

# HANDBOOK ON FEMALE SEXUAL HEALTH AND WELLNESS

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## **FORWARD: “WHY BOTHER?”**

Many patients have concerns regarding sexual health and function and want to talk with you about these concerns. And, they want you to raise the subject first. In a 2009 national survey, over 80% of women polled believed that sexual health was an important part of overall health. Another survey found that the majority of women (72%) wanted to speak with their health care professional about their sexual health, and 73% preferred that the health care professional bring up the topic.

Addressing sexual health issues with our patients has enhanced our practices and improved the well-being of our patients. We have found that many sexual health issues are easy to assess in a quick fashion, and do not adversely impact patient flow. Simple interventions often lead to more successful outcomes.

This handbook offers front-line healthcare professionals the practical and clinical tools needed for the care of women with sexual concerns, including definitions and information about screening, diagnosis, and treatment. We hope the recommendations made in this easy-to-use handbook provide you with the essential skills and resources to effectively begin the discussion about sexuality with your female patients, assess and manage common sexual health and wellness issues, and provide you with guidance on making appropriate referrals.

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## STARTING THE CONVERSATION

Patients want to talk to you about their sexual concerns—and they want you to raise the subject first. So how do you start the conversation?

The PLISSIT model can be a helpful tool for discussing sexual health or concerns with patients. The model provides the following guidance:

- Ask open-ended questions during routine history to give the patient permission to talk about her sexual concerns and reassure her that her feelings are normal and acceptable (see figure)  
*Example:* “Many women with menopause have sexual concerns. Do you?”
- Follow-up questions: “What do you mean by that?” “Tell me more.”
- Provide limited information
  - Education about female pelvic anatomy, the sexual response cycle, or the neurobiologic etiology of sexual problems
  - Discuss changes in sexual function throughout the lifecycle
  - Explain that sexual interest or desire may not be the first stage in response, and women may not experience orgasm 100% of the time
- Address the most important topics that you can in the limited time you have available; do not feel pressured to cover it all in one visit
- Encourage a follow-up appointment to focus solely on sexual health concerns
- Offer specific suggestions and solutions to treat the problem  
*Examples:* Use lubricant, over-the-counter moisturizers, or topical estrogen for dryness/dyspareunia; plan date nights and make sexual behavior a priority; improve diet, exercise, and sleep patterns to help overall mood

Beyond providing basic information and suggestions, many primary care providers will want to refer a patient, possibly for intensive therapy, to qualified sexuality specialists (see box).

When conducting an interview, the PEARLS model can provide a useful structure to elicit empathy and open communication:

- **Partnership:** acknowledges that the health care professional and the patient are in this together
- **Empathy:** expresses understanding to the patient
- **Apology:** acknowledge that the health care professional is sorry the patient had to wait, that a laboratory test had to be repeated, etc.
- **Respect/Reflect/Reinforce:** acknowledge the patient’s suffering, difficulties, etc.
- **Legitimize:** acknowledge that many patients are angry, frustrated, depressed, etc.
- **Support:** acknowledge that the health care professional will not abandon the patient

The following basic clinical competencies can help any women’s health care practice integrate conversations about sexual concerns into routine patient visits:

- Initiate a frank concise conversation about sexual health in an appropriate health care environment
- Complete an appropriate sexual health history, appropriate to the concern
- Bring closure to a current appointment and segue to a subsequent appointment if needed
- When appropriate, recommend and refer to a qualified specialist best suited to address the patient’s sexual concern (see page 13)

### PLISSIT MODEL

**P**ermission

**L**imited

**I**nformation

**S**pecific

**S**uggestions

**I**ntensive

**T**herapy

### PEARLS MODEL

**P**artnership

**E**mpathy

**A**pology

**R**espect/  
Reflect/Reinforce

**L**egitimize

**S**upport

## PSYCHOSOCIAL ISSUES

Sexual function does not exist in a vacuum—it is influenced by relationships, fatigue, stress, and other sociocultural factors in a woman’s life. The following issues are important to assess to provide the appropriate context for your clinical evaluation:

- Sexuality and desire can be deeply affected by the health, stability, and status of the woman’s relationship
- There is an important difference between sexual drive (primarily the biological component of desire) and sexual motivation (primarily the intrapsychic and interpersonal components)
- Current and past abuse can impact sexual health; ask about a history of sexual abuse in routine health care examinations with clear, direct questions (e.g., “Has anyone, including your partner or a family member, ever forced you to do something sexually that you did not want to do?”)
- Cultural and religious backgrounds can influence sexual health; therefore, without judgement, ask about the patient’s values, beliefs, and desires regarding sexuality and sexual activity within her relationship(s)
- A partner’s sexual dysfunction can affect your patient’s sexual health and satisfaction; be sure to ask about the health and well-being of the patient’s partner(s) as well

## BASIC SCREENING FOR SEXUAL FUNCTION

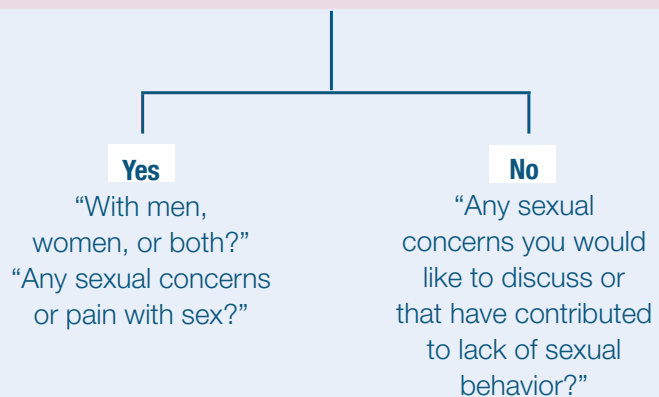
### LEGITIMIZE THE IMPORTANCE OF ASSESSING SEXUAL FUNCTION

“It is part of my routine to ask about sexual health as part of the well-woman visit.  
Do you have any concerns?”

“Some studies show that as women age, they may have less desire for sex or decreased lubrication, which makes intercourse uncomfortable.”

“Have you noticed any changes?”

### “ARE YOU CURRENTLY INVOLVED IN A SEXUAL RELATIONSHIP?”



## SEXUAL DRIVE

- Based on neuroendocrine mechanisms and evidenced by spontaneous sexual interest
- Relative, and each person has a certain drive level
- Exact neuroendocrine mechanisms responsible for drive remain unclear
- In some, sexual drive declines progressively as a function of aging

VS.

## SEXUAL MOTIVATION

- Characterized by the willingness of a person to engage in sexual activity
- Often the most important component of sexual desire
- Can be impacted by the quality of a relationship, psychologic functioning, worries about health, children
- A person can have high levels of sexual desire but if they have conflict with their partner or are suffering from clinical depression, motivation to be sexual will often be lacking

## OPEN-ENDED “ICEBREAKERS” TO START THE DISCUSSION

The following phrases can open a dialogue about sexual health with your patients. When you talk about this issue within the overall history will vary. Many health professionals use them in the social history or review of systems. They are also helpful in assessing the personal, relationship, and global impact of sexual concerns.

- *It is part of my routine to ask about sexual health as part of the well-woman visit. Tell me about any sexual concern/problem/issue you may be having.*
- *How do you think this sexual problem may be affecting your relationship or your life in general?*
- *Please describe your sexual problem.*
- *What distresses you the most about this sexual problem?*
- *What have you tried to manage the problem so far?*
- *Do you have any medical conditions that affect your quality of life, including your sexual health?*
- *What would a successful resolution of your sexual problem(s) look like?*
- *Tell me about the conversations you have had with your partner so far about this problem.*

You may also want to consider asking close-ended questions which require a direct answer (i.e., *Does sex hurt? Are you sexually satisfied?*). Follow-up these close-ended questions with another open-ended comment to allow further expansion of the problem (i.e., *Tell me more. What do you mean by that?*). Encourage the woman to use her own language with which she is most comfortable. If you are unfamiliar with her terms, do not be afraid to ask for clarification.

## FEMALE SEXUALITY PATIENT HANDOUTS

There are a number of sources for obtaining patient handouts on female sexuality. They are best utilized as adjuncts to patient/clinician discussion, not as an alternative to them.

- American Association of Sexuality Educators Counselors and Therapists ([www.aasect.org](http://www.aasect.org))
- American College of Obstetricians and Gynecologists ([www.acog.org/publications/patient\\_education/](http://www.acog.org/publications/patient_education/))
- ARHP Sex and Sexuality Reproductive Health Topic Area ([www.arhp.org/Topics/Sex-and-Sexuality](http://www.arhp.org/Topics/Sex-and-Sexuality))
- International Society for the Study of Women's Sexual Health ([www.isswsh.org](http://www.isswsh.org))
- Healthy Women (<http://www.healthyywomen.org/publications>)
- North American Menopause Society ([www.menopause.org/edumaterials.aspx](http://www.menopause.org/edumaterials.aspx))

## WHEN AND HOW TO REFER

Most front-line health care professionals are comfortable managing sexual issues—up to a point. Most practices can do the following:

- Give the patient permission to discuss the problem
- Validate her concern as legitimate
- Provide limited information and suggestions
- Determine if a follow-up visit is required

When a sexual concern exceeds your level of comfort or expertise or warrants intensive therapy, you will want to refer a patient to a qualified specialist, such as a sex therapist (see box). Comprehensive and optimal sexual care often may require both a physical and mental health approach and a multidisciplinary team is often crucial. It can help to:

- Become familiar with certified sex therapists and sexuality counselors in your area
- Refer the patient with the assurance that you are adding a team member to address her problem and emphasize that you will continue ongoing involvement in her care

### SEX THERAPY RESOURCES

- American Association of Sexuality Educators Counselors and Therapists ([www.aasect.org](http://www.aasect.org))
- International Society for the Study of Women's Sexual Health ([www.isswsh.org](http://www.isswsh.org))
- Society for Sex Therapy and Research ([www.sstarnet.org](http://www.sstarnet.org))

## FEMALE SEXUAL DYSFUNCTIONS: DSM-IV-TR DEFINITIONS

The DSM IV TR criteria for female sexual dysfunction:

- Classified as persistent or recurrent and causing “marked distress” or “interpersonal difficulty”
- Not better accounted for by a general medical or psychiatric condition (i.e., anxiety and depression)
- Not due exclusively to the direct physiologic effects of a substance or medication
- Sexual Dysfunction may be:
  - **Lifelong:** has been present since the onset of sexual functioning
  - **Acquired:** develops only after a period of normal functioning
  - **Situational:** is limited to certain types of stimulation, situations, or partners
  - **Generalized:** is not limited to certain types of stimulation, situations, or partners

FEMALE SEXUAL DYSFUNCTIONS: DSM-IV-TR DEFINITIONS		
	DSM-IV or ICD-9	DSM-IV Definitions
<b>Sexual desire disorders</b>		
<b>Hypoactive sexual desire disorder</b>	302.71 or 799.81	Deficiency or absence of sexual fantasies and desire for sexual activity
<b>Sexual aversion disorder</b>	302.79	Aversion to and active avoidance of genital sexual contact with a sexual partner
<b>Sexual arousal disorders</b>		
<b>Female sexual arousal disorder</b>	302.72	Persistent or recurrent inability to attain, or to maintain until completion of the sexual activity, an adequate lubrication-swelling response or sexual excitement
<b>Orgasmic disorders</b>		
<b>Female orgasmic disorder</b>	302.73	Persistent or recurrent delay in, or absence of, orgasm following a normal sexual excitement
<b>Sexual pain disorders</b>		
<b>Dyspareunia</b>	302.76 or 625.0	Genital pain that is associated with sexual intercourse
<b>Vaginismus</b>	306.51 or 625.1 or	Recurrent or persistent involuntary contraction of the perineal muscles surrounding the outer third of the vagina when vaginal penetration with penis, finger, tampon, or speculum is attempted

American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition. Text Revision. Washington, DC; American Psychiatric Association; 2000.  
Buck CJ, et al. 2009 ICD-9-CM Professional Edition, Volumes 1 & 2. St. Louis, MO; Saunders Elsevier; 2008.



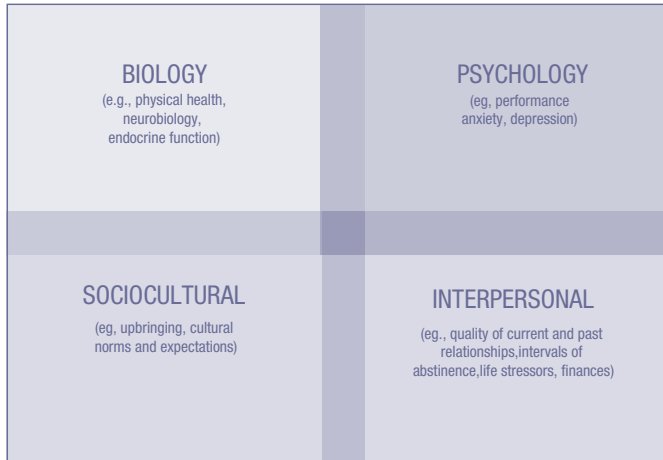
## CLINICAL PEARLS

- Overlapping sexual disorders are very common (e.g., hypoactive sexual desire disorder often results in decreased arousal and difficulty with orgasm)
  - When one dysfunction is revealed, ask about others
  - Treatment of disorders may be concurrent or sequential
- Discuss the chronology of the sexual concerns; it is imperative to uncover which sexual problem presented first
- The key is to define the primary disorder and discuss with the patient which disorder should be addressed first

## FEMALE SEXUAL RESPONSE

There are a variety of opinions, definitions, and theoretical models that describe normal female sexual response. For example, the DSM-IV-TR 2000 describes the sexual response cycle as comprising desire, excitement, orgasm, and resolution. The following additional theoretical models may be useful to your understanding of the female sexual response:

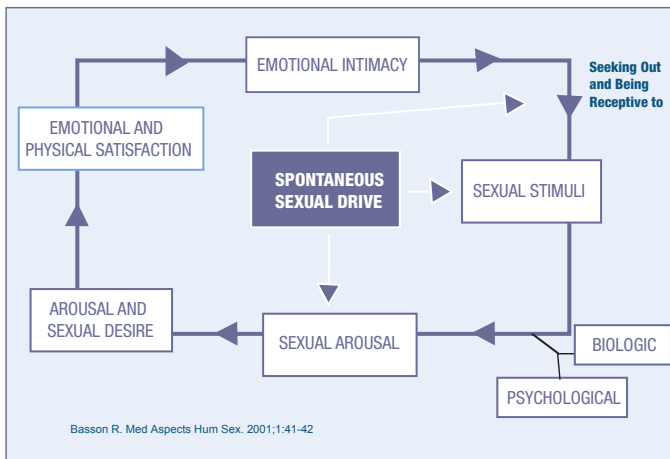
### BIOPSYCHOSOCIAL MODEL



### BIOPSYCHOSOCIAL MODEL

- Integrates multiple etiologic factors and determinants
  - Biologic (e.g., physical health, neurobiology, and endocrine function)
  - Psychologic (e.g., performance anxiety and depression)
  - Sociocultural (e.g., upbringing, cultural norms, and expectations)
  - Interpersonal (e.g., quality of current and past relationships, intervals of abstinence, life stressors, and finances)
- The integration and input of all these components are essential for sexual response

### CIRCULAR MODEL

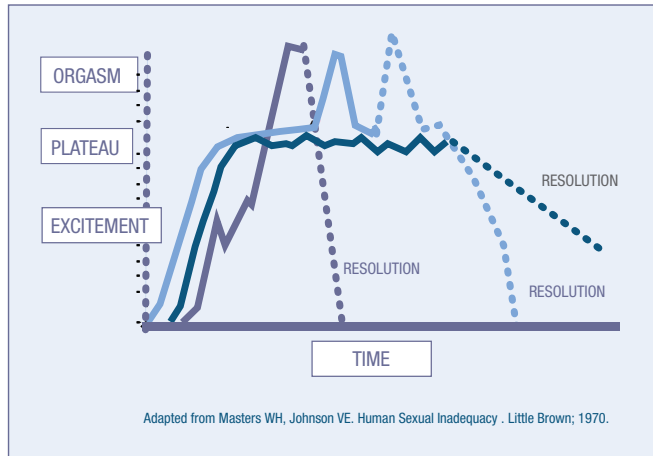


### CIRCULAR MODEL

(Basson)

- Sexual satisfaction, and not orgasm, appears to be the focus in some women
  - A woman begins a sexual response experience from a point of relative sexual neutrality but with a goal of emotional intimacy with her partner; she may seek or be receptive to sexual stimuli
  - Goals for sexual activity may be complex and not merely for internal satisfaction of an “innate” sexual hunger
  - Receptivity to sexual stimuli allows the woman to move to a state of physiologic arousal
  - If the mind continues to process the stimuli on to further arousal, sexual desire may encourage the woman to move forward to sexual satisfaction and orgasm fostering intimacy and reinforcing sexual motivation
  - This model reinforces the notion that female motivation for sexual activity is complex and not specifically an innate phenomenon

## LINEAR MODEL



## LINEAR MODEL

*(Masters and Johnson: traditional model of a linear progression from one phase of the sexual response to the next)*

- Views sex as a natural, biologic phenomenon
  - Sensory stimulation leads to increased peripheral blood flow and vasocongestion
  - With continuing stimulation, increased pelvic floor muscle tension and vasocongestion increase until development of a “plateau” phase that leads to orgasm; physical changes are apparent in the woman
  - During orgasm, there is a brain discharge, widespread genitor-pelvic muscle contraction, and increased cardiac output
  - Resolution follows orgasm with return to the non-stimulated state.
- The essential components of sexual response depend upon adequate functioning and interplay of hormonal milieu, nerves, veins, arteries, and genitor-pelvic muscles

## ELEMENTS OF A COMPLETE SEXUAL HISTORY

Sexual functioning is multifactorial. Factors associated with female sexual dysfunction include medications, psychologic disorders, comorbidities, relationship/partnership issues, and hormone use and non-use.

A thorough sexual history should assess medical, reproductive (obstetric/gynecologic), surgical, psychiatric, social, and sexual information.

- DSM-IV-TR: sexual dysfunction that is not better accounted for by a general medical or psychiatric condition, nor due exclusively to the direct physiologic effects of a substance or medication.

A patient's history may not be sufficient to assess her sexual function, and a physical examination or laboratory testing may be needed to determine if anatomic or physiologic factors are involved in a sexual complaint (The American College of Obstetricians and Gynecologists note that local practices and expectations can differ regarding the use of chaperones, and recommend that the request by either a patient or physician to have a chaperone present during a physical examination should be accommodated, regardless of the physician's sex. — ACOG Guidelines for Women's Health Care, 3rd edition 2007).

## ELEMENTS OF A THOROUGH SEXUAL HISTORY

Because a variety of general health and psychosocial factors can impact sexual function, a thorough sexual history must cover a lot of ground:

### Psychosocial Issues

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- Relationship status
- History of abuse (verbal, emotional, physical, or sexual)
- Alcohol, tobacco, illicit drug use

### Medical Issues

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- |   |  |
|---|--|
| ■ Current health status   | ■ Surgical history   |
| ■ Past medical history  | ■ Endocrine system <ul style="list-style-type: none"><li>— Diabetes</li><li>— Thyroid disorders</li><li>— Hyperprolactinemia</li><li>— Androgen deficiency</li></ul>                 |
| ■ Medications   | ■ Neurologic disorders   |
| ■ Reproductive history and current status <ul style="list-style-type: none"><li>— Age of menarche</li><li>— Menstrual history</li><li>— Obstetric history (pregnancies, losses, duration of labor, and consequences of delivery, delivery type, birthweights)</li><li>— Infertility</li><li>— Contraception</li><li>— Sexually transmitted infections</li><li>— Gynecologic problems (pain, pelvic floor disorders, postpartum)</li><li>— Surgeries</li><li>— Urologic problems (incontinence episodes)</li></ul> | ■ Hypertension   |
|   | ■ Psychiatric illnesses <ul style="list-style-type: none"><li>— Mood disorders (major depression, bipolar illness)</li><li>— Anxiety disorders</li><li>— Psychotic illness</li></ul> |
|   | ■ Other chronic illnesses <ul style="list-style-type: none"><li>— Breast cancer</li><li>— Rheumatoid arthritis</li><li>— Psoriasis</li></ul>   |

## GYNECOLOGIC EXAMINATION:

If the history indicates that a physical examination is necessary, it should include the elements outlined in the table below.

### ELEMENTS OF THE GYNECOLOGIC EXAMINATION

#### INSPECTION OF EXTERNAL GENITALIA

Muscle tone, skin color/texture, skin turgor and thickness, pubic hair amount, vaginal pH  
Cotton swab test of vulva, vestibule, hymenal ring, Bartholins and Skenes gland ostium (pain mapping)  
Retract clitoral prepuce, expose clitoral glans  
Examine posterior fourchette and hymenal ring

#### MONOMANUAL EXAMINATION

Palpate rectovaginal surface, assess contraction/relaxation capability and tenderness with palpation of levator muscles, bladder, urethra  
Evaluate vaginal depth

#### BIMANUAL EXAMINATION

Palpate uterus and adnexa and perform rectovaginal examination

#### SPECULUM EXAMINATION

Examine the vaginal lining and mucosa, assess Portia and vaginal vault for estrogenization, etc.  
Perform genital cultures if infection is suspected  
Test vaginal pH if vaginal atrophy is a concern

Adapted from Phillips NA. The clinical evaluation of dyspareunia. *Int J Impot Res.* 1998;(suppl 2):S117-S120.

## COMMON MEDICATIONS THAT MAY IMPACT FEMALE SEXUAL FUNCTION

- Antidepressants and mood stabilizers
  - Tricyclic antidepressants
  - MAOIs (monoamine oxidase inhibitors)
  - SSRIs (selective serotonin-uptake inhibitors)
  - SNRIs (serotonin-norepinephrine reuptake inhibitors)
  - Typical antipsychotics (phenothiazines, thioxanthenes, butyrophenones)
  - Atypical antipsychotics
  - Mood stabilizers (e.g., carbamazepine, lithium)
- Other CNS drugs
  - Anticonvulsants (e.g., phenobarbital, phenytoin)
  - Anticholinergics (e.g., diphenhydramine, benzotropine)
  - Opioids
  - Amphetamines
- Hormones and hormone antagonists
  - Hormonal contraception\*, estrogens, progestins, antiandrogens, GnRH agonists
- Antihypertensive agents
  - Beta blockers
  - Alpha blockers
  - Diuretics
- Cardiovascular agents
  - Triglyceride lowering agents
  - Digoxin
- Weight loss agents
- Histamine receptor (H2) blockers
- Chemotherapeutic agents (e.g., busulfan, chlorambucil, cyclophosphamide)
- Aromatase inhibitors
- Immunosuppressants
- Steroids

\*Although there are some reports of sexual side effects in women using a range of hormonal contraception, there is no consistent pattern of effect. Some published data has indicated that premenopausal women who take oral contraceptive pills may have a lower average frequency of sexual thoughts, interest, and days of sexual activity/month (it is hypothesized that oral contraceptive pills increase sex hormone-binding globulin and lower free testosterone). Other studies, however, show that sexual interest scores do not change significantly for women on oral contraceptive pills. Further research is required to clarify the effect of oral contraceptive pills on sexual function.

## SCREENING FOR FEMALE SEXUAL DYSFUNCTION

### SCREENING TOOLS

A variety of screening instruments have been developed to help you screen and assess female sexual problems that are causing patient distress.

#### BRIEF SEXUAL SYMPTOM CHECKLIST

This brief questionnaire can be incorporated into a patient intake form and used as a pre-consultation screening tool (Hatzichristou D, et al. J Sex Med. 2004;1:49-57).

**Please answer the following questions about your overall sexual function in the past 3 months or more.**

1. Are you satisfied with your sexual function?  
 Yes       No If No, please continue.
2. How long have you been dissatisfied with your sexual function? \_\_\_\_\_
3. The problem(s) with your sexual function is: (mark one or more)
  - a. Problems with little or no interest in sex
  - b. Problems with decreased genital sensation (feeling)
  - c. Problems with decreased vaginal lubrication (dryness)
  - d. Problems reaching orgasm
  - e. Problems with pain during sex
  - f. Other:
4. Which problem (in question 3) is most bothersome (circle) a b c d e f
5. Would you like to talk about it with your health care provider?  
 Yes       No

There are several validated screening tools that focus on hypoactive sexual desire disorder (HSDD), which is the most common sexual concern of women of all ages. These screening tools will vary in their usefulness depending upon your clinical specialty and the patient population you serve. Below is a list of a few of these tools:

- Decreased Sexual Desire Screener (DSDS): 5 questions, self-administered
  - Assesses for generalized acquired HSDD
  - Clayton AH, et al. J Sex Med. 2009;6:730-738.
- Female Sexual Function Index (FSFI): 19 questions, self-administered
  - All of the dimensions of female sexual function including sexual satisfaction
  - Rosen R, et al. J Sex Marital Ther. 2000;26:191-208.

- Sexual Interest and Desire Inventory–Female (SIDI–F): 13 items, clinician administered
  - Severity of female HSDD
  - Clayton AH, et al. *J Sex Marital Ther.* 2006;32:115-135.
- Brief Hypoactive Sexual Desire Disorder Screener: 4 questions, self-administered
  - HSDD in postmenopausal women
  - Leiblum S, et al. *J Sex Med.* 2006;3:455-464.
- Brief Profile of Female Sexual Function (B–PFSF): 7 questions, self-administered
  - HSDD in postmenopausal women
  - Rust J, et al. *Gynecol Endocrinol.* 2007;23:638-644.
- Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire (PISQ-12): 12 questions (short form), self-administered
  - Sexual function in women with pelvic organ prolapse and/or urinary incontinence
  - Rogers RG, et al. *Int Urogynecol J.* 2003;14:164-168.
- Female Sexual Distress Scale-Revised (FSDS-R): 13 questions, self-administered
  - Distress associated with female sexual dysfunction
  - Derogatis LR, et al. *J Sex Med.* 2008;5:327-364.

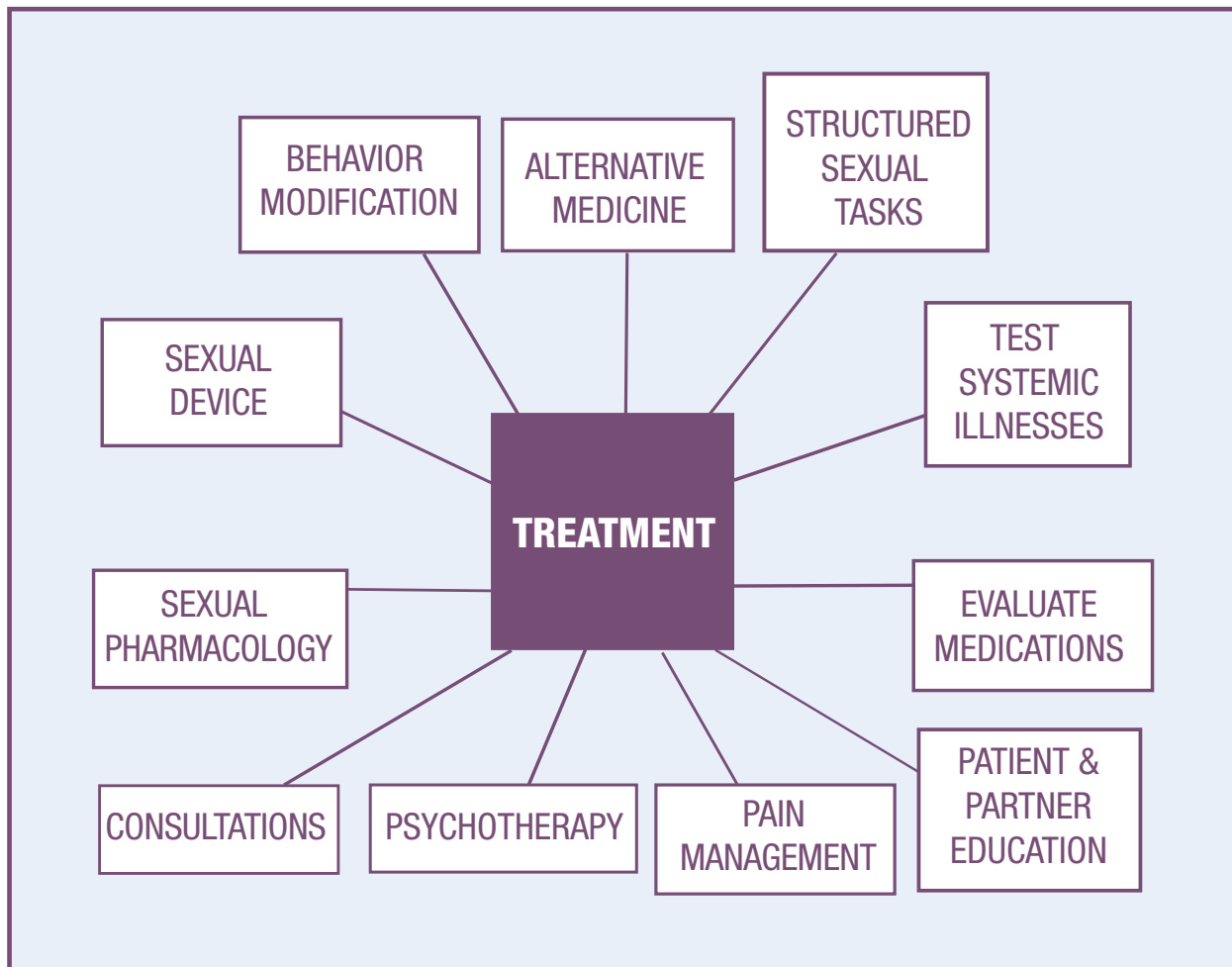
# TREATING FEMALE SEXUAL DYSFUNCTION

## GENERAL APPROACHES

A foundation for treating sexual concerns includes:

- Using the PLISSIT model for history-taking and therapy
- Facilitating patient and partner education
- Identifying and treating medical conditions that may contribute
- Considering medication and substance use (both current and past) as a possible causative role, and resolving appropriately
- Providing sexual counseling, coaching, and intensive sex therapy, when indicated

The following illustration provides an overview of interventions used in the treatment of patients with a female sexual complaint or dysfunction.





## TREATMENT FOR FEMALE SEXUAL DYSFUNCTION MEETING DSM-IV-TR CRITERIA

Treatment of patients who meet the DSM-IV-TR criteria for female sexual dysfunction requires an individualized approach and may include a combination of counseling (office-based advice), cognitive-behavioral interventions, pharmacotherapy, and treatment of concomitant medical or psychiatric conditions.

Most front-line health care professionals enlist the help of a qualified specialist, including sexuality counselors and sex therapists, to care for patients with DSM-IV-TR sexual dysfunction (see “When and How to Refer”).

Pharmacologic treatments address physiologic needs, imbalances, or symptomatic complaints, and comprise only one part of the overall management of patients with female sexual disorders.

At the time of this writing, the only pharmacologic treatment approved by the U.S. Food and Drug Administration for the treatment of any female sexual disorder is conjugated equine estrogen (Premarin Vaginal Cream®) for the treatment of moderate to severe dyspareunia due to menopause.

## TREATING HYPOACTIVE SEXUAL DESIRE DISORDER

Desire is a relatively complex concept that comprises 3 distinct but interrelated components.

- Drive: biologic component based on neuroendocrine mechanisms and evidenced by spontaneous sexual interest (i.e., feeling “horny”)
- Cognitive: reflects person’s expectations, beliefs, and values related to sex
- Motivation (emotional/interpersonal): willingness of a person to engage in sexual activity

Delineating the components of desire is essential because treatment approaches differ based on which component or components of desire are impaired. Treatment options include:

- Individual cognitive behavioral therapy and/or couples sex therapy
- Pharmacotherapy
  - Hormone therapy (e.g., exogenous testosterone replacement, DHEA-S)
  - Centrally acting pharmacologic agents that may positively impact sexual functioning

## TREATING SEXUAL AVERSION DISORDER

Sexual aversions may be general or very specific and can develop in response to any sexual stimulus, overt or covert.

- Aversion versus desire: aversion is a phobic avoidance and or revulsion of sexual activity whereas HSDD is about loss of desire and not an aversion to sex (although it may ultimately develop)

It is important to distinguish events that may have initiated aversion and current behavior that may reinforce the aversion response. Treatment is based on a graduated exposure paradigm.

- Behavioral therapy follows from the conceptualization
- Relaxation exercises with graded and patient-controlled reintroduction of sexual behavior (e.g., Yoga meditation, rhythmic breathing, music therapy, guided imagery)
- Pharmacotherapy (used to facilitate behavioral therapy)
  - SSRIs
  - Anxiolytics

## TREATING FEMALE SEXUAL AROUSAL DISORDER

A thorough sexual history is essential in making an accurate diagnosis. Although not listed in the DSM IV-TR, many sexual medicine experts would suggest that arousal disorder is best understood by subtypes:

- Generalized: no subjective awareness of genital or overall arousal and no lubrication/vasocongestion or increased heart rate
- Missed arousal: genital engorgement present but no awareness
- Genital arousal: subjective excitement is present but no genital engorgement

There is significant overlap with arousal and orgasmic disorders, and distinguishing between the two may be difficult.

More randomized clinical trials are needed to evaluate the efficacy of treatment options for female sexual arousal disorder.

Current options include:

- Self stimulation and masturbation, sensate focus exercises coupled with improving communication with partners — sexual accessories may be adjunctive aids as well as sexual education to understand genitor-pelvic anatomy and sexual response
- Medical intervention:
  - Mechanical (EROS clitoral stimulator, vacuum device)
  - Hormonal (systemic or local estrogen therapy for arousal disorder acquired after menopause)
  - Pharmacologic (nitric oxide promoters)
- Over-the-counter-lubricants, feminine arousal oil (e.g., Zestra® Essential Arousal Oils™), and/or long-acting vaginal moisturizers

## TREATING FEMALE ORGASMIC DISORDER

The etiology of orgasmic problems is likely multifactorial, including physiologic and psychosocial factors. Treatment options include:

- Cognitive-behavioral approaches that alter negative attitudes and reduce anxiety
- Permission-given by the clinician to:
  - Become educated about sexual response including orgasmic response
  - Practice and explore self-stimulation/masturbation in privacy
  - Use fantasy, erotic literature, and/or self stimulators or vibrators to heighten arousal
  - Practice sensate focus exercises

## TREATING DYSPAREUNIA

Dyspareunia is often viewed as a specific pain disorder with independent psychological and biologic contributors with context-dependent etiologies. Physical examination may be required to rule out underlying anatomic pathology. Specific testing, including pelvic sonogram and vulvoscopy, may be useful in certain situations.

- Differential diagnosis: introital dyspareunia, vaginismus, vulvovaginal atrophy, inadequate lubrication, vulvodynia, deep dyspareunia, endometriosis, pelvic inflammatory disease
- Assess/consider concurrent psychological or behavioral contributions via sexual history

Treatment options include treating the underlying physiologic or psychological source of the pain:

- Anti-irritant hygiene program
- Vulvovaginal atrophy
  - Topical/local estrogen preparations (tablets, creams, rings)
  - Premarin® Vaginal Cream is FDA-approved to treat moderate-to-severe postmenopausal dyspareunia
- Burning pain (indicative of neuroproliferation)
  - Low-dose tricyclic antidepressants (e.g., amitriptyline), SSRIs (e.g., duloxetine), or anticonvulsants (e.g., gabapentin)
- Pelvic floor myofascial pain and guarding of pelvic floor muscle

- Refer for manual pelvic floor muscle physical therapy (visit [www.APTA.org](http://www.APTA.org) for qualified and trained pelvic floor specialist/provider)
- Low-dose muscle relaxing agent (e.g., cyclobenzaprine, diazepam)
- Anxiety management and coping
  - Refer for cognitive behavioral therapy
- Referral for couples sexual counseling/therapy to explore non-penetrating pleasuring techniques (as appropriate)

## TREATING VAGINISMUS

Vaginismus is persistent difficulty to allow vaginal entry of a penis, finger, or any object despite the express wish to do so.

Important considerations during assessment:

- Vaginismus may be limited to sexual activity and may not be seen during a pelvic examination
- Vaginismus may occur due to fear of pelvic examinations, but not impact sexual activity

Treatment is based on a combination of cognitive and behavioral psychotherapeutic approaches to desensitize the woman to her anxiety/panic and help achieve a sense of control over a sexual encounter or a pelvic examination, and an understanding that she is no longer in danger of experiencing pain. Treatment options may include:

- Cognitive behavioral therapy
- Pelvic floor physical therapy
- Relaxation training with systemic desensitization using graduated vaginal dilators to help gain control over and relax muscles and stretch the vagina

## SEX THERAPY INTERVENTIONS

Sexuality counselors and sex therapists typically treat patients with desire, arousal, performance, and satisfaction issues. They also counsel patients and their partners who have experienced sexual trauma or abuse, or those who may be struggling with gender identity or sexual orientation issues, fetishes, sexual pain, or sexual compulsions/addictions.

Qualified specialists, including sex therapists, offer a variety of interventions that may help a patient reconnect emotionally and sexually with their partner(s). Some common strategies include:

- Helping patients develop realistic and appropriate expectations
- Identifying contextual catalysts for sexual activity and helping patients gain awareness of positive sexual cues/triggers
- Assigning sensate focus exercises that help individuals and couples desensitize to sexual activity that causes anxiety or avoidance and increase non-demanding pleasure
- Teaching the practice of mindfulness
- Exploring alternate forms of sexual expression
- Addressing sexual boredom
- Discussing the use of lubricants, moisturizers, dilators, vibrators, and sexual enhancers

For more information on this topic, see previous box on sex therapy resources (page 7) and visit <http://www.arhp.org/SHF-Therapy>.

## CLINICAL COMPETENCIES FOR SEXUAL HEALTH: TOP 10 THINGS YOU SHOULD KNOW

A multidisciplinary panel of sexual health experts, convened by the Association of Reproductive Health Professionals (ARHP), identified the top 10 things frontline health care providers need to know about female sexual health to talk knowledgeably about the subject with their patients, initiate treatment, or refer. Here, presented in random order are their recommendations:

- 1.** Hypoactive Sexual Desire Disorder (HSDD) is the most common female sexual dysfunction (1 in 10 women suffer from HSDD)
- 2.** Female sexual response may be influenced by neurotransmitters and other chemicals in the brain:
  - Dopamine, norepinephrine, epinephrine, opioids, and melanocortins are contributors to the sexual response cycle
  - Our understanding of the neurobiologic mechanisms involved in the sexual response is in its infancy.
- 3.** Medications and medical conditions can both have profound effects on sexual function
- 4.** Depression and its treatment commonly affect sexual function
- 5.** Anger/resentment may be an underlying factor in sexual dissatisfaction and disorders
- 6.** Vulvovaginal atrophy is common and can be treated
- 7.** Most women want their health care provider to bring up the topic of sexuality during routine visits
- 8.** Often, one open-ended question takes the same amount of time as several closed-ended questions
- 9.** Use of the PLISSIT model (see page 4) for history-taking and therapy can be helpful when working with women who have a sexual dysfunction
- 10.** It is important to refer appropriately

For more information on this topic, please visit <http://www.arhp.org/SHF-Top-10>.

## EMERGING SEXUAL PHARMACOLOGY

Identifying pharmacologic treatments for female sexual disorders is an active area of clinical research. Some agents of interest are listed below:

- Libigel®
  - Gel formulation of testosterone that is in phase III clinical and safety trials for the treatment of HSDD
- DHEA
  - Vaginal suppositories under evaluation in phase III clinical trials for the treatment of vaginal atrophy in postmenopausal women

The following journals are excellent sources for clinical research and emerging trends in female sexual health and management of female sexual dysfunctions:

- Journal of Sexual Medicine
- Journal of Sex and Marital Therapy
- Archives of Sexual Behavior
- Contraception, An International Reproductive Health Journal
- American Journal of Ob/Gyn
- Obstetrics and Gynecology
- Journal of Women's Health
- Women's Health Care (NPWH)

## SEXUAL DYSFUNCTION AND COMMON OB/GYN ISSUES

### PELVIC SURGERY

- Few studies have addressed the role of pelvic surgery and female sexual dysfunction
- Common gynecologic conditions such as fibroids, prolapse and adnexal pathology may cause female sexual dysfunction
  - Pelvic surgery to correct these conditions may improve, have no effect on, or even worsen sexual function
  - Approximately 13% to 37% of women undergoing hysterectomy experience a decline in sexual function with complaints ranging from decreased desire to painful intercourse, diminished sensation or difficulty achieving orgasm
  - Vaginal surgery resulting in significant vaginal narrowing is rare even in women undergoing posterior colporrhaphy (without levator plication) and may improve function
  - Risks of the newer interpositional vaginal mesh delivery systems, however, include vaginal mesh exposure, decreased vaginal caliber with contraction, dyspareunia and pelvic pain necessitating additional surgery for mesh removal
- The possible etiology of sexual dysfunction following pelvic surgery warrants further investigation and patients need to be aware of potential benefits and risks

### GYNECOLOGIC CANCERS

- Research suggests that up to 83% of women report sexual problems after gynecologic cancer (vulvar, cervical endometrial), and 90% of women report sexual problems after breast cancer
- The most prevalent sexual problems following treatments for gynecologic cancers include decreased desire, impaired lubrication, change in intensity of orgasm, reduced vaginal sensitivity, and superficial dyspareunia related to loss of elasticity and vaginal shortening/narrowing (fatigue is also a common factor in impaired sexual function)
- In addition to the physical changes related to cancer, psychological and interpersonal difficulties may contribute to sexual problems including anxiety, altered body image, and difficulty communicating with partner(s) about altered sexual response
- Healthcare professionals should recognize and normalize cancer patients' and partner experiences with altered sexuality in order to provide comprehensive survivorship care
- Counseling should include suggestions to improve sexual intimacy such as changing from intercourse to other forms of touching

### INCONTINENCE

- Research suggests that >40% of women with urinary incontinence and other lower urinary tract symptoms have concomitant female sexual dysfunction
- A significant relationship exists between urodynamically proven stress urinary incontinence and desire disorders, urge type urinary incontinence and orgasm disorders, and recurrent urinary tract infections and dyspareunia
- Women should be asked specifically about coital incontinence (10% to 27% of women) which is underreported and can be associated with shame and sexual abstinence

## PELVIC PAIN

- An estimated 16% to 25% of women experience dyspareunia, often leading to sexual avoidance as a result of chronic pelvic pain
- Careful physical examination should be performed to identify and treat specific pain generators such as vulvodynia, endometriosis, interstitial cystitis, provoked vestibulodynia, pelvic floor muscle hypertonus
- Multi-disciplinary care and referrals for concomitant sexual therapy and physical therapy are integral to regaining sexual function for women with chronic pelvic pain

## PREGNANCY

- Sexuality changes throughout pregnancy and can be attributed to changes in anatomy, increased size of the gravid uterus, and psychological concerns
- Most couples can continue having sexual intercourse throughout pregnancy provided there is no obstetric contraindication
- The psychologic and logistical challenges of parenthood also commonly influence sexuality and sexual expression
- Sexual activity does not stimulate labor, and most studies do not link sexual activity to changes in Apgar scores or preterm delivery
- The majority of women recover prepregnancy sexual functioning. However, there are some women who report significantly impaired sexual function after pregnancy, including complaints of dyspareunia or HSDD, that are not the consequence of the challenges of caring for an infant
  - Sexual function should be assessed at the post-partum visit

## SEXUALLY TRANSMITTED INFECTIONS

- Research suggests that diagnosis and treatment of a sexually transmitted infection (STI) can result in sexual problems in up to 55% of women (and 35% of men)
- Psychosexual vulnerability particularly manifested as depression, anger, guilt, shame and anxiety may accompany the STI diagnosis and decrease sexual satisfaction for months to years thereafter
- It is important for clinicians to emphasize that most STIs are manageable conditions, and should not be viewed as a punishment or judgment — Involvement in support groups can be very helpful for individuals who struggle with their diagnosis

## HORMONAL CONTRACEPTIVES

- Many women enjoy sexual activity more freely without the fear of pregnancy
- Although there are some reports of sexual side effects in women using a range of hormonal contraception, there is no consistent pattern of effect
- Some published data has indicated that premenopausal women who take oral contraceptive pills may have a lower average frequency of sexual thoughts, interest, and days of sexual activity/month
- Other studies, show that sexual interest scores do not change significantly for women on oral contraceptive pills
- Further research is required to clarify the effect of oral contraceptive pills on sexual function
- Caution should be exercised if one is attributing poor sexual health directly to OCs alone; a comprehensive and individualized assessment is warranted

## BODY IMAGE

- Body image may have a profound impact on a woman's ability to enjoy a satisfying and positive sexual life
- Negative thoughts about one's body (e.g., feeling overweight or unattractive) or self-consciousness about aspects of one's body (e.g., breast size, facial features) will diminish a woman's enjoyment of sexual encounters
- Heterosexual women are more likely to experience body dissatisfaction than heterosexual men, and lesbian-identified women have as much body dissatisfaction as heterosexual women

## MENOPAUSE

- The menopausal transition is marked with lowered sex steroid levels and atrophic vulvar vaginal changes, which may contribute to lowered sexual enjoyment and increased reports of pain during sexual activity
  - A comprehensive assessment and physical examination is often required for diagnosis
  - Minimally absorbed, local vaginal estrogen products (rings, creams, and tablets) can reverse changes in the vaginal mucosa
- Changes in sexual desire are also seen
- The menopausal period can include many lifestyle changes (e.g., diagnosis of chronic illnesses, retirement, empty-nest syndrome, divorce, the impact of psychosocial stresses) that should be considered when assessing sexual function



