ORIGINAL RESEARCH—ONCOLOGY

What Couples Say about Their Recovery of Sexual Intimacy after Prostatectomy: Toward the Development of a Conceptual Model of Couples' Sexual Recovery after Surgery for Prostate Cancer

Daniela Wittmann, PhD, MSW,*† Marsha Carolan, PhD,‡ Barbara Given, PhD, RN, FAAN,§ Ted A. Skolarus, MD, MPH,*¶ Heather Crossley, BA,* Lawrence An, MD,** Ganesh Palapattu, MD, FACS,* Patricia Clark, MSN, PhD, RN,** and James E. Montie, MD*

*Department of Urology, University of Michigan, Ann Arbor, MI, USA; †Department of Social Work, University of Michigan Health System, Ann Arbor, MI, USA; ‡Department of Human Development and Family Study, Michigan State University, East Lansing, MI, USA; §College of Nursing, Michigan State University, East Lansing, MI, USA; ¶VA Ann Arbor Healthcare System, HSRD Center for Clinical Management Research, Ann Arbor, MI, USA; **Comprehensive Cancer Center, University of Michigan, Ann Arbor, MI, USA

DOI: 10.1111/jsm.12732

ABSTRACT

Introduction. Interventions designed to help couples recover sexual intimacy after prostatectomy have not been guided by a comprehensive conceptual model.

Aim. We examined a proposed biopsychosocial conceptual model of couples' sexual recovery that included functional, psychological, and relational aspects of sexuality, surgery-related sexual losses, and grief and mourning as recovery process.

Methods. We interviewed 20 couples preoperatively and 3 months postoperatively. between 2010 and 2012. Interviews were analyzed with Analytic Induction qualitative methodology, using NVivo software. Paired *t*-tests described functional assessment data. Study findings led to a revised conceptual model.

Main Outcome Measures. Couples' experiences were assessed through semi-structured interviews; male participants' sexual function was assessed with the Expanded Prostate Cancer Index Composite and female participants' sexual function with the Female Sexual Function Index.

Results. Preoperatively, 30% of men had erectile dysfunction (ED) and 84% of partners were postmenopausal. All valued sexual recovery, but worried about cancer spread and surgery side effects. Faith in themselves and their surgeons led 90% of couples to overestimate erectile recovery. Postoperatively, most men had ED and lost confidence. Couples' sexual activity decreased. Couples reported feeling loss and grief: cancer diagnosis was the first loss, followed by surgery-related sexual losses. Couples' engagement in intentional sex, patients' acceptance of erectile aids, and partners' interest in sex aided the recovery of couples' sexual intimacy recovery. Unselfconscious sex, not returning to erectile function baseline, was seen as the end point. Survey findings documented participants' sexual function losses, confirming qualitative findings.

Conclusions. Couples' sexual recovery requires addressing sexual function, feelings about losses, and relationship simultaneously. Perioperative education should emphasize the roles of nerve damage in ED and grief and mourning in sexual recovery. **Wittmann D, Carolan M, Given B, Skolarus TA, Crossley H, An L, Palapattu G, Clark P, and Montie JE. What couples say about their recovery of sexual intimacy after prostatectomy: Toward the development of a conceptual model of couples' sexual recovery after surgery for prostate cancer. J Sex Med 2015;12:494–504.**

Key Words. Prostatectomy; Sexual Recovery; Couples; Survivorship

Introduction

Current research recognizes that post-prostatectomy erectile dysfunction (ED) affects the couple, not just the patient [1–5]. The effect on the couple continues long after prostate cancer treatment. However, many studies examine only one time point of this experience [6–8] pre- or postoperatively, rather than the process of recovery. As a result, we lack a full understanding of the process of couples' sexual recovery after prostate cancer surgery. We know that men have found the use of sexual aids after prostatectomy difficult [9]. We also know that we do not fully understand what is helpful for recovering sexual intimacy. Additionally, we do not fully understand the process involved in couples moving toward recovering sexual intimacy.

Interventions aimed at restoring couples' sexual intimacy have shown promise and have increasingly incorporated more sophisticated intervention content as well as study designs. For example, Canada and colleagues evaluated a four-session intervention for men and for couples that included behavioral exercises [10]. It temporarily improved sexual function for both men and partners. Schover and colleagues compared a web-based intervention with a face-to-face intervention in a randomized trial and found that they were equally effective, with positive effects on sexual function for men who completed the intervention, men with female partners with higher sexual function, and female partners with lower baseline sexual function [11].

The accepted definition of sexuality includes biopsychosocial dimensions, sexual function, individual sexuality, and sexual relationships. In both Canada et al. and Schover et al. studies, the intervention sought to improve sexual function. Both interventions also attended to patients' and partners' negative thoughts about sexual aids and taught communication skills for couples. These interventions clearly show that it is important to attend to not only sexual function but also to individuals' psychology and to the relationship. However, while basing the interventions on previous research findings, neither study presented an empirically based theoretical model that would direct the kind of psychosocial content that would help couples move toward recovery. Negative thoughts about erectile aids are, of course, important to address, but perhaps do not fully account for what is psychologically meaningful to men and partners as they approach sexual recovery after prostatectomy.

Manne and Badr have presented a theoretical model that has guided their design of an emotional intimacy-enhancing intervention [12]. The model proposes a paradigm in which greater openness within the couple with each other about cancer-related difficult subjects leads to better adaptation to cancer. They piloted an intimacy-enhancing intervention with prostate cancer survivor couples [13]. While successful, the intervention had modest results, perhaps because the physiologic sexual function, so important to couples' intimacy after prostate cancer treatment, was not included.

Theoretical models of the impact of cancer on the biopsychosocial components of sexuality [14–16] recognize that biopsychosocial sexual losses are an aspect of the experience of coping with post-cancer treatment sexual adaptation. Tierney notes that grief is a response to the sexual losses, while Wittmann et al.'s model considers the grief process as the process of recovery. However, these models have not been tested empirically. As a result, the biopsychosocial model of sexual recovery has not yet been fully understood or incorporated into intervention research studies. Similarly, a biopsychosocial approach to sexual recovery after prostate cancer surgery has not reached clinical care. In usual busy clinical care, urologists treat ED; patients and partners' feelings about sexual losses and requisite adaptation of their sexual interactions go unaddressed.

We developed a model of couples' sexual recovery that builds on previous research and incorporates the biopsychosocial nature of sexuality and the process of grief and mourning as the method through which couples move toward recovering sexual intimacy while incorporating treatment-related sexual changes [17]. Prostatectomy is conceptualized as a "psychosocial transition" [18], a life-altering event that creates biopsychosocial sexual losses, ushering in grief and mourning as the process of change. Our study's aim was to test this model against prostate cancer survivors' and partners' real-time experience of sexual recovery. We hypothesized that couples would use the grief process to reach a meaningful sexual intimacy end point after experiencing prostatectomy-related changes/losses of men's erectile function (bio), sexual confidence (psycho), and familiar sexual interactions (social). We wanted to understand how couples would define this end point.