Female Sexual Function:
Key Recommendations from the 4th International for Consultation for Sexual Medicine
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Disclosures

**Scientific Advisory Boards:**
Emotional Brain, Palatin, Pfizer, Sprout Pharmaceuticals

**Publication Support:**
Pfizer
Committee 1: Current Definitions, Classification, and Epidemiology of Sexual Dysfunction in Men and Women
ICSM-4

• **Hypoactive sexual desire dysfunction is:**
  • Persistent or recurrent deficiency or absence of sexual/erotic thoughts or fantasies and desire for sexual activity

• **Female sexual arousal dysfunction is:**
  • Persistent or recurrent inability to attain or to maintain until completion of sexual activity, an adequate subjective assessment of her genital response

ICSM-4

• High level of overlap/variation between different types of sexual dysfunction for women

• Low sexual desire has different prevalence rates and is distinguished from low level of arousal: low sexual desire is the most prevalent dysfunction, followed by low arousal.

• Very few incidence or prevalence data on genital versus subjective arousal. How could this distinction be made for desire?

### DSM 5: Genito-Pelvic Pain/Penetration Disorder

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<th>Code</th>
<th>Description</th>
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<td>302.76</td>
<td>Persistent or recurrent difficulties with 1 or more of the following: 1. Vaginal penetration during intercourse 2. Marked vulvovaginal or pelvic pain during intercourse or penetration attempts 3. Marked fear or anxiety about vulvovaginal or pelvic pain in anticipation of, during, or as a result of vaginal penetration 4. Marked tensing or tightening of the pelvic floor muscles during attempted vaginal penetration.</td>
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Symptoms persisted a minimum of 6 months and not better explained by a nonsexual mental disorder or consequence of severe relationship distress or other significant stressors and not due to effects of substance/medication or other medical condition, APA2013
Female Genito-Pelvic Pain Dysfunction

Persistent or recurrent difficulties with at least one 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.
• Grade C

ICSM Orgasm Disorders & Level of Evidence

• **FOD (grade B)**
  - Marked delay in, marked frequency of, or absence of orgasm and/or
  - Marked decrease in intensity

• **PGAD (expert opinion)**
  - Spontaneous, intrusive, and unwanted genital arousal (tingling, throbbing, pulsating) in the absence of sexual interest and desire
  - Arousal unrelieved by at least one orgasm, and feeling of arousal persists for hours to days

• **Post-Orgasmic Illness Syndrome (expert opinion)**
  - Negative feelings, experiences, and/or physical symptoms

• **Hypohedonic Orgasm (expert opinion)**

• **Painful Orgasm (expert opinion)**

Committee 13B: Endocrine Aspects of Female Sexual Function and Dysfunction
Summary of Recommendations

• Research has focused on sex steroids in female sexual function and use of sex steroids, or compounds with similar actions on treatment of FSD.

• Research into role of other hormones in FSD remains lacking.

• Systemic estrogen therapy is not recommended for sole purpose of treatment of FSD.

• Local estrogen therapy and ospemiphene are effective and approved for the treatment of vulvo-vaginal atrophy.

• While data supports the use of testosterone therapy for some women with FSD, approved formulations for women are generally unavailable.

Oral vs. Transdermal Systemic Estrogen Therapy

• Based on expert opinion, findings from various studies and understanding of hormone physiology and pathophysiology, we conclude:

• As oral estrogen therapy increases circulating SHBG, resulting in lowered free T, transdermal ET may be preferred when ET is elected and sexual function is a concern, although RCTs that have compared sexuality with oral vs. transdermal ET are limited (Grade C).

Supported by unpublished data from the Kronos Study
Evidence of Systemic Testosterone Effects from Clinical Trials

• Consistent benefits of transdermal testosterone vs placebo for sexual satisfaction, desire, arousal, pleasure AND orgasm in RCTs of:
  • Surgically postmenopausal women on estrogen
  • Naturally postmenopausal women on estrogen + progestin
  • Postmenopausal women on no hormone therapy
  • Premenopausal women aged 35-45
  • Women with SSRI emergent loss of libido aged 35-55

Based on expert opinion, findings from various studies and understanding of hormone action we conclude:

- Trial of transdermal T therapy for HSDD can be considered.
- Treatment should not be continued beyond 6 months if a woman experiences no benefit.
- Approach is limited by availability of approved T formulations for women in most countries.
- Ideally, T formulations approved to treat male hypogonadism and compounded T formulations should not be used, but in many countries clinicians have no other T formulations to offer women.
Committee 14:
Treatment of women’s sexual desire, arousal, and orgasm disorders
Psychological Treatment Approaches

• Sex therapy
  • Sensate focus: Graded series of non-demand sensual touching exercises
    • Shows moderate effectiveness for improving desire, especially when compliance with behavioral exercises is high (Level 2)
  • Directed masturbation for FOD
    • Shows moderate effectiveness especially in lifelong FOD (Level 2)

• Cognitive behavioral therapy
  • Involves identifying and altering behaviors (eg, avoidance) and cognitions (eg, unrealistic behaviors) that lead to sexual problems and low desire
    • Evidence is moderate, but studies are > 10 years old (Level 2)

Psychological Treatment Approaches

• Mindfulness-based therapy*
  • Based out of Eastern approaches that focus on being present without judgment
  • Effectiveness for improving desire:
    • Includes psycho-education about sexual response and cognitive therapy as well as mindfulness
    • Involves skills practice of mindfulness practice, body scans, nonmasturbatory genital self-stimulation
  • Especially helpful for women who have a disconnect between genital and subjective arousal
  • Effectiveness for women with gynecological cancer, without a history of cancer, traumatic history (Level 2)

Approaches to Treatment

• Increase estrogen (local vaginal, systemic) testosterone (local vaginal, systemic), Tibolone, Ospemifene
• Increase dopamine
• Increase norepinephrine
• Modulate serotonin
• PDE-5 Inhibitors
• Moisturizers, Lubricants, Arousal “Gels”
• Devices
Flibanserin (Level 1)

- Flibanserin - mixed post-synaptic 5HT\textsubscript{1A} agonist and 5HT\textsubscript{2A} antagonist
  - 5HT\textsubscript{1A} agonists may have pro-sexual effects.
  - Flibanserin also a 5HT\textsubscript{2A} antagonist which might have pro-sexual effects.
- Flibanserin also has activity at dopamine D\textsubscript{4} receptors and moderate affinity for 5HT\textsubscript{2B} and 5HT\textsubscript{2C} receptors.
- Flibanserin is thought to produce region-specific elevations in dopamine and norepinephrine and may help to offset inhibitory serotonergic activity impacting desire pathways.
Committee 15:
Women’s Sexual Pain Disorders
International Consensus Conference on Vulvovaginal Pain (Vulvodynia) Nomenclature

There is an unmet medical need for a comprehensive, evidence-based set of vulvovaginal pain diagnoses that can be easily utilized by both expert and non-expert healthcare providers to establish diagnoses in their patients and to guide treatment.
A. Vulvar pain caused by a specific disorder*

- Infectious (e.g. recurrent candidiasis, herpes)
- Inflammatory (e.g. lichen sclerosus, lichen planus, immunobullous disorders)
- Neoplastic (e.g. Paget disease, squamous cell carcinoma)
- Neurologic (e.g. post-herpetic neuralgia, nerve compression or injury, neuroma)
- Trauma (e.g. female genital cutting, obstetrical)
- Iatrogenic (e.g. post-operative, chemotherapy, radiation)
- Hormonal deficiencies (e.g. genito-urinary syndrome of menopause [vulvo-vaginal atrophy], lactational amenorrhea)

*Women may have both specific disorder and vulvodynia
B. Vulvodynia

Vulvar pain of at least 3 months duration, without clear identifiable cause, which may have potential associated factors.

Descriptors (pain-based):

• Localized (e.g. vestibulodynia, clitorodynia) or Generalized or Mixed (Localized and Generalized)

• Provoked (e.g. insertional, contact) or Spontaneous or Mixed (Provoked and Spontaneous)

• Onset (primary or secondary)

• Temporal pattern (intermittent, persistent, constant, immediate, delayed)
Potential Factors Associated with Vulvodynia

- Co-morbidities and other pain syndromes (e.g. painful bladder syndrome, fibromyalgia, irritable bowel syndrome,) [Level of evidence 2a]
- Genetics [2b]
- Hormonal factors [2b]
- Inflammation [2b]
- Musculoskeletal (e.g. pelvic muscle overactivity, myofascial, biomechanical) [2b]

- Neurologic mechanisms
  - Central (spine, brain) [2b]
  - Peripheral [2b]
  - Neuroproliferation [2b]
- Psychosocial factors (e.g. mood, interpersonal, sexual function) [2b]
- Structural defects (e.g. perineal descent) [2b]
Treatment of Vulvodynia

• A multidisciplinary approach should be used in the assessment and treatment of women with vulvodynia.

• Tricyclic antidepressants should not be used for the treatment of vulvodynia.

• Vulvar vestibulectomy should be considered in women with provoked vestibulodynia if conservative treatments fail.

• Pelvic floor muscle evaluation should be considered in all women with vulvodynia.