Women & Wellness
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Optimizing Intimacy
Everything You Wanted to Know About Sex...But Were Afraid to Ask!

Jan L Shifren, MD
Professor of Obstetrics, Gynecology and Reproductive Biology
Harvard Medical School
Director, Midlife Women’s Health Center
Vincent Ob/Gyn Service, Massachusetts General Hospital
Types of Female Sexual Problems

- Low Sexual Desire
  - Hypoactive Sexual Desire Disorder (HSDD)
- Difficulty with Arousal
  - Sexual Arousal Disorder (FSAD)
- Difficulty with Orgasm
  - Sexual Orgasm Disorder
- Sexual Pain Problems
  - Pelvic Pain
  - Vaginismus
Effect of Age on Low Sexual Desire with Distress


Sexuality & Health Among Older US Adults

- National Social Life, Health, and Aging Project
- ~ 1500 men & ~ 1500 women, aged 57-85 years
- Majority older adults in intimate relationships & regard sexuality as important part of life
- Impact age on availability of partner marked for women - Only 40% women aged 75-85 had spouse or intimate relationship vs 78% men

24% of women reported distress about their sexual relationship and/or own sexuality

Poor predictors of distress were physical aspects of sexual response:
- Arousal
- Vaginal lubrication
- Orgasm

Best predictors of sexual distress were:
- General well-being
- Emotional relationship with partner

National probability sample
Telephone computer-assisted self-interview
987 women, 20-65 years

Factors Affecting Sexuality

Interpersonal Relationships
- Relationship quality & conflict
- Partner performance & technique

Psychology
- Depression, Anxiety
- Past sexual or physical abuse
- Antidepressant use
- Alcohol or drug abuse
- Body image (weight, fitness)

Sexuality

Sociocultural Influences
- Stress, Fatigue
- Lack of privacy
- Inadequate education
- Cultural or religious concerns

Physiology
- Medical / Neurologic problem
- Gynecologic / Urogenital problem
- Estrogen deficiency
- Androgen insufficiency
Treatment of Sexual Problems

**Interpersonal Relationships**
- Counseling - relationship & psychological
- Sex therapy - education, sensate focus exercises

**Psychology**
- Treat depression, anxiety
- Adjust medications (SSRI’s)
- Improve body image

**Sociocultural Influences**
- Adjust life situation - stress, fatigue, privacy
- Address religious & cultural beliefs

**Sexuality**

**Physiology**
- Treat medical & gynecologic problems
- Devices/Vasoactive substances
- Estrogen/Testosterone therapy
Psychotherapy, Counseling, and Sex Therapy

*Individual & Couple*

- Relationship conflict
- Major life stressors
- Discrepant desire levels between partners
- Cultural & religious prohibitions
- Depression
- Anxiety
- Body image issues
- Sensate focus exercises
- Education: Technique, Devices, Novelty
I was on hormone replacement for two years before I realized that what I really needed was Steve replacement.
“BIBLIOTHERAPY”

- Sexual Health & Menopause
  *(online at www.menopause.org)*
- Fifty Shades of Grey, by E L James
- Getting the Sex You Want, by S Leiblum & J Sachs
- Making Love the Way We Used To, by A Altman & L Asher
- Becoming Orgasmic, by J Heiman & J Lopiccolo
- The New Love and Sex After 60, by R Butler & M Lewis
- American Association of Sex Educators, Counselors and Therapists (aasect.org)
Yoga in Female Sexual Function

- 40 sexually active women
- Yoga program x 12 weeks
- Total FSFI score improved 19% (p< 0.0001)
- All domains significantly improved (desire, arousal, lubrication, orgasm, satisfaction, pain)
- Greater improvement in women age > 45 years c/w younger women

Non-Hormonal Therapeutic Options

- **Lifestyle modification: Increased sexual activity**
- **Vaginal Lubricants & Moisturizers**
- **“Warming” Massage Oils (Zestra)**

<table>
<thead>
<tr>
<th>Lubricant – As needed</th>
<th>Moisturizer – Long term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water-based</strong></td>
<td><strong>Silicone-based</strong></td>
</tr>
<tr>
<td>Slippery Stuff</td>
<td>ID Millennium</td>
</tr>
<tr>
<td>Astroglide</td>
<td>Pjur</td>
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<tr>
<td>K-Y Jelly</td>
<td>Pink</td>
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<tr>
<td>Summer’s Eve</td>
<td></td>
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<tr>
<td>FemGlide</td>
<td>Oil-based</td>
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<td>Pre-Seed</td>
<td>Elegance</td>
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<td></td>
<td>Replens</td>
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<td></td>
<td>Moist Again</td>
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<td></td>
<td>Vagisil Feminine Moisturizer</td>
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<tr>
<td></td>
<td>Feminease</td>
</tr>
<tr>
<td></td>
<td>K-Y Silk-E</td>
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<tr>
<td></td>
<td>K-Y Liquibeads</td>
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</tbody>
</table>

NAMS. *Menopause* 2013;20:888
## EROS-Clitoral Therapy Device

### Possible mechanism of action: \( \uparrow \) Clitoral blood flow

<table>
<thead>
<tr>
<th></th>
<th>FSD</th>
<th>No FSD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20 women (9 pre/11 postMP)</td>
<td>12 women (10 pre/2 postMP)</td>
</tr>
<tr>
<td>Sensation</td>
<td>90%</td>
<td>58%</td>
</tr>
<tr>
<td>Lubrication</td>
<td>80%</td>
<td>33%</td>
</tr>
<tr>
<td>Ability to achieve orgasm</td>
<td>55%</td>
<td>42%</td>
</tr>
<tr>
<td>Sexual satisfaction</td>
<td>80%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Prevalence of Genitourinary Syndrome of Menopause

About 50% of all postmenopausal US women have GSM

Only 6%-7% treated

Many women are unaware that symptoms progress without treatment and that safe and effective treatments are available

Courtesy of NAMS
Low Dose Local Estrogens for Treatment of Vaginal Atrophy & Dyspareunia

- Vaginal cream: Estrace (E2) & Premarin (CE) (0.5-1 gram, 2-3 times/week)
- Vaginal ring: Estring (Q 3 mos.)
- Vaginal tablet: Vagifem (2 times/week)
- No significant increase in estrogen blood levels
Double-blind, placebo-controlled trial
- 781 women with arousal disorder
- Age: 18 to 70 years

No difference in efficacy between sildenafil and placebo

Effective only for SSRI-induced sexual dysfunction

Antidepressant medications associated with a wide range of sexual disorders of desire, arousal, orgasm, and pain.

Sexual dysfunctions may occur in more than 50% of patients treated with SSRIs.

Fewer sexual dysfunctions associated with bupropion, nefazodone, and mirtazapine.
Bupropion (Wellbutrin) Treatment of HSDD in Premenopausal Women

- Randomized, double blind, placebo-controlled study
- 66 Premenopausal women, non-depressed
- Bupropion SR 300-400 mg/d x 112 days
- Inhibits both dopamine & norepinephrine reuptake
- Significant ↑ CSFQ total score & pleasure, arousal, orgasm subscales
- Side effects: agitation, HTN, insomnia, dry mouth, tremor, rare seizures

### Effect of Flibanserin in Women with Hypoactive Sexual Desire Disorder

<table>
<thead>
<tr>
<th>Sexual Function Endpoint</th>
<th>Flibanserin (100 mg qhs)</th>
<th>Placebo</th>
<th>Placebo-subtracted change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory Sexual Events</td>
<td>1</td>
<td>0.6</td>
<td>0.4*</td>
</tr>
<tr>
<td>Desire (FSFI)</td>
<td>0.7</td>
<td>0.4</td>
<td>0.3*</td>
</tr>
<tr>
<td>FSFI (total score)</td>
<td>4.2</td>
<td>2.7</td>
<td>1.5*</td>
</tr>
<tr>
<td>Distress (FSDS-R)</td>
<td>-8.3</td>
<td>-6.3</td>
<td>-2*</td>
</tr>
<tr>
<td>% Women with Meaningful Benefit from Study Medication</td>
<td>37.6%</td>
<td>28.0%</td>
<td>9.6%</td>
</tr>
</tbody>
</table>

Serotonin receptor 1A-agonist & 2A-antagonist
FDA Approved for Premenopausal women with HSDD
Common AEs: dizziness, somnolence, nausea, headache
No alcohol use allowed

*P < 0.01

Menopause and Testosterone Levels

Pre-menopausal

Post-menopausal


Effects of Hormones & Relationship Factors on Sexual Function through the Menopausal Transition

Sexual response predicted by:

- Feelings for partner
- Change in partner status
- Prior level of sexual function
- Estradiol level

Total testosterone levels or Free T Index did not predict sexual function

Prospective observational study
Population based
8 years of longitudinal data
336 women, 45-55 years at baseline

Testosterone Injections and Sexual Function

Use of a Testosterone Patch in Hypoactive Sexual Desire Disorder

- Phase 3 clinical trials
  - 24-weeks
  - Multicenter, double-blind, placebo-controlled
- 1095 surgically & 549 naturally menopausal women on ET or EPT with HSDD
- Randomized groups
  - Placebo
  - Testosterone 300 mcg/d

Sexuality Domains in Naturally Menopausal Women

Shifren et al. Menopause; 2006; 13: 770

**Sexuality Domains**

- Desire
- Arousal
- Orgasm
- Pleasure
- Decreased Concerns
- Responsiveness
- Self-image

*p < 0.001; †p < 0.01 vs. placebo
LibiGel

Phase III Pivotal Trials

- No statistically significant difference in ANY endpoint c/w placebo
- Safety Data: not released

Median Free T (pg/mL)

<table>
<thead>
<tr>
<th>Month of Treatment</th>
<th>LibiGel 300 mcg/day</th>
<th>Intrinsa 300 mcg/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Month 1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Month 2</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Month 3</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Month 6</td>
<td>4</td>
<td>-</td>
</tr>
</tbody>
</table>

biosantenews@biosantepharmaceuticals.ccsend.com (12.2011)
Testosterone Vaginal Cream

“*The Oprah Winfrey Prescription*”
(~1/10th male dose)

- 1% Testosterone cream
- Compounded by pharmacist
- Apply 0.5 grams topically nightly
- Dispense 45 grams (~3 month supply)
- NO Data on Safety or Efficacy!
- Goal: serum testosterone level within normal range for women
Androgen Therapy Potential Risks

- Hirsutism, Acne
- Virilization - clitorimegaly, voice changes
- Liver dysfunction
- Adverse lipid changes (↓ HDL)
- Fluid retention with edema, hypertension, exacerbation of heart disease
- Psychological changes
- Potential estrogen risks - CVD, Breast cancer
- Virilization of female fetus
Sexual Motivation & Duration of Partnership

“Wants to have sex often” - % YES responses

Cross-sectional survey
1865 students, Aged 19-32
Relationships 2 mos. to 7.5 years