Women’s Sexual Health: Fun for All Ages

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The Three Vs

- Clitoral hood
- Clitoris
- Urethral meatus
- Hymenal tags
- Hart’s line
- Ostium of minor vestibular gland
- Labium minus
- Labium majus
- Ostia of Bartholin’s glands
- Posterior fourchette
Female Sexual Response Cycle

Female Sexual Response Cycle

Emotional Intimacy

Emotional and Physical Satisfaction

Sexual Arousal

Spontaneous Sexual Drive

Arousal and Sexual Desire

Sexual Stimuli

Biologic

Psychological

Biopsychosocial Model of Female Sexual Response

- **Biology** (e.g., physical health, neurobiology, endocrine function)
- **Psychology** (e.g., performance anxiety, depression)
- **Sociocultural** (e.g., upbringing, cultural norms and expectations)
- **Interpersonal** (e.g., quality of current and past relationships, intervals of abstinence, life stressors, finances)

When it’s good, fabulous!
When it’s bad….

- You are not alone
- You do not have to live like this!
Vulnerable Time Periods

- Adolescence
- Post-partum
- Perimenopause
- Menopause
The majority of adults in middle and later life are engaged in intimate relationships and regard sexuality as an important part of life.
| Differential Diagnosis: Chronic Diseases that Negatively Affect Sexual Function |
|---------------------------------|-----------------------------------------------|
| Mood Disorders                  | Major Depression, Bipolar disorder            |
| Anxiety Disorders               | Generalized Anxiety, Specific Phobia,         |
| Psychotic Disorders             | Schizophrenia                                  |
| Endocrine Disorders             | Diabetes, Thyroid disorders, Hyperprolactinemia, Adrenal Insufficiency |
| Urologic conditions             | Renal Failure, Urinary Tract Infection, Urinary Incontinence |
| Cardiac and Vascular Disease    | Hypertension, Coronary Artery Disease, Myocardial Infarction |
| Gynecologic Disorders           | STIs, Chronic Pelvic Pain/Endometreosis, Dyspareunia/Vulvar Pain Disorders, Vulvovaginal Atrophy, Chronic Vulvovaginal Candidiasis, Postpartum Physical/Hormonal Changes, Pelvic Organ Prolapse |
| Cancer and surgical, chemo therapy treatments | Breast Cancer, Anal Cancer, Colorectal, Gynecological |
| Dermatologic Conditions         | Eczema, Psoriasis, Paget’s, Vulvar Dystrophies |
**OBJECTIVES:** Estimate the prevalence of self-reported sexual problems (any, desire, arousal, and orgasm), the prevalence of problems accompanied by personal distress, and describe related correlates

**NOT DETERMINED:** Whether low desire with sexually related personal distress was primary or secondary to another illness; pain was not assessed

**POPULATION:** 31,581 US female respondents ≥18 years of age from 50,002 households

**RESULTS***: Response rate was 63% (n=31,581 / 50,002)

![Graph showing prevalence of female sexual problems associated with distress](image)

### Prevalence of Sexual Problems Associated with Distress (PRESIDE)

<table>
<thead>
<tr>
<th>Age-stratified Prevalence</th>
<th>Desire 2868/28,447</th>
<th>Arousal 1556/28,461</th>
<th>Orgasm 1315/27,854</th>
<th>Any 3456/28,403</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-44</td>
<td>8.9</td>
<td>3.3</td>
<td>3.4</td>
<td>10.8</td>
</tr>
<tr>
<td>45-64</td>
<td>12.3</td>
<td>7.5</td>
<td>5.7</td>
<td>14.8</td>
</tr>
<tr>
<td>65 or older</td>
<td>7.4</td>
<td>6.0</td>
<td>5.8</td>
<td>8.9</td>
</tr>
</tbody>
</table>

Decreased Sexual Desire With Distress Negatively Impacts Women’s Lives

- Decreased sexual desire is associated with negative effects including:
  - Poor self-image
  - Mood instability
  - Depression
  - Strained relationships with partners
The Impact of Sexual Dysfunction on a Relationship

*When sex is good*

It adds 15-20% additional value to a relationship

*When sex is bad/non-existent*

It plays an inordinately powerful role draining the relationship of all positive value, about 50-70%!

Barry McCarthy 1997 JSMT
Components of Desire

**DRIVE:**
*Biological* component based on neuroendocrine mechanisms

**COGNITIVE:**
Reflects expectations, beliefs and values

**MOTIVATION:**
Willingness to engage in sexual activity
Drive: Neuro-hormonal Contributions

- Sex steroids and neurotransmitters play a role in modulating sexual interest (drive) and behavior
Female Sexual Drive and the Brain

- Dopamine modulates sexual desire
- Norepinephrine and dopamine increase the sense of sexual excitement and the desire to continue sexual activity
- Neurotransmitters modulate the secretion of many hormones
- Hormones influence synthesis and storage of neurotransmitters
Medications Associated with Sexual Problems

• Antidepressants/mood stabilizers
  - Selective serotonin reuptake inhibitors (SSRIs)
  - Serotonin-norepinephrine reuptake inhibitors (SNRIs)
  - Tricyclics
  - Antipsychotics
  - Benzodiazepines
  - Antiepileptics
  - Monoamine oxidase inhibitors (MOAIs)

• Antihypertensives
  - B-blockers
  - α-blockers
  - Diuretics

• Cardiovascular agents
  - Lipid-lowering agents
  - Digoxin

• Hormones
  - Oral contraceptives
  - Estrogens
  - Progestins
  - Antiandrogens
  - Gonadotropin-releasing hormone (GnRH) agonists

• Other
  - Histamine2-receptor blockers
  - Narcotics
  - Amphetamines
  - Anticonvulsants
Psychosocial Factors

- Relationship conflict
- Major life stressor(s)
- Boredom
- Discrepant desire levels between partners
- Cultural/religious prohibitions/guilt
- Subclinical depression/anxiety/body image
Arousal

- For some women, our sexual response is not primary arousal but a secondary arousal (responsive)
- Who is the initiator?
- Understanding your own sexual response style
When Sex Hurts

- Vulvovaginal atrophy
- Infection
- Dermatoses
- Vulvodynia
- Pelvic floor muscle dysfunction
The Three Vs

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The passage of time
Vestibulodynia

The pain is confined to the vestibule; it (generally) stops outside of Hart’s line and there is (generally) no pain inside the vagina.

- The pain is throughout the entire vestibule. (If the pain is significantly worse in the back part of the vestibule consider a dual diagnosis, and follow the next decision tree the right as well)
- The pain is much worse at 4, 6, & 8 o’clock position of the vestibule (and there is minimal or no pain on either side of the urethra).
- There may be tenderness when deep pressure is applied to the perineum.
- The pain is mainly in the vestibule but there is irritation, redness, and (possibly fissures) on the perineum or in the grooves between the labia minora and majora.
- Ulcers or erosions that may be confined to the vestibule but may also occur on the labia and perineum.

Hormonally mediated vestibulodynia

- The pain began:
  - While taking hormonal contraceptives or other medications that affect reproductive hormones, such as those for endometriosis, breast cancer, acne, infertility or removal of ovaries,
  - While breastfeeding, perimenopause or postmenopause, or during abnormal or missing menstrual cycles.
- Pain is also associated with low calculated free testosterone levels; decreased libido, arousal or energy; or depression

Congenital neuroproliferative vestibulodynia

- Pain since first tampon insertion or first attempt at intercourse
- Never completely pain-free sex
- Sensitivity or pain when pushing in on the belly button but none when pressure on the rest of the abdomen. The pain may radiate towards the vagina.

Acquired neuroproliferative vestibulodynia

- The pain began after:
  - A severe allergic reaction to a topical medication
  - A severe yeast infection
- More likely in women with a history of very sensitive skin or irritant or allergic reactions.
- Women may have certain genetic polymorphisms.

Hypertonic pelvic floor dysfunction

- The muscles of the pelvic floor are tight and tender when examined by an experienced doctor or physical therapist; also an abnormal EMG of the pelvic floor muscles.

Vaginitis

- Inflammation that includes the vestibule and vaginal mucosa. The vaginal mucosa typically looks inflamed and there is frequently yellowish discharge.
- *Bacterial vaginosis does not cause enough inflammation to cause vestibulodynia*

Lichen planus

- Ulceration in the vestibule that can have "fern-like" or violet borders. The erosions can extend into the vagina and can also affect the vulva and vagina.
- Very significant scarring of the vulva and vagina possible.

Lichen Sclerosus

- Ulcerations in the vestibule and labia but not in the vagina. Thick, white, itchy skin with very significant scarring.

Desquamative inflammation vaginitis (DIV)

- Thick, yellowish discharge that dries like glue and ruins underwear. The vaginal pH is ~5.0 with numerous white blood cells and parabasal cells on wet mount

Allergic vaginitis

- Semen allergy: swollen and inflamed vagina and vestibule that only occurs when condom is not used during intercourse
- Latex or spermicide allergy: swollen and inflamed vagina and vestibule that only occurs when condoms are not used during intercourse

Candidiasis

- Positive culture for yeast infections that do not respond to three doses of fluconazole.
Barrier to Accurate Diagnosis: Overlap of Female Sexual Disorders

Sexual Desire Disorders

Sexual Arousal Disorder

Dyspareunia

Orgasmic Disorder

Vaginismus

Few Women Seek Formal Care

Type of help-seeking for problems of desire, arousal, or orgasm: N=3,239/31,581

- Formal: 34.5%
- Informal: 41.9%
- Anonymous: 14.5%
- Did not seek help: 9.1%

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Treat what is treatable

- General health and well being
- Medication management
- Lubricants
- Hormonal therapy
- Pelvic floor physical therapy
- Sex therapy
The Role of Androgens

- Androgens appear to be important in female sexuality
- Decline in androgens parallels increasing age in late reproductive years (30+)
- Declining levels contribute to decline in sexual desire, arousal, and orgasm

Sex Hormone Binding Globulin

- Made in the liver
- Binds circulating sex hormones such as testosterone
No FDA Approved Testosterone Options for Low Desire

- Testosterone gels and patches approved for men
- Compounded 1% testosterone cream or gel for women
- Testosterone injections
- Subcutaneous pellets
Sex therapy - Sensate Focus

- Developed by Masters and Johnson in the late 1960’s
- Most well-known technique and most frequently prescribed behavioral sex therapy (for couples)
- Series of progressive, in vivo (homework) desensitization exercises
- Primary goal to enhance partners’ awareness of pleasurable experiences and their own preferences for sexual touch while reducing anxiety through graded exposure

Masters and Johnson, Human Sexual Inadequacy 1970
Pelvic Floor Physical Therapy

Illustration #2  Female Pelvic Floor Anatomy

- clitoris
- urethra
- ischiocavernosus
- vagina
- bulbocavernosus
- vestibule
- perineal body
- transversus perineum
- levator ani:
  - puboccygeus
  - iliococcygeus
- anus
- anal sphincter
- coccyx bone
- gluteus maximus

©Amy Stein, Heal Pelvic Pain

UC San Diego Health System
Breaking the Cycle

• SPEAK UP
• Get the right diagnosis
• Multidisciplinary approach
• Invest in yourself! You are worth it!
Questions?

Thank you for your time and attention!