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Breast

Exploring the Role of Partner Satisfaction in Predicting Patient Satisfaction Regarding Post-mastectomy Breast Reconstruction

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Background: Qualitative studies have suggested that perceived partner satisfaction is an important predictor of patient satisfaction in post-mastectomy breast reconstruction. To better characterize these relationships, a couple-based study employing a quantitative analysis was conducted.

Methods: BREAST-Q and a novel partner survey were used to assess relationships among patient satisfaction, perceived partner satisfaction, and reported partner satisfaction in 11 couples. Breast reconstruction patients completed the postoperative BREAST-Q, and their partners completed a survey designed to assess satisfaction with their emotional relationship, partner's breasts, partner's medical care, and sexual relationship.

Results: The majority of patients were married. Seventy-three percent of women had an implant-based reconstruction, while 27% had an abdominal-based reconstruction. The majority (82%) of patients reported no complications with reconstructive procedures. The mean patient BREAST-Q score was 86 (range, 48–97), and the mean partner score was 87 (64–98). There was a correlation of 0.85 between reported partner satisfaction and patient satisfaction. Fifty-eight percent of partners reported being afraid to touch their partner's reconstructed breasts out of fear of causing pain; 7% of patients reported experiencing pain in the area of their reconstructed breasts.

Conclusions: This study reveals that partner satisfaction with breast reconstruction correlates with patient satisfaction. With this knowledge, we will be able to formulate suggestions on how preoperative consultations could be conducted as to optimize patient and partner satisfaction and bridge the gap between patient and partner knowledge of postoperative pain. *(Plast Reconstr Surg Glob Open 2020;8:e2943; doi: 10.1097/GOX.0000000000002943; Published online 15 July 2020.)*

INTRODUCTION

Despite advances in the treatment of breast cancer, the present standard of care still includes a combination of chemotherapy, hormone therapy, radiation, and partial or complete mastectomy. Although these therapies have proved to increase survival rates, the adverse effects are noteworthy and affect all aspects of a woman's life. For many women, breast cancer treatment results in a significant insult to their employment, finances, social life, and sexual life.[1] Studies have shown that women who have undergone mastectomy report decreased feelings of femininity and body satisfaction.[1] Although breast reconstruction can improve psychosocial well-being following mastectomy, women will still invariably suffer from treatment side effects such as radiation fibrosis, loss of breast sensation, and side effects of hormonal therapies. These factors all contribute to postoperative satisfaction following breast reconstruction, which has been found to be highly variable, dependent on the type of reconstruction, and therefore has prompted considerable research.[2–5]

Prior studies have investigated the variables that contribute, both positively and negatively, to patient satisfaction following post-mastectomy breast reconstruction.[1,6] Several of these studies have suggested that perceived partner satisfaction is an important predictor of patient satisfaction.[6–8] Additional studies focused on the partners

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of the patients and the effects of the varying treatment modalities on their relationship satisfaction.[8,9] Broadly, 3 themes continued to reemerge throughout the literature: disappointment with preoperative counseling, avoidance of sexual contact postoperatively, and unsatisfactory postoperative communication between partners.[3,5,10–12] These studies have largely relied on open-ended questions, restricting the analyses to identification of common themes and qualitative data.

To better characterize these relationships, a couple-based study employing quantitative analysis was conducted. Using a partner-centered survey and the BREAST-Q, we hypothesize that patients who report higher levels of satisfaction with their post-mastectomy breast will have partners with higher levels of reported satisfaction.

METHODS

A single-center, cross-sectional survey of women who had completed post-mastectomy breast reconstruction, as well as their partners, was conducted over a 4-month period in 2018. Institutional Review Board approval was obtained for this study from the Medical College of Wisconsin. Patients who had completed their breast reconstruction surgical procedures were included in this study. Demographic data were self-reported and included age, cancer stage, type of mastectomy and reconstruction, and surgical complications. Relationship data were reported, which included marital status, length of relationship, and sexuality.

The BREAST-Q is a validated procedure-specific questionnaire designed to measure patient satisfaction and quality of life.[13] Patients completed the postoperative BREAST-Q module as well as a question regarding their perception of their partner's satisfaction. Partners completed a novel survey designed to assess satisfaction with their emotional relationship, partner's reconstructed breasts, partner's medical care, and sexual relationship (**see appendix, Supplemental Digital Content**, which displays the partner survey, **http://links.lww.com/PRSGO/B426**). The questionnaire was designed based on common themes and questions that were the subject of prior partner-centered research. Couples were instructed to complete the questionnaires independently and to not discuss answers until they had both completed the surveys. The BREAST-Q and partner survey were scored from 0 to 100, with a higher score reflecting greater satisfaction. The patient-reported partner satisfaction questionnaire employed a Likert-type scale ranging from 1 to 4, with 4 indicating maximal satisfaction.

Descriptive statistics were used to analyze demographic data. A Pearson's correlation coefficient was calculated to assess the strength of the relationship between patient satisfaction and reported partner satisfaction.

RESULTS

Thirty-four couples were asked to participate in the study. Fifteen patients returned completed surveys, 11 of the corresponding partners returned the surveys. As a result, we were able to analyze data from 11 couples (32% response rate). Participant demographic data are displayed in Table 1. The mean age of patients was 52.8 years, and the mean age of their partners was 54.6 years. The majority of patients were married (91%), with 1 patient in a long-term relationship. The mean length of the relationships was 27 years (range, 4–53). All couples included in this study were heterosexual.

All patients had completed their reconstruction and were no longer undergoing any active cancer treatments. The majority (73%) of patients had undergone bilateral mastectomy. Eight (73%) of the women had undergone tissue expander/implant-based reconstruction, while 3 (27%) had abdominal-based reconstruction. Forty-six percent of patients had chemotherapy and 27% had radiotherapy. The majority (82%) of patients reported no major complications with their reconstructive procedures.

The mean patient BREAST-Q score was 86 (range, 48–97), and the mean partner satisfaction score was 87 (range, 64–98). There was a strong positive correlation of 0.85 ($P < 0.001$) between reported partner satisfaction and patient satisfaction scores (Fig. 1). Forty-four percent of patients perceived their partner's satisfaction as "very satisfied," 44% as "slightly satisfied," 11% as "slightly dissatisfied," and 11% as "very dissatisfied." There was no relationship between type of reconstruction and partner satisfaction (F = 0.59) from this small sample. Of interest, 58% of partners reported being afraid to touch their partner's reconstructed breasts out of fear of causing pain, and 7% of patients reported experiencing pain in the area of their reconstructed breasts.

DISCUSSION

This study found a strong positive correlation between partner satisfaction and patient satisfaction with post-mastectomy breast reconstruction. The majority of patients reported relatively high satisfaction, but when patient satisfaction was low so too was their partners' satisfaction. More specifically, partners who reported low satisfaction tended to score lower on the following 3 questions: (1) How satisfied are you with the look of your partner's reconstructed breast(s) now, compared with that before she had any

Table 1. Participant Demographics (n = 11)

Variables	
Patient age, y, mean (range)	52.8 (37–74)
Partner age, y, mean (range)	54.6 (36–72)
Length of relationship, y, mean (range)	27 (4–53)
Time since procedure, mo, mean (range)	20.9 (2.1–107.1)
Breast cancer stage	
Stage 0, total (%)	3 (27%)
Stage I, total (%)	3 (27%)
Stage II, total (%)	2 (18%)
Stage III, total (%)	2 (18%)
Genetic predisposition	1 (9%)
Mastectomy	
Unilateral, total (%)	3 (27.3%)
Bilateral, total (%)	8 (72.7%)
Nipple-sparing mastectomy, total (%)	2 (18.2%)
Chemotherapy, total (%)	5 (45.5%)
Radiotherapy, total (%)	3 (27.3%)
Type of reconstruction	
Prosthetic, total (%)	8 (72.7%)
Autologous, total (%)	3 (27.3%)
Postoperative complication	2 (18%)

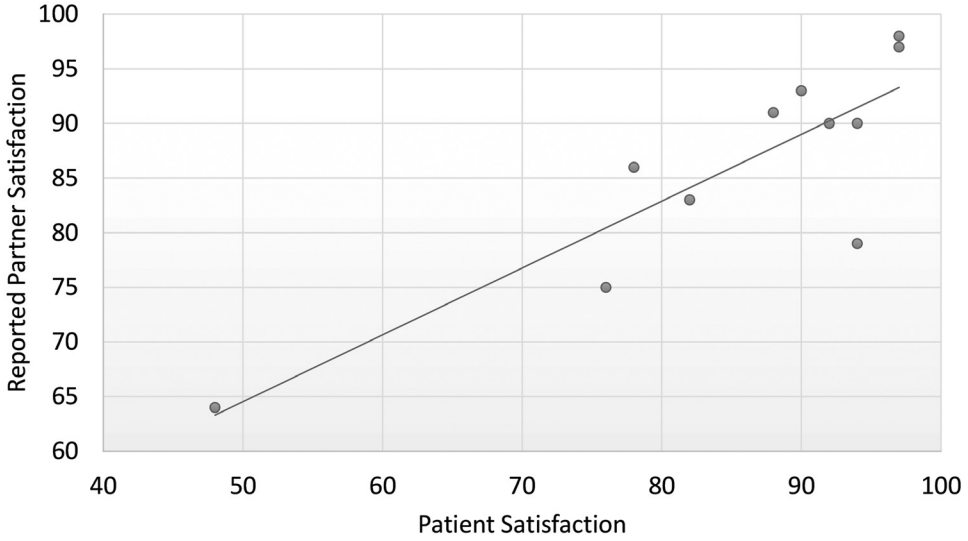

Fig. 1. Graph depicting the correlation (0.85) between reported partner satisfaction and patient satisfaction with post-mastectomy breast reconstruction.

breast surgery? (2) Do you find your partner as sexually attractive as you did before her breast reconstruction? (3) Are you satisfied with the appearance of partner's reconstructed breast(s), revealing that satisfaction is closely tied to the actual appearance of the breasts compared to their preoperative state. This may be appropriately managed with improved preoperative education that includes the discussion of realistic postoperative expectations, both for the patient and the partner.

This issue of a perceived knowledge gap is a well-documented, not just in patients, but also in their partners.[3,12] Cohen et al[3] aimed to study the experience of women who underwent a breast reconstruction, as well as potential ways of improving their satisfaction. They found that patients were most dissatisfied with the information and education that they were given before surgery. Specifically, patients wanted to know what their scars would look like.[3] In a partner-centered study, Sandham and Harcourt[12] explored the feelings of male partners regarding their wives' breast reconstruction after having a mastectomy. While partners described variable levels of involvement in the preoperative decision-making process, most reported feeling ill-informed regarding postoperative expectations in terms of appearance.[12]

A recent study found that women who had been given more medical information before their breast reconstruction reported a better body image regardless of partner involvement.[14] However, the level of partner involvement in preoperative planning was inversely related to decision regret in the same group of women.[14] Authors concluded that partner involvement was perceived as support, which positively impacted patients' long-term decision confidence.[14] It is not unreasonable to assume that partners who were more involved in the preoperative planning process had direct access to more information than those who were less involved. Armed with the appropriate information, partners were more equipped to form realistic expectations for life after breast reconstruction and provide support for their significant other.

Sexual contact and body image are additional factors that contribute to both patient and partner satisfaction. Rowland and Metcalfe[5] investigated men's experiences with their partner's physique and body image following mastectomy and reconstruction. Some common themes identified by the researchers were avoidance of sexual contact, hesitance in talking with the patient about their altered appearance, and strong emotional reactions to the process of mastectomy and reconstruction.[5] In fact, avoidance of sexual contact is a recurring topic in both patient and partner-centric studies regarding post-mastectomy breast reconstruction.[9,11,12,15] It appears as though the avoidance of sexual contact by partners may be perceived as dissatisfaction by patients, ultimately contributing to patient dissatisfaction.[16]

Prior studies have investigated the factors that most heavily impact sexual function between couples after mastectomy and found that both partners and patients reported sexual anxiety following reconstruction, highlighting the lack of communication about sexual issues between partners.[11] Furthermore, sexual anxiety was associated with a reduced self-image in patients.[11] A study exploring the perceived reaction of partners to their significant other's treatment of breast cancer found that partner-initiated sexual contact was related to improved patient well-being.[7]

In the present study, we found that partners who reported greater agreement with the statement "I am afraid that touching my partner's reconstructed breast(s) will cause her pain" reported lower overall satisfaction. Fifty-eight percent of the partners in our study reported being afraid to touch their partner's reconstructed breasts out of fear of causing pain. Conversely, only 7% of patients reported experiencing pain in the area of their reconstructed breasts over the previous 2 weeks. This finding was an interesting discrepancy between patients' reported pain and partners' fear of causing pain. This finding is consistent with, and expands on, previous work, which

found that many men found it difficult to communicate with their partner about their bodies after reconstruction and, thus, avoided sexual contact.[5,11]

Interpretation of the current study's findings must consider its limitations. First, this study is limited by a poor response rate and small sample size. Inherent bias toward higher satisfaction with outcome may exist in those couples who participated in the study compared to nonresponders. Second, surveys were collected retrospectively. A prospective study that includes an assessment of body image, well-being, sexuality, and relationship between partners preoperatively compared to postoperatively would have strengthened our results. Finally, the small sample size limited our ability to validate the novel partner survey, which we plan to incorporate into a larger scale study in the future.

CONCLUSIONS

It has been established that patients who are satisfied with their reconstruction have partners who are also satisfied.[6–8] Lack of knowledge surrounding appropriate postoperative expectations, pain and sexual anxiety, appear to be the principal barriers to both patient and partner satisfaction following breast reconstruction.[3,5,7,11,12] As physicians, it is our job to properly inform and counsel our patients. We suggest that physicians encourage partners to be involved in preoperative consultations and that they use their postoperative appointment as an opportunity to open the conversation between patient and partner. The decisions made regarding a women's cancer treatment and breast reconstruction are hers alone, and the degree to which her partner is involved in the process is of course her choice. It is our hope that bridging the gap between patient and partner knowledge will facilitate patients' emotional healing after post-mastectomy breast reconstruction.

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