Interpersonal Violence, Posttraumatic Stress Disorder, and Menopause-Related Sexual Dysfunction in an Ethnically-Diverse, Community-Based Sample of Women

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Interpersonal Violence and PTSD are Common and Impact Health

Breiding, MMWR 2014
Do interpersonal violence and PTSD affect menopause-related sexual function?

- Vaginal Dryness
- Itching
- Soreness
- Irritation

- Sexual Lubrication
- Pain Function

Reported by >50% of peri- and postmenopausal women
Interpersonal violence, PTSD associated with sexual dysfunction in younger women

Sexual assault

PTSD*

Vaginal symptoms

Sexual Pain Function

*Schnurr et al., JWH 2009; Smith et al., JTD 2011
Objectives

1) To examine the prevalence of interpersonal violence and PTSD among community-dwelling midlife and older women.

2) To determine whether interpersonal violence and PTSD are associated with increased risk for menopause-related sexual dysfunction.
Reproductive Risks of Incontinence Study at Kaiser (RRISK)

- Multiethnic cohort of 2,016 women aged 40-85
- Long-term Kaiser Permanente enrollees randomly selected within age and race strata
- Study designed to assess medical and psychosocial predictors of urinary incontinence
- Cross-sectional data from wave 3 (2008-2012) included interpersonal violence, PTSD
Assessment of Interpersonal Violence

• Self-administered questionnaire, lifetime:
  • Emotional/Verbal Intimate Partner Violence
  • Physical Intimate Partner Violence
  • Sexual assault

Mouton et al., Annals of Family Medicine, 2010
Assessment of PTSD

• Self-administered PTSD Checklist-Civilian Version (PCL-C) assessed past month:
  • Re-experiencing, avoidance, hypervigilance, and mood symptoms related to “stressful experience”
  • Clinical cut-off: ≥30 (range: 17-85)

Walker et al., Gen Hosp Psychiatry, 2002
Assessment of Menopause-Related Sexual Dysfunction

- Interviewer-administered questionnaire assessed past month:
  - Vaginal irritation
  - Vaginal soreness
  - Vaginal pain with intercourse
Statistical Analyses

1) **Descriptive analyses**
   Demographic characteristics
   Predictors: Emotional and physical intimate partner violence, sexual assault, PTSD
   Outcomes: Vaginal irritation, vaginal soreness, vaginal pain with intercourse

2) **Multivariable logistic regression models**
   Run separately for each predictor and outcome
   Models adjusted for age, race/ethnicity, BMI, menopause status, hormone therapy
### Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>N=2,106</th>
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<tbody>
<tr>
<td><strong>Age (mean, SD)</strong></td>
<td>61 (10)</td>
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<tr>
<td><strong>BMI (mean, SD)</strong></td>
<td>30.2 (7.4)</td>
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<tr>
<td><strong>Race/ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>Non-Latina white</td>
<td>39%</td>
</tr>
<tr>
<td>Latina white</td>
<td>20%</td>
</tr>
<tr>
<td>Black</td>
<td>21%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>19%</td>
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<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>High school or less</td>
<td>19%</td>
</tr>
<tr>
<td>Some college</td>
<td>44%</td>
</tr>
<tr>
<td>College +</td>
<td>22%</td>
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<tr>
<td><strong>Menopause Status</strong></td>
<td></td>
</tr>
<tr>
<td>Pre- or perimenopausal</td>
<td>18%</td>
</tr>
<tr>
<td>Postmenopausal</td>
<td>55%</td>
</tr>
<tr>
<td>Surgically postmenopausal</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Hormone therapy</strong></td>
<td>17%</td>
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# Interpersonal Violence and PTSD

<table>
<thead>
<tr>
<th>Category</th>
<th>N=2,106</th>
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<tbody>
<tr>
<td>Lifetime emotional IPV</td>
<td>21%</td>
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<tr>
<td>Lifetime physical IPV</td>
<td>16%</td>
</tr>
<tr>
<td>Lifetime sexual assault</td>
<td>19%</td>
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<tr>
<td>Current PTSD (PCL ≥30)</td>
<td>22%</td>
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</tbody>
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## Menopause-Related Sexual Dysfunction

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Vaginal irritation</td>
<td>32%</td>
</tr>
<tr>
<td>Vaginal soreness</td>
<td>7%</td>
</tr>
<tr>
<td>Vaginal pain with intercourse*</td>
<td>17%</td>
</tr>
</tbody>
</table>

*In subset of sexually active participants (n=1457)
Interpersonal Violence and PTSD are Associated with Sexual Dysfunction

Emotional IPV
- Vaginal irritation
- Vaginal soreness
- Vaginal pain with intercourse

OR (95% CI)
Interpersonal Violence and PTSD are Associated with Sexual Dysfunction

**Emotional IPV**
- Vaginal irritation
- Vaginal soreness
- Vaginal pain with intercourse

**Sexual Assault**
- Vaginal irritation
- Vaginal soreness
- Vaginal pain with intercourse

**OR (95% CI)**
Interpersonal Violence and PTSD are Associated with Sexual Dysfunction

Emotional IPV
- Vaginal irritation
- Vaginal soreness
- Vaginal pain with intercourse

Sexual Assault
- Vaginal irritation
- Vaginal soreness
- Vaginal pain with intercourse

Posttraumatic Stress Disorder
- Vaginal irritation
- Vaginal soreness
- Vaginal pain with intercourse

OR (95% CI)
Limitations

• Cross-sectional data limits ability to determine longitudinal trends, causation

• Self-reported symptoms may not reflect true clinical significance

• Generalizability of sample may be limited
Summary

- Over 20% of cohort reported interpersonal violence, clinically significant PTSD symptoms
- Interpersonal violence and **PTSD** increased risk for menopause-related sexual dysfunction
Clinical Implications

- Recognize prevalence, importance of PTSD
- Psychoeducation about effects of interpersonal violence and PTSD on health and symptom burden may enhance care
- Trauma-informed treatment is important for women across the aging spectrum
Thank you!

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Dave Thom, MD, PhD, MPH

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