

Desire and Arousal:

Masters and Johnson 1966, Kaplan 1979

(I Can't Get No) Satisfaction

Jagger and Richards 1965

*David Portman, MD, FACOG, IF
Director, Columbus Center for
Women's Health Research
Columbus, Ohio USA*

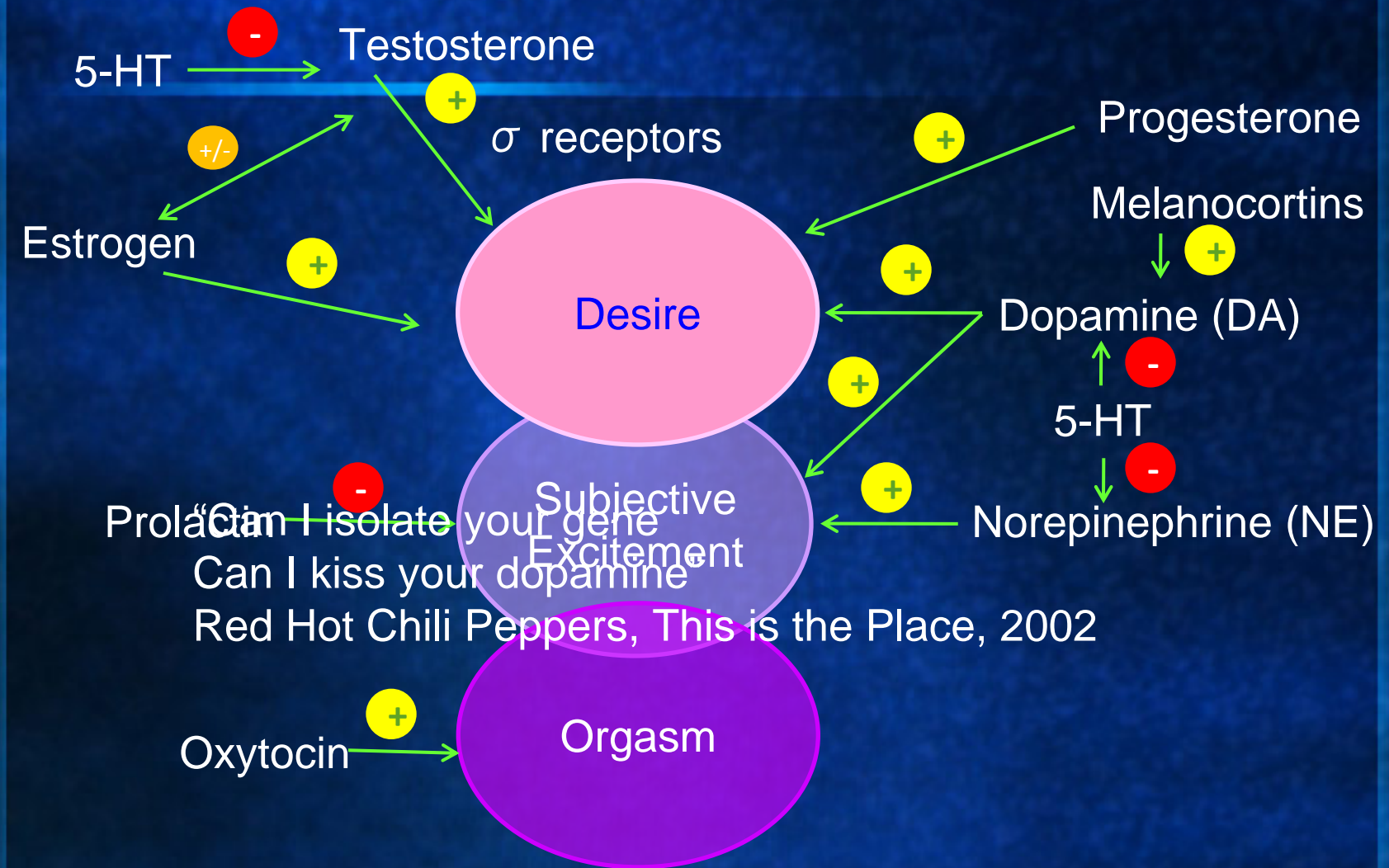
Disclosures

Grant/Research support: Shionogi, Palatin Technologies, Boehringer Ingelheim, Trimel Pharmaceuticals, Pfizer, Bayer, Endoceutics, Teva, Noven Pharmaceuticals, Warner Chilcott

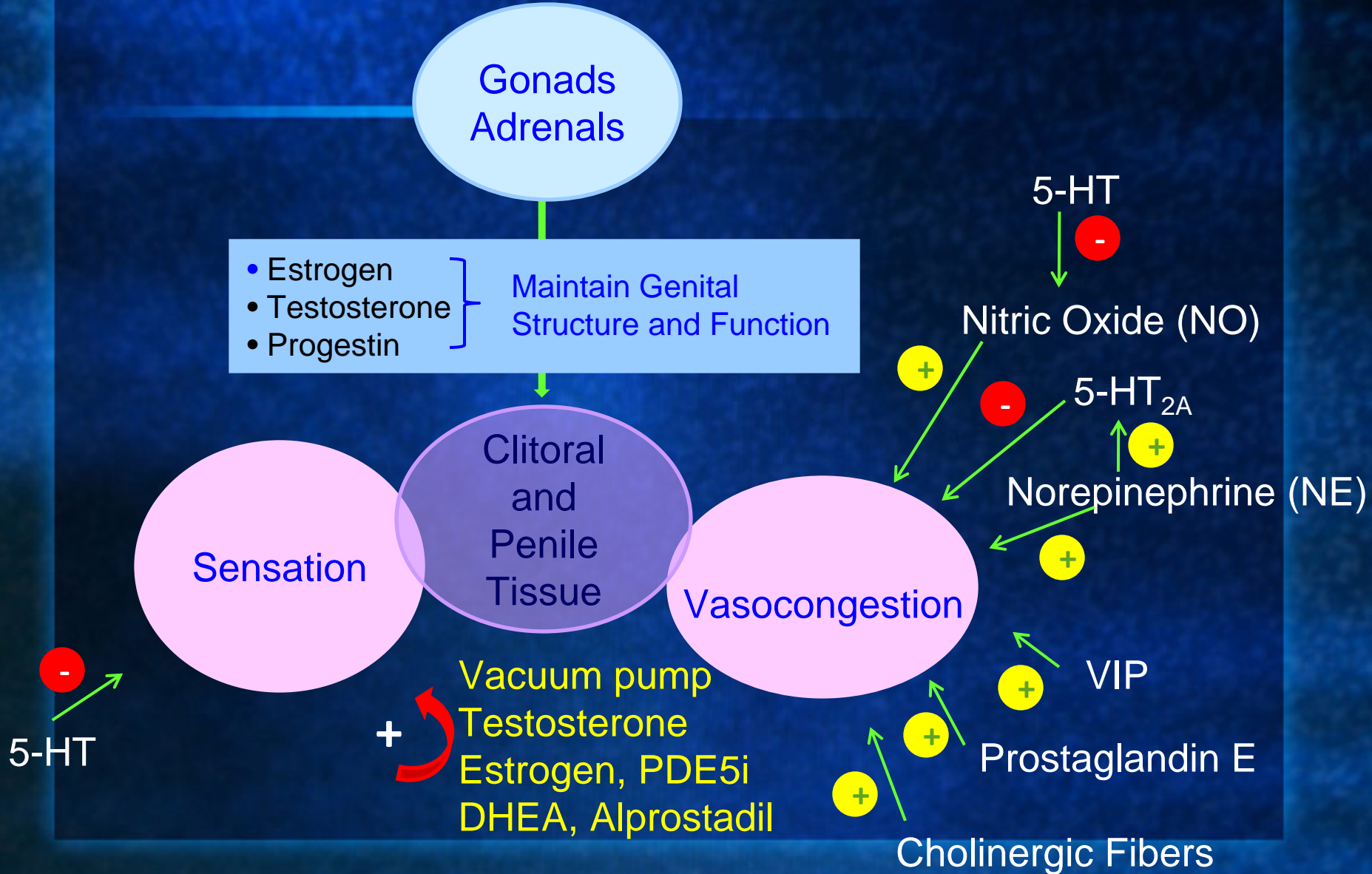
Consultant: Sprout Pharmaceuticals, Shionogi, Palatin Technologies

Honorarium: Shionogi, Palatin Technologies, Teva, Warner Chilcott

Physiology of Sexual Function–CNS:



Physiology of Sexual Function—Peripheral Tissues



Clayton A, Hamilton D. *Psychiatr Clin N Am.* 2010;33:323-338.

Sexual Desire: Excitatory and Inhibitory Pathways

Inhibitory

Flibanserin
Buspirone

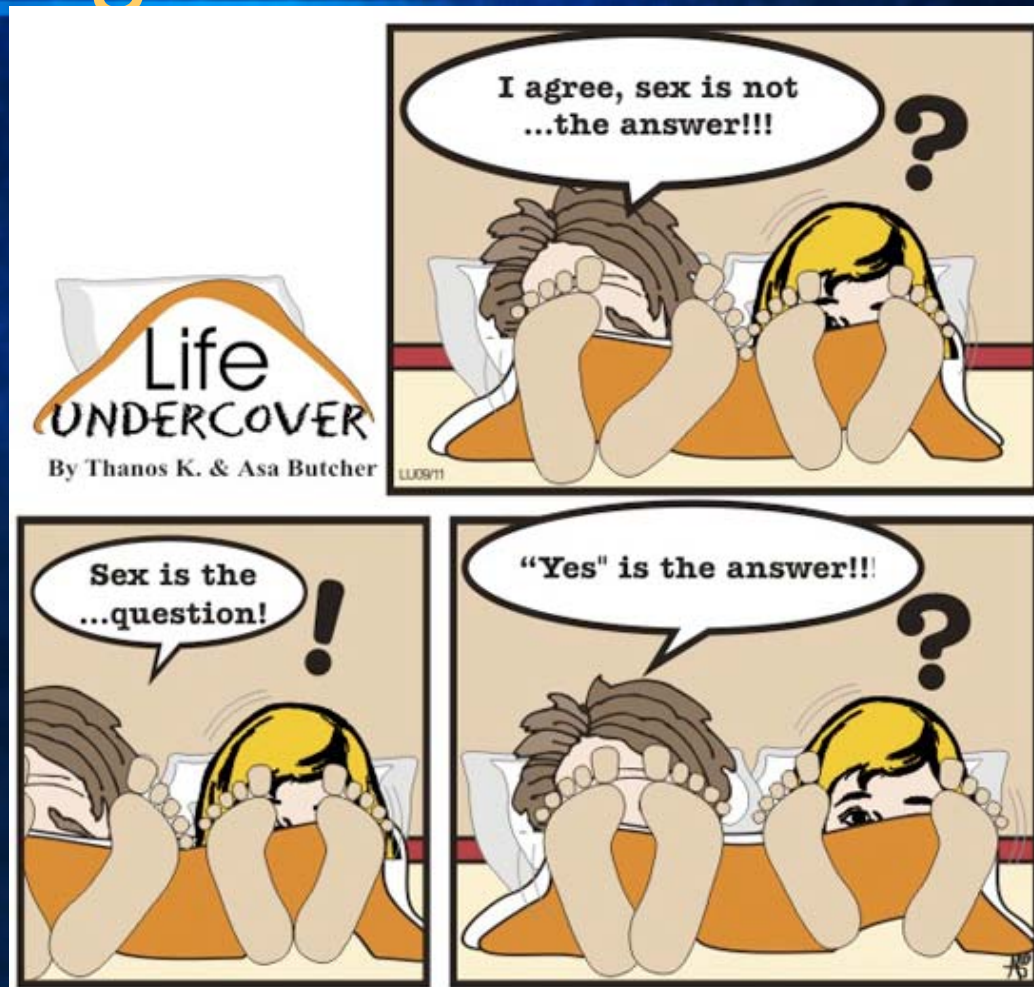
-
5-HT
Prolactin
Opioids
Endocannabinoids

Excitatory

+
Dopamine
Norepinephrine
Oxytocin
Melanocortins

Testosterone
Flibanserin
Bremelanotide
Bupropion

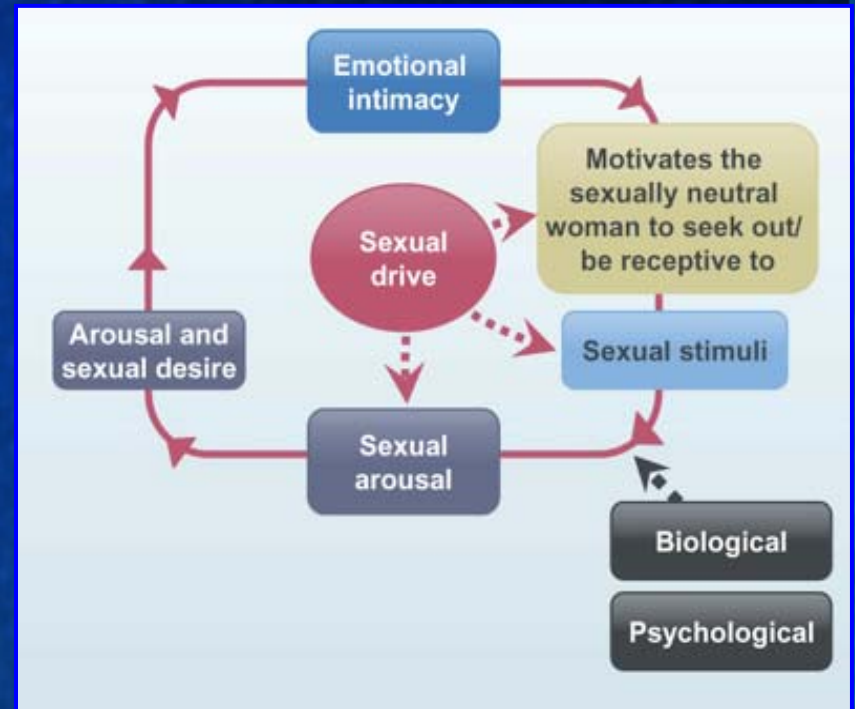
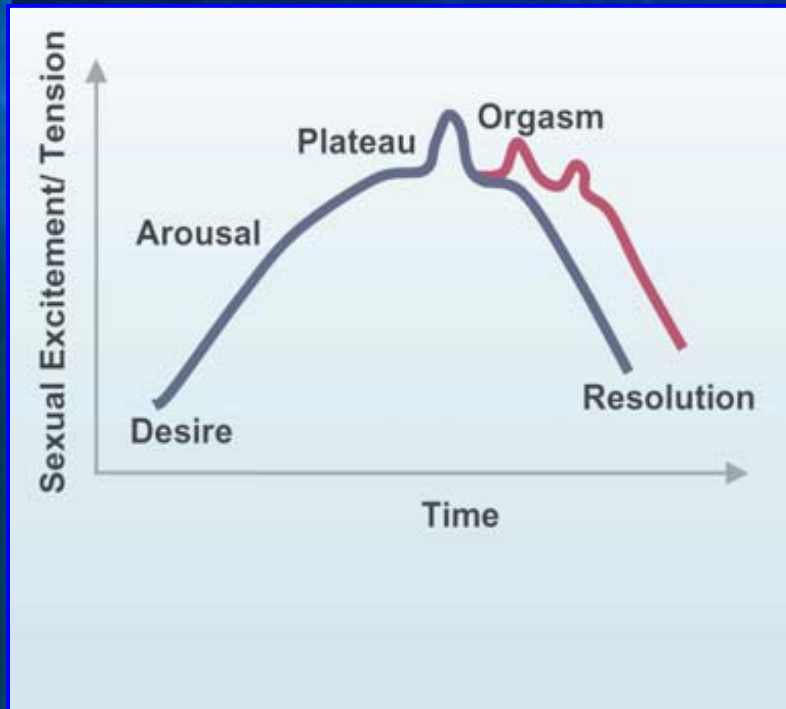
Are HSDD and FSAD distinct nosologic entities?



Two Theoretical Models of Female Sexual Response

Linear Model ^{1,2}

Circular Model ³



1 Masters WH and Johnson VW. Human Sexual Respon. Boston:Little Brown;1966 2 Kaplan HS. Disorders of Sexual Desire and Other New Concepts and Techniques in Sex Therapy. New York:Brunner/Mazel;1979

3 Basson R. Obstet Gynecol. 2001;98(2):350-353

DSM IV-TR

Sexual Desire Disorders	DSM-IV-TR Definitions
Hypoactive Sexual Desire Disorder* (HSDD)	Deficiency or absence of sexual fantasies and desire for sexual activity
Sexual Aversion Disorder*	Aversion to and active avoidance of genital sexual contact with a sexual partner
Sexual Arousal Disorders	
Female Sexual Arousal Disorder* (FSAD)	Inability to attain, or to maintain until completion of the sexual activity, an adequate lubrication-swelling response of sexual excitement

***All FSDs are classified as persistent or recurrent and causing marked distress or interpersonal difficulty**

Proposed SI/AD Criteria

- A. Lack of sexual interest/arousal for a minimum duration of approximately 6 months as manifested by at least three (previously four) of the following indicators:
 - 1. absent/reduced frequency or intensity of interest in sexual activity
 - 2. absent/reduced frequency or intensity of sexual/erotic thoughts or fantasies
 - 3. absent/reduced frequency of initiation of sexual activity and is typically unreceptive to a partner's attempts to initiate

Proposed SI/AD Criteria

- 4. absent/reduced frequency or intensity of sexual excitement/pleasure during sexual activity on all or almost all (approximately 75%) sexual encounters
 - 5. absent/reduced sexual interest/arousal in response to any internal or external sexual/erotic cues (e.g., written, verbal, visual, etc.)
 - 6. absent/reduced frequency or intensity of genital and/or nongenital sensations during sexual activity on all or almost all (approximately 75%) sexual encounters
- B. The disturbance causes clinically significant distress or impairment

What Model Do Women Endorse?


- Community sample of 133/580 RNs 25-69 yrs old
 - 58-item questionnaire assessed perception of their sexual experience with models of female sexual response and FSFI
- Equal proportions of women endorsed linear models and circular models as representing their own sexual experience
- Women endorsing the circular model had significantly lower FSFI scores than women who endorsed linear models
- Complete endorsement of any one model of women's sexual response is premature

Implication for Clinical Research

- 3 North American Phase III trials of flibanserin in 2573 premenopausal women seeking treatment and meeting DSM-IV criteria for HSDD by structured diagnostic interview
 - All met SI/AD criteria A1-A3, with distress
 - A3 determined by SIDI-F item 2
- Vast majority of women would not meet 4 criteria for SI/AD diagnosis
 - Criteria 4-6 **not** met: 68% of encounters satisfying, moderate arousal and adequate lubrication
 - Triggers cannot be assessed
 - Premenopausal women infrequently have genital arousal problems

A Purpose for Theoretical Models

- Provide a conceptual framework to help organize thinking about the complexities of human behavior
 - Neurophysiological mechanisms
 - Underlying psychological mechanisms
 - The way in which these mechanisms interact with social and cultural factors
- Allow formulation of testable hypotheses
 - Provide a basis for the design and development of pharmacologic and psychological treatments
- A model rather than precise descriptions of reality

W I  H

Your Voice. Your WISH.



www.isshwsh.org
www.yourvoicewish.com

“Everything should be made
as simple as possible,
but not simpler.”

Albert Einstein

