Sexual Therapy and Rehabilitation after Treatment for Ovarian Cancer (START-OC): Preliminary Results from a Brief Psychosexual Intervention

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For ovarian cancer (OC) survivors, serious sexual dysfunction is one of the most distressing long-term side effects of treatment.

90% of survivors report loss of interest in sexual activity years after diagnosis.

Treatment-related sexual dysfunction and accompanying psychological distress are not addressed for most survivors.
Women’s Voices…

- I still feel so guilty. I know that I should make more of an effort, I mean, its been 4 years. If I am being honest, I probably think about it and feel bad it at some point every night.

- I’ve lost so much interest in sex and I know I have to do something about it because it’s your body, it’s your future, and you know my husband’s good, it’s like not that he would ever do anything on the side, but the kids are getting old and pretty soon it’s just going to be the two of us and I’m thinking, oh God.
Development of Intervention

- **Aim:** *To pilot a brief, low-intensity psychosexual intervention to manage sexual dysfunction and distress after ovarian cancer treatment.*

  - **Theory-driven:** Guided by Self-Determination Theory (Deci & Ryan, 1985), intervention promotes self-efficacy (autonomy), competence and relatedness in order to facilitate behavioral change and psychological well-being.

  - **Brief / Low-intensity:** Previous interventions high intensity in scope and content (e.g. 8-10 sessions, expensive, labor-intensive

  - **Integrative Format:** Group paired with individual tailoring
Intervention Design and Content

- **Module 1 – Targeted sexual health education**
  - Topics include vaginal health (e.g., information about moisturizers, vaginal dilators), enhancing arousal and increasing low desire

- **Module 2- Body/Body Awareness**
  - Pelvic floor education, physical sensation scan, progressive muscle relaxation,

- **Module 3- Mindfulness-Based Cognitive Therapy/Sex Therapy**
  - Developing awareness of automatic thoughts; moving away from avoidance/distraction; shifting from automatic reaction to response that is intentional and skillful
START-OC Intervention

Study Design

- Single half-day group session with 3 primary learning modules:
  1) Sexual health education
  2) Body awareness and relaxation training
  3) M-CBT/Sx Therapy and activity planning

- Questionnaires completed at four time points: 2 months pre-group session (Baseline 1), immediately before the group session (Baseline 2), 2 months post-group session (Follow-Up), 6 months post-group session (data not shown here).

- Single tailored individual telephone counseling 1 month after group.
Ready, Set, Action!

• Creation of Personalized Action plan
  ◦ Individual reflection on personal challenges and information learned in group session
  ◦ Identification of 1 or more specific problems to be addressed
  ◦ Description of actionable next steps to be taken starting in the next month
Educational materials and phone counseling

- Take-home materials included instructions for relaxation exercises, information on how to use vaginal dilators, and resource sheets with additional about vaginal moisturizers, pelvic floor exercises and personal products.

- Phone Coaching Session: 1 month post group session
  - Call to address remaining questions, review action plan, address barriers and challenges, and modify plan if needed
Eligibility & Recruitment

Eligible participants were women who:

- Were diagnosed with ovarian cancer.
- Endorsed at least 1 symptom of distressing sexual dysfunction (e.g., decreased sexual interest).
- Able to attend a group session.

- Exclusion criteria included history of pelvic radiation

Women recruited through DFCI oncologists and surgeons. Notices posted through several community-based support and advocacy groups.
**Measures**

- Measures were completed at baseline and 2-months post-intervention.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Content</th>
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<tbody>
<tr>
<td>Female Sexual Function Index</td>
<td>Sexual functioning (Overall sexual function score and domain scores, including desire, arousal, lubrication, orgasm, satisfaction, and pain).</td>
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<td>Sexual Attitude Scale</td>
<td>Sexual self-efficacy after ovarian cancer.</td>
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<td>Sexual Knowledge</td>
<td>True/false sexual knowledge for successful management of sexual dysfunction post ovarian cancer.</td>
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<tr>
<td>Brief Symptom Inventory (BSI-18)</td>
<td>Psychological distress (Global Severity Index score and domain scores, including somatization, depression, and anxiety).</td>
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<tr>
<td>Workshop Evaluation Survey*</td>
<td>Satisfaction with group session.</td>
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Participants

- Preliminary data includes 39 participants who attended the intervention
  - Mean age of 54.9 (range, 27-70) years
  - 97.4% were White, non-Hispanic
  - 84% were married or living as married
  - 49.7% had obtained a college degree or higher
  - Mean of 6.9 (range, 1-20) years since ovarian cancer diagnosis
Workshop Evaluation

“The group session gave me helpful information for addressing treatment-related sexual problems.”

97% agree that the group was helpful

“I enjoyed participating in the group session.”

95% agree that the group was enjoyable

“The content of the group session was easy to understand.”

100% agree that the group session was easy to understand
Thirty-eight of 39 women (97%) reported high satisfaction ratings when asked if they were satisfied with the content of the intervention.
Results: Paired Sample t-tests (FSFI)

**Mean Score**

- **Desire**
- **Arousal**
- **Lubrication**
- **Orgasm**
- **Satisfaction**
- **Pain**

**Overall Sexual Functioning**

- **Baseline 1**
- **Baseline 2**
- **Follow-Up**

* p < 0.05  
** p < 0.01
Results: Psychological Distress (BSI-18)

BSI-18 Scores

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Baseline 2</th>
<th>Follow-Up</th>
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<tbody>
<tr>
<td>Somatization</td>
<td>53</td>
<td>47</td>
</tr>
<tr>
<td>Depression</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>Anxiety</td>
<td>49</td>
<td>51</td>
</tr>
<tr>
<td>Global Severity Index</td>
<td>53</td>
<td>51</td>
</tr>
</tbody>
</table>

* *p<0.05
Conclusions

- Participants reported sizable improvements in sexual functioning and psychological distress post-intervention.

- Moderate effect sizes were noted regarding improved sexual function and decreased depression from a low-intensity intervention.

- Women were satisfied with the intervention and results support the hypothesis that brief, multi-modal intervention could be an acceptable format for sexual rehabilitation for women after ovarian cancer and treatment.
Limitations

• Small sample size

• Primarily homogenous sample
  ◦ Question of whether this can be generalized to other groups of women

• Preliminary results
  ◦ Need to look at durability of results
Implications/Future Directions

- To date, this is the first brief, low-intensity intervention addressing sexual dysfunction for women after treatment for OV CA which suggests promising results for a much neglected problem that negative impacts QOL.

- This intervention provides evidence for utilizing an integrative approach:
  - Mindfulness-based CBT and targeted sexual health education to address a much-neglected problem after OVCA.

- Need to look at additional analyses including knowledge and self-efficacy measures as well as additional time point.

- Imperative to test this intervention in a randomized-controlled trial.
Co-Investigators

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