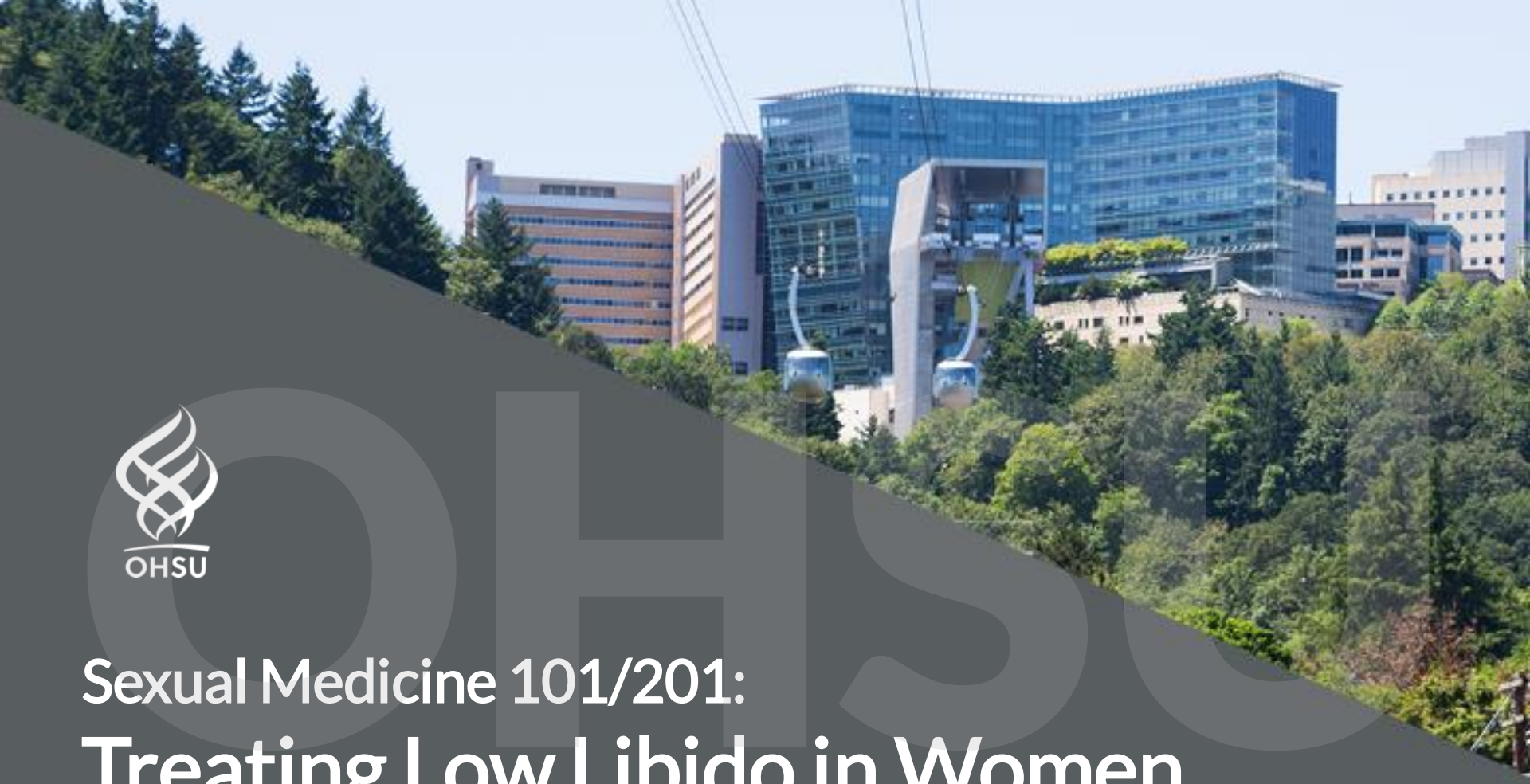
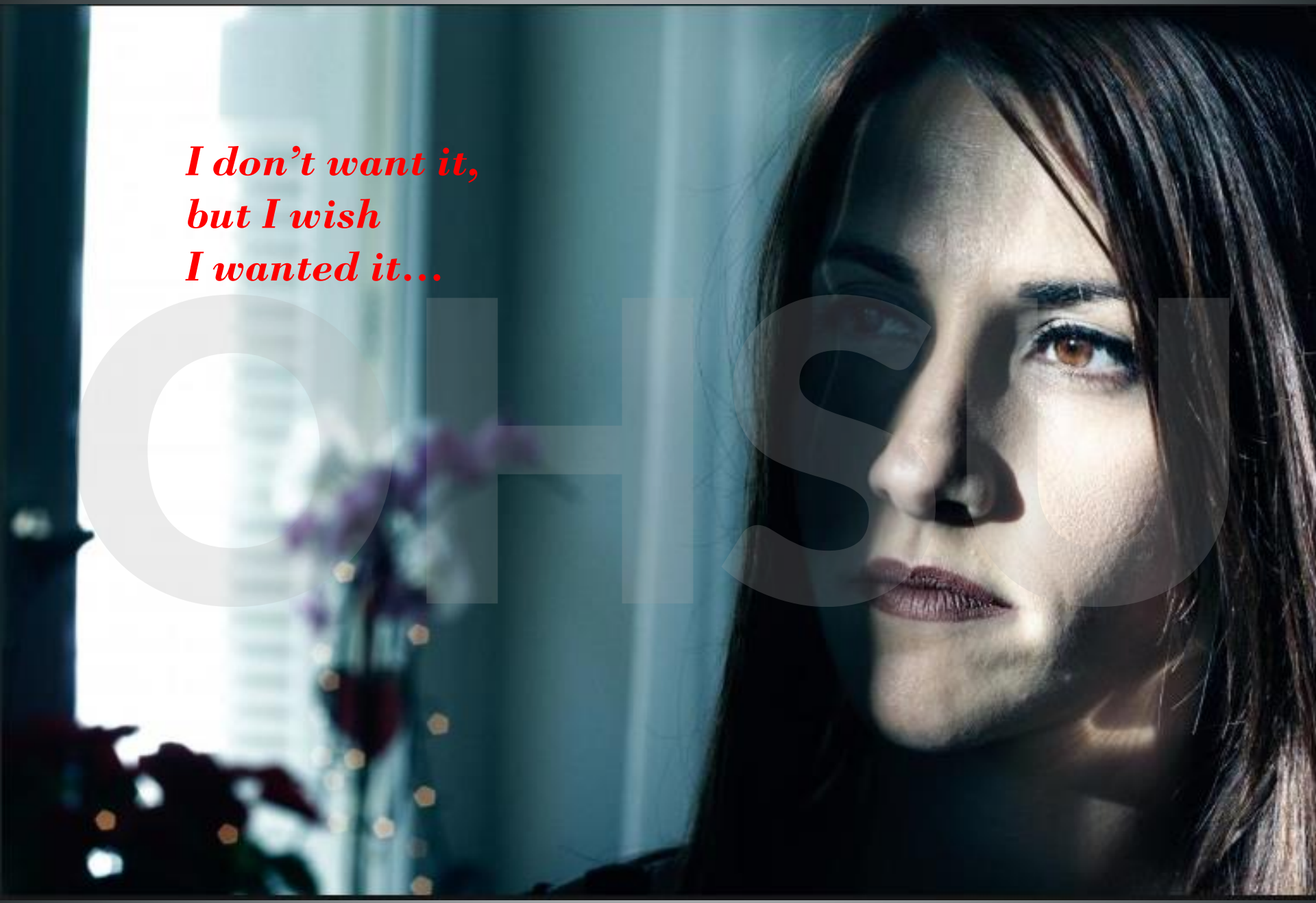


## Sexual Medicine 101/201:

# Treating Low Libido in Women

**Karen E Adams MD, FACOG, NCMP, FISSWSH**
Professor and Director, Menopause and Sexual Medicine Program
Department of OBGYN, Oregon Health & Science University


*I don't want it,*
*but I wish*
*I wanted it…*

## *OHSU Center for Women's Health*

# *Menopause & Sexual Medicine Program*

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# *The CWH Sexual Medicine Collaborative*

Gynecology
- hormonal treatments
- minor surgeries
- localized treatments

Behavioral Health
- Sex therapy (AASECT-certified)
- Couples therapy
- nonhormonal medication mgmt

Physical Therapy
- biofeedback
- pelvic floor muscle specialist

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# Disclosures:

- Astellas Pharma Global Development sponsors one research project
- Today I will discuss both on- and off-label uses of drugs
- My perspective is solely that of a clinician and educator

# Learning Objectives:

- After this talk, you will:
  - Know the biopsychosocial model of sexual dysfunction in women
  - List 3 behavioral approaches that can improve sexual function in women
  - List 3 pharmacological treatments that can improve sexual function in women

# Why Sexual Health?

Brody, S. *Biological Psychology,* February 2006.
Brody, S. *Biological Psychology,* March 2000.
Light, K. *Biological Psychology*, April 2005.
Charnetski, C. *Psychological Reports,* June 2004.
Ebrahim, S. *J of Epid and Cmm Health,* February 2002.
Mulhall, J. *J of Sexual Medicine*; online Feb. 8, 2008.
Meston, C. *Archives of Sexual Behavior,* August 2007.
Kosfeld, M. *Nature,* June 2, 2005.

- Often necessary for reproduction
- Most common reason for stopping antidepressants
- Decreased BP and cardiovascular risk in men (NE, 5HT, DHEA)
- Important component in stress reduction (OXT)
- Increased intimacy/bonding- generosity, nurturing behavior (OXT)
- Improved self esteem and weight management (EPI, NE, DA)
- Improved sleep and pain tolerance (Endorphins)
- Elevated immune system (IgA)
- Improved bladder control, decreased prostate CA in men
- Muscle strengthening

*Sexual Health Impacts Medical Health*

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# Only <20% of women with FSD will raise the issue…

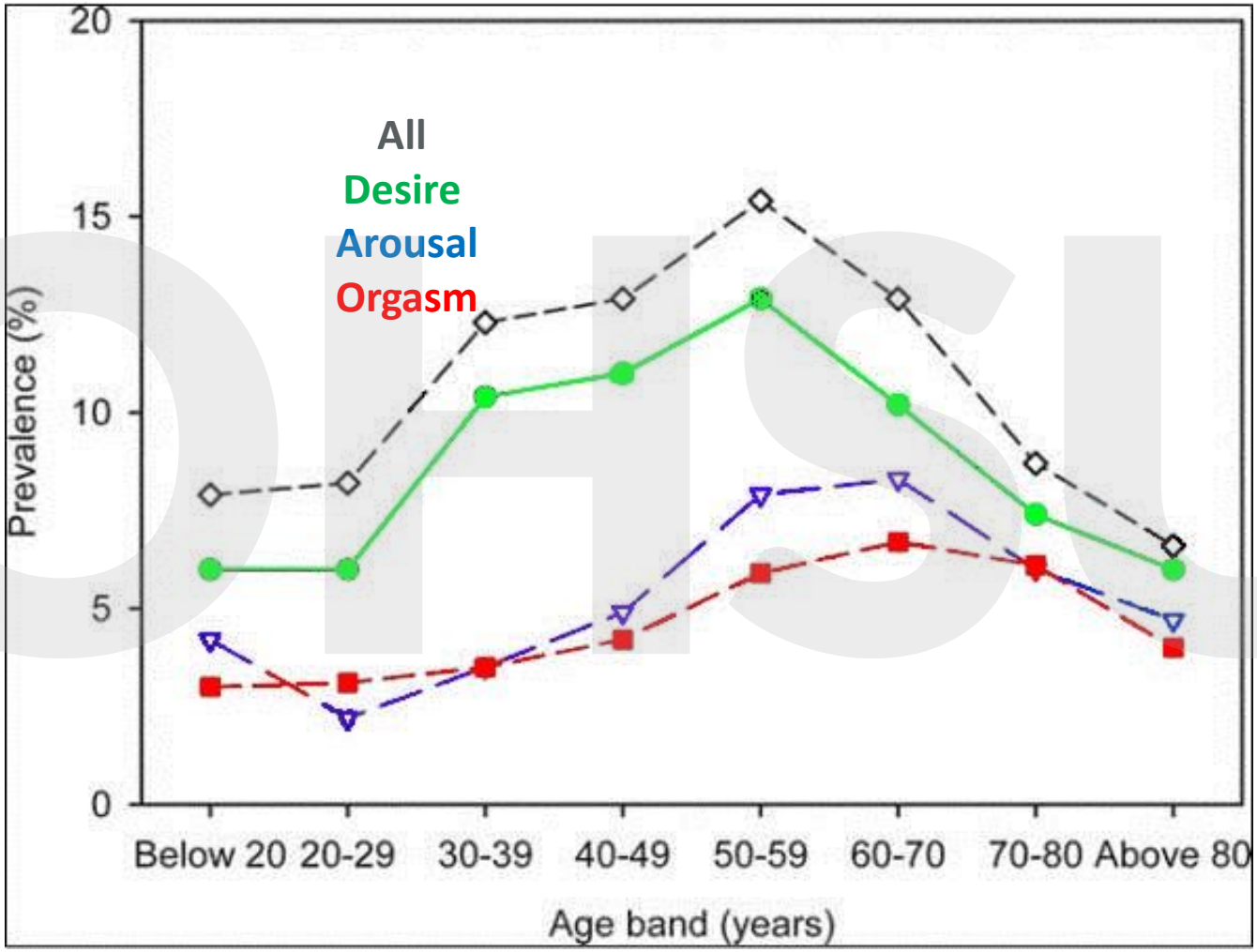
- Barriers (Nusbaum and Hamilton, 2002)
  - Embarrassment
  - Uncertainty about ability to treat
  - Belief it's not relevant to their health
  - Time constraints

# “Typical” sexual med patients

- Menopausal
- PTSD from trauma
- A variant in psychiatric patients
- Complications of childbirth or infertility
- Ambiguous genitalia
- Cancer survivors
  - Radiation
  - Tamoxifen/AIs
- Desiring pregnancy but unable to have PIV
- Sexual pain conditions
  - Vulvar
  - Pelvic

LACK OF LIBIDO

# Sexual Problems/Distress in US Women: Prevalence and Correlates*




Shifren, Jan; Monz, Brigitta; Russo, Patricia; Segreti, Anthony; Johannes, Catherine: Obstetrics & Gynecology. 112(5):970-978, November 2008

*Recent data suggest prevalence same in women who identify as lesbian or bisexual

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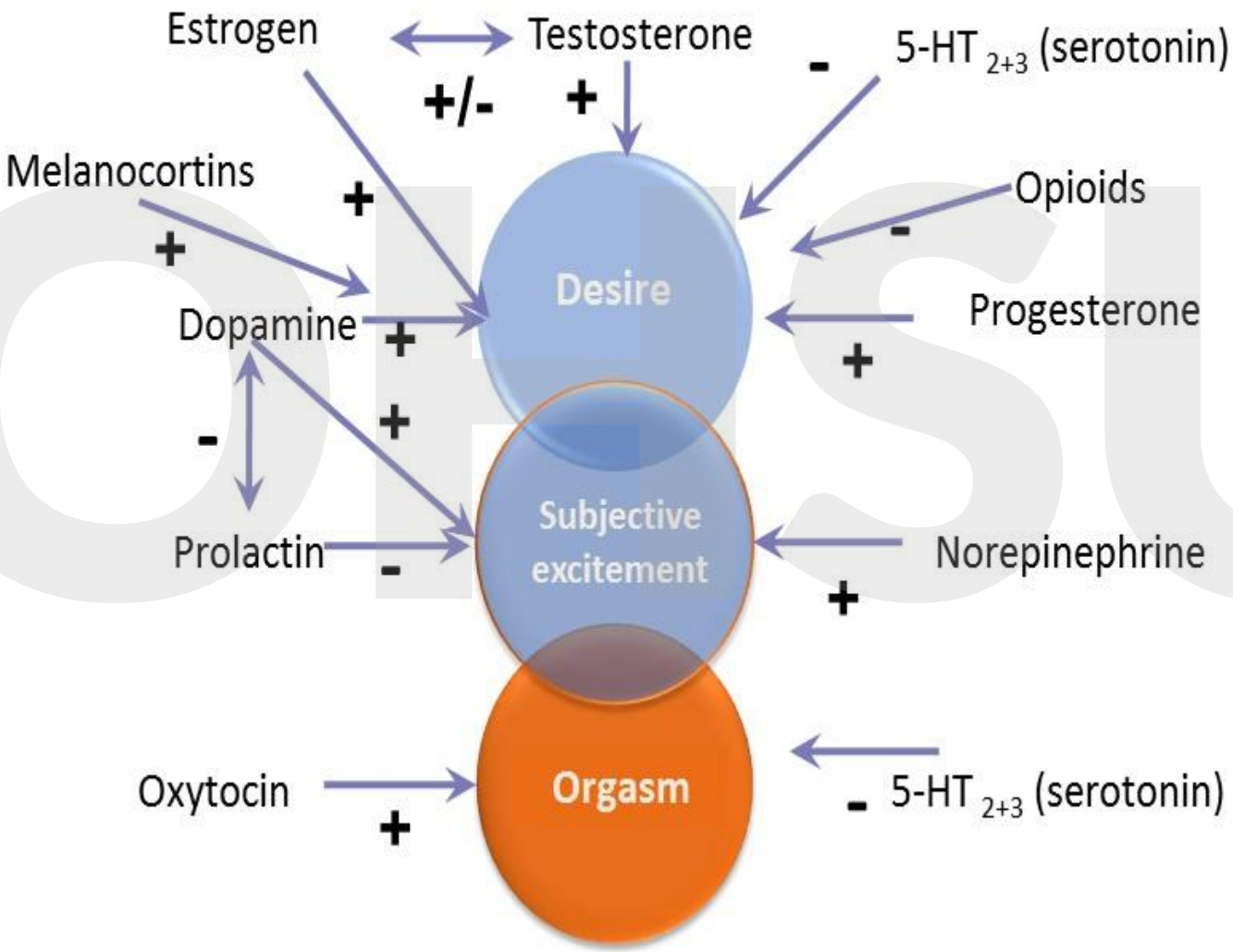
# Prevalence of Female Sexual Dysfunction (PRESIDE)

| SEXUAL COMPLAINT | SEXUAL PROBLEM | SEXUAL PROBLEM + DISTRESS |
|---|---|---|
| Desire | 39% | 10% |
| Arousal | 26% | 5% |
| Orgasm | 21% | 5% |
| Any Dysfunction | 44% | 12% |

Shifren J, et al, Obstet Gynecol. 2008;112:970-978

# Central Effects of Neurotransmitters and Hormones on Sexual Functioning



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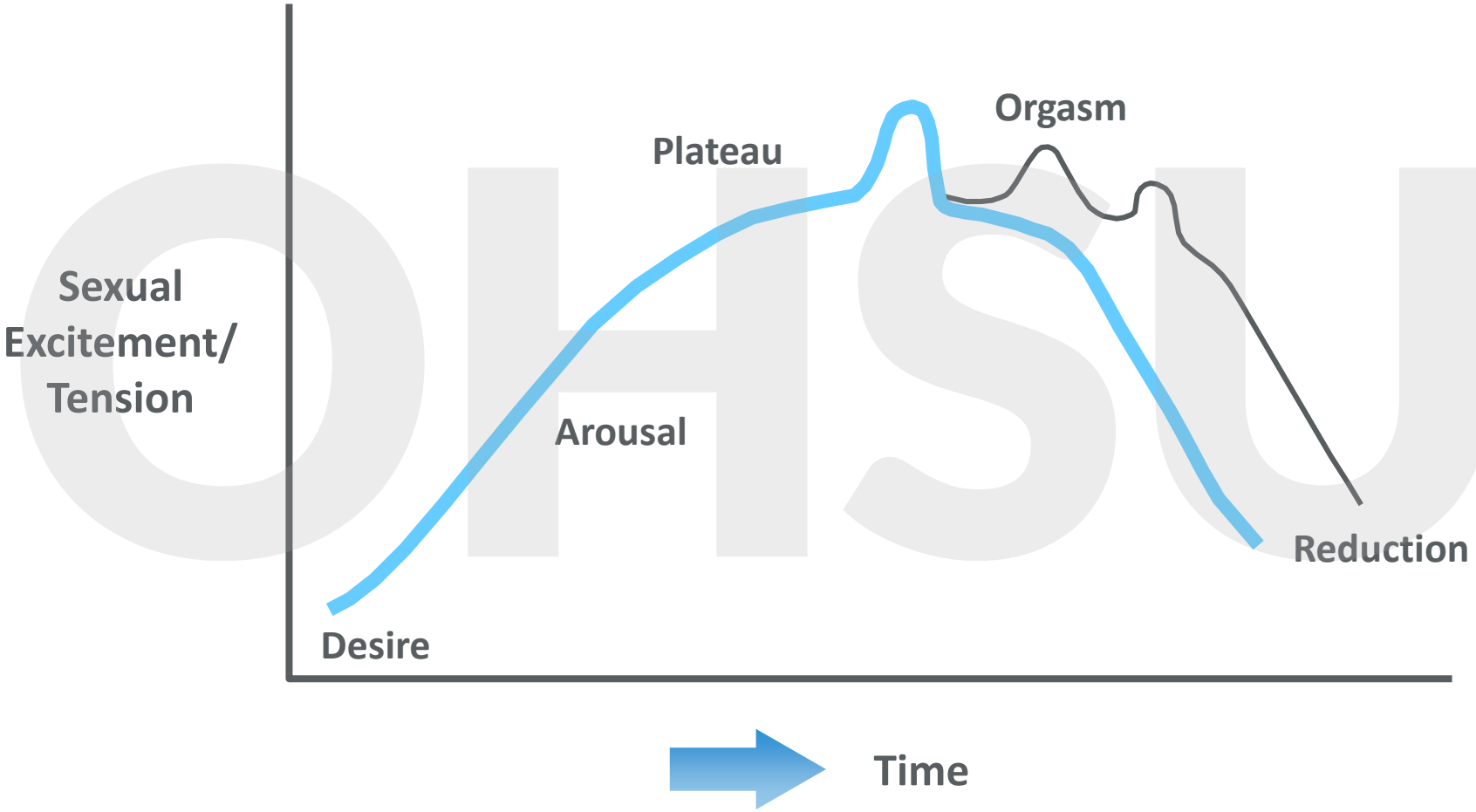
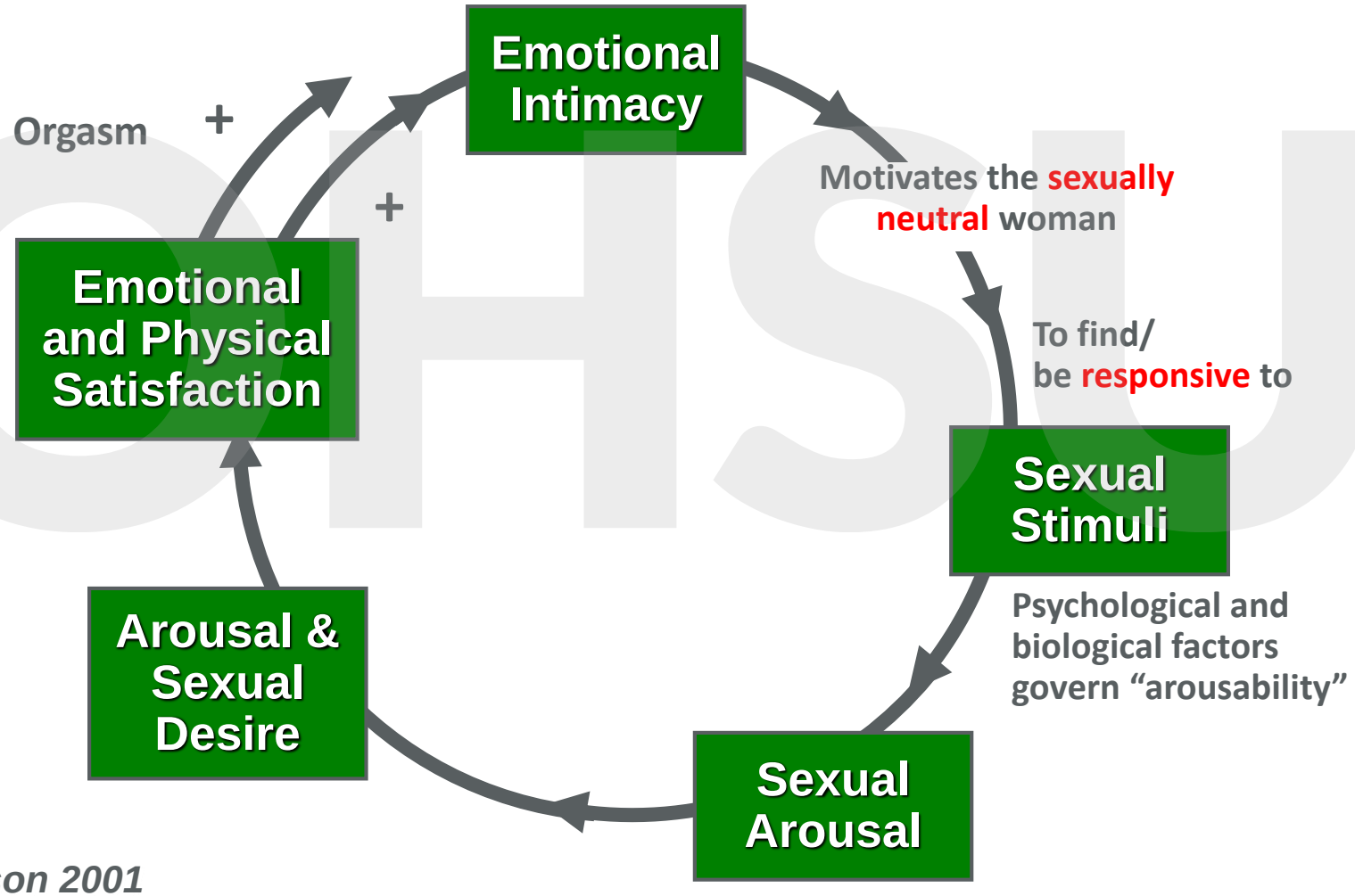
# Traditional Model of Sexual Response

*Masters & Johnson/Singer Kaplan*

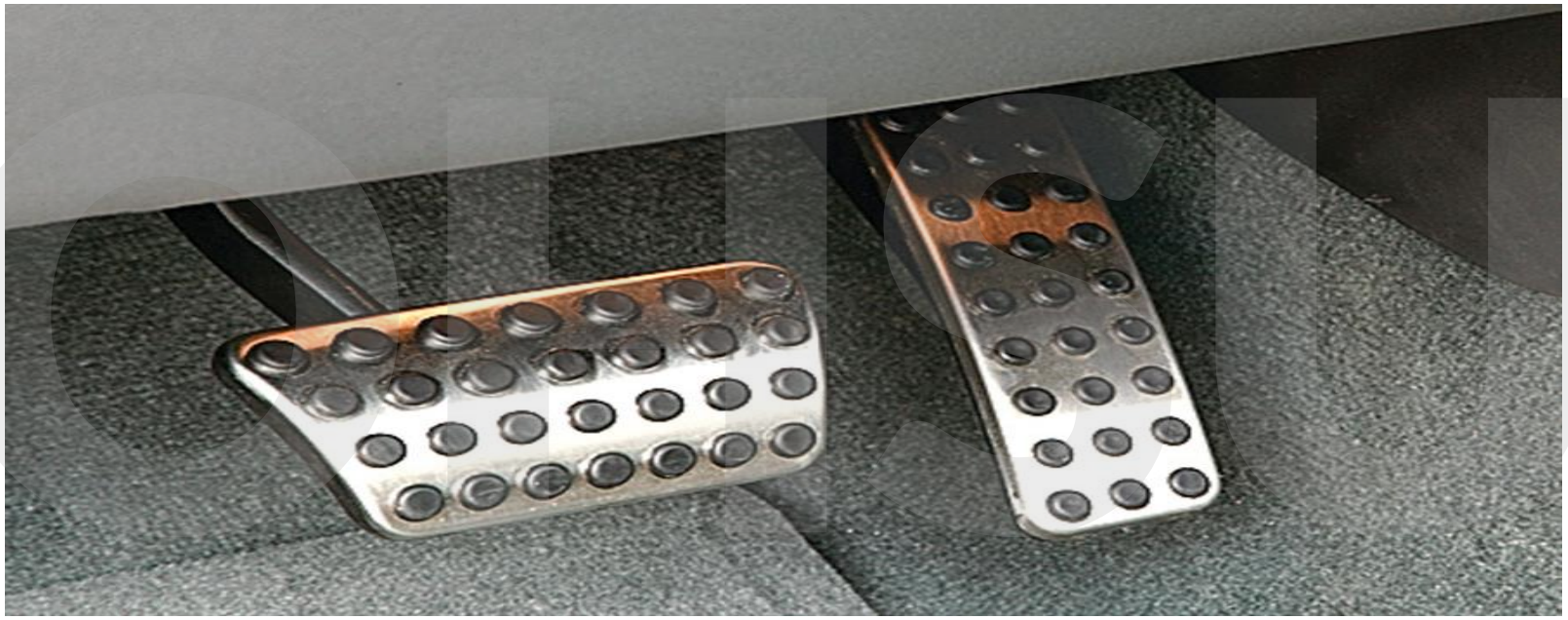


# "Basson Model" Female Sexuality




*Basson 2001*

# Janssen and Bancroft: The Dual Control Model



-Janssen, Erick and Bancroft, John. The Dual Control Model: The role of sexual inhibition and excitation in sexual arousal and behavior. In *The Psychophysiology of Sex*, ed E Janssen. Indiana U Press, 2007.

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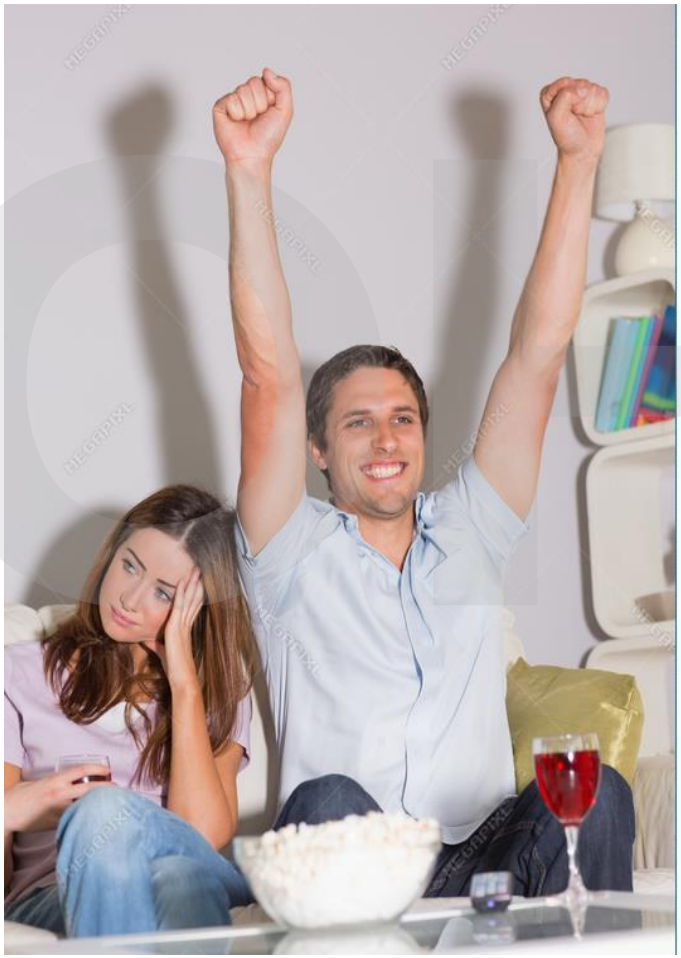
# In general…



- Men have more sensitive accelerators
- Women have more sensitive brakes
- Each person's goal should be to understand themselves

# The Dual Control Model

Turn off the "offs"

Turn on the "ons"

# Come As You Are: "What gets you in the mood?"

- An **attractive partner** who **respects you and accepts you** as you are
- Feeling **trusting and affectionate** in the relationship
- Being **confident and healthy**, both emotionally and physically
- **Feeling desired** by your partner
- Being approached in a way that **makes you feel special**
- **Erotic cues**, like erotica or porn

- Also….**IT DEPENDS!**

# CONTEXT is everything!

# Context

- A woman who has all those things STILL may not want to have sex if:
  - She has the flu
  - She worked 70 hours that week
  - Her mother is visiting
  - She likes them both to be freshly showered and they just came in from gardening
- Because…CONTEXT!
- Women's sexual response is more sensitive than men's to context

# Context

- What we want and like **changes** based on our external circumstances and our internal state

# The Power of Context

- When your brain is in a stressed state, almost everything is perceived as a potential threat

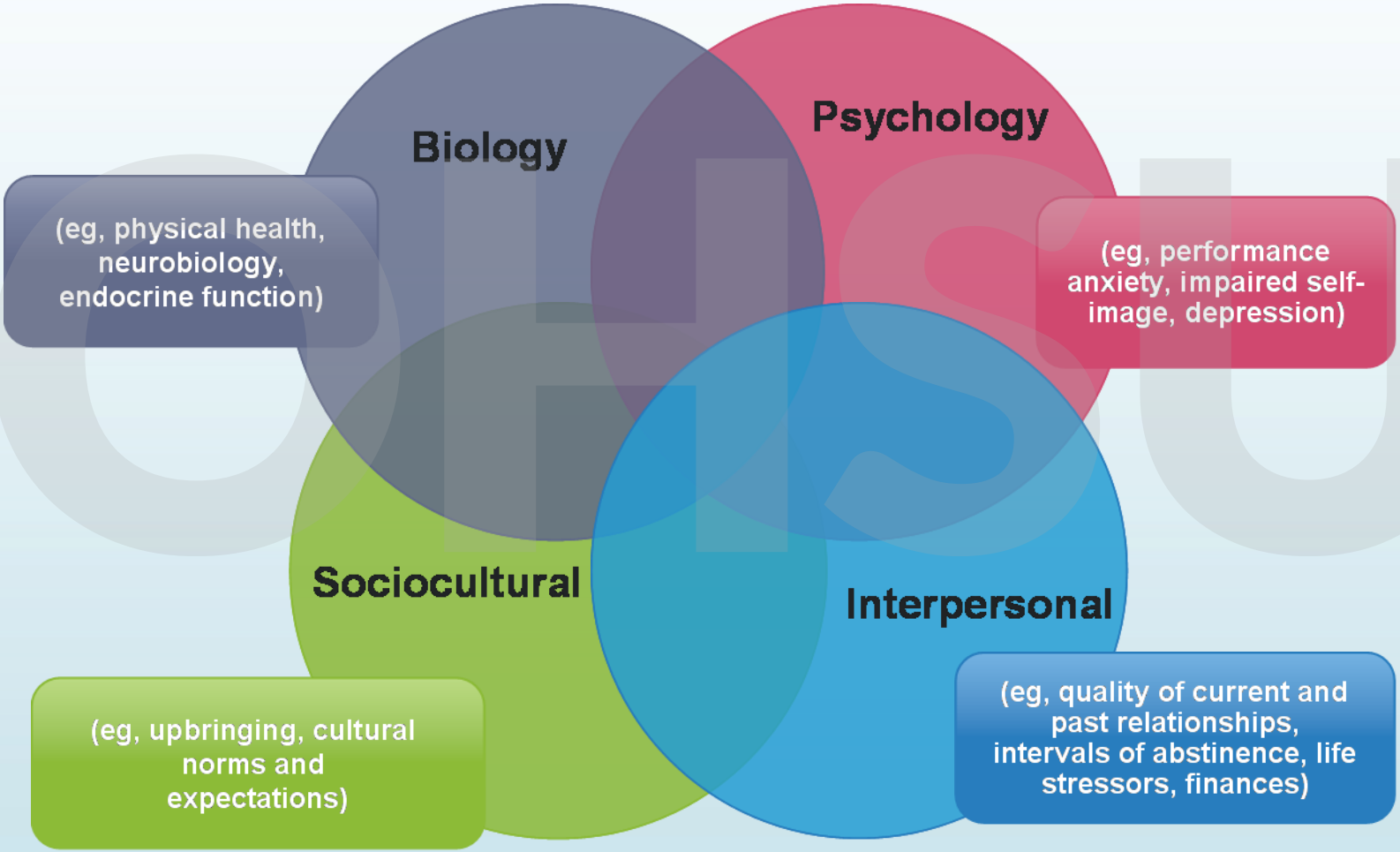
# “You are not broken”

# Case- Mary

- 54 year old female h/o HTN, T2DM and depression. When asked about her medications she says:

- "I don't know…I read that there could be sexual side effects. For me, *if I could never have sex again I'd be just fine*. But Mark, he feels pretty upset about it and I guess maybe I do too, I'm not sure."

# Biopsychosocial Model of Female Sexual Response




Althof SE, et al. *J Sex Med.* 2005;26:793-800. Rosen RC, Barsky JL. *Obstet Gynecol Clin North Am.* 2006;334:515-526.

# Hypoactive Sexual Desire Disorder (HSDD)

Manifests as ***any*** of the following:

- 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.



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# HSDD bottom line:

Reduced or absent desire

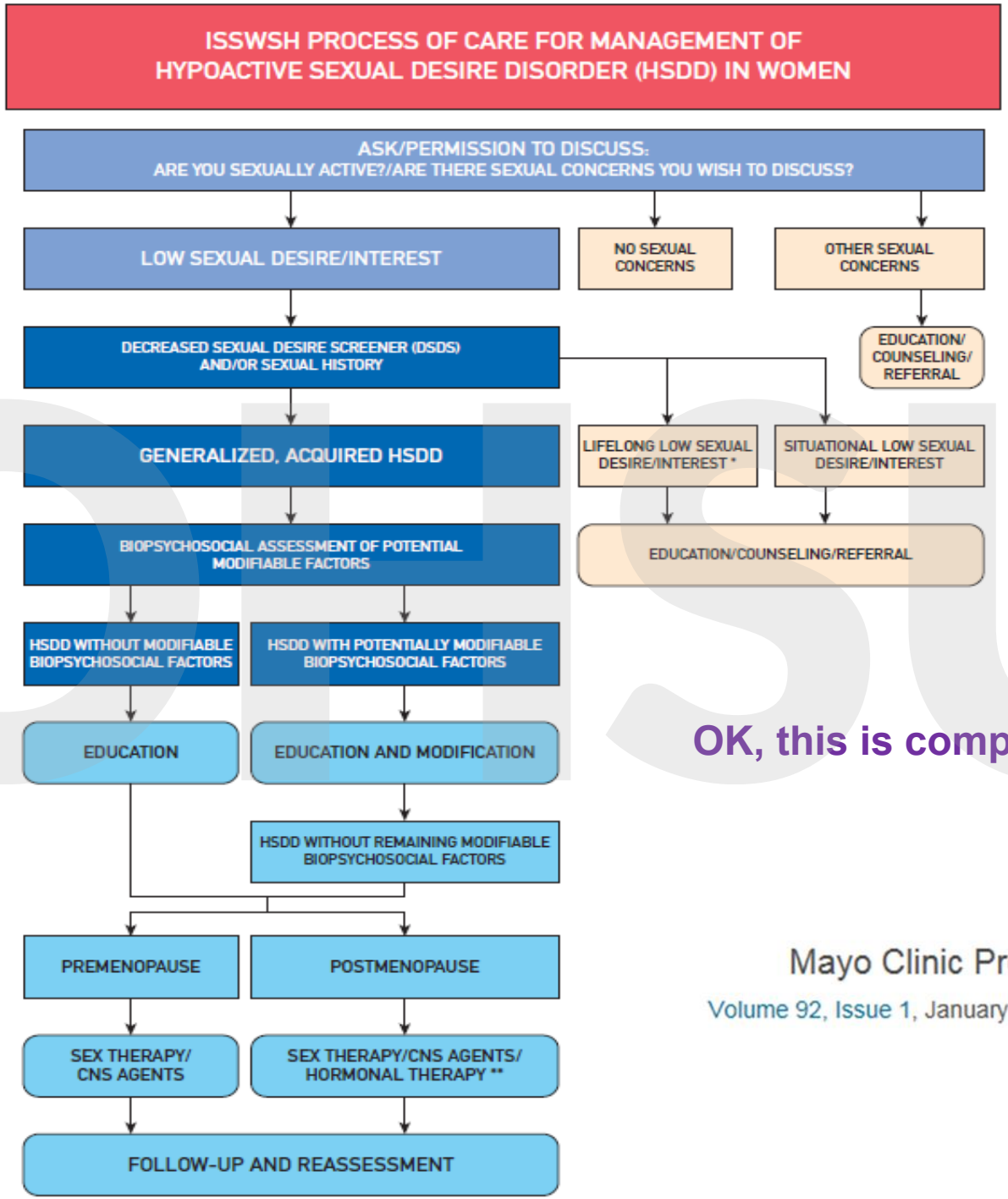
(*spontaneous* or *responsive*)

to either initiate or participate in sexual activity

- often includes avoidant behaviors
- excludes pain

AND

involves personal distress




**OK, this is complicated…**

Mayo Clinic Proceedings

Volume 92, Issue 1, January 2017, Pages 114-128



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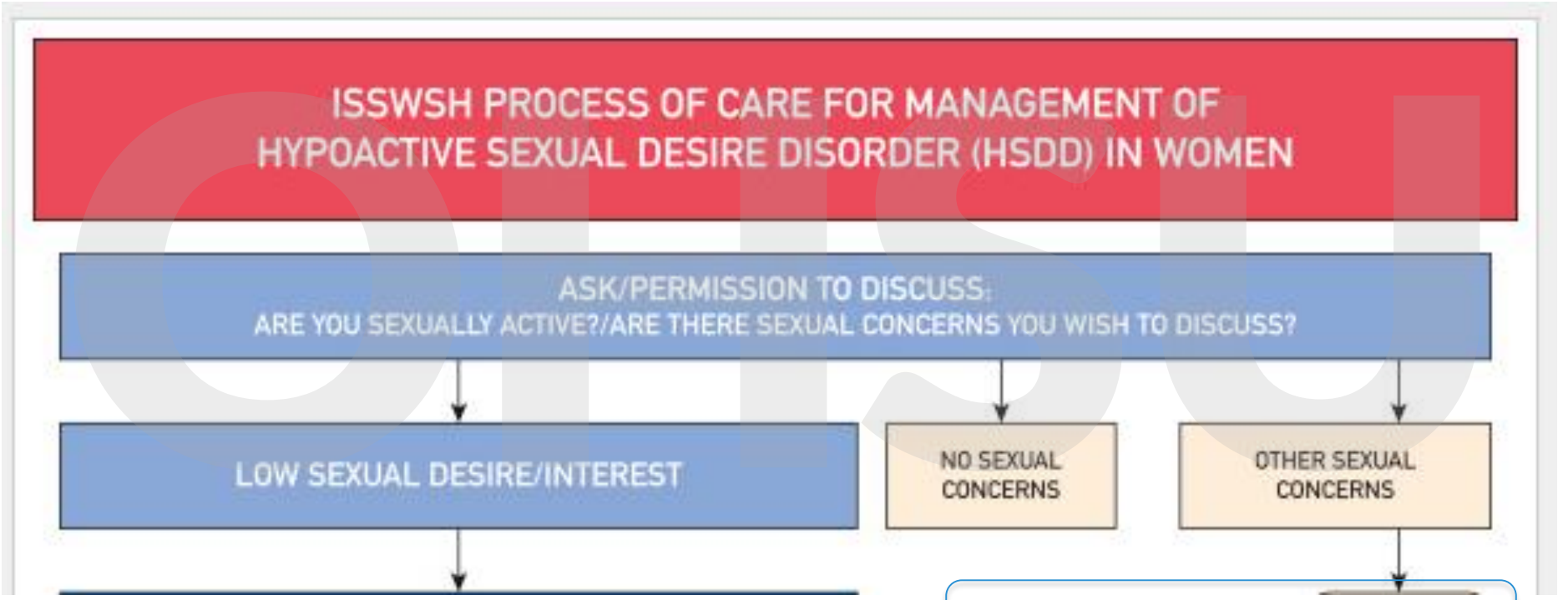
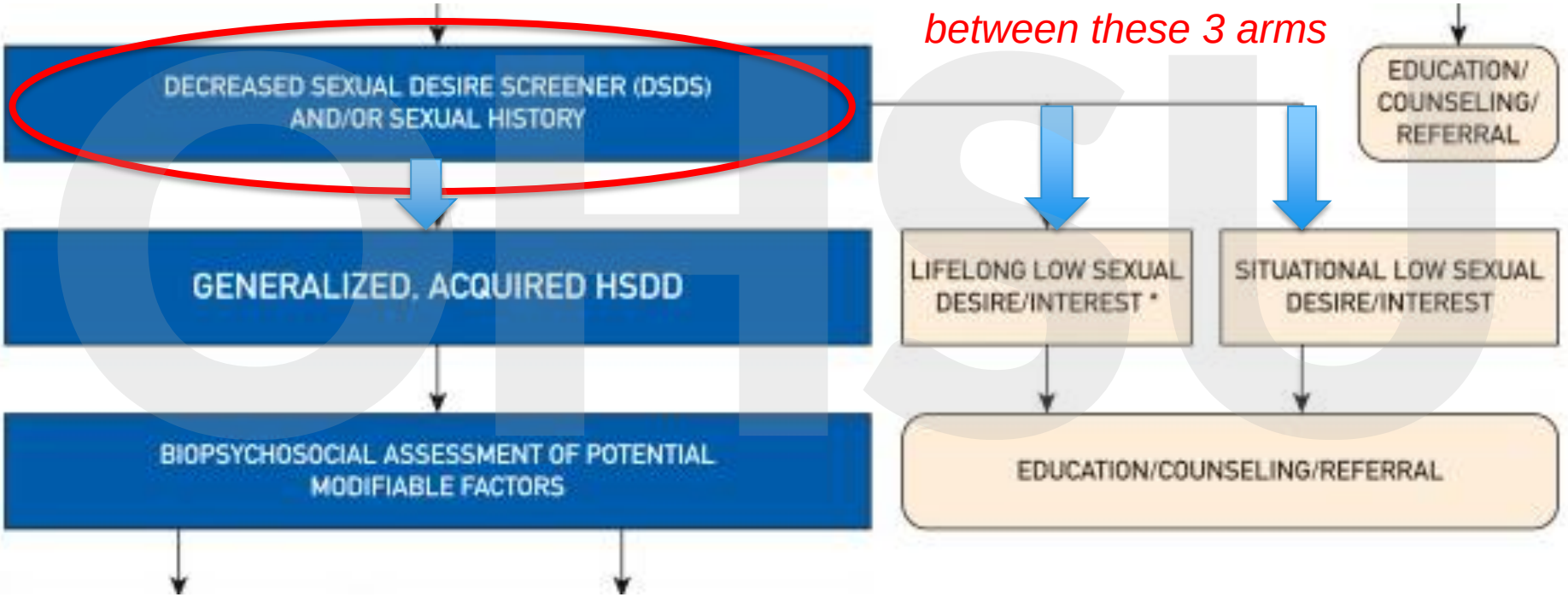
# Let's break it down!



# When it's "low sexual desire or interest"

*Screener will differentiate between these 3 arms*

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# Decreased Sexual Desire Screener (DSDS)

| | | |
|---|---|---|
| 1. In the past, was your level of sexual desire/interest good and satisfying to you? | No ☐ | Yes ☐ |
| 2. Has there been a decrease in your level of sexual desire/interest? | No ☐ | Yes ☐ |
| 3. Are you bothered by your decreased level of sexual desire/interest? | No ☐ | Yes ☐ |
| 4. Would you like your level of sexual desire/interest to increase? | No ☐ | Yes ☐ |
| 5. Please check all the factors that you feel may be contributing to your current decrease in sexual desire/interest: | | |
| A. An operation, depression, injuries, or other medical condition | No ☐ | Yes ☐ |
| B. Medications, drugs or alcohol you are currently taking | No ☐ | Yes ☐ |
| C. Pregnancy, recent childbirth, menopausal symptoms | No ☐ | Yes ☐ |
| D. Other sexual issues you may have (pain, decreased arousal, orgasm) | No ☐ | Yes ☐ |
| E. Your partner's sexual problems | No ☐ | Yes ☐ |
| F. Dissatisfaction with your relationship or partner | No ☐ | Yes ☐ |
| G. Stress or fatigue | No ☐ | Yes ☐ |

**NO to Q1, 2, 3, or 4 = Not generalized acquired HSDD**

**YES to all Q1–4 and clinician-verified NO to all Q5 factors = Generalized acquired HSDD**

**YES to all Q1–4 and YES to any Q5 factor = clinician to use best judgment to determine diagnosis**

Clinical assessment of patient answers is required.

- On average, the DSDS took < 15 minutes to complete in a clinical study (N = 921)
- DSDS had a sensitivity of 0.836 (84%) and a specificity of 0.878 (88%) (N = 263)

This image was published in the Journal of Sexual Medicine, Vol 6. Clayton AH, Goldfischer ER, Goldstein I, et al. Validation of the decreased sexual desire screener (DSDS): a brief diagnostic instrument for generalized acquired female hypoactive sexual desire disorder (HSDD). Copyright Elsevier 2009.

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# Medical Conditions…

**TABLE 3. Medical Conditions Potentially Impacting Sexual Function[a,b]**

| Medical Condition | Desire | Arousal | Orgasm | Pain | Comments |
|---|---|---|---|---|---|
| Coronary artery disease | – | + | – | – | None |
| Hypertension | + | – | – | – | Impact of hypertension or treatment is unclear; one study found an association with low desire |
| Diabetes | + | – | – | – | Low desire may relate to depression and relationship status |
| Metabolic syndrome | + | + | + | – | None |
| Hypothyroidism | – | + | + | – | Increased problems with lubrication and orgasm |
| Pituitary tumor/hyperprolactinemia | + | – | – | – | None |
| Urinary incontinence | + | + | – | + | None |
| Renal failure | – | – | – | – | Dialysis associated with sexual dysfunction |
| Spinal cord injury/multiple sclerosis/ neuromuscular disorders | + | + | + | + | Direct impact on sexual response; indirect effect on desire may be mediated by arousal disorders/pain |
| Parkinson disease/dementia/head injury | + | – | – | – | Desire may be increased or decreased |
| Arthritis | – | – | – | + | Decreased mobility and chronic pain may impair sexual function |
| Dermatological conditions (vulvar lichen sclerosus, vulvar eczema, psoriasis, Paget disease) | – | – | – | + | None |
| Gynecologic conditions (genitourinary syndrome of menopause, sexually transmitted infections, endometriosis, chronic pelvic pain, childbirth, pelvic organ prolapse) | – | – | – | + | None |
| Malignancy and treatment (breast, anal, bladder, colorectal, and gynecologic cancers) | + | + | + | + | Sexual function may be directly or indirectly impacted by cancer diagnosis and treatment. Factors include cancer diagnosis, disease itself, treatment (surgery, radiation, chemotherapy), and body image |
| Major depression | + | + | + | – | None |

[a] + = affected; – = not affected.
[b] Data from references 50-52.
Adapted from *Am Fam Physician*,[53] with permission.

# Substance or Medication-Induced Sexual Dysfunction

- Alcohol
- Sedative/hypnotic
- Opioids
- Amphetamine/Cocaine
- Oral Contraceptives
- Other:
  - SSRI's, TCA's MAOI
  - Antipsychotics
  - Propanolol

"It provokes the *desire*
but takes away the *performance*."
--Macbeth

**TABLE 4. Medications Associated With Female Sexual Dysfunction**

| Medication | Desire disorder | Arousal disorders | Orgasm disorders |
|---|---|---|---|
| Anticholinergics | – | + | – |
| Antihistamines | – | + | – |
| Amphetamines and related anorexic drugs | – | – | + |
| Cardiovascular and antihypertensive medications | | | |
| Antilipid medications | + | – | – |
| β-Blockers | + | – | – |
| Clonidine | + | + | – |
| Digoxin | + | – | + |
| Spironolactone | + | – | – |
| Methyldopa | + | – | – |
| Hormonal preparations | | | |
| Danazol | + | – | – |
| GnRH agonists | + | – | – |
| Hormonal contraceptives | + | + | – |
| Antiandrogens | + | + | + |
| Tamoxifen | + | + | – |
| GnRH analogues | + | + | – |
| Ultralight contraceptive pills | + | + | – |
| Narcotics | + | – | + |
| Psychotropics | | | |
| Antipsychotics | + | + | + |
| Barbiturates | + | + | + |
| Benzodiazepines | + | + | – |
| Lithium | + | + | + |
| SSRIs | + | + | + |
| TCA | + | + | + |
| MAO inhibitors | – | – | + |
| Venlafaxine | + | + | + |
| Other | | | |
| Histamine 2 receptor blockers and promotility agents | + | – | – |
| Indomethacin | + | – | – |
| Ketoconazole | + | – | – |
| Phenytoin sodium | + | – | – |
| Aromatase inhibitors | + | + | – |
| Chemotherapeutic agents | + | + | – |

GnRH = gonadotropin-releasing hormone; MAO = monoamine oxidase; SSRIs = selective serotonin reuptake inhibitors; TCA = tricyclic antidepressants; + = yes; – = no.
Adapted from *Fertil Steril*,[54] with permission from Elsevier.

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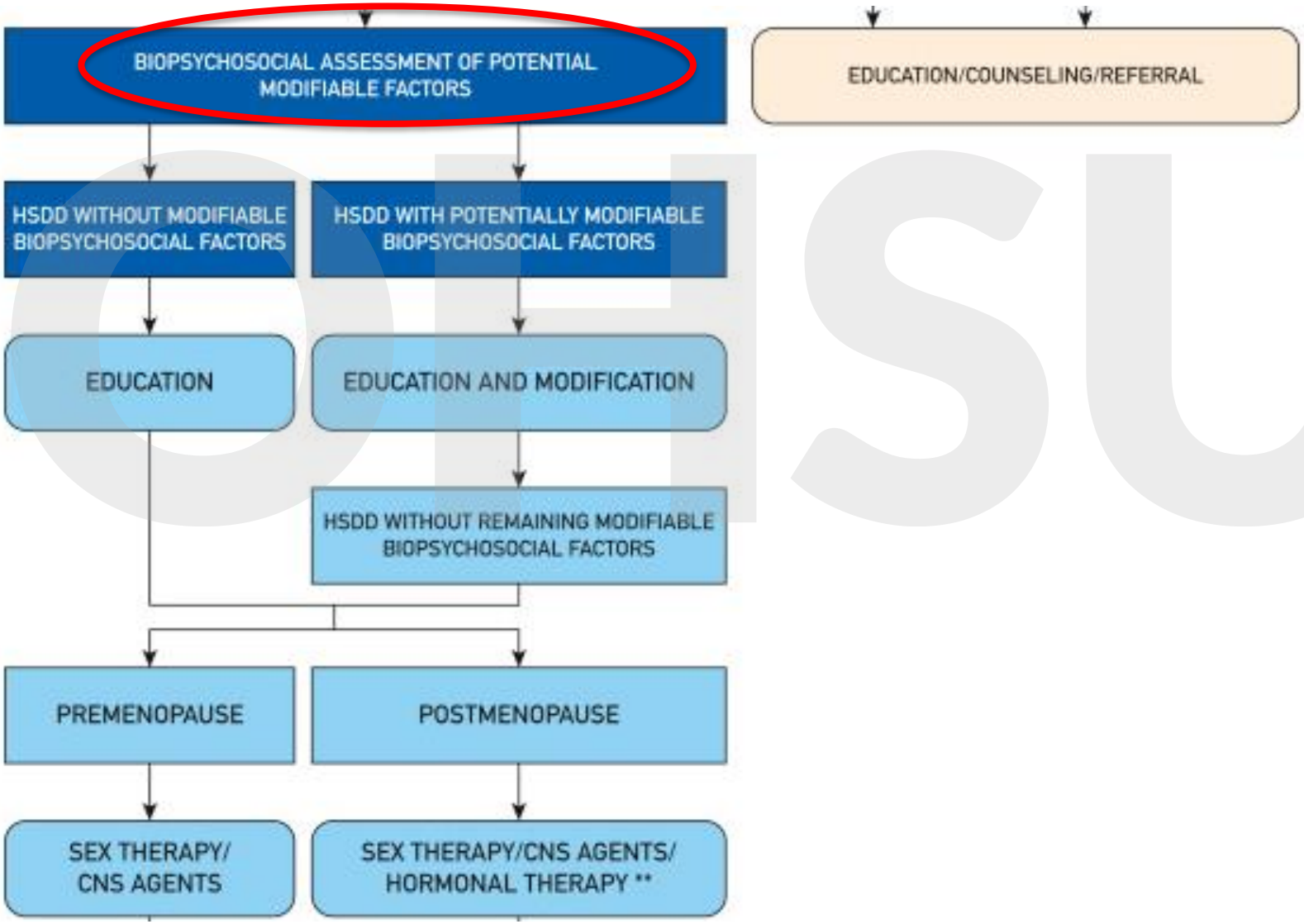
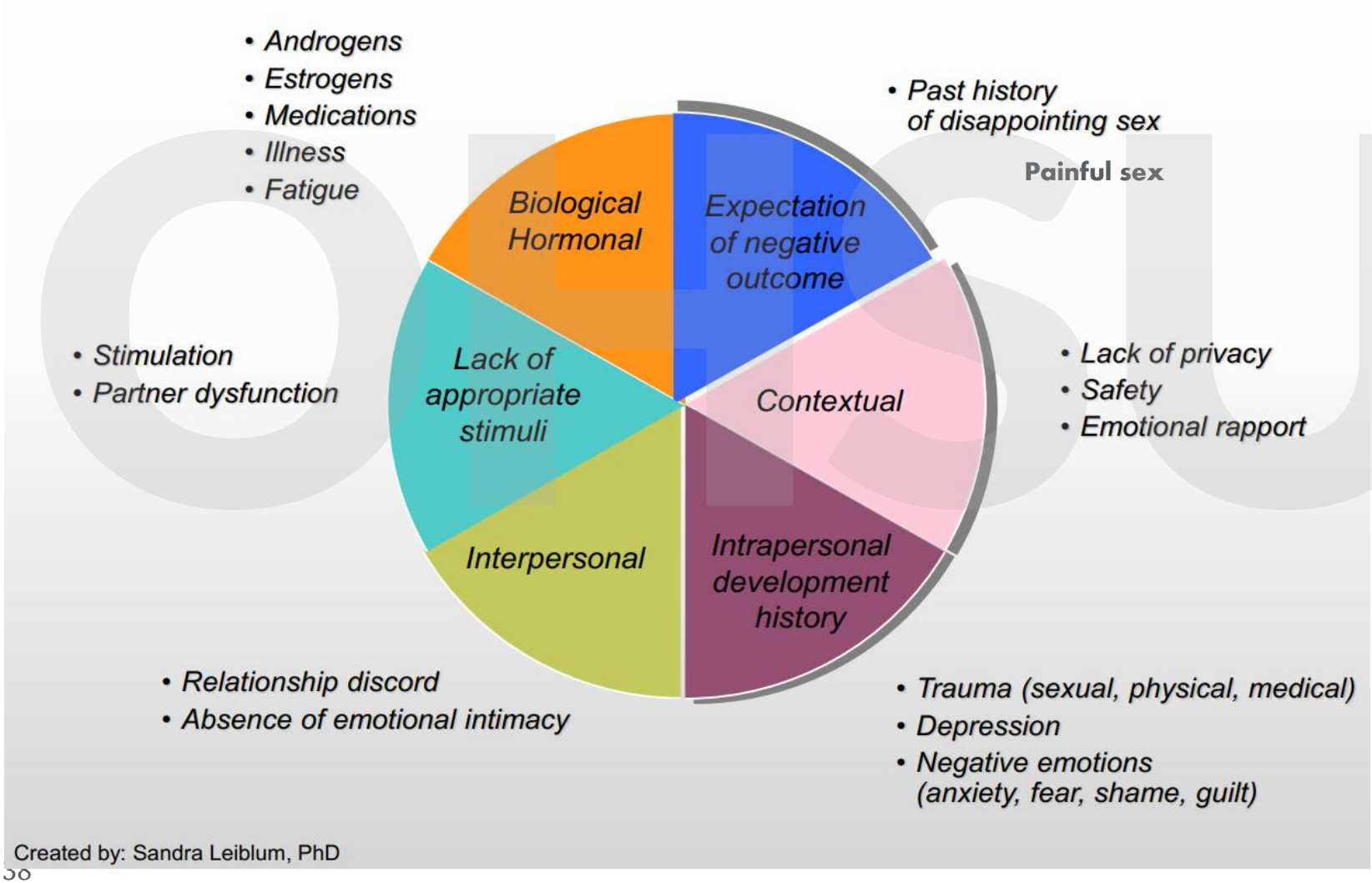
# You've diagnosed generalized acquired HSDD. Next:



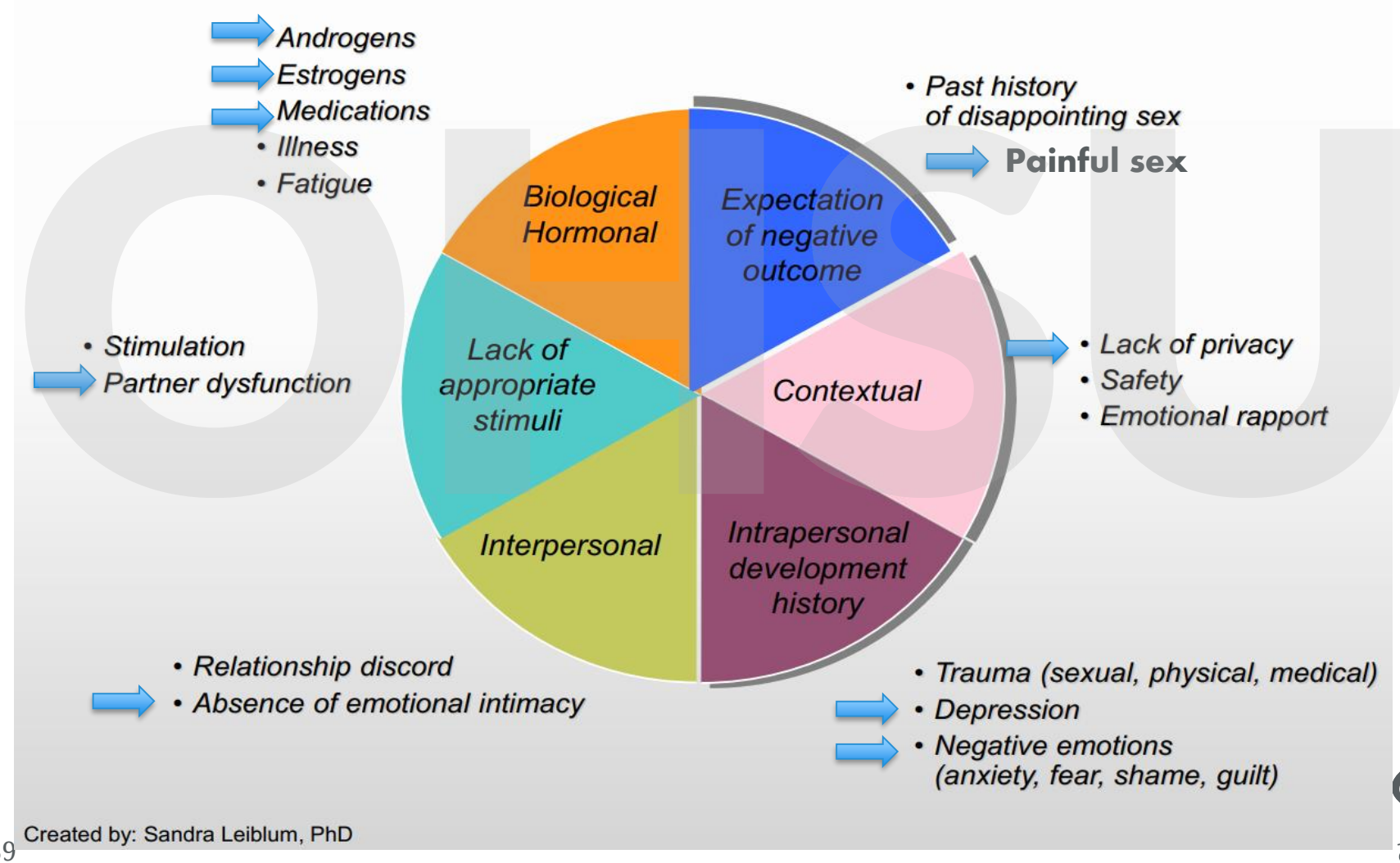
# Mary 54 year old female h/o HTN, T2DM and depression

- Sx began 5 years ago with “discomfort” with penetration when her periods stopped. Desire decreased for the past 4 years. Can still orgasm with masturbation. Now avoids any physical touch from her partner. No sexual contact of any type for 18 months. She no longer feels as close to her HB but she loves him. Feels guilt, shame and sadness. No h/o trauma.
- Meds: propranolol, metformin, fluoxetine 40mg (2 years), zolpidem PRN
- SocHx: Married 20 years, daughter recently moved home with grandchild, works FT as RN
- wt. gain 10 pounds. HB has Erectile Dysfunction
- PE: BMI 27, constricted affect, PHQ9= 15. GU: mild atrophic changes

# FSD Etiology



# FSD Etiology--Mary



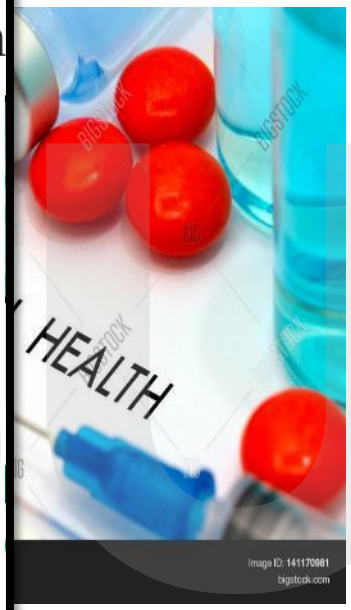
# Treatment?


## FDA Approves Female-Libido-Enhancing Man

NEWS IN BRIEF
June 9, 2015

VOL 51 ISSUE 23
Health · Science & Technology · Science · Medicine · Sex

WASHINGTON—In an effort to address the needs of women suffering from a lack of sexual desire, the FDA announced Tuesday that it had approved a new female-libido-enhancing man, which is expected to be made available to the general public by year's end. "After conducting numerous trials on hundreds of female subjects with low sex drives, we determined that this man significantly increased sexual interest among women of all ages," said FDA representative Jane Newlon, who noted that using the 75kg man, known as Gabriel, every day had been shown to activate the regions of the brain associated with pleasure, increase blood flow to the genitals, and boost instances of orgasm by almost 40 percent. "We observed a sharp rise in libido immediately after the man is introduced, with stimulative effects lasting for up to four hours at a time. In a marketplace dominated by male-libido-enhancing products, it is a significant milestone to finally have a safe, effective option for women who want to increase their arousal, and that is exactly what this man offers." Newlon went on to warn consumers that when mixed with alcohol, the man becomes much less effective.

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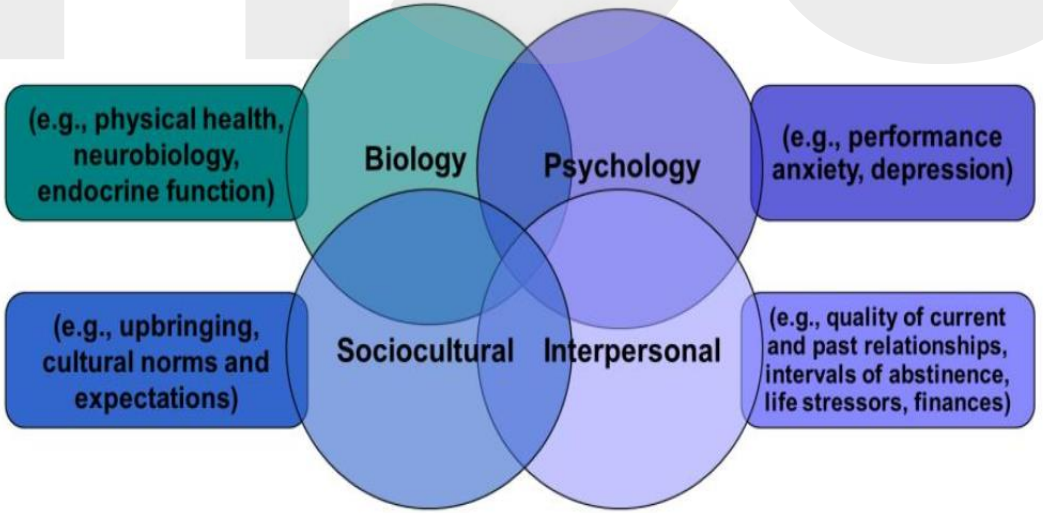
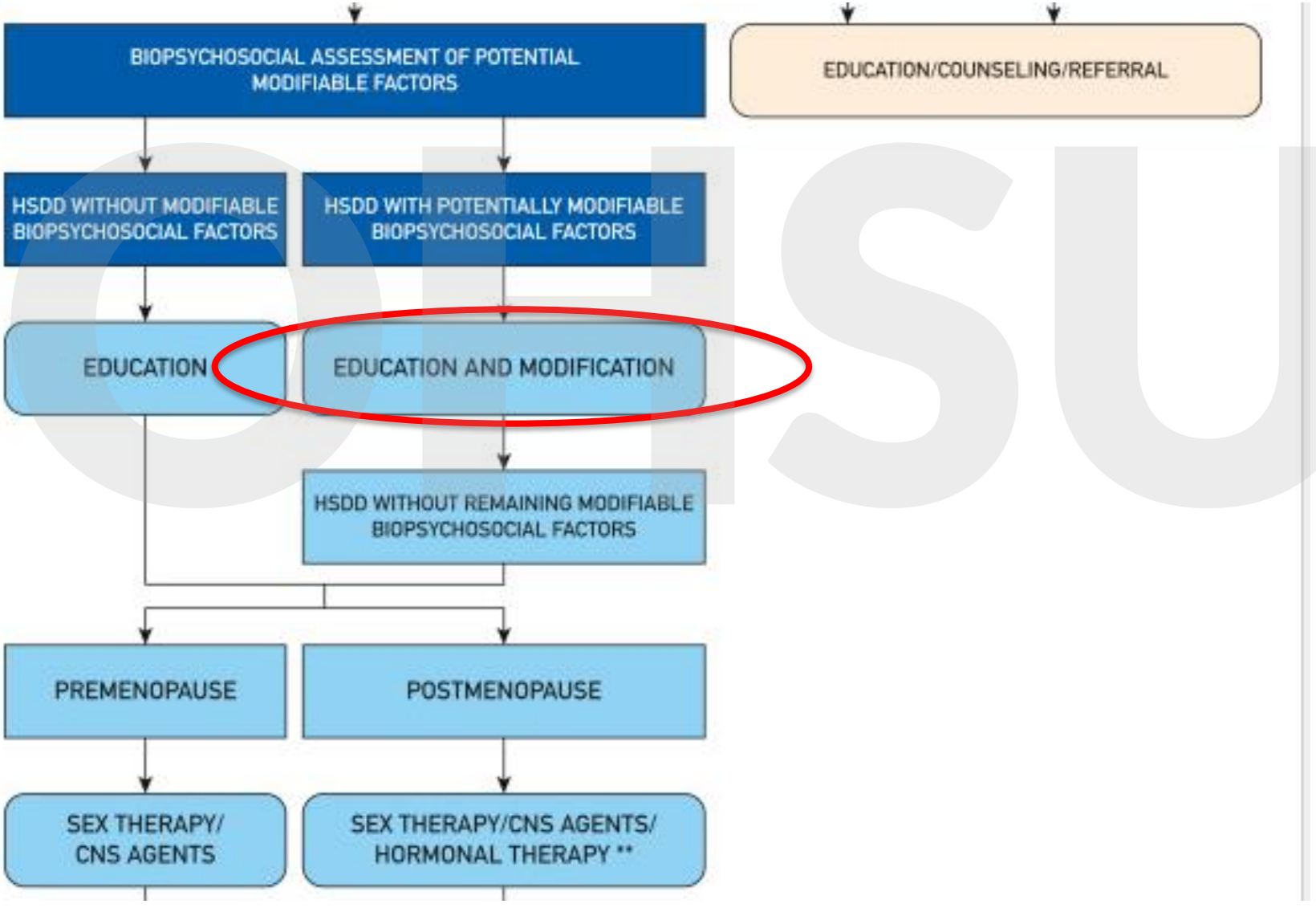
# Treatment Options

- Office based education and counseling
- Hormonal treatments (oral or local)
- Non hormonal treatments (oral or local)
- I won't discuss PAIN in this talk (local estrogen, pelvic floor PT, surgery, etc…)



# Back to the algorithm…



# Learning Objectives:

- After this talk, you will know
  - The biopsychosocial model of sexual dysfunction in women
  - 3 behavioral approaches that can improve sexual function in women
  - 3 pharmacological treatments that can improve sexual function in women

# Evidence Based Behavioral Interventions: Low Libido

- Office Based "Counseling": Education/Behavioral Therapy
- Scheduled Sex
- Sex Therapy
- MBgCBT (Mindfulness-based Group CBT)
- Sleep[1]
- Exercise[2]



1.Hoffman BM Ment Health Phys Activity. 2009 2. Kalmbach DA 2015

# 1st Line treatment: Office-based Education/"Counseling"

- Review what's normal
  - Basson model
  - *spontaneous* versus *responsive* desire
- Impact of stress on sexual desire
  - Dual-control model
- Importance of adequate sexual stimulation
  - erotica menu

# Office-based Education/"Counseling"

- Impact of pleasurable sexual experiences on desire
  - Brings her back around the Basson wheel to receptivity
- Influence of age and relationship duration
  - Normal for women's libido to decrease 1-4 y into a relationship
- Bibliotherapy
  - Mating in Captivity-Esther Perel PhD
  - Come as You Are - Emily Nagoski PhD

# Scheduled Sex as treatment for Low Libido – Behavioral Activation


- Positive behavioral feedback loop raises levels of testosterone
- Committing to regular sexual activity breaks a pattern of avoidance
- Decreased anxiety on non sexual days
- Timing natural periods of elevated libido, more energy

1. Dabbs JM Male and female salivary testosterone concentrations before and after sexual activity. Physiol Behav. 1992 2. Lorenz *Depress Anxiety*. 2014

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# What is Sex Therapy?

## Locate an AASECT Certified Professional

Search for a sexuality educator, sexuality counselor or sex therapist in your area.

| | | | | |
|---|---|---|---|---|
| Eugene | Wendy L. Maltz, MSW | Diplomate of Sex Therapy | Co-Director | Therapist |
| Florence | Michele Clarkson, MSW, LCSW, CDST | Supervisor of Sex Therapy, Diplomate of Sex Therapy | Psychotherapist, Body Psychology, Sex Therapist/Sex Coach | Therapist |
| Portland | Angie Gunn, LCSW CST | Sex Therapist | Licensed Clinical Social Worker, Certified Sex Therapist in Private Practice | Therapist |
| Portland | Maegan C. Megginson, MA, LMFT, LPC | Sex Therapist | Licensed Marriage and Family Therapist, Licensed Professional Counselor | Therapist |
| Portland | Heather Brooks Rensmith, LCSW | Sex Therapist | Licensed Clinical Social Worker | Therapist |
| Portland | Mark Henry, MA, LPC | Sex Therapist | Licensed Professional Counselor | Therapist |
| Portland | Nicole Harrington Cirino, MD | Sex Therapist | Psychiatrist | Therapist |
| Portland | Kate McNulty, Kate McNulty | Sex Therapist, Supervisor of Sex Therapy | Private Practice | Therapist |
| Portland | Karlaina Brooke, PsyD | Sex Therapist, Supervisor of Sex Therapy | Clinical Psychologist | Therapist |
| Portland | Roger Carlson, PhD, MDiv | Sex Therapist | Psychologist | Therapist |

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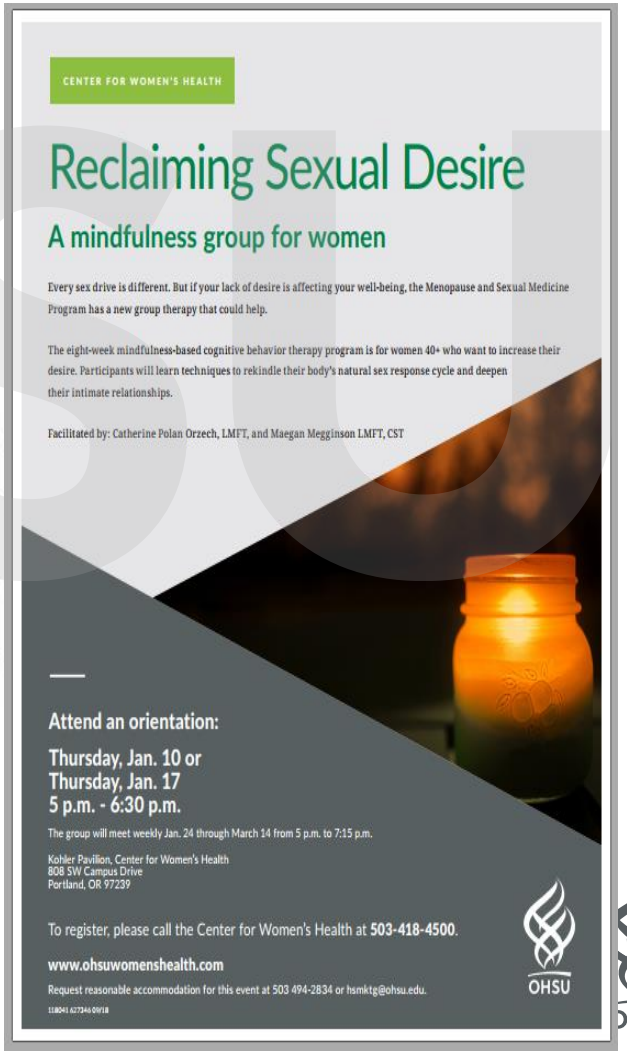
# Empirically Tested Sex therapy

(Heiman and Meston 1997)

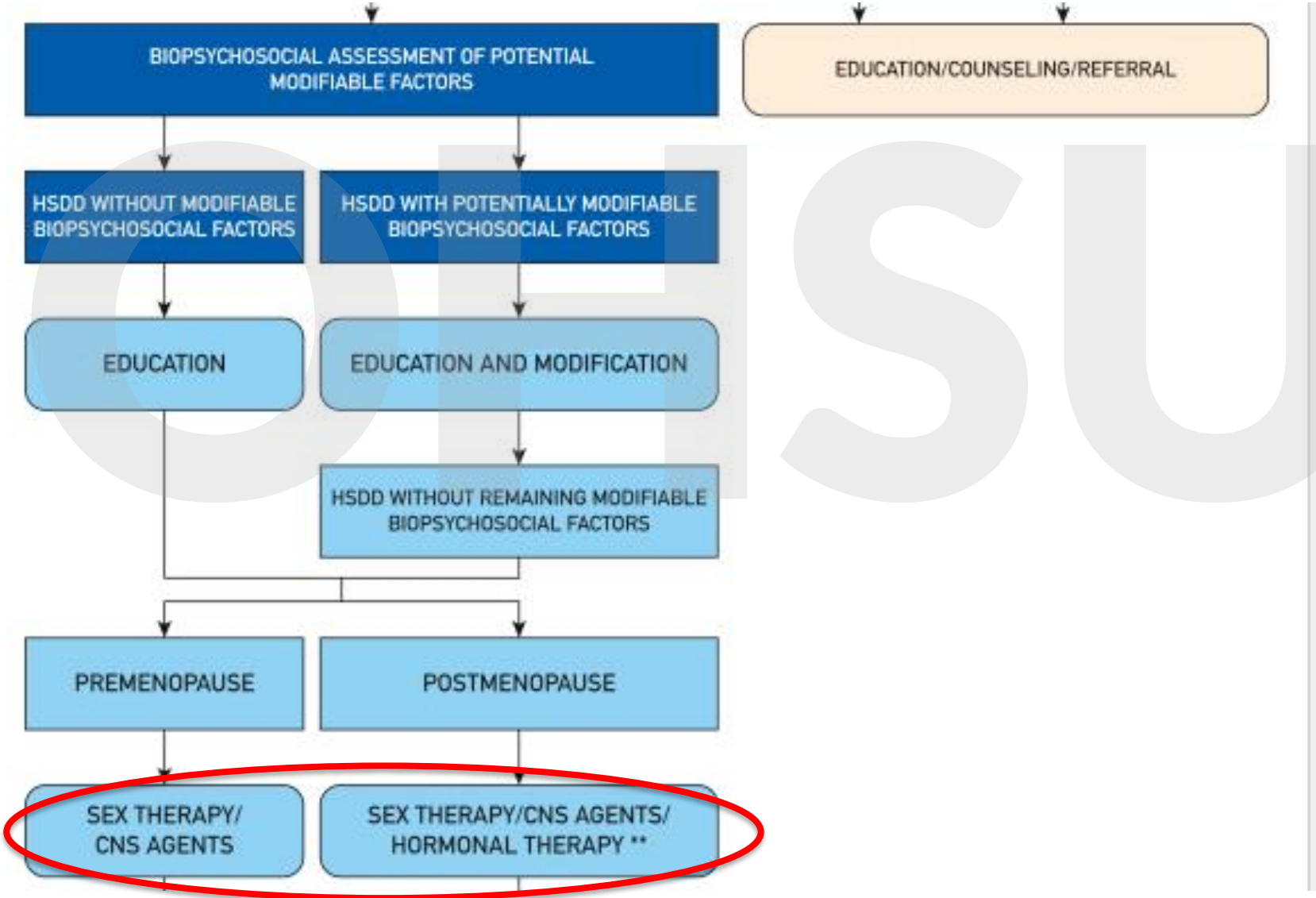
- Trained, licensed therapists that seek additional 2-4 years of training
- “Clothes on” office based
- Brief, solution focused 5-20 sessions – with or without partner present
- Alters dysfunctional emotions, cognitions and behaviors
- Educational component - Bibliotherapy
- Home work (behavioral)
- Treats sex as the legitimate problem not as a symptom of underlying pathology

# MBgCT-Mindfulness Based group Cognitive Behavioral Therapy


Based on *Segal's 2001 Mindfulness-Based Cognitive Therapy for Depression*.
Brotto L. 2008, 2015.

# Back to the algorithm…



# “Doctor, is there a pill I can take?”

# Learning Objectives:

- After this talk, you will know
  - The biopsychosocial model of sexual dysfunction in women
  - 3 behavioral approaches that can improve sexual function in women
  - 3 pharmacological treatments that can improve sexual function in women

# Biological Approaches for Low Desire

- Increase androgens (locally and systemically)
- Increase dopamine
- Increase norepinephrine
- Modulate serotonin
- Melanocortins

"CNS Agents"

# Testosterone

- 300 mcg transdermal patch
- Several studies showed a **small increase in "sexually satisfying events"** over baseline in PMP women
- FDA has repeatedly rejected citing concerns re: off-label use and safety
- At least one study showed **increased breast cancer** rates with patch, also CV concerns

# Lancet Diab Endo July 2019

36 RCTs, 8500 postmenopausal women

Articles

## Safety and efficacy of testosterone for women: a systematic review and meta-analysis of randomised controlled trial data

Rakibul M Islam, Robin J Bell, Sally Green, Matthew J Page, Susan R Davis


### Summary

**Background** The benefits and risks of testosterone treatment for women with diminished sexual wellbeing remain controversial. We did a systematic review and meta-analysis to assess potential benefits and risks of testosterone for women.

**Methods** We searched MEDLINE, Embase, the Cochrane Central Register of Controlled Trials, and Web of Science for blinded, randomised controlled trials of testosterone treatment of at least 12 weeks' duration completed between Jan 1, 1990, and Dec 10, 2018. We also searched drug registration applications to the European Medicine Agency and the US Food and Drug Administration to identify any unpublished data. Primary outcomes were the effects of testosterone on sexual function, cardiometabolic variables, cognitive measures, and musculoskeletal health. This study is registered with the International Prospective Register of Systematic Reviews (PROSPERO), number CRD42018104073.


*Lancet Diabetes Endocrinol* 2019

Published Online
July 25, 2019
http://dx.doi.org/10.1016/S2213-8587(19)30189-5

See Online/Comment
http://dx.doi.org/10.1016/S2213-8587(19)30251-7

Women's Health Research Program (R M Islam PhD, Prof R J Bell MBBS, Prof S R Davis MBBS), School of Public Health and Preventive

# Testosterone Meta-analysis

- Increased
  - Sexually satisfying events
  - Desire
  - Pleasure
  - Arousal
  - Orgasm
  - Responsiveness
  - Self image
- Significant ⬆LDL and ⬇HDL with oral but not transdermal

# Testosterone dosing

- 300 mcg
- Not oral

- Compounding pharmacy
- Testosterone troche 1200 mcg
  - Sig: dissolve ¼ troche in mouth daily

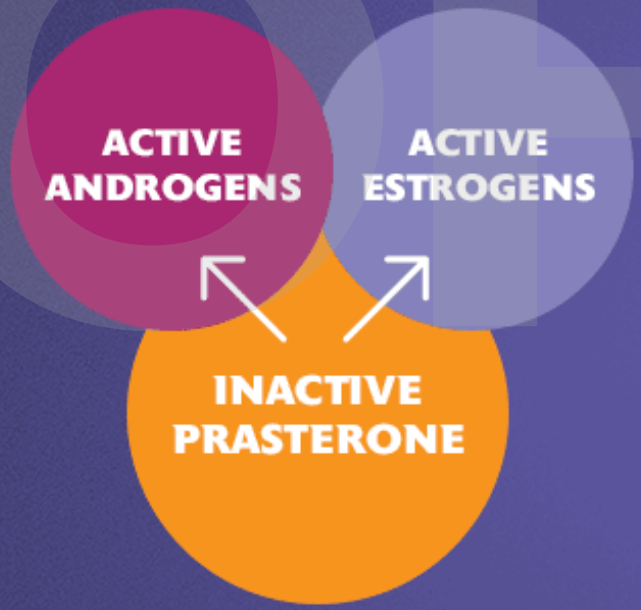
# Prasterone (Intrarosa)

- FDA approved for vulvovaginal atrophy in 2016
- 6.5 mg nightly vaginal insert

# The concept of “Intracrinology”

## INTRAROSA IS THE FIRST AND ONLY FDA-APPROVED NON-ESTROGEN THERAPY WITH PRASTERONE[1]

### PRASTERONE IS A SYNTHETIC VERSION OF ENDOGENOUS DHEA[1]




**Prasterone steroidogenesis[1]**

- Prasterone, an inactive endogenous steroid, is converted into 5 biologically active androgens and estrogens (testosterone, dihydrotestosterone, 17β-diol, estrone, and estradiol). The mechanism of action of INTRAROSA is not fully established[1,2]
  - Exogenous prasterone is metabolized in the same manner as endogenous prasterone[1]
  - Human steroidogenic enzymes transform prasterone into androgen and estrogen sex steroids[1]

Not actual size.

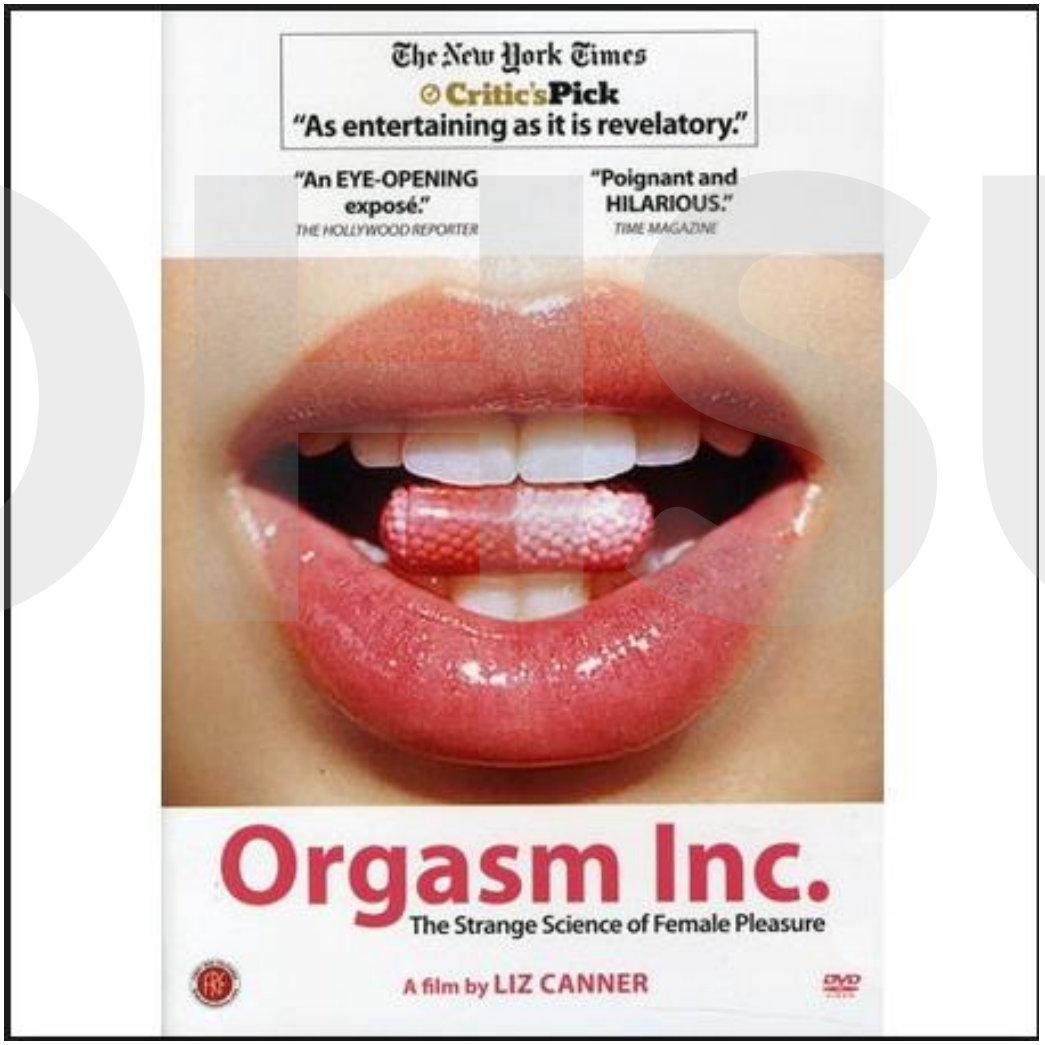
DHEA=dehydroepiandrosterone.

# Prasterone: effect on sexual function

- 52 week trial
- Statistically significant increase in domains
  - Desire 28%
  - Arousal 49%
  - Lubrication 115%
  - Orgasm 51%
  - Satisfaction 41%

*Bouchard C, Labrie F, Derogatis L et al Horm Mol Biol Clin Investig. 2016 Mar;25(3):181-90.*

# WOW, have we found it?



# Hmmmm…

## INTRAROSA AND HER BODY: PHARMACOKINETICS[1]

Post Day-7 $C_{max}$ | Post Day-7 Prasterone | Post Day-7 Testosterone | Post Day-7 Estradiol ($E_2$)

**$C_{max}$ of prasterone, testosterone, and estradiol on Day 7 following daily administration of placebo or INTRAROSA (mean±SD)[1]***

| | | PLACEBO (n=9) | INTRAROSA (n=10) |
|---|---|---|---|
| **Prasterone** | $C_{max}$(ng/mL) | 1.60 (±0.95) | **4.42 (±1.49)** |
| **Testosterone** | $C_{max}$(ng/mL) | 0.12 (±0.04)† | **0.15 (±0.05)** |
| **Estradiol** | $C_{max}$(pg/mL) | 3.33 (±1.31) | **5.04 (±2.68)** |

*Mean prasterone $C_{max}$ after 7 days was significantly higher in women treated with INTRAROSA after 7 days vs those treated with placebo. The $C_{max}$ of testosterone and estradiol were slightly higher in women treated with INTRAROSA after 7 days vs those treated with placebo.

†n=8.

Actor portrayal

# Prasterone and sexual function

- Serum levels of DHEA and all 5 metabolites showed no meaningful change
- Possible stimulatory effect through a local action

- Theory: androgens made locally from DHEA in the vagina increase local nerve density??

# Prasterone contraindications

- Undxd vaginal bleeding
- Breast cancer
  - WHRU will be a site for those trials

# Flibanserin

# Flibanserin: Science

- 5-HT mixed receptor agonist and antagonist
- Increases downstream release of DA and NE
- Reduces 5-HT
  - Mediates sxs of reduced interest and desire

- FDA approval 2015 for premenopausal women, prescriber certification

- Increased **satisfying sexual episodes** by an average of 1.7 per month compared to 1.0 per month by placebo
  - BASELINE 2.7
  - PLACEBO 3.7
  - FLIBANSERIN 4.5

# Flibanserin is NOT “The Female Viagra”

# Viagra/Flibanserin

| | VIAGRA | FLIBANSERIN |
|---|---|---|
| Mechanism of action | Blood flow to penis | Central (brain chemistry) |
| Onset | Almost immediately | Effect seen at 4 weeks, maximal at 8 weeks |
| Effectiveness | Almost all men | Est. 1/10 women w desire disorders |
| Degree of response | Robust | Modest |
| Scripts filled in first 2 mos | 1 million | 227 |

SIDE EFFECTS: nausea, dizziness, syncope esp if combined with alcohol

13% discontinuation rate

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THE FDA WILL SOON APPROVE THE DRUG FLIBANSERIN, AKA "VIAGRA FOR WOMEN." EVEN THOUGH ITS SIDE EFFECTS MAY OUTWEIGH ITS RELATIVELY MINOR BENEFITS.
I'M A SMIDGE RANDY. ALSO NAUSEOUS, SLEEPY AND DIZZY.
PROGRESS MARCHES ON
RALL.COM
A NEW DOMAIN.NET
© 2015 TED RALL

# Other "CNS agents"

- Buspirone: 5HT1a agonist, reduces serotonin inhibition , D2 agonist
- Buproprion: Increases DA and NE
- Vilazodone: SSRI plus 5HT1a agonist, reduces serotonin inhibition

Just approved:

- Bremelanotide : melanocortin receptor agonist –Increases DA
  - Woman injects into her thigh at least 45 mins prior to sex

# Sexual Medicine- Resources

ISSWSH Fall Course and Certification
International Society for the Study of Women's Sexual Health

SSTAR
Society for Sex Therapy and Research

AASECT Certification
American Association Sexual Educators Counselors and Therapists

Principles and Practice of Sex Therapy 5th edition. Binik, Y.M. Hall, K.S. 2014

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Menopause and Sexual Medicine

If you are going through menopause and also have concerns about your sexual health, thi clinic can help. You will see both a gynecologist and a psychiatrist in the same day. The clinic also treats menopausal women with complex medical conditions or who are not responding to other treatments.

The clinic is led by Karen Adams, M.D., a gynecologist and North America Menopause Society certified menopause expert, and Nicole Cirino, M.D., a psychiatrist and ASSECT-certified sex therapist.

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# Thank You