


# **The Impact of Aging on Women's Sexuality**



**Sheryl A. Kingsberg, PhD  
Associate Professor  
Case Western Reserve University  
School of Medicine  
Cleveland, Ohio**

# Sexuality and Aging: A Timely Topic

---

- ❖ Viagratization of Europe
- ❖ “The Graying of Baby Boomers”
  - 77,702,865 Baby Boomers
    - Born between 1946-1964
- ❖ Changing cultural stereotypes of middle-aged women
- ❖ Research and treatment for sexual problems

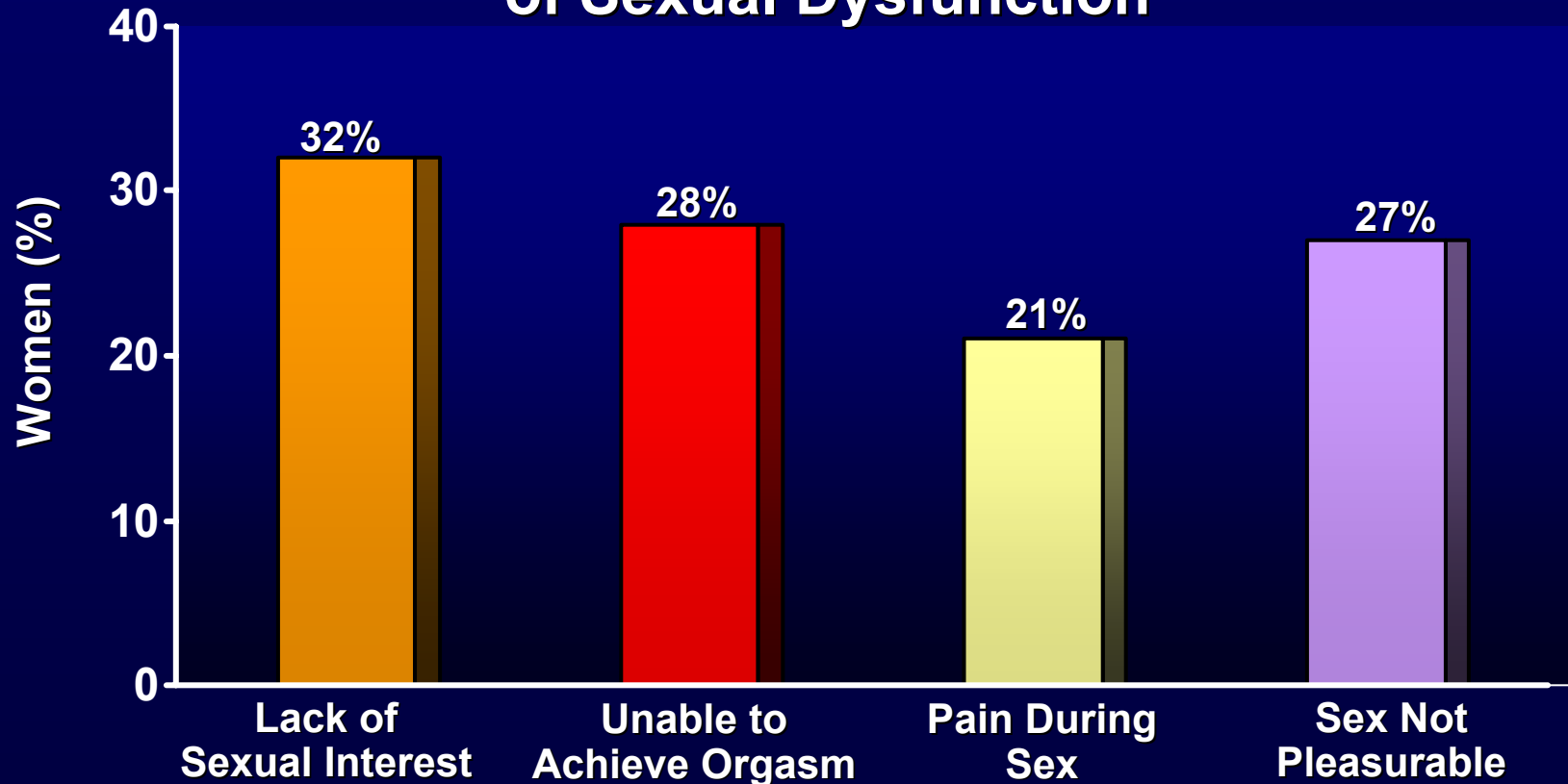
# Sexual Dysfunction in the United States: National Health and Social Life Survey

---

- ❖ 43% of women (n=1749, age range 18-59) reported sexual dysfunction
- ❖ 31% of men (n=1410, age range 18-59) reported sexual dysfunction

# Prevalence of Sexual Dysfunction in Women

**43% of Women Experienced Some Form of Sexual Dysfunction**



Women aged 18 to 59 years.

Laumann EO, et al. *JAMA*. 1999;281:537-544.

# DSM IV

## Female Sexual Dysfunctions

---

- **Hypoactive Sexual Desire Disorder**
- **Sexual Aversion Disorder**
- **Female Sexual Arousal Disorder**
- **Female Orgasmic Disorder**
- **Dyspareunia**
- **Vaginismus**

# Hypoactive Sexual Desire Disorder

---

Persistent absence of sexual fantasies and desire for sexual activity that causes personal distress

# WISHeS Study Population

---

- Study participants: 2,467 volunteers from national database willing to participate in surveys or recruited at home in-person
- Inclusion criteria:
  - ❖ Women, aged 20-70 yrs
  - ❖ Literate in the national language
- Overquotas of surgically menopausal and hysterectomized women recruited to achieve evaluable population

# Percentage of Women with HSDD

|              | Premenopausal<br>(20-49yrs)<br>N=610 | Surgical<br>(20-49yrs)<br>N=152 | Surgical<br>(50-70yrs)<br>N=319 | Natural<br>(50-70yrs)<br>N=275 |
|--------------|--------------------------------------|---------------------------------|---------------------------------|--------------------------------|
| % Low desire | 16                                   | 29                              | 46                              | 42                             |
| % HSDD       | 7                                    | 16                              | 12                              | 9                              |

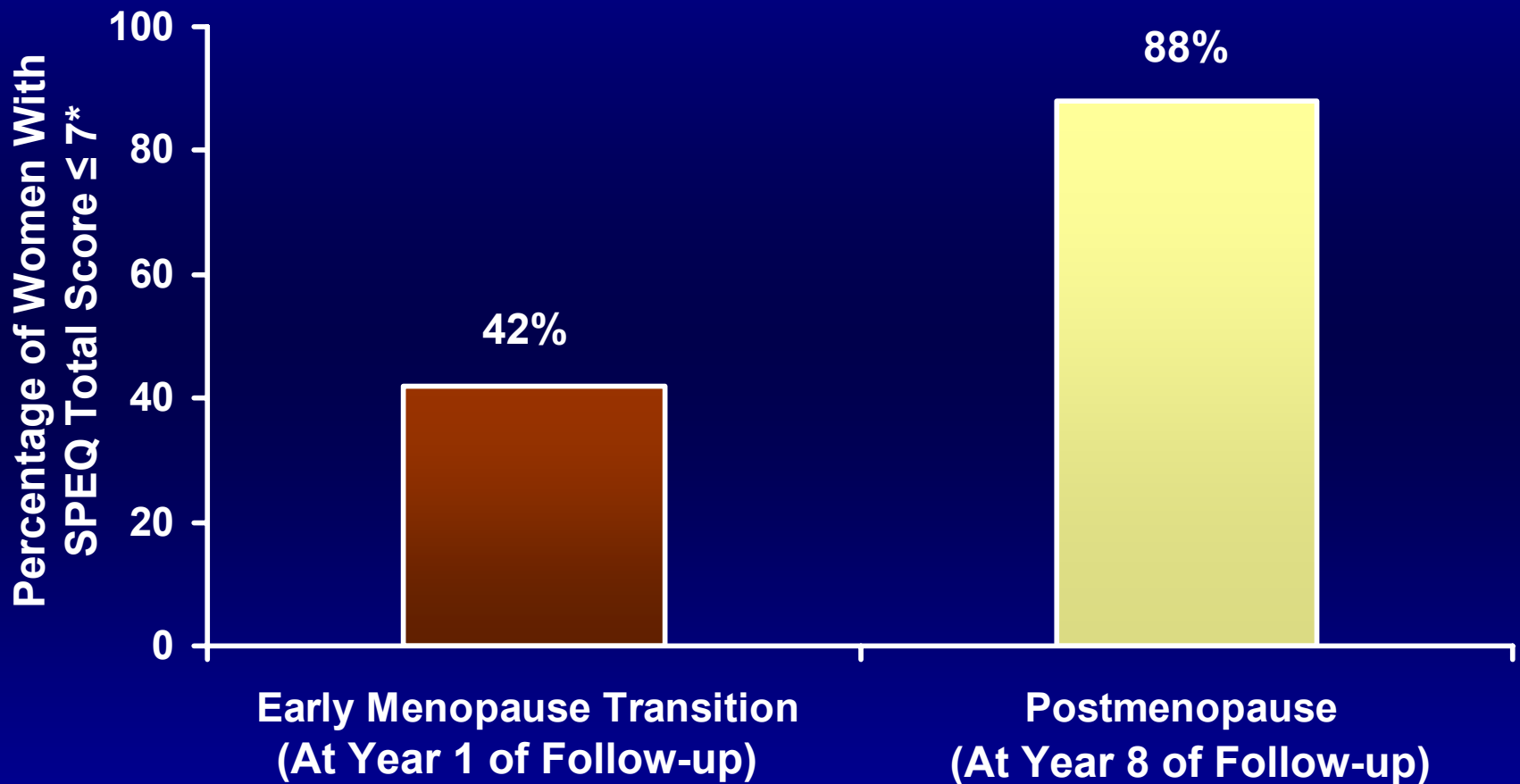
\*p<0.05 vs. PreM or NM women

Base: women from France, Germany, Italy, and UK with sexual partners

# What is the Incidence of HSDD Among U.S. Menopausal Women?

| Menopausal Status                                    | Surgical<br>(20-49 yrs) | Surgical<br>(50-70 yrs) | Natural<br>(50-70 yrs) |
|------------------------------------------------------|-------------------------|-------------------------|------------------------|
| Age                                                  |                         |                         |                        |
| % Low desire (a)                                     | 36                      | 33                      | 29                     |
| % Women with low desire classified as distressed (b) | 72                      | 44                      | 33                     |
| % Total population with HSDD (a x b/100)             | 26                      | 20                      | 10                     |

# Female Sexual Function Declines With Menopause Transition

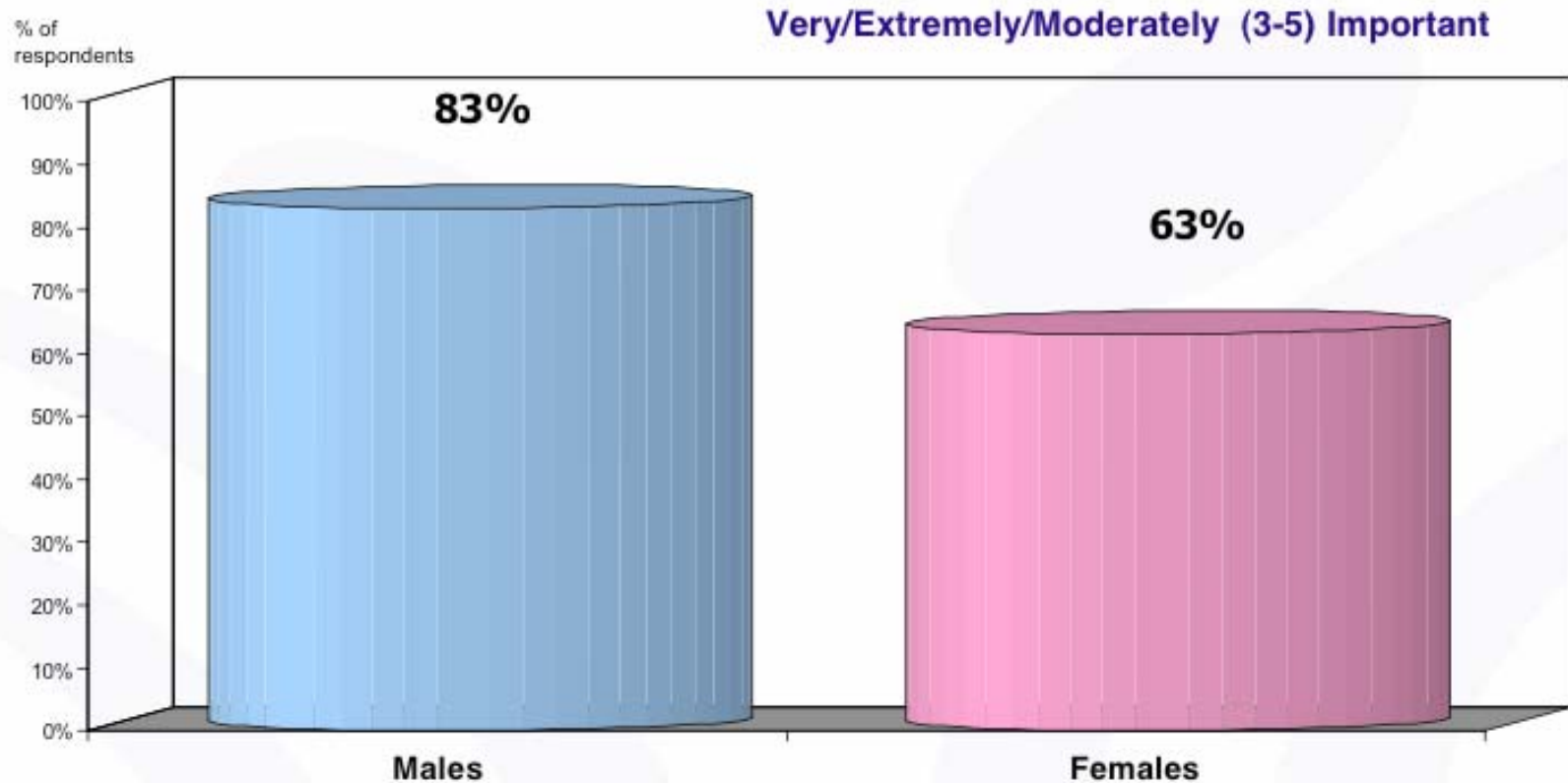


\*SPEQ total score  $\leq 7$  considered to indicate sexual dysfunction

# National Council of Aging

- ❖ 51% of women in their 60's report sexual activity once per month or more
- ❖ 30% of women in their 70s report sexual activity once per month or more
- ❖ 66% of women said that sex was an important component of their relationship with their partner
- ❖ 70% of the sexually active women reported being as satisfied with their sexual lives compared to when they were in their 40's

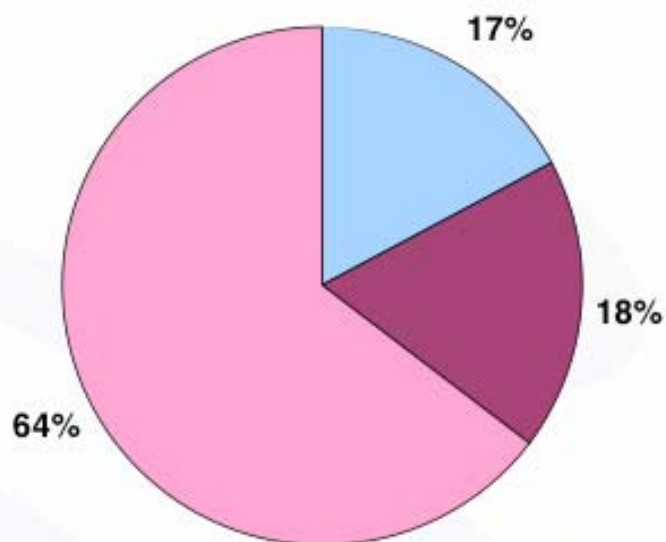
## How important is sex in your overall life?



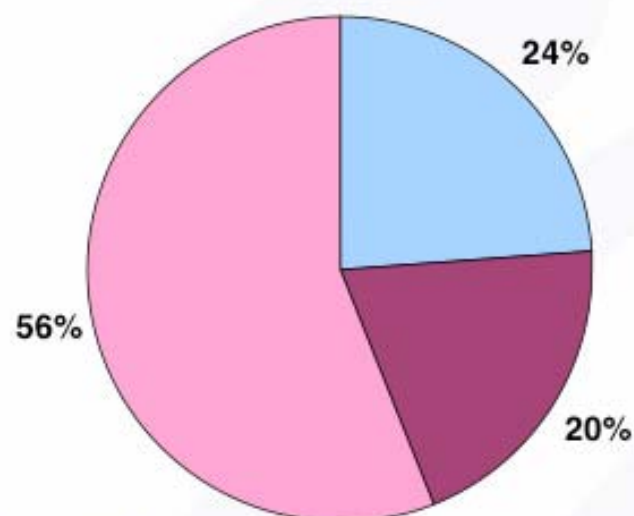
Based on a 5-point scale, where "5" is Extremely Important and "1" is Not at All Important.

## Do you agree with the statement “older people no longer want sex”?

### Males



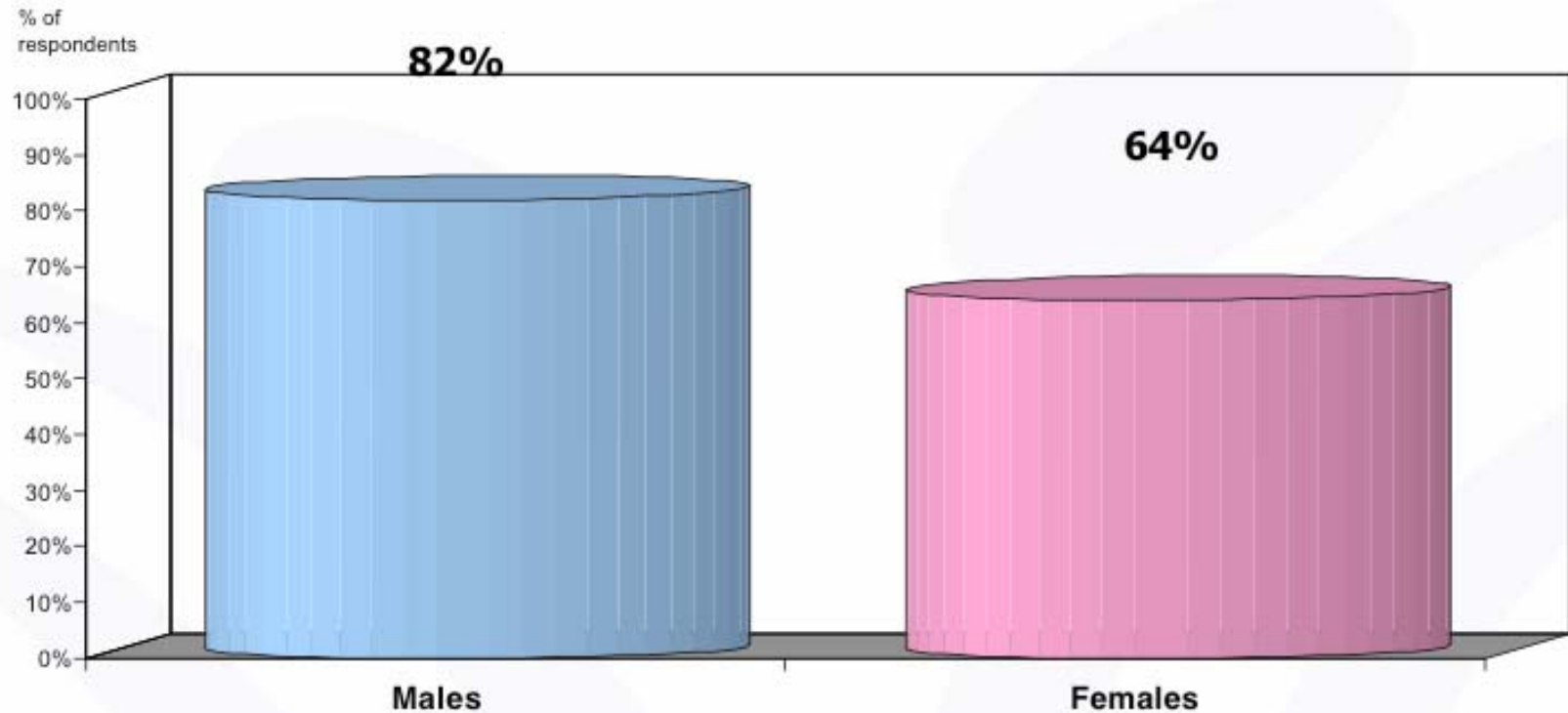
### Females



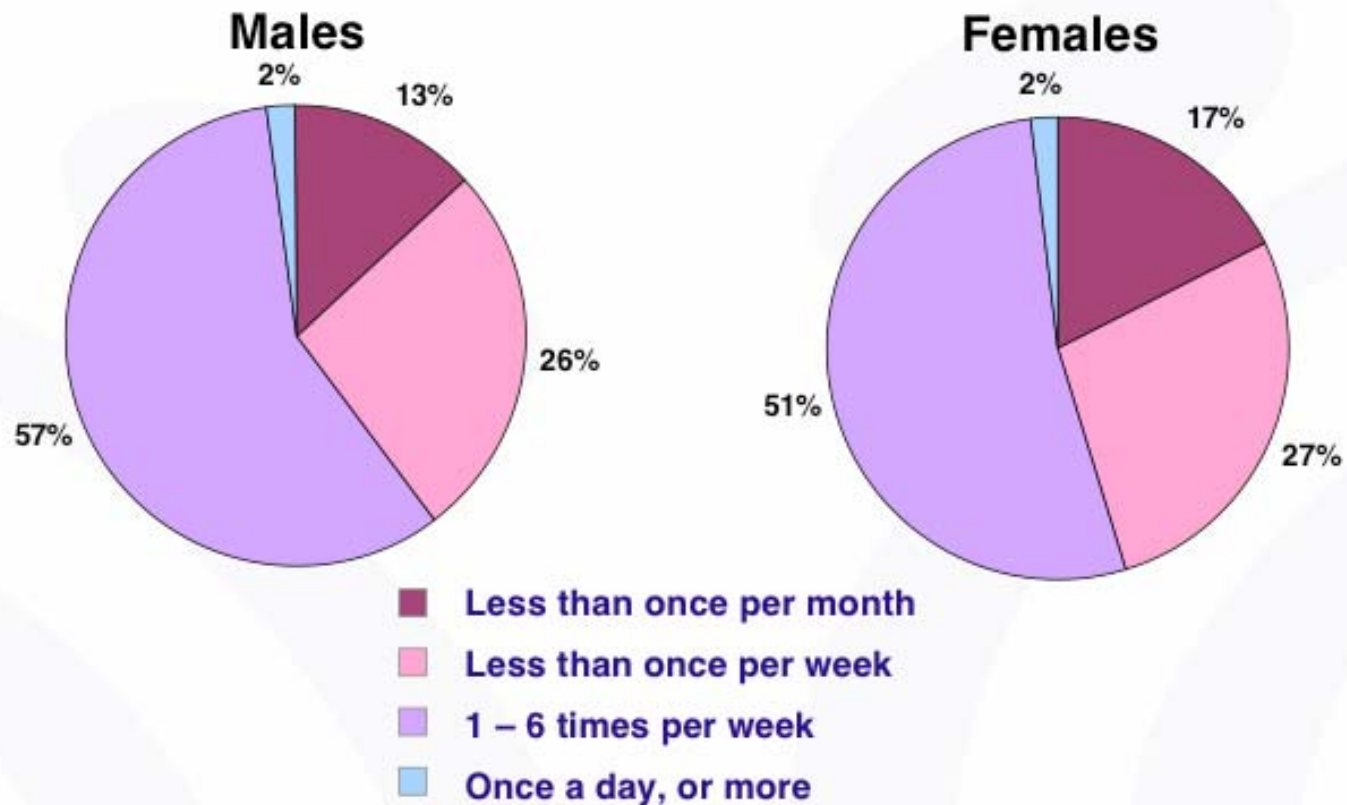
-  Somewhat/Strongly Agree (4-5)
-  Neither (3)
-  Somewhat/Strongly Disagree (1-2)

Based on a 5-point scale, where "5" is Strongly Agree and "1" is Strongly Disagree.

## Have you had intercourse in the past 12 months?



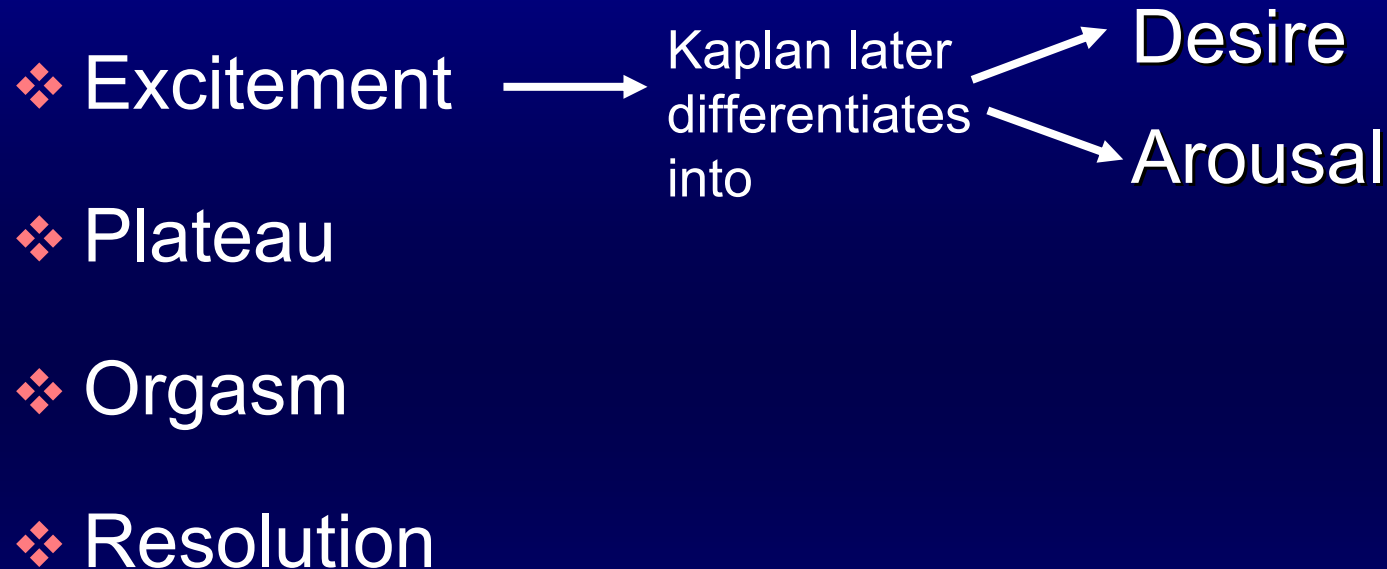
## How frequently have you had sex in the past 12 months?



Note: Among those who have had sex in the past 12 months.

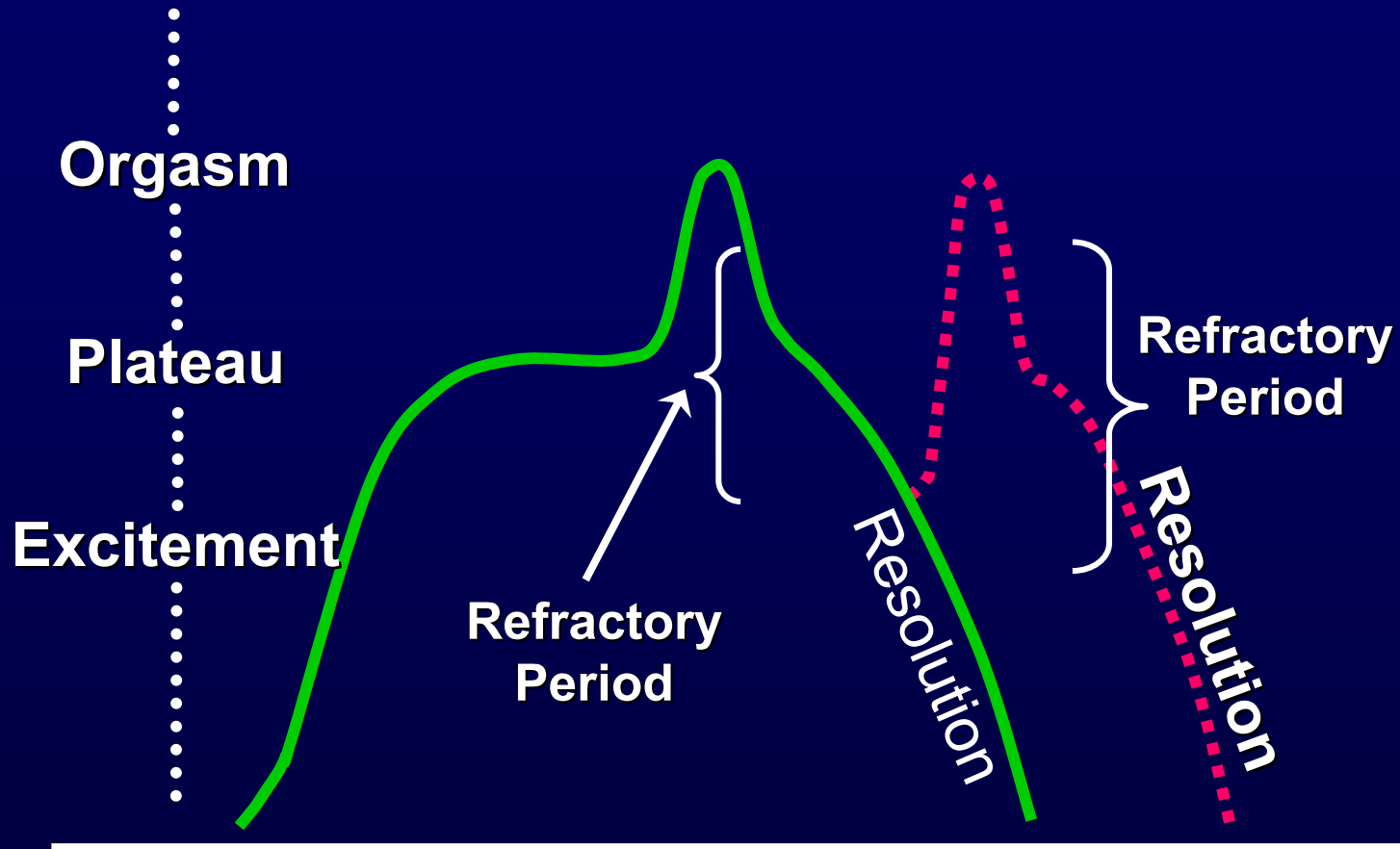
Global Study of Sexual Attitudes and Behaviors funded by Pfizer Inc. Copyright © 2002 Pfizer Inc. All rights reserved.

# Human Sexual Response: Phases

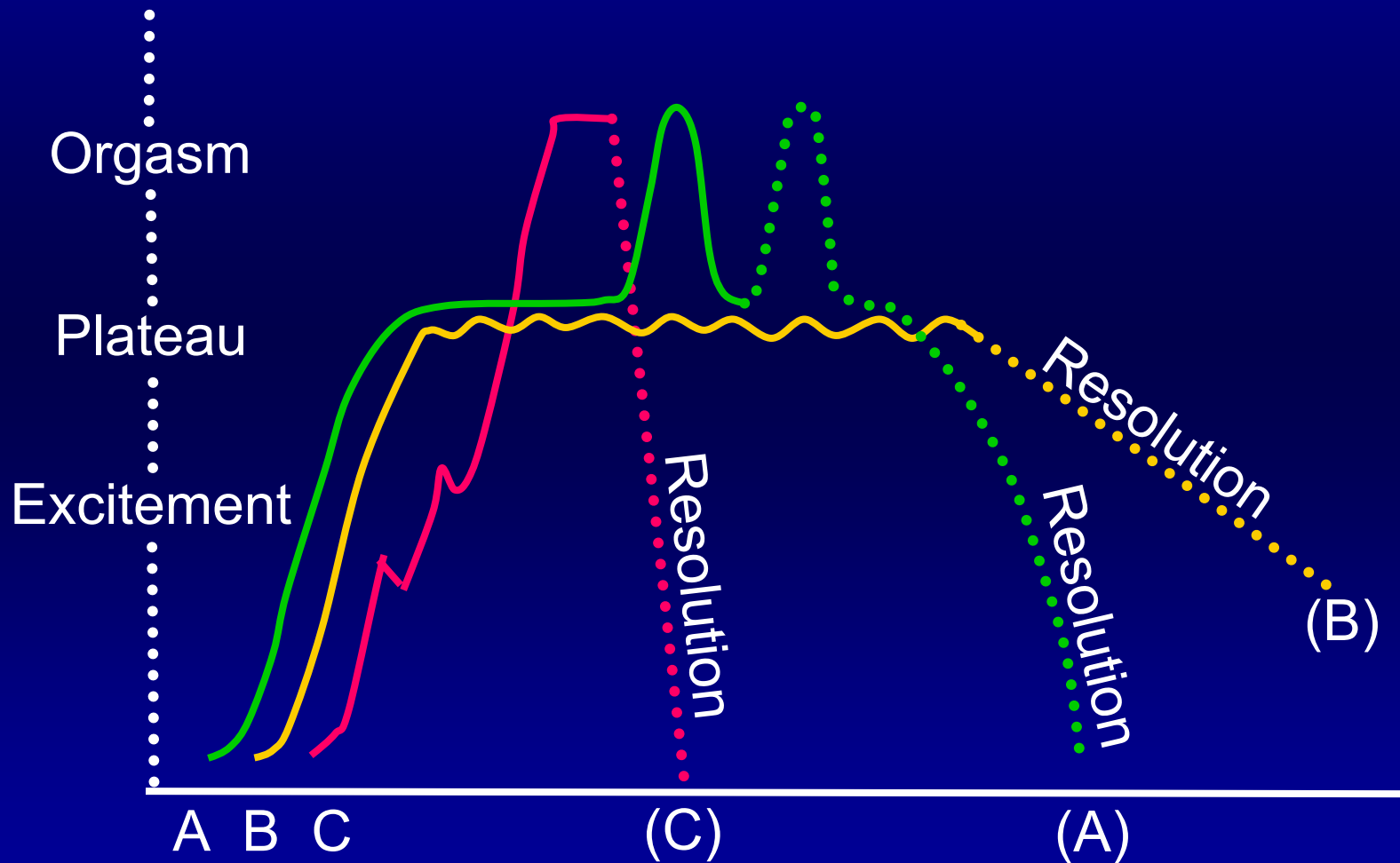


**Linear progression**

# Male Sexual Response Cycle



# Female Sexual Response Cycle

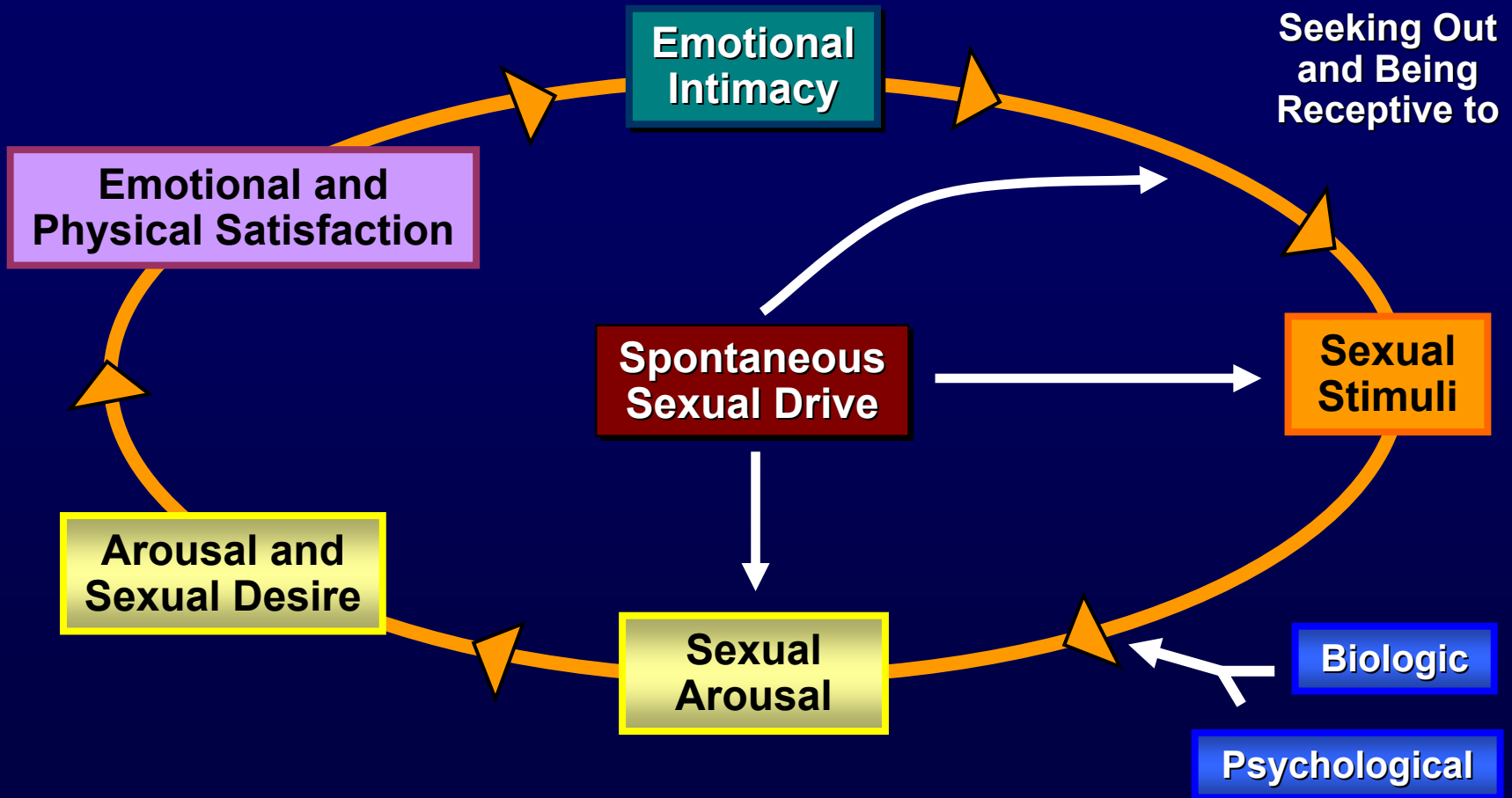


# Components of Sexual Desire

---

- ❖ Drive
- ❖ Expectations/Beliefs/Values
- ❖ Motivation

# Female Sexual Response Cycle



# Heterosexual Dilemma

---

Sex for men is a stress reliever

Sex for women requires stress relief

# Menopause and Sexual Function: The Impact of Estrogen Deficiency

---

- ❖ Vaginal dryness
- ❖ Genital atrophy
- ❖ Decreased vascularization
- ❖ Decreased vaginal elasticity

# Heterosexual Dilemma

---

The Unintended Consequence of Treating  
Erectile Dysfunction in an Older Couple  
That Has Been Sexually Inactive:

DYSPAREUNIA

# The Role of Androgens

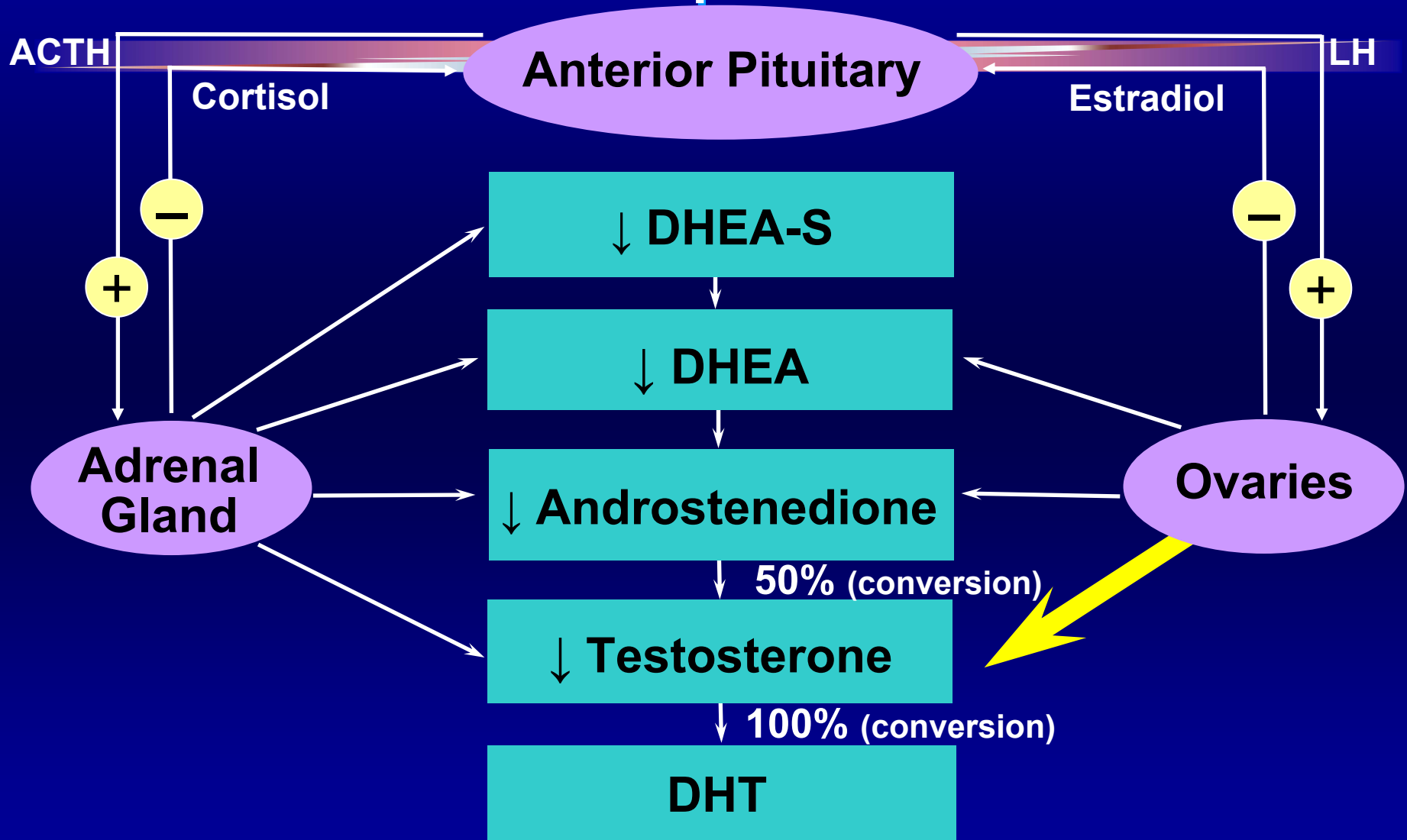
---

- ❖ 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

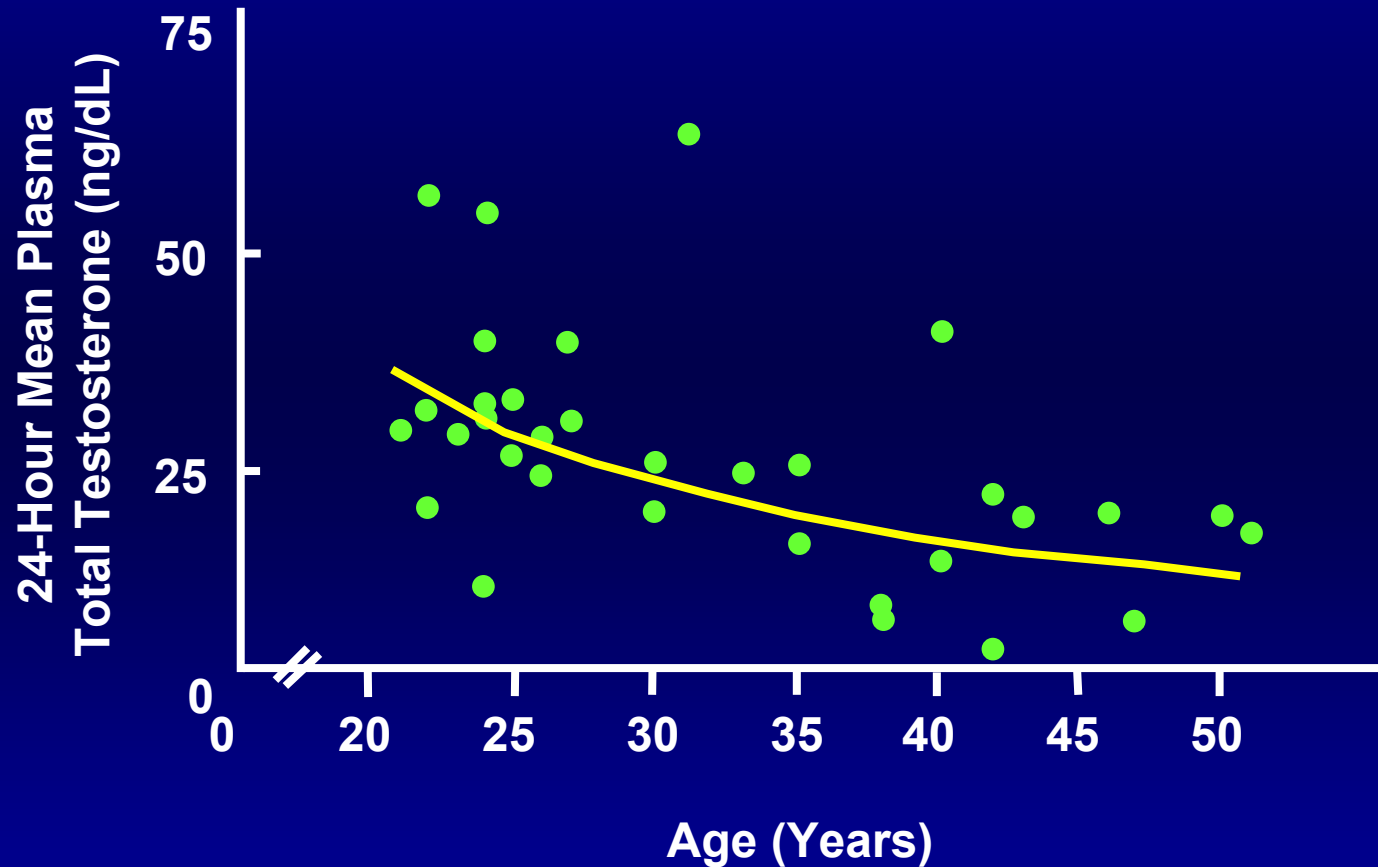
# Causes of Low Testosterone in Women

- **Normal aging**
- ❖ **Disorders of testosterone production**
  - Oophorectomy
  - Ovarian failure
  - Adrenal insufficiency
  - Hypopituitarism
  - Chronic illness
  - Corticosteroids
  - Estrogen replacement

# Androgen Dynamics in Postmenopausal Women



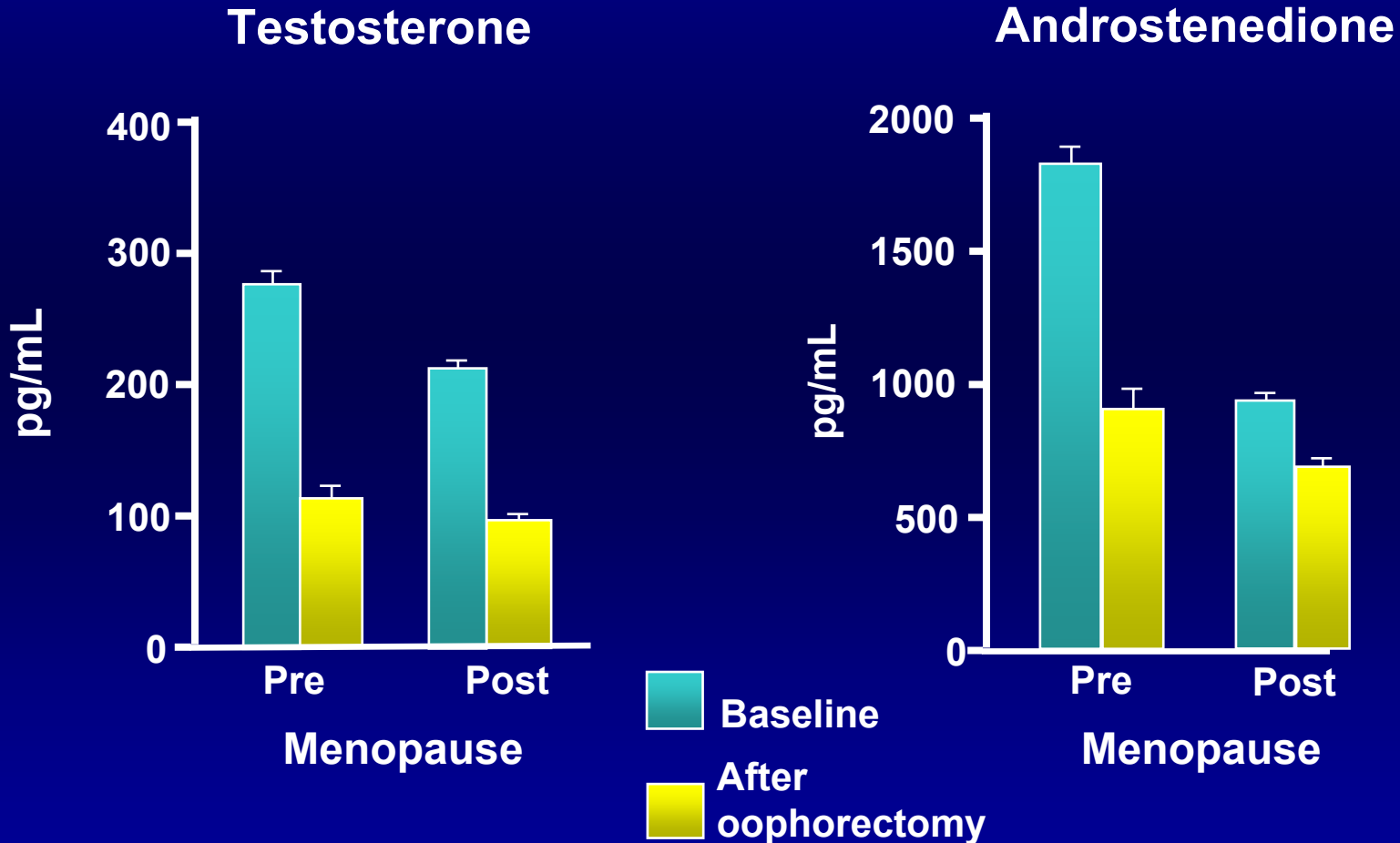
# Total Testosterone Levels in Women Decrease With Age



$r = -0.54; P < 0.003$

Zumoff B, et al. *J Clin Endocrinol Metab.* 1995;80:1429-1430.

# Testosterone and Androstenedione Before and After Surgical Menopause



# Sex Hormone-Binding Globulin

- **SHBG is the carrier protein for estrogen and testosterone**
  - SHBG-bound fraction is unavailable for biological activity
- **Production regulated by estrogen-testosterone balance**
  - Estrogen stimulates SHBG production
  - Testosterone decreases SHBG synthesis

# Definition of Androgen Insufficiency

---

**A pattern of clinical symptoms in the presence of decreased bioavailable testosterone and normal estrogen status**

# What Are the Signs and Symptoms of Androgen Insufficiency?

---

**Diminished well-being**

**Unexplained fatigue**

**Decreased sexual desire**

**Thinning and loss of pubic hair**

# **Social Psychology Theories: Psychosocial Aspects of Female Sexual Desire**

---

## **❖ Self-Perception Theory**

- People make attributions about their own attitudes by relying on observations of external behaviors (Bem, 1965)**

## **❖ Wundt's schema of sensory affect (aka Kingsberg's Ice-Cream Analogy)**

- increases of stimulus intensity above threshold are felt as increasingly pleasant up to a peak value beyond which pleasantness falls off through indifference to increasing unpleasantness.**

# Sexual Aversion Disorder

---

- ❖ **Persistent or recurrent extreme aversion to, and avoidance of, all (or almost all) genital sexual contact with a partner**
- ❖ **The disturbance causes marked personal distress**
- ❖ **Often presents with similar symptoms to HSDD**

# Female Sexual Arousal Disorder

---

**Persistent or recurrent inability to attain, or to maintain until completion of the sexual activity, an adequate lubrication-swelling response of sexual excitement**

# Arousal Disorders

---

## Potential Medical Intervention

- ❖ **Mechanical** (Vacuum device)
- ❖ **Hormonal** (Estrogen)
- ❖ **Pharmaceutical** (PDE-5 inhibitors, nitric oxide promoters)

# Medical Factors Associated with Arousal Disorder

---

- **Menopause**
- **Surgery**
- **Vascular disease**  
(CAD, diabetes)
- **Smoking**
- **Medication effects**

# Female Orgasmic Disorder

---

- Persistent or recurrent delay in, or absence of, orgasm following a normal sexual excitement phase
- >40% of women are “situationally orgasmic”

# Orgasmic Disorder: *Treatment Options*

- ❖ **Referral to sex therapist: Success rate extremely high**
- ❖ **Permission by physician to**
  - Practice and explore self-stimulation/masturbation in privacy
  - Assert desired stimulation with partner
- ❖ **If caused by medication (eg, SSRI), consider changing**

# Dyspareunia

---

**Pain or discomfort that occurs during or as the result of intercourse and may be experienced as:**

- **Pressure**
- **Aching**
- **Tearing**
- **Friction**
- **Rubbing**
- **Burning**

# Causes of Insertional Dyspareunia

---

- ❖ **Candidiasis**
- ❖ **Herpes**
- ❖ **Vaginal atrophy**
- ❖ **Vestibulitis**
- ❖ **Trauma**
- ❖ **Radiation**
- ❖ **Topical irritants**

# Causes of Deep Dyspareunia

---

- ❖ Pelvic inflammatory disease
- ❖ Pelvic surgery
- ❖ Endometriosis
- ❖ Pelvic tumors
- ❖ Irritable bowel syndrome

# Sexual Pain Disorders: *Treatment Options*

---

## Dyspareunia

- ❖ Treat pain and underlying etiology
- ❖ Offer counseling and strategies for pain control

# Vaginismus

---

**Recurrent or persistent involuntary spasm of the musculature of the outer third of the vagina that interferes with sexual intercourse**

# Sexual Pain Disorders: *Treatment Options*

---

## Vaginismus

- ❖ **Progressive muscle relaxation and vaginal dilatation**
  - **Success rates approach 90%**
- ❖ **Refer nonresponders to sex therapists (sooner than later!)**

Berman JR, Goldstein I. *Urol Clin North Am.* 2001;28:405-416.  
Phillips NA. *Am Fam Physician.* 2000;62:127-136, 141-142.

# Prevention and Treatment of Sexual Problems

---

**ASK! You cannot treat a problem if you don't know it exists**

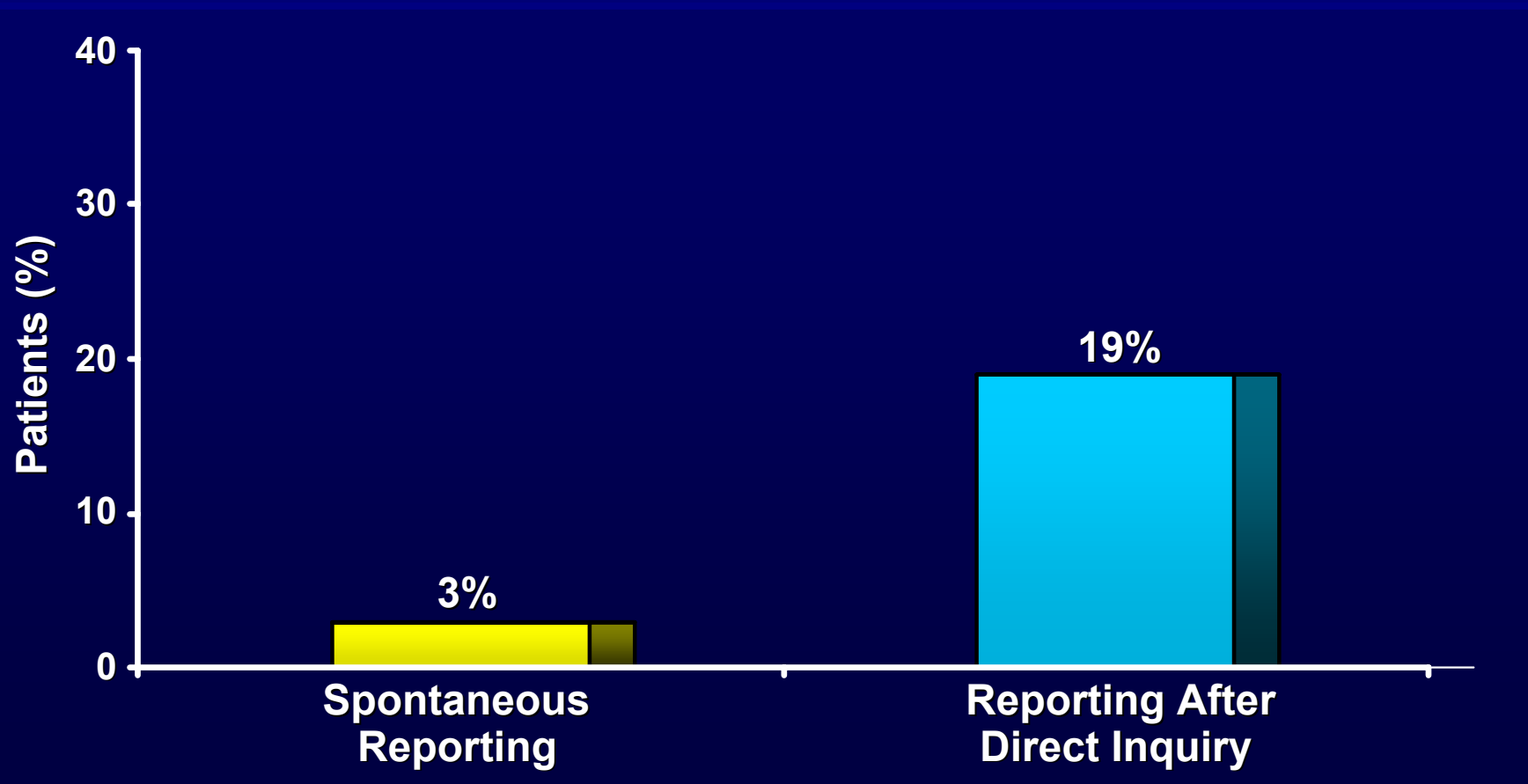
# Clinician Based Barriers

- ❖ Embarrassment<sup>1</sup>
- ❖ Inadequate knowledge/skills<sup>2</sup>
- ❖ “Improving quality of life” may not be considered a high priority<sup>3</sup>
- ❖ Concern that management will be time-consuming and/or poorly reimbursed<sup>4</sup>

1. Korenman SG. *Am J Med.* 1998;105:135-144. 2. Broekman CPM, et al. *Int J Impot Res.* 1994;6:67-72.

3. Eid JF, Sadovsky R. *Cliniguide® to Erectile Dysfunction.* Lawrence DellaCorte Publications, Inc; September 1, 2001. 4. Baum N, et al. *Patient Care.* Spring 1998 (suppl):17-21.

# Physician Questioning Increases Patient Reporting of Sexual Dysfunction

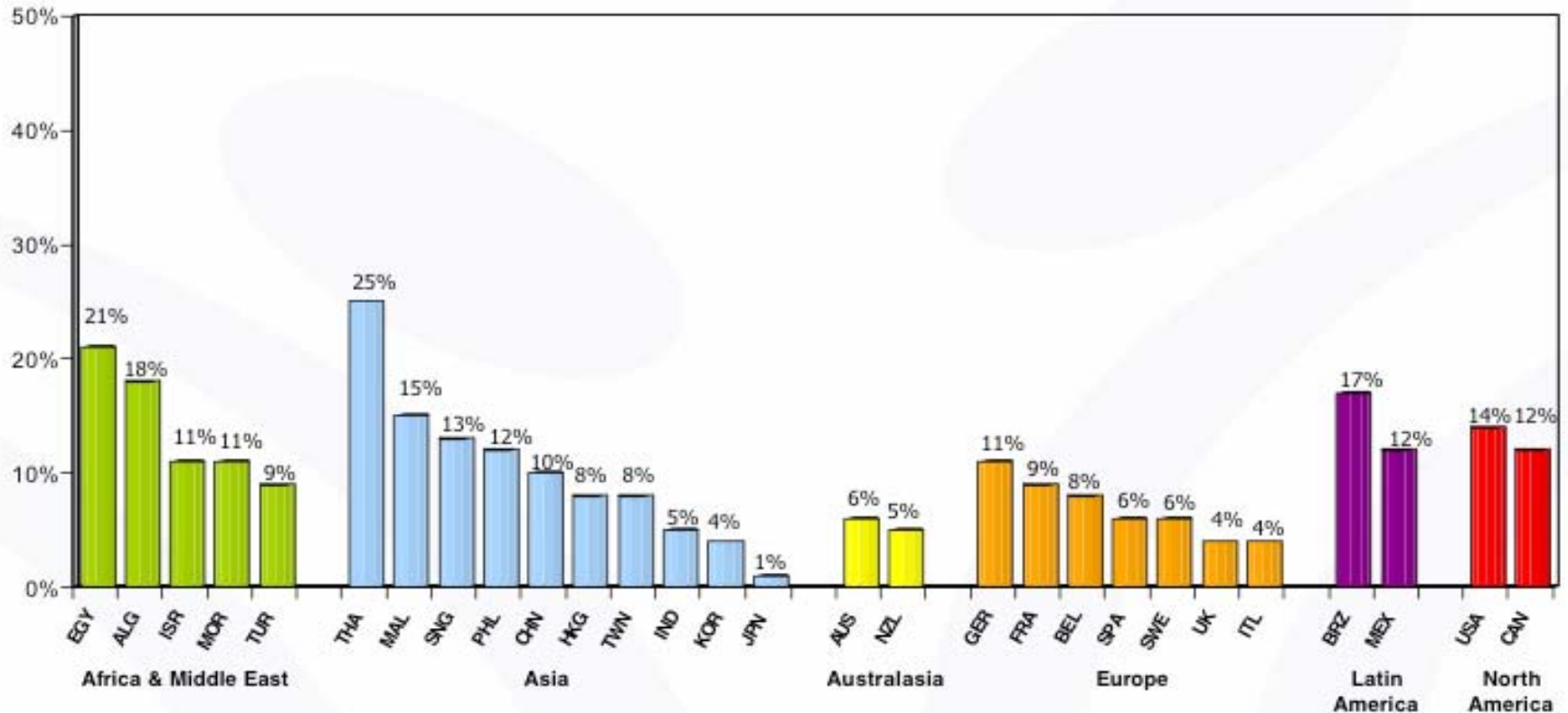


N=887.

Bachmann GA, et al. *Obstet Gynecol.* 1989;73:425-427.

# Has your doctor asked whether you have sexual difficulties (within the last 3 years)?

% of Respondents



Note scale ends at 50 percent

# How to Bring up the Topic

---

## ❖ Generic

- “Many people have concerns or questions about their sexuality. I would like to ask you a few questions about this, and would be pleased to answer any questions you may have.”

## ❖ Illness Specific

- “Many women after having a baby/after menopause notice a change in their sexual desire, have you noticed any changes?”

# What to Include?

## A brief assessment and opening the door

---

- ❖ Are you currently involved in sexual relationship?
- ❖ Are you sexually active with men, women or both?
- ❖ Are you or your partner having any sexual difficulties or concerns at this time? What questions or concerns do you have about sex?
- ❖ “Have you noted any change in your sexual interest?” “Are you bothered by your current level of desire for sex?”
- ❖ “Are you having any pain during sexual activity”?



## Resources for Clinicians

[www.FSDeducation.eu](http://www.FSDeducation.eu)

American Association of Sex Educators, Counselors, and Therapists

(AASECT) [www.aasect.org](http://www.aasect.org)

American College of Obstetricians and Gynecologists (ACOG) [www.acog.org](http://www.acog.org)

American Society for Reproductive Medicine (ASRM) [www.asrm.org](http://www.asrm.org)

Centers for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov)

Contraception Online [www.contraceptiononline.org](http://www.contraceptiononline.org)

Endometriosis Association [www.endometriosisassn.org](http://www.endometriosisassn.org)

Gay and Lesbian Medical Association [www.glma.org](http://www.glma.org)

Kaiser Reproductive and Sexual Health Resource [www.kff.org](http://www.kff.org)

Kinsey Institute [www.indiana.edu/~kinsey](http://www.indiana.edu/~kinsey)

International Academy of Sex Research (IASR) [www.iasr.org](http://www.iasr.org)

International Society for the Study of Women's Sexual Health [www.isswsh.org](http://www.isswsh.org)

Intersex Society of North America [www.isna.org](http://www.isna.org)

National Vulvodynia Association (NVA) [www.nva.org](http://www.nva.org)

North American Menopause Society (NAMS) [www.menopause.org](http://www.menopause.org)

Sexuality Information and Education Council of the U.S. (SIECUS) [www.siecus.org](http://www.siecus.org)

Society for the Scientific Study of Sexuality (SSSS) [www.sexscience.org](http://www.sexscience.org)

World Association for Sexology [www.worldsexology.org](http://www.worldsexology.org)

[www.femalesexualdysfunctiononline.org](http://www.femalesexualdysfunctiononline.org)

[Sheryl.Kingsberg@uhhospitals.org](mailto:Sheryl.Kingsberg@uhhospitals.org)

**TACK SÅ MYCKET!**