75% of sexual experiences, and their association with sexually related personal distress.¹⁸ Female sexual dysfunction may be lifelong or acquired after a period of normal functioning and may be situational

TABLE 1. ISSWSH and ICSM FSDs: Nomenclature and Definitions

Hypoactive sexual desire disorder

Manifests as any of the following for a minimum of 6 mo:

- Lack of motivation for sexual activity as manifested by either:
 - Reduced or absent spontaneous desire (sexual thoughts or fantasies)
 - Reduced or absent responsive desire to erotic cues and stimulation or inability to maintain desire or interest through sexual activity
- Loss of desire to initiate or participate in sexual activity, including behavioral responses such as avoidance of situations that could lead to sexual activity, that is not secondary to sexual pain disorders

AND is combined with clinically significant personal distress that includes frustration, grief, incompetence, loss, sadness, sorrow, or worry.

Female sexual arousal disorder

Female cognitive arousal disorder

- Characterized by the distressing difficulty or inability to attain or maintain adequate mental excitement associated with sexual activity as manifested by problems with feeling engaged or mentally turned on or sexually aroused, for a minimum of 6 mo.

Female genital arousal disorder

- Characterized by the distressing difficulty or inability to attain or maintain adequate genital response, including vulvovaginal lubrication, engorgement of the genitalia, and sensitivity of the genitalia associated with sexual activity, for a minimum of 6 mo.
- Disorders related to:
 - Vascular injury or dysfunction and/or
 - Neurologic injury or dysfunction

Persistent genital arousal disorder

- Characterized by the persistent or recurrent, unwanted or intrusive, distressing feelings of genital arousal or being on the verge of orgasm (genital dysesthesia), not associated with concomitant sexual interest, thoughts, or fantasies for a minimum of 6 mo.

May be associated with:

- Limited resolution, no resolution, or aggravation of symptoms by sexual activity with or without aversive or compromised orgasm
- Aggravation of genital symptoms by certain circumstances
- Despair, emotional lability, catastrophization, or suicidality
- Inconsistent evidence of genital arousal during symptoms

Female orgasm disorders

- Characterized by the persistent or recurrent, distressing compromise of orgasm frequency, intensity, timing, or pleasure associated with sexual activity for a minimum of 6 mo:
 - *Frequency*: orgasm occurs with reduced frequency (diminished frequency of orgasm) or is absent (anorgasmia).
 - *Intensity*: orgasm occurs with reduced intensity (muted orgasm).
 - *Timing*: orgasm occurs either too late (delayed orgasm) or too early (spontaneous or premature orgasm) than desired by the woman.
 - *Pleasure*: orgasm occurs with absent or reduced pleasure (anhedonic orgasm, pleasure dissociative orgasm disorder).

Female orgasmic illness syndrome

- Characterized by the peripheral or central aversive symptoms that occur before, during, or after orgasm not related, per se, to a compromise of orgasm quality.

Genitopelvic pain penetration dysfunction

Persistent or recurrent difficulties with ≥ 1 of the following:

- Vaginal penetration during intercourse
- Marked vulvovaginal or pelvic pain during genital contact
- Marked fear or anxiety about vulvovaginal or pelvic pain in anticipation of, during, or as a result of genital contact
- Marked hypertonicity or overactivity of pelvic floor muscles with or without genital contact

FSD = female sexual dysfunction; ICSM = International Consultation on Sexual Medicine; ISSWSH = International Society for the Study of Women's Sexual Health. Modified from McCabe et al.¹⁴ and Parish et al.^{15,17}

(present only in certain situations) or generalized (present in all situations); and related distress is characterized as mild, moderate, or severe. Women may experience problems in multiple aspects of their sexual response, thus FSDs may be concurrent. The etiology of FSD is often multifactorial and includes biological,

psychological, interpersonal, and sociocultural risk factors and contributors¹⁵; ICD-11 terms these as *etiological qualifiers*.¹⁶

The female sexual response cycle occurs in 2 distinguishable patterns. In the traditional linear model, “spontaneous” desire for sex motivates initiation of sexual activity, which then leads to arousal and orgasm. In the alternative, circular model, sexual activity may be initiated by motives other than desire for sex, for example, a desire for intimacy; “responsive” sexual desire occurs only after the arousal produced by the stimulation of sexual activity.¹⁹ Assessment of sexual desire in women should evaluate the presence or absence of both spontaneous and responsive desire.

Female sexual desire and arousal disorders were separated into 2 distinct categories in earlier iterations of the *DSM*. The rationale for merging these categories in the *DSM-5* included the co-occurrence of desire and arousal problems; the challenge of distinguishing between spontaneous desire and responsive desire and distinguishing sexual desire from other motivations for sexual activity; and the relatively low reporting of sexual fantasy in women.²⁰⁻²² However, based on substantial observational, clinical sample, registry, and treatment outcome data, experts have recommended maintaining separate categories of hypoactive sexual desire disorder (HSDD) and female sexual arousal disorder.^{14,15}

In the *DSM-5*, dyspareunia and vaginismus were also merged into a single category: genitopelvic pain penetration disorder. The ICSM version of genitopelvic pain penetration dysfunction is defined in [Table 1](#). Sexual pain can occur with initial penetration or deep thrusting or with noncoital sexual activities. Women may also have persistent vulvar pain or pain at the vulvar vestibule with provocation, known as provoked vestibulodynia.²³

Whereas desire, arousal, and orgasm difficulties and sexual pain concerns are more commonly seen in clinical practice, persistent genital arousal disorder, pleasure dissociative orgasm disorder, and female orgasmic illness syndrome are rare but very distressing

conditions, with emerging data describing their characteristics and impact ([Table 1](#)).¹⁵

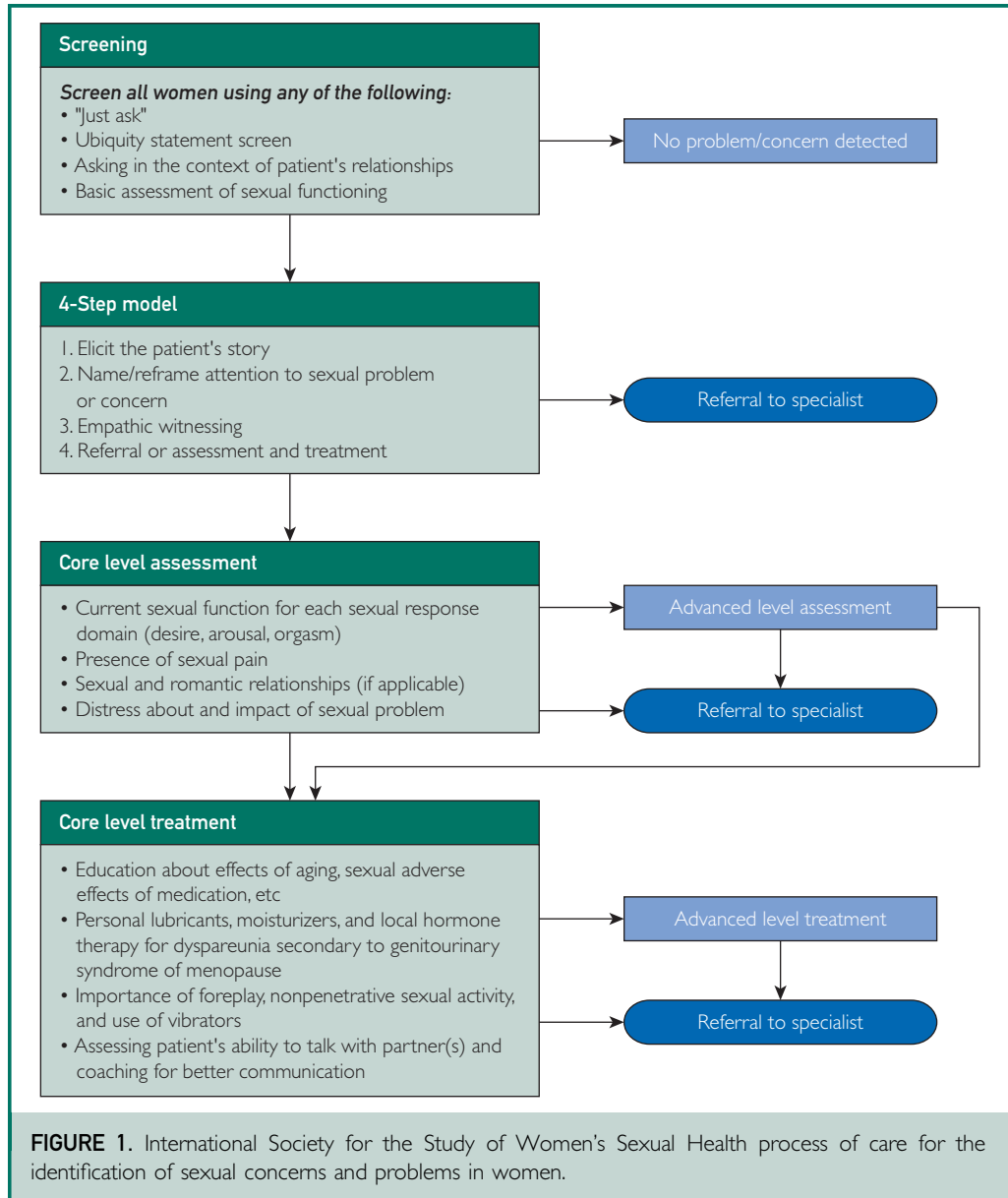
Sexual distress is a crucial element in the definition and for the diagnosis of an FSD. Distress is described as bother, concern, unhappiness, frustration, anger, or hopelessness. It can manifest as distressing behavior such as reduced or absent initiation of sexual activity, avoidance of sexual situations, or participation in sexual activity without desire for it. Personal distress can be related to the woman’s own sexual problem or to the potential effect on her partner and their relationship.^{24,25}

EPIDEMIOLOGY

A broad range of sexual health concerns is common among women of all ages.²⁶⁻²⁸ When personal distress is included in the definition, FSD is less prevalent than the overall rates of sexual problems. Sexual problems in women are more prevalent with increasing age, but sexual distress decreases with age, making the prevalence of FSD approximately stable throughout the life span of women.

The Prevalence of Female Sexual Problems Associated With Distress and Determinants of Treatment Seeking (PRESIDE) study²⁹ involving 31,581 US women aged 18 to 102 years found that, overall, 44% reported any sexual problem (desire, arousal, orgasm). Low desire was the most common problem reported by 39% of women, low arousal by 26%, and orgasm problems by 21%. When distress was combined with a sexual problem, 12% experienced any distressing sexual problem (10% low desire, 5.5% low arousal, 4.7% orgasm problems).²⁹ A distressing sexual problem was more common in women aged 45 to 64 years (14.8%) than in younger (10.8%) or older (8.9%) women. Similar patterns have been shown in other larger-scale studies.^{30,31}

In the PRESIDE study, of the more than 1000 women (approximately one-third) who sought formal help for sexual problems, nearly 90% sought help from their gynecologist or primary care physician.³² More than half of the women who sought help did so



during a routine examination, but only 7% initiated the conversation about sexual health in that visit.

Women's sexual function is influenced by many biopsychosocial factors. The best known risk factors are depression, poor self-assessed health, anxiety, low educational level, partner sexual problems, sexual abuse, marital difficulties, stress, antidepressant drug use, poor health, cancer, urinary incontinence, and chronic diseases such as diabetes, neurologic diseases, and pain.³³⁻³⁵

CORE AND ADVANCED LEVELS OF ENGAGEMENT

This POC defines the role of clinicians in addressing FSDs for both core and advanced levels of engagement. Core level skills are proposed as both necessary and sufficient for effective basic management of women with FSD and are designed with the recognition that some patients whose sexual problems are identified will be referred to sexual health experts. Advanced level skills describe professional competencies for clinicians with greater interest in women's

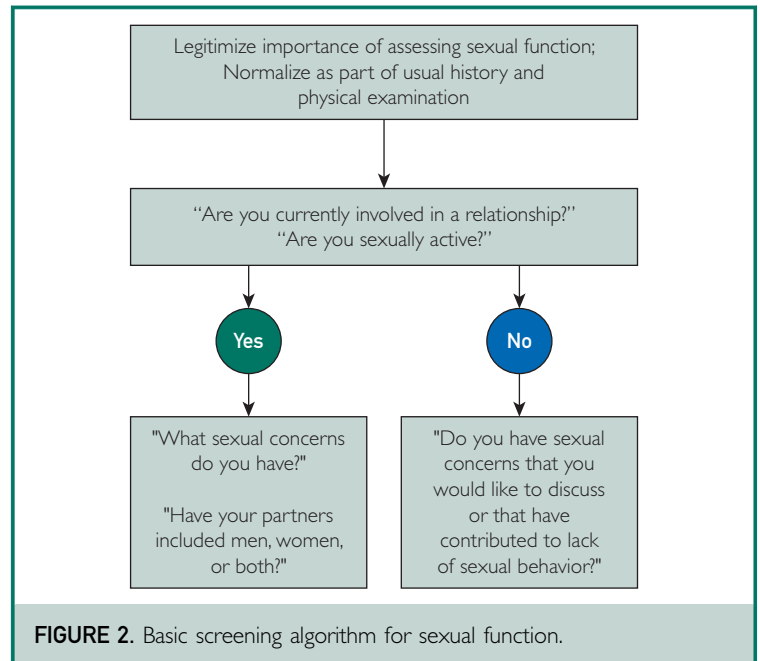
sexual health and sexual medicine specialists (Figure 1).

Core Level

Screening and Detection: Just Ask. The framework for addressing women's sexual health begins with a mandate to screen for and detect sexual problems and concerns, followed by application of the 4-step model of care discussed later herein, when a sexual problem or concern is detected. The essential precondition for addressing FSD is to detect it. The most fundamental recommendation of this document is simply to ask about sexual satisfaction, concerns, or problems.

The Ubiquity Statement Screen for Sexual Problems and Concerns. This screening assessment is an effective strategy for addressing sexual concerns and problems and can be used to address any awkward, socially undesirable, or stigmatizing topic.³ It begins with a universalizing and normalizing ubiquity statement that reassures the patient that sexual concerns are common, normal, and even expected.²⁷ For example, "Many women who have reached menopause, like you, have concerns about sexual activity." This normalizing, universalizing statement is followed by a closed-ended question, "Do you?" that acts as a screen. A positive response is then followed by an open-ended invitation, "Please, tell me about it," to initiate the patient's narrative. Preceding the normalizing statement with a declaration that assessing sexual functioning is an important part of your usual history and physical examination with all your patients can help put patients at ease.

Asking in the Context of Discussing the Patient's Relationships. Another strategy is to inquire about sexual functioning in the context of a more general discussion about the patient's intimate relationships. A broad open-ended question, such as "How are things going with your partner/spouse?" may elicit a comment about sexual concerns, and this can easily be followed by, "and how are you and your partner doing in terms of your sexual relationship?"



Basic Assessment of Sexual Functioning.

To encourage all practitioners to address sexual function in their patients, it is important to emphasize that even the most basic assessment can be useful and limited to a small number of specific questions with minimal time involvement. Three questions (Figure 2) can suffice for a basic assessment.³⁶ It is essential to inquire about the gender of partners. It is important not to make assumptions about sexual orientation and behavior, as not all patients identify as heterosexual or engage exclusively in heterosexual sexual behaviors even if they label themselves as such.

Four-Step Model

The 4-step model provides a framework for engaging with the patient. The 4 steps that follow screening and detection are as follows: step 1, elicit the patient's story; step 2, name and (re)frame attention to the sexual concern or problem; step 3, empathic witnessing; and step 4, referral or assessment and treatment.

After a problem is detected, step 1 is to elicit the story of the problem so that it can become the focus of attention (step 2). Empathic witnessing, step 3, reinforces the

importance of the problem and validates the patient's efforts to address it. The first 3 steps serve as the foundation for recommending treatment or referral (step 4), which will often be the outcome of core level engagement.

Step 1. Elicit the Story. The first step is to elicit a narrative description of the problem and its affect on the patient's life, emotional state, and relationships. The goal is to help the patient discover and describe her distress, her functional impairment, and the effect the problem is having on her life.

Patient-Centered Communication: Open-Ended Questions. The core principles of patient-centered interviewing are to enable the patient to express what is important to her, to recognize her concerns and emotions, and to allow the interviewer to synthesize the biopsychosocial depiction of the patient's problem.³⁷ Although patients prefer that the clinician bring up the topic, this interviewing style allows the patient to lead parts of the conversation so that her concerns and expectations can be heard.³⁷ The most fundamental element of patient-centered communication is the use of open-ended questions to elicit the patient's story.³⁸

Open-Ended Questions in Ask-Tell-Ask Sequences. As clinicians elicit the patient's story, they also provide new information. Because clarity regarding the patient's understanding is essential to giving information, it is critical to *ask the patient before telling the patient* something new. With the *first ask* of an ask-tell-ask sequence the clinician will learn what the patient knows that is correct, mistaken, and the most useful information the patient can understand. The *tell* is then purposefully constructed to validate the patient's correct understanding, correct her mistaken beliefs, and add the next piece of information they are ready to hear.

After new information is provided, a *second ask* should be used to learn whether the information had the intended effect and to iteratively continue the ask-tell-ask dialogue. Asking before telling helps the clinician stay on the

thread of the patient's narrative and avoid providing information that will be confusing or to which the patient cannot respond.

Bringing the "Pain" Into the Room. The essential goal of a discussion about a sexual problem is to elicit the patient's story and bring the patient's emotional distress and impact of the dysfunction on the patient's life into the narrative (bringing the "pain" into the room). Normalizing emotional distress and then asking about it, essentially a reapplication of the ubiquity statement process focused on emotional distress, is an effective strategy for accomplishing this.

In summary, the purpose of step 1 is for the clinician to expose the problem and elicit the magnitude of distress sufficient to justify declaring the problem worthy of clinical attention.

Step 2. Name and (Re)Frame Attention to the Sexual Problem or Concern. Step 2 consists of naming and framing the problem. It does not require a precise or refined diagnosis at this point in the process. The essential task is to name and validate the importance of the sexual problem or concern in whatever form the patient and clinician understand it. The clinician can move on with additional assessment and more specific diagnosis, according to their level of engagement, as described in step 4.

Patients may present with a concern that initially seems to be "the problem" but that turns out to be due to or accompanied by another equally or more important problem that they did not initially mention or that became apparent through the process of eliciting the story. This is often the case with sexual problems or concerns. In these circumstances the naming becomes a reframing, which is accomplished with the following generic statement: "It seems to me that in addition to your <initial complaint>, what you've just told me about your <sexual concern or problem> is just as painful, important, and worthy of attention."

Step 3. Empathic Witnessing. A patient-centered interview intrinsically witnesses

the patient's story, and just listening is an empathic act. Empathic witnessing by a clinician is powerful and healing, and this effect is amplified when the clinician reflects her or his understanding of the patient's life and efforts in words. The strategy is to commend the patient on her efforts to address and cope with the issues and challenges she has revealed in her story. Empathic witnessing statements may take the following form: I am impressed with how committed you are to addressing <the sexual problem and its effects on your relationship/life> despite how difficult that is. You are <really beginning to take steps/determined> to try and solve <this problem>. Step 3, empathic witnessing, is really the beginning of treatment for many women, as the reflection and understanding it creates begin to solve the problem.

Step 4. Referral or Assessment and Treatment. Step 4 offers 2 pathways that can be used singly or in combination. At this point, the clinician may choose to either refer to another clinician or specialist or continue with further assessment and treatment. As busy clinicians know, effective management of any clinical problem takes time. Sexual problems are not unique in this respect, but they do deserve time proportional to the effect that they have on the quality of patients' lives. A clinician should deal with the time required for addressing a sexual problem in the usual fashion by choosing to manage it at that appointment or to validate and schedule a follow-up visit. Whether the clinician manages the sexual problem herself or himself or elects to refer, the skills that follow will help with the execution of efficient history taking and construction of a therapeutic plan. The options in step 4 allow clinicians practicing at different levels of engagement to adjust the intervention to their skills, comfort, and resources.

The Challenges of Referring for Sexual Problems. Referral for treatment of sexual problems can be more challenging than referral for less emotionally laden and potentially embarrassing subjects.³⁹ It is

important to make the referral in a way that does not feel like a rejection, a dismissal, or an indication that the clinician has been embarrassed or discomforted. For example, "I consider sexual health to be important to your overall health and quality of life and want you to get the best possible treatment. I have a colleague who specializes in treating women's sexual problems, and I would like to refer you to her/him so that she/he can help us improve your sexual health."

The idea that the problem may need special expertise is consistent with its being important and worthy of attention and explains the need for expertise that goes beyond that of the clinician. Patients are accepting of referral for treatments that may require more in-depth care than is available in a general or subspecialty medicine setting. For example, pointing out that a therapist may need to meet with the patient for a longer session and more frequently than the clinician can accommodate makes 1 reason for a referral clear.

Core Level Assessment of Sexual Function Setting the Stage for the Sexual History. Establishing rapport and putting the patient at ease are critical first steps and help improve overall patient satisfaction. The clinician sets the tone for the conversation. If the clinician demonstrates comfort and ease with sexual terminology and content, patients are more likely to feel comfortable reporting their sexual concerns. Clinicians may benefit from practicing the use of explicit sexual terminology (eg, clitoris, penis) to desensitize themselves to any embarrassment or hesitation. Blushing or stammering and avoiding eye contact sends a negative message. Body language is important for putting a patient at ease when discussing sexuality. Sitting is preferred to standing and gives the impression that more time has been spent with a patient, but standing sends the message that the clinician is wrapping up a visit and does not really want to address any other issues even if a question is posed.

The best time to obtain a sexual history or initiate a discussion of sexual concerns

will vary depending on the nature of the visit. This might be in the context of discussing the patient's relationships, or with a ubiquity statement, triggered by a relevant medical or physiologic issue, such as menopause, or during a review of systems. The discussion should take place in a private setting, and confidentiality must be ensured. If possible, the patient should be clothed to eliminate the embarrassment and vulnerability often experienced when sitting in an examination gown.

Anticipating whether a referral is likely can help determine the agenda for the initial discussion. It is important to attend to patient discomfort and either defer sensitive questions for a later time or supply alternative responses for patients if they seem too embarrassed to provide explicit sexual details.¹

Scales and Questionnaires. Self-administered questionnaires can be valuable when addressing a sensitive topic. A waiting room questionnaire can allow for quick and easy initial screening of sexual function, and patients learn early in the office visit that sexual health is of importance to the clinician and appropriate to discuss. Recommended screeners include the Decreased Sexual Desire Screener,⁴⁰ the Brief Profile of Female Sexual Dysfunction,⁴¹ and the brief screener suggested by Hatzichristou et al.⁴² The Female Sexual Function Index is a well-validated self-report instrument that assesses 6 domains and has an established cutoff score of 26.55 for FSD.⁴³

Sexual History: Domains and Questions. A focused sexual history is likely sufficient to identify sexual dysfunction and initially should assess current sexual function for each sexual response domain (desire, arousal, orgasm), presence of sexual pain, sexual/romantic relationship (if applicable), and distress about and impact of the sexual problem.

At the core level, a clinician should be able to identify the most common sexual problems that cause distress, including low sexual desire, difficulty with sexual arousal, difficulty with orgasm, sexual pain/

genitopelvic pain penetration dysfunction, and relationship problems.

A more specific sexual dysfunction diagnosis (Table 1) requires a thorough biopsychosocial sexual assessment and may require referral to a sexual medicine specialist.

Core Level Treatment

The clinician may initiate many interventions before referral. Empathic delineation of a problem may be therapeutic and help the woman to start solving the problem. Providing education may entail explaining the sexual adverse effects of a medication, the changes in sexual function related to menopause or aging, and the importance of foreplay/nonpenetrative sexual activities. Clinicians at the core level may recommend personal lubricants and moisturizers and may feel competent prescribing local hormone therapy (vaginal estrogen or prasterone)^{44,45} for dyspareunia secondary to genitourinary syndrome of menopause (GSM) or recommending vibrators to assist with arousal and orgasm. Assessing the patient's ability to talk to their partner(s) about sexual function and experiences and coaching about better communication are important and effective interventions. However, many sexual health concerns have a biopsychosocial etiology and may require a multidisciplinary treatment team.⁴⁶ Sexual health concerns that are predominantly due to psychological, interpersonal, or sociocultural factors are best treated by a mental health provider. Sexual pain disorders likely need a sexual medicine specialist in conjunction with a pelvic floor physical therapist.³⁴

Addressing Medical Issues Affecting Sexual Functioning

Any medical problem or treatment that affects physical functioning and well-being can have a profound effect on sexual function, and clinicians can play an important role in recognizing and treating those effects (Table 2).^{33,35,47}

Oral Contraceptives. Oral contraceptives have the potential to both improve and reduce sexual satisfaction.⁴⁸ When women using combined hormonal contraceptives

have low desire, pain, or decreased arousal or orgasm, switching to a different contraceptive method may be helpful.⁴⁹

Depression and Antidepressant Medication. Many women with depression are treated with selective serotonin reuptake inhibitors or serotonin and norepinephrine reuptake inhibitors. Both the primary disease and its pharmacologic therapy can have a significant effect on libido and sexual response. For treatment-emergent sexual dysfunction, strategies include dose reduction, drug discontinuation or switching, and augmentation or use of medication with a lower rate of adverse effects. Adding or switching to bupropion may help with this problem.⁵⁰ Behavioral interventions such as exercise before sex, scheduling sexual activity, or vibratory stimulation may also be useful.⁵⁰

Other Medications. Other medications, including tamoxifen, aromatase inhibitors, gonadotropin-releasing hormone agonists, antihypertensives, and antihistamines, may adversely affect sexual function. Clinicians should review the role of medication and consider modifying drug regimens when treating sexual dysfunction.³³

Genitourinary Syndrome of Menopause. Genitourinary syndrome of menopause affects at least 50% of postmenopausal women. Many women experience dyspareunia and may not realize that decreased libido or orgasmic difficulties may be secondary to their vulvovaginal atrophy.⁵¹ Treating GSM can alleviate this problem.⁵²

Partner Sexual Problems. Women's sexual health may be adversely affected by their partners' sexual dysfunction (eg, erectile dysfunction, premature ejaculation, HSDD). Assessment of the partners' physical health and sexual function is part of a more detailed assessment of patients' sexual health.⁵³

The Role of Physical Examination and Laboratory Tests

Assessment of vaginal and vulvar pain should include a focused history and

TABLE 2. Contributing Factors to Sexual Dysfunction^{33,35,47}

Medical conditions
Cardiovascular disease
Diabetes
Thyroid disease
Chronic pain
Urinary incontinence
Spinal cord injury
Multiple sclerosis
Neuromuscular disorders
Prolactinoma
Malignancy/treatment: mastectomy, gynecologic/colorectal surgery, pelvic radiation
Gynecologic disorders: pelvic organ prolapse, endometriosis, fibroids, vulvar dermatoses, vulvodynia/vestibulodynia
Psychiatric disorders
Medications
Anticonvulsants: carbamazepine, phenytoin, primidone
Cardiovascular medications: amiodarone, β -blockers, calcium channel blockers, clonidine, digoxin, hydrochlorothiazide, statins, methyl dopa
Hormonal agents: antiandrogens (flutamide, spironolactone), gonadotropin-releasing hormone agonists, combined hormonal contraceptives, tamoxifen, aromatase inhibitors
Pain medication: nonsteroidal anti-inflammatory drugs, opioids
Psychotropic medications: antipsychotics, benzodiazepines, lithium, selective serotonin reuptake inhibitors, serotonin and norepinephrine reuptake inhibitors, tricyclic antidepressants

examination to identify potential causes or contributing factors, including infectious, inflammatory, neoplastic, neurologic, traumatic, iatrogenic, and hormonal factors. A pelvic examination including a vulvovaginal examination is important for women with pelvic pain. It may help locate the source of the pain, including vulvar skin conditions and GSM in postmenopausal women. Referral to a specialist (gynecology, sexual medicine, dermatology) is usually indicated when the examination does not clearly establish the source of sexual pain.⁵⁴

Laboratory testing (eg, vaginal pH) may be helpful but is usually not necessary. Testing for sexually transmitted infections and other vaginal pathogens may be useful in assessing sexual pain. Other laboratory tests, such as thyroid function and prolactin levels, may be indicated based on the patient's symptoms or findings on physical examination.⁵⁵

Advanced Level Skills

Clinicians interested in more intensive engagement in the assessment and treatment

of women's sexual concerns and problems can incorporate more advanced skills in taking a sexual history, diagnosing FSD, and initiating treatment.

Sexual History. If the patient reports a sexual concern, it is important to inquire whether the problem is lifelong or acquired and to explore whether it is generalized or situational (eg, present during partnered sexual activity but not with self-stimulation). Answers to these questions can help the clinician better determine whether the patient's sexual concerns are primarily biologically or psychologically based.

Sensitivity to and skill in discussing religious background, cultural and environmental factors, and attitudes toward and style of communication about sexuality in the patient's family of origin can all contribute to a more effective sexual history.

Assessing Sexual Function Using the Sexual Response Cycle. Clinicians engaged at the advanced skill level should perform a more thorough assessment of the patient's sexual functioning:

Desire—Questions should focus on frequency of interest in engaging in any type of sexual activity (eg, self-stimulation, oral sex) and how the level of desire may be affecting her relationships.⁵⁶ Women may report not having spontaneous desire (ie, interest/fantasies that are not in response to external sexual stimuli) but may report having responsive desire (ie, interest/willingness to engage when approached for sexual activity or being sexually stimulated).³⁴

Arousal—Clinicians should assess sexual arousal by asking about difficulties with lubrication and diminished genital engorgement and sensation. They should also ask whether there is sufficient sexual stimulation and about the relationship between arousal and sexual practices, partner(s), and situations.

Orgasm—Clinicians should learn about the patient's frequency of orgasm, ease and methods of achieving orgasm, and intensity of and satisfaction with orgasm. It is important to explore whether the woman has

desire and arousal and whether there is sufficient sexual stimulation.

Pain—In addition to learning whether the patient is experiencing any genitopelvic pain, clinicians should inquire about whether the pain is constant (unprovoked) or only during penetrative activities or genital contact (provoked), whether it is superficial or deep, the relationship between the occurrence of pain and arousal, and context.

Diagnosis of FSD. Regarding low sexual desire, distinctions should be made between the presence (or absence) of responsive vs spontaneous desire; and assessments of dysfunction should be framed with an understanding that responsive desire may be normal and satisfying. Clinicians should also determine whether low sexual desire is due to a medical, psychological, sociocultural, or relational problem. The relationship(s) between dysfunctions related to desire, arousal, and orgasm and pain (if present) should be established.

Advanced level clinicians should also be aware of important but less common FSDs, such as persistent genital arousal disorder, pleasure dissociative orgasm disorder, and female orgasmic illness syndrome (Table 1).

Comorbid Behavioral Health and Psychiatric Problems

When serious psychosocial problems are encountered, the advanced level clinician should apply the 4-step model of care to identify, reframe, empathically witness, and then refer patients to sex therapists or other mental health professionals. Past or current sexual abuse, body image concerns, psychiatric conditions, trauma, and conflict in relationship(s) are commonly encountered in patients with sexual problems. Patients should be screened for commonly occurring mental health issues, including depression, anxiety, and substance abuse disorders. The presence of unresolved sexual trauma; lifelong sexual problems; or ongoing intrapersonal, interpersonal, and sociocultural problems should also prompt referral to a sexual or mental health specialist.⁵⁷

TABLE 3. Treatments for Female Sexual Dysfunctions^{34,36,52,55}

Medication category	Product name	Formulation	Indication
Pharmacologic treatments			
Local vaginal estrogens	Estradiol or CEE cream (Estrace, Premarin)	Cream	Genitourinary syndrome of menopause
	Estradiol vaginal tablet (Vagifem, Yuvaferm)	Vaginal tablet	
	Estradiol vaginal gel cap (Imvexxy)	Vaginal gel cap	
	Estradiol vaginal ring (Estring)	Vaginal ring	
	Ospemiphene (Osphena)	Oral tablet	
Selective estrogen receptor modulator	Ospemiphene (Osphena)	Oral tablet	Genitourinary syndrome of menopause
DHEA	Prasterone (Intrarosa)	Vaginal suppository	Genitourinary syndrome of menopause
Testosterone (Not FDA approved in women, approved in countries outside the United States)	Testosterone	Transdermal cream or gel	Hypoactive sexual desire disorder
Serotonin agonist/antagonist	Flibanserin (Addyi)	Oral tablet	Hypoactive sexual desire disorder
Nonpharmacologic treatments			
Lubricants	Multiple products	Water-based Silicone-based Hybrid (water- and silicone-based) Oil-based	Used as needed for to reduce friction and enhance comfort with sexual activity
Moisturizers	Multiple products	NA	Used regularly for maintenance of vulvar/vaginal moisture
Sex therapy	NA	NA	Helpful for all FSD diagnoses
Pelvic floor physical therapy	NA	NA	For treatment of pelvic floor dysfunction
Mechanical devices	Vibrators Clitoral vacuum device (Eros)	NA	Used to enhance vulvar, clitoral, and vaginal stimulation
Vaginal lasers (FDA cleared, but no specific indication for genitourinary syndrome of menopause)	Carbon dioxide fractional lasers Erbium YAG lasers	NA	Genitourinary syndrome of menopause

CEE = conjugated equine estrogen; FDA = Food and Drug Administration; FSD = female sexual dysfunction; NA = not applicable; YAG = yttrium-aluminum-garnet.

Advanced Level Treatment

In-depth discussion of advanced level treatment is beyond the scope of this POC. More complex treatments that are within the scope of practice of the well-trained clinician are listed in Table 3. Advanced level pharmacotherapy includes the use of ospemifene in addition to the use of vaginal hormone therapy for GSM,⁵⁸ flibanserin for generalized acquired HSDD in premenopausal women,^{59,60} and off-label use of flibanserin⁶¹ or transdermal testosterone in postmenopausal women with HSDD.⁶² Nonpharmacologic treatments

may include devices such as the clitoral vacuum device or laser^{63,64} and the integration of sex therapy or pelvic floor physical therapy.

Establishing a robust referral network is helpful; possible referrals may include a variety of specialties, such as gynecology or urogynecology with a special interest in sexual health, sexual medicine, sex therapy, and pelvic floor physical therapy. Professional organizations are valuable resources for information and networks of providers (Supplemental Appendix, available online at <http://www.mayoclinicproceedings.org>).

CONCLUSION

This ISSWSH POC provides a paradigm for the clinician to identify sexual problems in women and provide basic management strategies, taking into account the biological, psychological, sociocultural, and relationship factors that may be playing a role. The goal of identification is to provide education, management, and referral when appropriate for women with sexual concerns or problems.

ACKNOWLEDGMENT

We thank Tessa Benitez, general manager, and Julia Mensing, meeting and event coordinator, of ISSWSH.

SUPPLEMENTAL ONLINE MATERIAL

Supplemental material can be found online at <http://www.mayoclinicproceedings.org>. Supplemental material attached to journal articles has not been edited, and the authors take responsibility for the accuracy of all data.

Abbreviations and Acronyms: CEE = conjugated equine estrogen; **DSM** = *Diagnostic and Statistical Manual of Mental Disorders*; **FDA** = Food and Drug Administration; **FSD** = female sexual dysfunction; **GSM** = genitourinary syndrome of menopause; **HSDD** = hypoactive sexual desire disorder; **ICD** = *International Classification of Diseases and Related Health Problems*; **ICSM** = International Consultation on Sexual Medicine; **ISSWSH** = International Society for the Study of Women's Sexual Health; **POC** = process of care; **YAG** = yttrium-aluminum-garnet

Affiliations (Continued from the first page of this article.): Medical College, New York, NY (S.J.P.); Department of OB/GYN, Albert Einstein College of Medicine, Bronx, NY (S.R.H.); San Diego Sexual Medicine, San Diego, CA (S.W.G., R.H.-C.); Department of Clinical Medicine and Department of Family and Community Medicine, Sexological Clinic, Psychiatric Center Copenhagen, University of Copenhagen, Denmark (A.G.); Department of OB/GYN, University Hospitals Cleveland Medical Center, Case Western Reserve University School of Medicine, OH (S.A.K.); Lisa Larkin MD and Associates, Cincinnati, OH (L.L.); Department of Obstetrics, Gynecology and Reproductive Sciences, Yale University School of Medicine, New Haven, CT (M.J.M.); University of Toronto, ON, Canada (V.B.); Park Nicollet Sexual Medicine and Male Infertility, St. Louis Park, MN (K.C.); Novant Health Mintview Ob/Gyn, Charlotte, NC (A.K.-J.); Department of Psychology and Division of General Internal Medicine, Mayo Clinic, Rochester, MN (J.R.); Department of Family Medicine, SUNY-Downstate Medical Center, Brooklyn, NY (R.S.); and Center for Women's Health and Division of General Internal Medicine, Mayo Clinic, Rochester, MN (S.S.F.).

Grant Support: Funding for this project was provided by the International Society for the Study of Women's Sexual Health from unrestricted educational grants from Valeant Pharmaceuticals International, Inc. and AMAG Pharmaceuticals.

Potential Competing Interests: Dr Parish serves on the scientific advisory boards of Allergan, AMAG Pharmaceuticals, and Duchesnay Pharmaceuticals; is a speaker for AMAG Pharmaceuticals; and is a consultant for Strategic Science & Technologies, TherapeuticsMD, and Proctor & Gamble. Dr Hahn has received grant support from Valeant. Ms Goldstein serves on the scientific advisory boards of Duchesnay and Ipsen and is a consultant for Strategic Science & Technologies. Dr Giraldi serves on the scientific advisory board of Palatin Technologies and Pfizer; is a speaker for Pfizer and Eli Lilly; and is a consultant for Eli Lilly. Dr Kingsberg is a speaker for TherapeuticsMD; is a consultant for AMAG Pharmaceuticals, Sprout, Emotional Brain, Valeant, Endoceutics, Palatin Technologies, Pfizer, Duchesnay, Matema, Lupin, GTx, IVIX, TherapeuticsMD, Dare, Strategic Science & Technologies; receives grant support from Endoceutics and Palatin Technologies; and has stock options in Viveve. Dr Larkin serves on the scientific advisory boards of TherapeuticsMD, AMAG Pharmaceuticals, and Proctor & Gamble; is a speaker for AMAG Pharmaceuticals, TherapeuticsMD, and Amgen; and is a consultant for Proctor & Gamble, AMAG, and TherapeuticsMD. Dr Minkin serves on the advisory board/consultant for AMAG Pharmaceuticals, Duchesnay, and Pfizer and is a speaker for AMAG Pharmaceuticals and Duchesnay. Dr Brown is a speaker for Pfizer. Dr Kelly-Jones is a speaker for AMAG Pharmaceuticals, Duchesnay USA, and Valeant. Dr Faubion is a consultant for AMAG Pharmaceuticals, Procter & Gamble, and Mithra Pharmaceuticals. The other authors report no competing interests.

Correspondence: Address to Sharon J. Parish, MD, New York Presbyterian Hospital/Westchester Division, 21 Bloomingdale Rd, White Plains, NY 10605 (shp9079@med.cornell.edu).

REFERENCES

1. Kingsberg SA. Taking a sexual history. *Obstet Gynecol Clin North Am.* 2006;33(4):535-547.
2. Institute of Medicine, Committee on the Future of Primary Care. *Primary Care: America's Health in a New Era.* Washington, DC: National Academies Press; 1996.
3. Sadovsky R, Nusbaum M. Sexual health inquiry and support is a primary care priority. *J Sex Med.* 2006;3(1):3-11.
4. Berman L, Berman J, Felder S, et al. Seeking help for sexual function complaints: what gynecologists need to know about the female patient's experience. *Fertil Steril.* 2003;79(3):572-576.
5. Schein M, Zyzanski SJ, Levine S, Medalie JH, Dickman RL, Alemagno SA. The frequency of sexual problems among family practice patients. *Fam Pract Res J.* 1988;7(3):122-134.
6. Dunn KM, Croft PR, Hackett GI. Sexual problems: a study of the prevalence and need for health care in the general population. *Fam Pract.* 1998;15(6):519-524.
7. Ende J, Kazis L, Ash A, Moskowitz MA. Measuring patients' desire for autonomy: decision making and information-seeking preferences among medical patients. *J Gen Intern Med.* 1989;4(1):23-30.

8. Metz ME, Seifert MH. Women's expectations of physicians in sexual health concerns. *Fam Pract Res J*. 1988;7(3):141-152.
9. Bertakis KD, Roter D, Putnam SM. The relationship of physician medical interview style to patient satisfaction. *J Fam Pract*. 1991; 32(2):175-181.
10. Kikano GE, Callahan EJ, Gotler RS, Stange KC. How emotional distress shapes the patient visit. *Fam Pract Manag*. 2000;7(4):47.
11. Patel D, Gillespie B, Foxman B. Sexual behavior of older women: results of a random-digit-dialing survey of 2,000 women in the United States. *Sex Transm Dis*. 2003;30(3):216-220.
12. Zakhari R. Female sexual dysfunction: a primary care perspective. *J Am Acad Nurse Pract*. 2009;21(9):498-505.
13. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*. Arlington, VA: American Psychiatric Association; 2013.
14. McCabe MP, et al. Definitions of sexual dysfunctions in women and men: a consensus statement from the Fourth International Consultation on Sexual Medicine 2015. *J Sex Med*. 2016;13(2): 135-143.
15. Parish SJ, Goldstein AT, Goldstein SW, et al. Toward a more evidence-based nosology and nomenclature for female sexual dysfunctions: part II. *J Sex Med*. 2016;13(12):1888-1906.
16. Reed GM, Drescher J, Krueger RB, et al. Disorders related to sexuality and gender identity in the ICD-11: revising the ICD-10 classification based on current scientific evidence, best clinical practices, and human rights considerations. *World Psychiatry*. 2016;15(3):205-221.
17. Parish SJ, Meston CM, Althof SE, et al. Toward a more evidence-based nosology and nomenclature for female sexual dysfunctions part III. *J Sex Med*. 2019;16(3):452-462.
18. Simon JA, Lukas VA. Distressing sexual function at midlife: unmet needs, practical diagnoses, and available treatments. *Obstet Gynecol*. 2017;130(4):889-905.
19. Basson R, Leiblum S, Brotto L, et al. Definitions of women's sexual dysfunction reconsidered: advocating expansion and revision. *J Psychosom Obstet Gynaecol*. 2003;24(4):221-229.
20. Brotto LA. The DSM diagnostic criteria for hypoactive sexual desire disorder in women. *Arch Sex Behav*. 2010;39(2):221-239.
21. Faubion SS, Parish SJ. Sexual dysfunction in women: can we talk about it? *Cleve Clin J Med*. 2017;84(5):367-376.
22. Parish SJ, Hahn SR. Hypoactive sexual desire disorder: a review of epidemiology, biopsychology, diagnosis, and treatment. *Sex Med Rev*. 2016;4(2):103-120.
23. Bomstein J, Goldstein AT, Stockdale CK, et al. 2015 ISSVD, ISSWSH and IPPS consensus terminology and classification of persistent vulvar pain and vulvodynia. *Obstet Gynecol*. 2016; 127(4):745-751.
24. Goldstein I, Kim NN, Clayton AH, et al. Hypoactive sexual desire disorder: International Society for the Study of Women's Sexual Health (ISSWSH) expert consensus panel review. *Mayo Clin Proc*. 2017;92(1):114-128.
25. Graziottin A. Prevalence and evaluation of sexual health problems: HSDD in Europe. *J Sex Med*. 2007;4(suppl 3):211-219.
26. Nusbaum MR, Gamble G, Skinner B, Heiman J. The high prevalence of sexual concerns among women seeking routine gynecological care. *J Fam Pract*. 2000;49(3):229-232.
27. Sadovsky R, Alam W, Encicilla M, Cosiquien R, Tipu O, Etheridge-Otey J. Sexual problems among a specific population of minority women aged 40-80 years attending a primary care practice. *J Sex Med*. 2006;3(5):795-803.
28. Laumann EO, Paik A, Rosen RC. Sexual dysfunction in the United States: prevalence and predictors. *JAMA*. 1999;281(6): 537-544.
29. Shifren JL, Monz BU, Russo PA, Segreti A, Johannes CB. Sexual problems and distress in United States women: prevalence and correlates. *Obstet Gynecol*. 2008;112(5):970-978.
30. Hayes RD, Dennerstein L, Bennett CM, Fairley CK. What is the "true" prevalence of female sexual dysfunctions and does the way we assess these conditions have an impact? *J Sex Med*. 2008;5(4):777-787.
31. Oberg K, Fugl-Meyer AR, Fugl-Meyer KS. On categorization and quantification of women's sexual dysfunctions: an epidemiological approach. *Int J Impot Res*. 2004;16(3):261-269.
32. Rosen RC, Shifren JL, Monz BU, Odom DM, Russo PA, Johannes CB. Correlates of sexually related personal distress in women with low sexual desire. *J Sex Med*. 2009;6(6):1549-1560.
33. Buster JE. Managing female sexual dysfunction. *Fertil Steril*. 2013; 100(4):905-915.
34. Faubion SS, Rullo JE. Sexual dysfunction in women: a practical approach. *Am Fam Physician*. 2015;92(4):281-288.
35. Kingsberg SA, Rezaee RL. Hypoactive sexual desire in women. *Menopause*. 2013;20(12):1284-1300.
36. Kingsberg SA, Janata JW. Female sexual disorders: assessment, diagnosis, and treatment. *Urol Clin North Am*. 2007;34(4):497-506. v-vi.
37. Fortin A, Dwamena FC, Frankel RM, Lepisto BL, Smith RC. The medical interview. In: *Smith's Patient Centered Interviewing: An Evidence-Based Method, Fourth Edition*. New York, NY: McGraw Hill Education; 2019:5-7.
38. Hahn SR, Friedman DS, Quigley HA, et al. Effect of patient-centered communication training on discussion and detection of nonadherence in glaucoma. *Ophthalmology*. 2010;117(7): 1339-1347.e6.
39. Harsh V, McGarvey EL, Clayton AH. Physician attitudes regarding hypoactive sexual desire disorder in a primary care clinic: a pilot study. *J Sex Med*. 2008;5(3):640-645.
40. Clayton AH, Goldfischer ER, Goldstein I, Derogatis L, Lewis-D'Agostino DJ, Pyke R. Validation of the decreased sexual desire screener (DSDS): a brief diagnostic instrument for generalized acquired female hypoactive sexual desire disorder (HSDD). *J Sex Med*. 2009;6(3):730-738.
41. Rust J, Derogatis L, Rodenberg C, Koochaki P, Schmitt S, Golombok S. Development and validation of a new screening tool for hypoactive sexual desire disorder: the Brief Profile of Female Sexual Function (B-PFSF). *Gynecol Endocrinol*. 2007; 23(11):638-644.
42. Hatzichristou D, Rosen RC, Broderick G, et al. Clinical evaluation and management strategy for sexual dysfunction in men and women. *J Sex Med*. 2004;1(1):49-57.
43. Rosen R, Brown C, Heiman J, et al. The Female Sexual Function Index (FSFI): a multidimensional self-report instrument for the assessment of female sexual function. *J Sex Marital Ther*. 2000;26(2):191-208.
44. Lethaby A, Ayeleke RO, Roberts H. Local oestrogen for vaginal atrophy in postmenopausal women. *Cochrane Database Syst Rev*. 2016;8:CD001500.
45. Labrie F, Derogatis L, Archer DF, et al. Effect of intravaginal prasterone on sexual dysfunction in postmenopausal women with vulvovaginal atrophy. *J Sex Med*. 2015; 12(12):2401-2412.
46. Rullo J, Faubion SS, Hartzell R, et al. Biopsychosocial management of female sexual dysfunction: a pilot study of patient perceptions from 2 multi-disciplinary clinics. *Sex Med*. 2018;6(3): 217-223.
47. Bitzer J, Giraldi A, Pfau J. Sexual desire and hypoactive sexual desire disorder in women: introduction and overview. Standard operating procedure (SOP Part 1). *J Sex Med*. 2013;10(1): 36-49.
48. Pastor Z, Holla K, Chmel R. The influence of combined oral contraceptives on female sexual desire: a systematic review. *Eur J Contracept Reprod Health Care*. 2013;18(1):27-43.
49. Casey PM, MacLaughlin KL, Faubion SS. Impact of contraception on female sexual function. *J Womens Health (Larchmt)*. 2017;26(3):207-213.
50. Lorenz T, Rullo J, Faubion S. Antidepressant-induced female sexual dysfunction. *Mayo Clin Proc*. 2016;91(9):1280-1286.
51. Parish SJ, Nappi RE, Krychman ML, et al. Impact of vulvovaginal health on postmenopausal women: a review of surveys on symptoms of vulvovaginal atrophy. *Int J Womens Health*. 2013;5:437-447.

52. Management of symptomatic vulvovaginal atrophy: 2013 position statement of The North American Menopause Society. *Menopause*. 2013;20(9):888-902. quiz 903-904.
53. Minkin MJ. Sexual health and relationships after age 60. *Maturitas*. 2016;83:27-32.
54. Dhingra C, Kellogg-Spadt S, McKinney TB, Whitmore KE. Urogynecological causes of pain and the effect of pain on sexual function in women. *Female Pelvic Med Reconstr Surg*. 2012;18(5):259-267.
55. Clayton AH, Goldstein I, Kim NN, et al. The International Society for the Study of Women's Sexual Health process of care for management of hypoactive sexual desire disorder in women. *Mayo Clin Proc*. 2018;93(4):467-487.
56. Althof SE, Rosen RC, Perelman MA, Rubio-Aurioles E. Standard operating procedures for taking a sexual history. *J Sex Med*. 2013;10(1):26-35.
57. Kingsberg SA, Woodard T. Female sexual dysfunction: focus on low desire. *Obstet Gynecol*. 2015;125(2):477-486.
58. Portman D, Palacios S, Nappi RE, Mueck AO. Ospemifene, a non-oestrogen selective oestrogen receptor modulator for the treatment of vaginal dryness associated with postmenopausal vulvar and vaginal atrophy: a randomised, placebo-controlled, phase III trial. *Maturitas*. 2014;78(2):91-98.
59. Katz M, DeRogatis LR, Ackerman R, et al. Efficacy of flibanserin in women with hypoactive sexual desire disorder: results from the BEGONIA trial. *J Sex Med*. 2013;10(7):1807-1815.
60. Thorp J, Simon J, Dattani D, et al. Treatment of hypoactive sexual desire disorder in premenopausal women: efficacy of flibanserin in the DAISY study. *J Sex Med*. 2012;9(3):793-804.
61. Simon JA, Kingsberg SA, Shumel B, Hanes V, Garcia M Jr, Sand M. Efficacy and safety of flibanserin in postmenopausal women with hypoactive sexual desire disorder: results of the SNOWDROP trial. *Menopause*. 2014;21(6):633-640.
62. Davis SR, Moreau M, Kroll R, et al. Testosterone for low libido in postmenopausal women not taking estrogen. *N Engl J Med*. 2008;359(19):2005-2017.
63. Salvatore S, Nappi RE, Parma M, et al. Sexual function after fractional microablative CO(2) laser in women with vulvovaginal atrophy. *Climacteric*. 2015;18(2):219-225.
64. Billups KL, Berman L, Berman J, Metz ME, Glennon ME, Goldstein I. A new non-pharmacological vacuum therapy for female sexual dysfunction. *J Sex Marital Ther*. 2001;27(5):435-441.