

Sexual Dysfunction in Women

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Disclosures

- I served as an unpaid speaker for AbbVie, Inc.

Mission Statement

- To innovate and provide expert training for OB/GYN providers and learners, inspiring motivated and effective quality clinical care that results in equitable outcomes, particularly for those with challenging social determinants of health.

Sexual Health Education- OB/GYN Residents

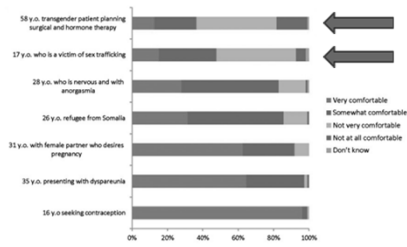
Table 4. Self-reported sexual health didactic sessions experienced during residency training (N = 802)

Didactic topic	Residency year					Differences between groups (P)
	1st n = 247	2nd n = 205	3rd n = 204	4th n = 146	All years n = 802	
Gender issues (LGBTQ) and sexual health	81 (32.8)	106 (51.7)	120 (58.8)	75 (51.3)	382 (47.8)	*
Screening for human sexual trafficking	33 (13.4)	33 (16.1)	41 (20.1)	28 (19.2)	135 (16.8)	←
Screening for sexual violence (including domestic and rape)	194 (66.2)	177 (57.1)	136 (66.7)	101 (69.2)	468 (58.4)	*
Age related sexual health	99 (40.1)	108 (52.7)	97 (47.6)	77 (52.7)	381 (47.5)	*
Sexual health for women with disabilities	15 (6.1)	13 (6.3)	16 (7.8)	14 (9.6)	58 (7.2)	←
Cultural competence in sexual health (including genital cutting)	42 (17.0)	52 (25.4)	62 (30.4)	46 (31.5)	202 (25.2)	←
Therapies for sexual dysfunction	52 (21.1)	70 (34.2)	87 (42.7)	70 (48.0)	279 (34.8)	*
Etiologies of sexual dysfunction (biome, neurologic, organic)	71 (28.7)	107 (52.2)	127 (62.3)	95 (65.1)	399 (49.8)	*

Data are n (%), unless otherwise specified.
 *Insufficient power to detect differences between groups.

Worly, J Sex Med, 2021.

Sexual Health Education- Program Directors



Worly, Intl J of Sex Health, 2018.

Objectives

1. Be familiar with normal sexual behavior, gender, and sexual orientation.
2. Gain proficiency in the categories of sexual dysfunction and treatment options.
3. Be prepared to discuss sexual problems and barriers with different age and orientation groups.
4. Examine special topics in Human Sexuality:
 1. Sex trafficking
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“Sexual health is a state of physical, emotional, mental and social well-being related to sexuality; it is not merely the absence of disease, dysfunction or infirmity.”

-World Health Organization
Sexual Health, 2002



Source: Pixabay

Why talk about sexual health?

- Each year in the US there are:
 - 45,000 new cases of HIV
 - 20 million sexually transmitted infections
 - 3 million unintended pregnancies
 - 1 million women are sexually assaulted
 - 12-63% sexual dysfunction prevalence

ACOG Practice Bulletin No. 706.
Worly, IJGO 2010.

The Genderbread Person

by www.ItsPronouncedMetrosexual.com

Gender Identity
 Woman Genderqueer Man
 Gender identity is how you, in your head, think about yourself. It's the chemistry that compares you (e.g., hormonal levels) and how you interpret what that means.

Gender Expression
 Feminine Androgynous Masculine
 Gender expression is how you demonstrate your gender based on traditional gender roles through the way you act, dress, behave, and interact.

Biological Sex
 Female Intersex Male
 Biological sex refers to the classified reproductive organs, hormones, and chromosomes. Female = vagina, ovaries, XX chromosomes, male = penis, testes, XY chromosomes. Intersex = a combination of the two.

Sexual Orientation
 Heterosexual Bisexual Homosexual
 Sexual orientation refers to who you are sexually, physically, and emotionally attracted to, based on their sex/gender in relation to your own.

Source: <https://www.samkillemann.com/work/genderbread-person/>

Female Sexual Response Cycle

Source: Pixabay

Basson R. Clin Update Womens Healthcare, 2014.

Neurotransmitters and Hormones

- Dopamine, norepinephrine, serotonin- inhibitory and excitatory
- Hormones: oxytocin, prolactin, estrogen, androgen, melanocortin
- Acetylcholine → Nitric oxide, free testosterone, and vasoactive intestinal peptide- clitoral vasocongestion
- Orgasm- opiate receptors, serotonin, prolactin, oxytocin

Source: nida.nih.gov

Cacioppo, Sex Med Rev. 2017
https://nida.nih.gov/sites/default/files/worksheetsmod1_69.pdf

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Pause, Think, and Apply: Patient #1

- 54yo G3P3 with h/o cervical cancer, s/p radical hysterectomy, lymph node dissection, pelvic radiation, now with decreased sexual desire for the past 3 years, and pain with sex
- P- Permission
- LI- Limited Information
- SS- Specific suggestions
- IT- Intensive Therapy

Keshavarz, Z. BMC Women's Health, 2021.

Female sexual interest/ arousal disorder

Female sexual interest

- Lack of/ decrease in 3:
 - Interest in sex activity
 - Sex thoughts/fantasies
 - Initiation/ response
 - Excitement/ pleasure
 - Interest in response to internal/ external cues
 - Genital/ nongenital sensations
- Occurs 75-100% of time
- Distress, >6 months
- Most common- 5.4-21.4%, peaks at 40-60yo

Arousal

- Inability to complete sexual activity with adequate lubrication that causes distress, > 6 mo
- 5.4-11.4%
- Associated with anhedonia

Leiblum SR, et al. Menopause 2006
 Kalmbach, et al. J Sex Med 2011
 Shifren, et al. Obstet Gynecol 2008
 DSM V, 2013

Differential diagnosis for decreased desire

Psychosocial-spiritual

- Relationship issues
- Lack of sex education
- "Sex is wrong"
- Infidelity
- Psychological disorder
- Addiction
- Body image
- Survivor of sexual violence
- Incontinence
- Infertility

Biologic

- Medical conditions
 - Hypothyroid
 - Obesity
 - Diabetes
 - Cancer
 - Vascular diseases
 - Mental illness
- Medications
 - Psychiatric meds
 - Hormonal contraception
 - Antihypertensives
 - Opioids/Steroids
- Normal aging

Sex Therapy

- Sexual skills training (anatomy, communication)
- Cognitive behavioral therapy
- Mindfulness therapy
- Couples therapy

Wheeler L. Obstet Gynecol, 2020.

Bupropion

- Norepinephrine and dopamine agonist
- Small improvement on FSD scale scores
- 150mg twice daily dosing did best in RCT for patients with SSRI-induced sexual dysfunction

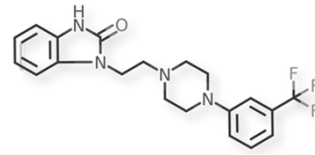


Source: Pixabay

Wheeler L. Obstet Gynecol, 2020.
Segraves RT. J Clin Psychopharm, 2004.

Flibanserin

- 5HT1A agonist and 5HT2A antagonist, 100mg daily has been approved by FDA in 2015 for premenopausal HSDD
- Inhibits serotonin and promotes dopaminergic effects, and increases NE



Wheeler L. Obstet Gynecol, 2020.
Clayton AH. Women's Health, 2010.
Source: <https://gers.ncats.nih.gov/gines/app/beta/substances/37JK4STR6Z>

Bremelanotide

- Approved for use in pre-menopausal women with HSDD in 2019
- Melanocortin receptor agonist



Source: Pixabay

Wheeler L. Obstet Gynecol, 2020.
Kingsberg S. Obstet Gynecol, 2019.

Systemic Estrogen

- Lowest dose, shortest time
- Effective for post-menopausal decreased sexual interest/arousal (systemic)
- Pair with progestin therapy
- Clinical assessment is essential
- Breast/ endometrial cancer risks v. benefits



Source: Pixabay

Wheeler L. Obstet Gynecol, 2020.
Taylor HS. JAMA IM, 2017.

<https://pixabay.com/photos/woman-dragon-relax-tame-fantasy-3613722/>

Vaginismus Treatment:

- Systematic desensitization of vagina with graduated dilators
- Emphasis on allowing patient to control pace and duration of sexual activity
- Pelvic floor physical therapy may be done to aid relaxation of pelvic muscles
- Vibration may be helpful
- Topical anesthesia (lidocaine jelly)

Wheeler L. Obstet Gynecol, 2020.

Genitourinary Syndrome of Menopause (Vulvovaginal atrophy)

- VVA affects 13-87% of postmenopausal women
- More frequent VVA leads to dyspareunia and infrequent intercourse
- Symptoms: dyspareunia, vaginal dryness, itching, incontinence



Source: Pixabay

Mili, Menopause, 2021.

Vaginal lubricants/ moisturizers

- Hyaluronic-based and polycarboxophil products 2-3 times per week
- Coconut, olive, and vegetable oils are less expensive
- Water-based lubricants dry out
- Silicone-based lubricants do not dry out

Wheeler L. Obstet Gynecol, 2020.

Ospemifene

- Ospemifene 60mg daily is an oral estrogen agonist/antagonist, FDA approved 2013
- Female Sexual Arousal Disorder/ Sexual Pain related to moderate-severe dyspareunia due to Vulvovaginal atrophy



Source: Pixabay

Wurtz et al. Clinical Interventions in Aging, 2014.
Constantine G. Climacteric, 2015.

Topical/ Systemic Estrogen

- Lowest dose, shortest time
- Topical is preferred- rings, gels, creams, tablets (minimal systemic absorption)
- Clinical assessment is essential
- Breast/ endometrial cancer risks v. benefits



Source: Pixabay

Wheeler L. Obstet Gynecol, 2020.
Simon JA. Menopause, 2014.

Prasterone

- Prasterone (DHEA) vaginal suppositories for moderate/ severe dyspareunia with vulvovaginal atrophy associated with menopause
- Estrogen is a prasterone metabolite



Archer DF. Menopause, 2015.

<https://www.flickr.com/photos/unicity6912751167/in/photolist-bwRESX-c8wTAZ-ug0XhuDMep-Kuc0Hh-JUL2Cz-4L1C3B-8TVHY-7f7S3q-#zgGV-L6S2K-76M-2W4Z2z-6569H-4DDBY-C8H1V-HF88B1p-ee7T-ub-ec3UJ-9K6DRe-56eZ-5UVv4P-5fFEN-4xgf-Fg-VEP5G-qhCS1-4F29D-4eN2M-4G5qao-HCeY9-8T6S1-9pW1W-avkC-4R-2nTWK-EI-eaNgE-qyL5Dh-3auW4-q2p2pB-4AV4x-Fv00a-byJ22g-4AV4v-TW3Wb-7Q4RQp-HSS7-44V4t-uYSKUR-seavv-cxyeC-2e9yC>

CC: 41yo G3P3 postpartum FTSVD 8 months ago, who is a cis-gendered heterosexual female has vaginal dryness with insertional dyspareunia for the past 6 months

What are the first steps of treatment?

- A. OTC vaginal lubricant
- B. Vaginal estrogen
- C. Oral estrogen
- D. Ospemifeme
- E. Prasterone

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Sex in Past Year

	Men (%)	Women (%)
Total	80	65
40-49 years old	93	88
70-80 years old	53	21
Sex more than once per week	44	38

Lindau ST. NEJM, 2007.

Sexual dysfunction and age

- Physical changes of aging
 - Cancer/ Incontinence
 - Physical and social environment
 - Education
 - Past experiences
 - Cultural background
 - Relationship
- Physical changes of aging in partner

Ambler et al. Reviews in Obstetrics & Gynecology, 2012.
 Arthur, J Geriatric Oncol. 2021.
 Worly, IJGO 2010.

LBGTQI and health care

- Barriers to care
- Violence
- Psychosocial issues
 - Depression, eating disorders, suicide attempts

ACOG Committee Opinion 525, 2012.

Transgender care

- 150,000 youth and 1.4 million adults in US
- Gender incongruence- disturbance in sexual or gender identity, distress
- Barriers to care- 54% attempted suicide, 21% resort to self-mutilation
- Possible treatment options:
 - 1. Living in the gender role consistent with identity
 - 2. Cross-sex hormone therapy
 - 3. Gender affirmation surgery

ACOG Committee Opinion, 2021.

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Sexual Abuse/ Assault Survivors

- 200,000- 1 million women are survivors of rape per year in US
- Impact on future sexual relationships
- Many feel like they cannot disclose, or are not ready
- Physician-patient relationship of trust and respect can lead to eventual disclosure

ACOG Committee Opinion No. 777, 2019.

Sex trafficking

- 27 million victims of sexual trafficking worldwide, 27% children, 55% girls
- Crimes of a sexual nature for economic purposes, \$150 billion/year
- 38-62% of prostitutes start as a minor
- Reportable offense for <18yo and >65yo
- National Human Trafficking Hotline



Source: Pixabay

ACOG Committee Opinion 787, 2019.

CC: 18yo G0P0 wearing very expensive clothes, poor personal hygiene, and with recurrent vaginal discharge

The patient has a "translator from home" with her, who answers all questions for her.

What is your next step?

- A. Continue with the history and exam with the "translator" in the room
- B. Ask the "translator" to leave at an opportune time, and screen the patient for violence/ trafficking
- C. Promise the patient that you will keep her safe and call the police

Female genital mutilation/ cutting

- Clitoridectomy, excision, infibulation
- 200 million girls/ women worldwide, 30 African/ Middle Eastern countries
- Occurs on infants to age 15
- Violation of human rights
- Many complications
 - Immediate: Pain, bleeding, infection, shock, death
 - Long-term: urinary, menstrual, sexual, obstetric psychological problems

Chappell AG. J Plast Reconstr Aesthet Surg, 2021

Sex for patients with disabilities

- Intellectual and physical disabilities are different
- Increased risk of nonconsensual sex acts
- Contraception issues- compliance
 - US Eugenics movement, Supreme Court Buck v. Bell 1927
- Decreased education
- Healthcare Power of Attorney issues
- Menstrual hygiene
- STI Screening regularly
- Pregnancy?

Holland-Hall. Pediatr Clin N Am, 2017.

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