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Body image and sexual dysfunctions: comparison between breast cancer patients and healthy women

Sepideh Bakht a *, Somayeh Najafi b

a General Psychology Department, Faculty of Psychology Alzahra University, Tehran, Iran
b Clinical Psychology Department, Faculty of Psychology, Shiraz University, Shiraz, Iran

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Abstract

Breast cancer is one of the most common diseases which affect too many women each year. Because of decreasing mortality rates due to this kind of cancer and the increasing number of young survivors, it is very important to study more about the disease and its consequences in the young group.

In order to compare sexual dysfunctions and body image issues in breast cancer patients with healthy women, a sample of 20 women were selected for both groups. The general inclusion criteria for both groups were: age below 50, menstruating, being married and sexually active, and not having a history of cervical problems or surgery, living with husband. Additional criteria for cancer group were mastectomy for at least one of the breasts and finishing of chemotherapy. Two questionnaires Multiple Body Self Relationships Questionnaire and Female Sexual Index were administered for both groups. Results showed that there is not a significant difference between overall sexual functioning score but the difference between Sexual Desire, Sexual Arousal, Satisfaction and pain subscales were statistically significant. A significant difference was also found for Body Image in all subscales except Subjective Weight subscale.

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1. Introduction

Sexuality is a complex process, coordinated by the neurological, vascular, and endocrine systems (Bachmann & Philips, 1998). Individually, sexuality incorporates family, societal and religious beliefs, and changes with aging, health status, and personal experience. In addition, sexual activity incorporates interpersonal relationships, each partner bringing unique attitudes, needs, and responses into the coupling (Karabulyt & Erci, 2009). A breakdown in any of these areas may lead to sexual dysfunction. Breast cancer presents medical and mortality concerns, and alters or removes physical and psychological symbols of femininity that may result in feelings of decreased sexuality. Following the primary treatment of breast cancer, women encounter a range of physical and psychosocial problems such as pain, lymphoedema, anger, depression, fear of recurrence, and sexual difficulties (Rendle, 1997; Steginga, Occhipinti, Wilson, & Dunn, 1998). Besides, women with breast cancer face not only cancer-related taboos but also...
issues related to changes in sexuality, femininity, and fertility (Kunkel & Chen, 2003). Breast cancer survivors report a 21% to 39% incidence of sexual dysfunction, and this may be related to chemotherapy (Ganz, Rowland, Desmond, Meyerowitz, & Wyatt, 1998; Goldsten & Teng, 1991). So it is stated that breast cancer treatment has been seen as especially traumatic to women’s sexual relationship (Kunkel & Chen, 2003).

Research related to this topic suggests that sexual functioning problems were common and that certain treatment, such as chemotherapy, may contribute to these problems (Ganz et al., 1998). Reported rates for specific sexual problems range from a low one of 15% for reduced physiological arousal (Hermann, Grundfest-Broniatowski, & Dowden, 1995) to a high one of 64% for reduced sexual desire (Barni & Mondin, 1997). Twenty-three percent of one sample indicated that they were dissatisfied or rather dissatisfied with their sexual life. Compared women with no history of cancer, long-term breast cancer survivors reported worse sexual functioning, characterized by greater lack of sexual interest, inability to relax and enjoy sex, difficulty becoming aroused, and difficulty reaching the orgasm (Broeckeli, Thors, Jacobsen, Small, & Cox, 2002). Another study determined that 90% of the participants continued sexual activity after treatment, but there was an increase in the incidence of sexual problems, which resulted in a slight reduction in the quality of their sex lives. Sixty-four percent of the women experienced an absence of sexual desire and 48% low sexual desire. Vaginismus, brief intercourse, and female orgasmic disorder were reported by 30% of the participants. Thirty-six percent suffered from sexual dysfunction before treatment, which worsened in about 27%, whereas in 49% of women sexual problems arose mainly after chemotherapy (26%) or surgery (12%) (Barni & Mondin, 1997). Aygun & Aslan (2008) According to the results of the measurements taken by FSFI, also found that more than half of the women, included in the study scope and who did not have any sexual dysfunction previously, were defined to have sexual dysfunction. Older ages, lower education, being unemployed, residing in rural areas, and being in menopause were the factors that were found to significantly affect sexual dysfunction prevalence (p<0.05). A lack or a reduction in sexual interest was found in 23.4–64% of breast cancer survivors [Barni & Mondin, 1997; Burwell, Case & avis, 2006] and arousal difficulties and/or lubrication problems in 20.5–48% [Barni & Mondin, 1997; Burwell, Case & avis, 2006]. Difficulties with orgasm appear to affect 16–36% of the patients [Barni & Mondin, 1997; Burwell, Case & avis, 2006]. Dyspareunia has been reported in 35.4%–38% [Barni & Mondin, 1997; Avis, Crawford & Manuel, 2005] and vaginism in 18%. These problems seem to develop shortly after the onset of treatment. However, not all women’s sexuality seems to deteriorate in the same way: two studies refer to improvements in sexual life after breast cancer in 7–12% of the patients [Barni & Mondin, 1997; Avis, Crawford & Manuel, 2005]. Studies on the impact of type of surgery have revealed contradictory results, with [Yurek, Farrar & Anderson, 2000] and without associations of mastectomy and greater sexual dysfunction. Suffering from body image problems after breast cancer surgery has been associated with an increase in sexual problems [Fobair et.al, 2006], while others have not found this association [Speer et.al, 2005].

Another variable that has been hypothesized as a risk factor for disruption after breast cancer treatment is psychological investment in body image. This hypothesis is that individual differences in concern about body image may influence the degree of threat that is posed by breast cancer and its treatment. Such differences in threat should then be reflected in psychological, social, and sexual well-being. This would be consistent with a point made many years ago by William James (1890): that an investment in a particular aspect of the self can create a vulnerability to distress if that aspect of self is threatened (Petronis, et al., 2003). Fobair et.al (2006), found that Body image and sexual problems were experienced by a substantial proportion of women in the early months after diagnosis. Half of the 546 women experienced two or more body image problems some of the time (33%), or at least one problem much of the time (17%). Among sexually active women, greater body image problems were associated with mastectomy and possible reconstruction, hair loss from chemotherapy, concern with weight gain or loss, poorer mental health, lower self-esteem, and partner’s difficulty understanding one’s feelings. Among the 360 sexually active women, half (52%) reported having a little problem in two or more areas of sexual functioning (24%), or a definite or serious problem in at least one area (28%). Greater sexual problems were associated with vaginal dryness, poorer mental health, being married, partner’s difficulty understanding one’s feelings, and more body image problems, and there were significant ethnic differences in reported severity. Shoma et.al (2009) studied one hundred postmenopausal Egyptian women with breast cancer. Their preoperative assessment showed no statistical significant difference regarding cognitive, affective, behavioral and evaluative components of body image between both studied groups. While in postoperative assessment, women in MRM group showed higher levels of body image distress among cognitive, affective and behavioral aspects. Another study by Helms, O’hea & Corso (2008), revealed that there are many obvious and real factors that are related to psychological distress in women coping with...
breast cancer, such as facing a life-threatening illness, painful and impairing treatments, and significant role changes. Although these factors are clearly important, issues related to body image in women faced with breast cancer can also add to psychological distress. Women, in general, are concerned with their appearance, their weight, and their body, with recent studies suggesting 89% of women reported concerns with weight. Such premorbid concerns are often deeply ingrained and can contribute to psychological distress in women treated for breast cancer.

The results of Garrusi an Faezee’s study (2008), on a sample of 82 Iranian female breast cancer survivors also revealed that the various aspects of sexual functioning that were disturbed was related to factors such as age, marital status, body image perception, and perceived husband’s attitude.

We conducted this study in order to find significant differences between breast cancer patients and healthy controls.

2. Method

2.1. Participants

20 women diagnosed with breast cancer were recruited from a medical oncology clinic in Mostafa Khomeini hospital. They were selected on the basis of inclusion criteria: younger than 50, being married and sexually active, having unilateral or bilateral breast surgery & completion of chemotherapy. Exclusion criteria were: being menopause, & having a history of pelvic surgery. For the control group 20 women with the same demographic characteristics were selected from patients’ healthy families.

2.2 Measures

2.2.1 Multidimensional Body-Self Relations Questionnaire (MBSRQ)

This is a 69-item questionnaire, which uses a 5-point Likert-type scale (from “very dissatisfied” to “very satisfied”), and examines body-image attitudes. The MBSRQ consists of 10 subscales (seven factor subscales and three special multi-item subscales). The seven factor subscales measure appearance evaluation, appearance orientation, fitness evaluation, fitness orientation, health evaluation, health orientation, and illness orientation. The evaluation subscales measure feelings and satisfaction/dissatisfaction with the topic, whereas the orientation subscales measure level of investment in that topic. The multi-item subscales measure body areas satisfaction, overweight preoccupation, and self-classified weight (Cash, 2000). The Cronbach’s alphas for these subscales ranged from .70 to .91 and the test-retest reliabilities ranged from .71 to .94 (Cash, 2000). A Persian version of MBSRQ has been validated in Iranian samples and had good psychometric properties (Rahati, 2004). This version contains six subscales (appearance evaluation, appearance orientation, fitness evaluation, fitness orientation, body areas satisfaction and self-classified weight).

2.2.2 Female Sexual Function Index (FSFI)

This self-report questionnaire contains 19 items that measure female sexual function providing scores in six domains (desire, arousal, lubrication, orgasm, satisfaction, and pain) as well as a sum score. Domain sum scores were multiplied by the specific domain factor. The questionnaire has been validated in asymptomatic and symptomatic women and contains strong psychometric properties. The FSFI can differentiate between women with and without sexual dysfunction, using a clinical cutoff score of 26.55, and has been widely validated (Wiegel, Meston & Rosen, 2005). This instrument has been translated and widely validated by Mohammadi et.al (2008).

2.3 Data Collection and Procedure

Data were collected using questionnaires including some demographic data, body image and sexual dysfunctions. The researchers visited the oncology clinics and interviewed with the patients. The investigators introduced the questionnaires to the participants and explained the material covered. Then the researcher read the items and participants rated their response. The women were in a separate and quiet room of the oncology clinic when they marked the questionnaires. All of the participants completed the questionnaires.
3. Results

Demographic data of the women in the study were shown in Table 1. The majority of sample group were between the ages of 35-50. The majority of them had completed the high school education.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Breast cancer</th>
<th>control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-35</td>
<td>9(18%)</td>
<td>8(16%)</td>
</tr>
<tr>
<td>35-50</td>
<td>41(82%)</td>
<td>42(84%)</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate &amp; elementary</td>
<td>2(4%)</td>
<td>3(6%)</td>
</tr>
<tr>
<td>High school</td>
<td>35(70%)</td>
<td>33(66%)</td>
</tr>
<tr>
<td>University</td>
<td>13(26%)</td>
<td>14(28%)</td>
</tr>
</tbody>
</table>

There was no statistically significant difference between breast cancer and healthy controls regarding total sexual functioning scores (t=1.15, p< 0.316), but there was significant differences in the two groups in sexual desire (t=2.47, p< 0.01), sexual arousal (t=4.04, p< 0.01), sexual satisfaction (t= -2.94, p< 0.01) & pain (t= 4.73, p< 0.01) subscales. Results has shown no significant difference in lubrication (t= 1.93, p= 0.63) & orgasm (t= 0.13, p= 0.314) subscales between the two groups.

There was also a significant difference between two groups regarding total body image scores (t=3.01, p< 0.01). among six subscales reviewed in this study only one subscale (self-classified weight, t=0.40, p=0.645) has shown no significant difference between breast cancer & healthy groups. Other subscales Appearance Evaluation (AO, t= -4.05,p<0.01), Appearance Orientation (AE, t= 0.314, p<0.05), Fitness Evaluation (FE, t= -4.88, p<0.01), Fitness Orientation (FO, t= 3.00, p<0.01) and Body Areas Satisfaction (BAS, t=8.03, p<0.01) showed significant difference between two groups.

4. Discussion

Breast cancer and its treatment may result in significant difficulties with sexual functioning and sexual life. Although in our study there was no significant difference between total numbers of sexual functioning, but there have been some special areas of significant difference (sexual desire, sexual arousal, sexual satisfaction & pain) between two the two groups. Previous literature in this area also have similar results regarding this issue (Barni & Mondin, 1997; Burwel, et al., 2006; Ganz et al., 1998; Broeckeli, Thors, Jacobsen, Small, & Cox, 2002; Avis, Crowford & Manuel, 2005). The study of Decker et al. (2005), also had similar results. In their study with 55 women with breast cancer patients, except one area (sexual desire) were lower, patients scores were significantly lower than healthy people.

Patients of this study also had lower scores in the all body image subscales except one (self-classified weight). This finding is comparable with other studies (for example, Fobair et.al, 2006; Shoma et.al, 2009; Helms, O’hea & Corso, 2008; Garrusi an Faezee, 2008). Howighorst-Knapstein et al. (2002) also found that, mastectomy resulted in lower sexual desire and changes in body image. Bakwell & Volker (2005) also showed that all types of treatment for breast cancer, had a significant impact on body image and menopausal status and finally result in sexual problems.

This study has some limitations. The first limitation of this study is the sample structure which was limited two young women and didn’t study older women with these problems. The second limitation if this study is the missing role of husband/partner in the study which can have a very important role in patient life.