A Sexual Health Educational Intervention to Improve Sexual Function and Psychosocial Adjustment in Male Rectal Cancer Survivors

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Disclosure

• No Disclosures
Impact of Sexual Dysfunction

• High rates of sexual dysfunction in men treated for rectal cancer

• Post-surgery, men report difficulties with:
  – Erectile functioning (59-90%)\textsuperscript{1,2}
  – Ejaculation (65-82%)\textsuperscript{1,2}
  – Lowered desire (77\%)\textsuperscript{3}

• 30-40% of sexually-active patients discontinue sexual activity\textsuperscript{2}

\textsuperscript{1}Nishizawa et al., Int J Colorectal Disease, 2011;
\textsuperscript{2}Milbury et al., Support Care Cancer, 2012;
\textsuperscript{3}Hendren et al., Annals of Surg, 2005
Impact of Sexual Dysfunction

- ED is associated with depression\(^1,2\)

- ED bother does not dissipate\(^3\)
  - Report lower general life happiness
  - No logical predictors

- Significant relationship difficulties\(^4\)

\(^1\) Araujo et al., Psychosom Med, 1998; \(^2\) Nelson et al., JSM, 2010; \(^3\) Nelson et al., JSM, 2010; \(^4\) Muller et al, 2002
Pilot Sexual Health Intervention to Improve Sexual Functioning Following Treatment for Rectal Cancer
Intervention

• Four in-person or telephone sessions, three booster calls
• Education
  − Sexual side effects of cancer treatment
  − Normalizing
  − ED treatments available, facilitating ED treatment decisions
• Action plans for sexual rehabilitation
  − Medication compliance
  − Sensate focus and maintenance of intimacy with partner
  − Communication
  − Cognitive reframing
• Available resources
Methods

• Male rectal cancer patients ($N=71$)
  – Reporting sexual dysfunction and associated bother
  – Married or partnered

• Randomized to:
  1) UC + Sexual health education intervention
  2) UC + referral to specialist + educational materials arm

• Sexual function and psychosocial variables assessed:
  – Baseline (Time 1)
  – 4 months post-baseline (Time 2)
  – 8 months post-baseline (Time 3)
Pilot RCT Aims

• **Primary Aims**
  – Sexual functioning
    • International Index of Erectile Function (IIEF)$^1$

• **Secondary Aims**
  – Psychosexual variables
    • Sexual Bother Items (Sexual Bother)
    • Self-Esteem and Relationship Questionnaire (SEAR)$^2$

  – Cancer-specific stress
    • Impact of Events Scale-R (IES-R)$^3$

$^1$Rosen et al., Urology, 1997; $^2$Althof et al., Urology, 2003; $^3$Weiss & Marmar., 1997
Analytic Strategy

• Compared change scores between groups
  − Independent measures t tests (p values)

• Reported effect sizes (Cohen’s d)\(^1\)
  − Small (.20)
  − Medium (.50)
  − Large (.80)

\(^1\)Cohen, Psych Bull, 1992
## Patient Characteristics (N=71)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>M ± SD or %</th>
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<tbody>
<tr>
<td>Age</td>
<td>57.07 ± 9.00</td>
</tr>
<tr>
<td>Race / Ethnicity (% White / Not Hispanic)</td>
<td>82%</td>
</tr>
<tr>
<td>Married vs. Partnered (% married)</td>
<td>88%</td>
</tr>
<tr>
<td>Years Since Most Recent Diagnosis</td>
<td>4.72 ± 2.83</td>
</tr>
<tr>
<td>Years Since Surgery</td>
<td>4.23 ± 2.83</td>
</tr>
<tr>
<td>Percent Treated with Radiation (% yes)</td>
<td>88%</td>
</tr>
<tr>
<td>Cancer Type (% rectal)</td>
<td>87%</td>
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<tr>
<td>Stoma (% yes)</td>
<td>15%</td>
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Sexual Function
IIEF Total Score

Baseline-Time 2: p < 0.01, d = 1.22
Baseline-Time 3: p < 0.01, d = 0.89
IIEF Erectile Functioning

Baseline-Time 2: p = 0.02, d = 0.96
Baseline-Time 3: p = 0.04, d = 0.59
IIEF Sexual Desire

Mean IIEF Sexual Desire

Baseline, T2, T3

Intervention, Usual Care

Baseline-Time 2: p< 0.01, d= 1.37
Baseline-Time 3: p= 0.03, d= 0.74
IIEF Combined Satisfaction

Baseline-Time 2: p = 0.02, d = 0.85
Baseline-Time 3: p = 0.04, d = 0.84
Psychosexual Functioning
Sexual Bother

Baseline-Time 2: p < 0.01, d = -1.44
Baseline-Time 3: p = 0.59, d = -0.20
SEAR Total Score

Baseline-Time 2: p = 0.52, d = 0.25
Time 2-Time 3: p = 0.02, d = 1.10
SEAR Confidence

Mean Self-Esteem and Relationship Confidence

Baseline - Time 2: $p = 0.96, d = 0.02$
Time 2 - Time 3: $p = 0.06, d = 1.14$
Conclusions

• A brief sexual health education intervention improves:
  − Sexual functioning (particularly earlier)
  − Psychosocial functioning (particularly later)

• Additional strategies may be needed to help sustain sexual health effects over time…
  …and to improve psychosocial functioning earlier

• Future directions