Effect of Nursing Counseling Guided by BETTER Model on Sexuality, Marital Satisfaction, and Psychological Status among Breast Cancer Women

Marwa A. Shahin[1], Hanan Amin Ali Gaafar[2], Doaa Lotfi Afifi Alqersh[3]

(1) Assistant professor of Maternal and Newborn Health Nursing, Faculty of Nursing, Menoufia University, Egypt,
(2) Lecturer of Obstetrics and Woman's Health Nursing, Faculty of Nursing, Banha University, Egypt
(3) Lecturer of Maternal and Newborn Health Nursing, Faculty of Nursing, Menoufia University, Egypt

Abstract:

Background: Breast cancer is one of the critical issues affecting women's health, and the numerous treatments can cause physical changes in addition to having a substantial impact on women's sexuality and psychological well-being. **Aim:** to assess the effect of nursing counseling guided by a BETTER model on sexuality, marital satisfaction, and psychological status among breast cancer women. **Design**: A quasi-experimental study design was used. **Setting:** The research was carried out in an outpatient clinic at the Menoufia University in Oncology Institute, Egypt. **Sampling**: For the study, a purposive sample of eighty-seven women was gathered. I**nstruments:** Six different instruments were employed to collect the data: a structured interview questionnaire, body image scale; female sexual function index; marital satisfaction index; ENRICH, the Arabic version of the Tylor anxiety scale, and the perceived stress scale. **The results**: The study's findings revealed a highly significant difference in the study participants' marital satisfaction, sexual orientation, and psychological well-being before and after applying BETTER model-based nursing counseling. **Conclusion**: The use of nursing counseling guided by the BETTER model significantly improved the sexuality, marital satisfaction, and psychological well-being of breast cancer women. **Recommendation:** It is advised to adopt a BETTER sexual counseling model to handle sexual dysfunction and psychological issues in breast cancer facilities. Maternity nurses should receive ongoing training on the effects of breast cancer therapy on women's sexuality and psychological health, as well as methods for dealing with these issues.

Keywords: Nursing Intervention, Sexuality, Marital Satisfaction, Psychological status

Introduction

Breast cancer is the most typical malignancy (24.2%). Breast cancer accounts for about one in four cancer diagnoses in women globally. According to the most recent worldwide cancer data for 2018, breast cancer is the most prevalent in 154 of the 185 nations represented. In addition, 15.0% of women die from cancer, with breast cancer being the most common type **(WHO, 2018)**. Egypt has a high cancer prevalence rate, with 29% of all cancer cases being breast cancer **(Allam & Abed Elaziz, 2012)**.

Sexual and mental issues might arise because of breast cancer diagnosis and treatment. Vaginal lubrication issues, diminished nipple feeling, diminished sexual excitement and orgasm, and other sexual dysfunctions

are all examples of sexual disorders **(Arraras et al., 2016)**. An estimated 85% of breast cancer patients reported having sexual issues **(Chang et al., 2018)**. Breast cancer patients often have marital intimacy problems as well as other psychological problems including low self-esteem. These problems may cause divorce and affect the well-being of spouses and cancer patients **(Boquiren et al., 2016)**.

More than simply arousal and orgasm are involved in female sexual function; it is influenced by several aspects (Figure 1). These incorporate sensuality, body image, mental wellness, lubrication, orgasm, satisfaction, and pain **(Boswell and Dizon, 2015)**.

Figure 1. Boswell, E. N., & Dizon, D. S. (2015). Breast cancer and sexual function. Translational andrology and urology, 4(2), 160-168.

The psychosexual effect of breast cancer is impacted by several factors. These factors are categorized as medical factors, individual factors, and relationship factors. Medical factors include various aspects of the treatment process, including surgical and other medical treatments. Individual factors involve physical and psychological factors such as pain, fatigue, depression, and anxiety. Finally, relationship factors include interpersonal aspects of a couple's relationship **(Dye, 2018).**

Psychosexual counseling provided by nurses has a considerable positive impact on marital harmony, sexual dysfunction, and sexual issues. The nurse is one of the medical professionals with whom women may most easily communicate and who is helpful in allaying their anxieties around sexual matters **(Taylor and Davis, 2011)**. The nurse's role as a counselor and mentor is crucial in detecting the psychological issues breast cancer patients have and helping them get the support they need to deal with them **(Dattilo and Brewer, 2015)**.

The importance of sexual oncology as a major topic requiring concern in nursing practice and research is growing. To properly address the demands of women's sexual health, nurses must possess an elevated level of sensibility **(Kotronoulas et al., 2015)**. Assessing sexual issues to provide proactive advice on treatment and the resume of sexual activity is one of the essential duties of nurses. Due to communication issues between nurses and women, nurses have not typically addressed this aspect of treatment. As a result, the inclusion of pertinent questions in the assessment of nurses allows the women the chance to

address concerns related to their sexual health, promoting dialogue **(Kotronoulas et al., 2015)**.

There are several models available for discussing sexual health, and they are all successful communication models that theoretically support interventional approaches like the PLISSIT model, which consists of permission, limited information, precise recommendations, and intensive therapy. Moreover, Mick et al., BETTER's Counseling Model (2004). As an organized method for nurses to address sexual concerns with oncology patients, the BETTER model has been established. Although this model was created with a particular population and profession in mind, all health professionals can use its elements to their advantage when working with patients who have a range of disabilities. Six stages make up the model: introduce, explicate, tell, time, educate, and record **(Quinn & Happell, 2012)**.

Significance of the study:

Scars, issues with body perception, and sexual issues are just a few of the negative effects that breast cancer and its therapies, such as excision, medications, radiation, and hormonal replacement, can have. It also results in substantial emotional suffering such as melancholy and depression, problems with one's looks, stigma, and a detrimental impact on intimate relationships, all of which lower one's quality of life **(Olcer, 2019)**. The management of cancer-related symptoms, sexual dysfunction, and psychological issues was all improved with the use of supportive health education and counseling **(Badger et al., 2020)**.

The American Nurses Association claims that as sexuality is a critical element of nursing care, it is a part of the nurse's job to identify and address patients' sexual needs and concerns. By improving their patients' sexual well-being, nurses play a crucial role in detecting these needs and boosting marital happiness **(Can, 2014; Turgut and Golbas, 2010)**. Additionally, nurses have a vital role in assisting cancer patients with their needs for psychological support and care and helping the patient develop the resilience to deal with the disease and its side effects **(Can, 2014)**. Therefore, the purpose of this study was to assess the effect of nursing c0unseling guided by the BETTER model on sexuality, marital satisfaction, and psychological status among breast cancer women.

Operational definition

A **BETTER counseling model**: addresses sexual difficulties with oncology patients. Six stages make up this model: introduce, explicate, tell, time, educate, and record.

Aim of the study:

To assess the effect of nursing c0unseling guided by a BETTER model on sexuality, marital satisfaction, and psychological status among breast cancer women

Study Hypotheses:

- W0men with breast cancer who receives nursing c0unseling guided by a BETTER model will have better sexual health after the intervention than they had before.

- W0men with breast cancer who receives nursing c0unseling guided by a BETTER model will have an enhanced level of marital satisfaction after the intervention than they had before.

- W0men with breast cancer who receives nursing c0unseling guided by a BETTER model will have an improvement in psychological status after the intervention than they had before.

Method

Study Design: For the study, a quasi-experimental research approach was adopted.

Study Setting: Oncology Institute, Menoufia University, Egypt, an outpatient clinic, was used for the study.

Sample: Eighty-seven women made up the study's purposively chosen sample with the following **requirements for inclusion:** married w0men diagn0sed with breast cancer, at reproductive age (18-45), undergoing breast cancer treatment. **Exclusion criteria:** women diagnosed with other sorts of gynecological cancer e.g. cervical cancer and uterine cancer, women with psychiatric problems, who underwent conservative breast surgery, and whose spouses have sexual health problems.

Sample size Equation:

To determine the necessary sample size for assessing the effectiveness of nursing c0unseling guided by a BETTER model on sexuality, marital satisfaction, and psych0logical status of women with breast cancer. The following sample size equation, as found on the Epic website (Open Source Statistics for Public Health)*, was employed:

Size of the sample n = [DEFF*Np (1-p)]/ [(d2/Z21-α/2*(N-1) +p*(1-p)]

Using the premises:

Population size (N) = 1000 (for finite population correction factor, or FPC).

The population's estimated percentage frequency of the outcome component is (p) = 40% +/- 5.

Confidence limitations % of 100 (absolute +/- %) (d) = 5%

90% z confidence intervals

The number of breast cancer-diagnosed women in the sample is 87.

Data Collection Instruments:

Instrument I. a structured interview questionnaire created by the researchers. It included age, education, occupation, residency, income, and length of the marriage. Menstrual history includes menarche age, menstruation length, blood loss, frequency, and regularity. Obstetric background, including gravidity, parity, and complications with prior pregnancies. Current medical history of breast cancer,

including the time the disease first manifested the phases of the disease, the treatments used, and any adverse effects.

Instrument II. Female Sexual Function Index (FSFI) (Anis et al., 2011).

The female sexual function index was adopted by Rosen et al (FSFI). It assesses six aspects of the sexual experience, including lubrication, orgasm, pleasure, and discomfort. There are 19 questions on it. The FSFI scale was modified to be applicable to Egyptian culture and now includes 12 questions that cover every element of sexual function and are used to measure the extent of women's sexual function. The index of female sexual function is scored overall as follows: It depends on the woman's responses to 12 items on a Likert scale with a maximum of three points. The female sexual function index had a 36 overall score. The following categories applied to the score: 75% of the sample is sexually active, or 27–36 out of the total score, average sexual function is 50%, -74%, or 18–26 out of a possible 40. Less than 50%, or 17 or fewer out of a total, are considered to have sexual dysfunction.

Instrument III. Body Image Scale (Hopwood et al., 2001). This is a female body image self-reporting tool. The European Organization for Cancer Research and Treatment developed the 10-part tool (EORTC). It has demonstrated strong clinical validity and great reliability (Cronbach alpha 0.93). Total scores ranged from 9 to 36; 9 to 17 represented a considerable level, 18 to 26 represented a satisfactory level, and 27 to 36 represented a poor level.

Instrument IV: ENRICH Marital Satisfaction Scale (Blaine and David, 1993): ENRICH Marital Satisfaction Scale (Blaine and David, 1993) a reliable instrument for determining marital satisfaction level. There are a total of 15 items, each on a Likert scale of 1 to 5. Strongly disagrees with (1), somewhat disagrees with (2), neither agrees with (3), moderately agrees with (4), and strongly agrees with (5). The total scores for responding to the questions ranged from 15 to 75, and they were divided into three categories: high satisfaction (scores between 57 and 75; over 75%), partial satisfaction (scores between 37 and 56; between 50 and 75%), and low satisfaction (scores below 37; less than 50%).

Instrument V: The Arabic version of the Tylor Anxiety Scale (Taylor, 1953): It was created by Tylor and translated and confirmed in 2010 by Mostafa Fahmi and Mohamed Ahmed. It has fifty items on a two-point Likert scale, where 1 is "yes" and 0 is "no." The total score, which varies from 0 to 50, is broken down into five categories: no anxiety (0–16), mild anxiety (17–20), moderate anxiety (21–26), severe anxiety (27–29), and extremely severe anxiety (30–50).

Instrument VI: Perceived Stress Scale (PSS) (State of New Hampshire Employee Assistance Program, 2019): It is a well-known instrument for stress assessment. It had ten questions, to which the respondent provided answers

of 0 - never, 1 - almost never, 2 - sometimes, 3 - often, and 4 - very often. While a lower score on the PSS suggests lesser perceived stress, a higher score on the PSS indicates more felt stress. The PSS's overall score ranged from 0 to 40. Low felt stress is defined as a score of 0 to 13, moderate felt stress as a score of 14 to 26 and severely felt stress as a score of 27 to 40.

Validity of the instrument:

To ensure the authenticity of the instruments, a group of professionals, comprising both medical and nursing experts, verified their correctness. They were also asked to rate the items' thoroughness and clarity. Changes and suggestions were taken into account.

Reliability of the instrument:

The researchers tested the internal consistency of the instruments by giving the identical instruments to the same participants under similar circumstances two or more times. This procedure is known as test-retest reliability. Repeated test results have been compared. Reliability was determined by the study's instruments to be 0.81 for the instrument I, 0.75 for instrument II, 0.93 for instrument III, 0.727 for instrument IV, 0.739 for instrument V, and 0.862 for instrument VI.

Ethical Considerations:

The required approval for the research setting was obtained once the Dean of the College of Nursing at Menoufia University issued an official letter. The women provided their informed agreement to take part in the research after being fully aware of its goals. There are no medical, social, or psychological risks for the study's female participants, and all women's rights have been protected. Both the women's privacy and the confidentiality of the data collected were fully guaranteed. Each woman was given a description of the intervention and information about her right to withdraw at any moment before participation.

Pilot Study

Prior to data collection, a pilot study was conducted using 10% of the total sample (8 women). It was carried out to determine how long it would take to finish the instruments and to confirm their clarity, applicability, and suitability. The necessary modifications were made considering the pilot study's findings.

Fieldwork

Starting in early September 2019 and ending in late February 2020, fieldwork was completed. The data was gathered by the researchers twice a week in the morning. In this context, the researchers presented themselves to the medical and nursing staff members. The study's purpose and nature were clearly explained.

The study's implementation was divided into four phases: interviewing and data collection phase, planning phase, intervention phase: application

of nursing counseling guided by the BETTER model, and evaluation phase.

Interviewing and data collection phase: After receiving informed consent, researchers enlist women who are enrolled in Menoufia University's cancer institute's outpatient clinic and who meet the inclusion criteria to participate in the study. The data gathered showed that women faced psychological and sexual issues related to the diagnosis and treatment of breast cancer.

Planning Phase:

General goal: to improve women's sexuality, marital satisfaction, and psychological state using nursing counseling guided by the BETTER model.

The learning components of the nursing intervention are being decided by the researchers at this stage. A variety of effective teaching techniques were used, including conversation, role-playing, demonstration, and the usage of basic Arabic. To disseminate information and encourage discussion, educational media such as laptops, videos, images, and written materials (booklets) are developed and made available. For all the chosen women, the researchers also determined the hours and frequency of counseling sessions to ensure adherence to the chosen therapies.

The implementation phase: It contained “Use of Nursing Counseling guided by the BETTER Model.

The stage of intervention: "Application of Nursing Counseling guided by the BETTER Model" was among its contents.

The counseling sessions took place in a study setting. Women had individual counseling sessions at this phase. The safety of the meeting setting was ensured by the researchers. Four counseling sessions were conducted using the stages of the BETTER counselling model. There is only one session lasting 2-hour every week (Quinn and Happell 2012).

Stage One: Introduce

The researchers bring up the subject of sexuality at this point. Even while some women might find it awkward to bring up this subject, doing so lets the women know that the researchers are open to talking about it if they ever feel the need to voice their worries.

Stage Two: Explain

The researchers inform and explain to women that sexuality is a crucial and meaningful aspect of their lives through open discussion with the women. This helps the woman to feel less embarrassed and informs her that sexual problems may have an impact on a woman's psychological status and marital satisfaction.

Stage Three: Tell

During this stage, the researchers advise the woman that if the intervention was unsuccessful in helping her problem, they will recommend her to another expert who can deal with it.

Stage Four: Time

The researchers assure that the previously selected scheduled time is suitable for women. If not, it may be discussed later in the session.

Stage Five: Educate

- At this stage, the researchers provide education to the women consistent with their needs about the followings:

- Female reproductive system and the components of the sexual response cycle.

-Breast cancer treatment, and its potential side effects on the performance of the sexual activity.

- Techniques for enhancing sexual performance include pelvic exercise, cognitive concentration activities, varied physical postures during sexual contact, and the use of lubricants.

- Techniques for controlling negative body image perception, such as dressing attractively, reconstructing breast cosmetics, and using specialized undergarments.

- Techniques for relaxation, such as breathing exercises, guided visualization, and recreation, are used to manage and reduce anxiety and stress. Additionally, spread knowledge about food therapy, such as a high-fruit diet, and frequent exercise, such as walking for a minimum of 30-minutes each day.

- Nausea, vomiting, diarrhea, dyspnea, and gingivitis are among the adverse effects of breast cancer therapies which can be managed with the use of physical activity, breathing exercises, nutrition therapy (high-fiber, low-fat, and vegetable/fruit-heavy diets), and oral hygiene.

Stage Six: Record

At the end of each session the researcher records data obtained and the intervention given to each woman.

Figure (2). Mick, J., Hughes, M. & Cohen, M. (2004). Using the BETTER model to assess sexuality. Clinical Journal of Oncology Nursing, 8(1), 84–86

The evaluation phase: The collection of post-intervention data occurred at the study period's end. After applying nursing counseling informed by the BETTER model, all five instruments—the female sexual function index (FSDI), body image scale, marital satisfaction scale, Tylor anxiety scale, and perceived stress scale—were measured.

Statistical Analysis

Using SPSS (Statistical Package of Social Science) software, version 22, the acquired data were arranged, tabulated, and statistically examined. To compare quantitative data before and after the intervention, the Chi-square test (2) and Fisher's Exact Test were used. The significance level was set at p = 0.05.

Results

Table (1) displayed the sociodemographic information of breast cancer women. The table indicated that most study participants were between the ages of 30 and 34. Nearly half of breast cancer women (43.7%) just completed their secondary school, 57.5% were housewives, and more than half (59.8%) did not have enough money to cover their basic needs.

Table (2) According to Table 2, a huge portion of the study participants (44.8%) had breast cancer that was in stage 2. Regarding breast cancer treatment, about (34.5%) of study participants underwent mastectomy surgery together with chemotherapy and hormone therapy, whereas the minority (5.7%) underwent mastectomy surgery along with radiotherapy.

Figure (3) displays that 51.72% of the study women underwent partial mastectomy meanwhile 48.27% of them underwent a total mastectomy.

Table (3) shows the sexual dysfunction among the study participants pre- and post-application of nursing counseling guided by the BETTER model. The table shows that every element of sexual function showed a statistically significant improvement, except for orgasm, as 36.8%, 39.1%, 44.8%, 57.5%, and 55.2% of study participants, respectively, had decreased desire, decreased arousal, decreased lubrication, sexual dissatisfaction, and dyspareunia post-intervention, as opposed to 57.5%, 56.3%, 65.5%,60.9%.

Table (4) showed the study participants' sexual functioning before and after applying nursing counseling based on a BETTER model. Sexual functioning improved statistically significantly after the intervention, with 23.0% of study participants becoming sexually active, compared to only 12.6% of study participants before the intervention, and with 31% of study participants experiencing sexual dysfunction, as opposed to 57.5% of study participants before the intervention.

Table (5) shows psychological status among study participants pre

and post-application of nursing counseling guided by the BETTER model. It revealed a statistically significant difference and improvement in study participants' psychological status as 46.0% of study participants had a mild level of anxiety post-intervention compared to 24.2% of them pre-intervention also 51.7% of study participants had a low level of stress after the intervention compared to 26.4% of them pre-intervention.

Figure (4) the impact of nursing counseling applied in accordance with the BETTER model on study participants' marital satisfaction was depicted in Figure (4). It showed that there was an improvement in the degree of study participants' marital satisfaction after intervention as 25.30% of the study participants reported a low level of marital satisfaction post-intervention compared to 48.30% of the study participants pre-intervention.

Table (6) showed the study participant's body image scores before and after the intervention. It showed a statistically significant change between the self-esteem levels prior and following the use of nurse counselling that followed the BETTER model. Before the intervention, the higher percentage's body image was poor (44.8%) and improved to good (50.6%) after the intervention.

Table 1: Sociodemographic information of breast cancer women (N=87)

Variables	**No**	**%**
Age		
18 – 29	19	21.8
30 – 34	31	35.6
35 – 39	27	31.0
40 – 45	10	11.5
Residence		
Urban	28	32.2
Rural	59	67.8
Educational level		
Read and write	25	28.7
Secondary	38	43.7
Bachelor degree	20	23.0
Post graduate	4	4.6
Occupation		
Working	37	42.5
Housewife	50	57.5
Income		
Enough	35	40.2
Not enough	52	59.8

Table 2: Stages and treatment of breast cancer among study participants (N=87)

Variable	No (n=87)	%
Stages of breast cancer		
Stage 1	36	41.4
Stage 2	39	44.8
Stage 3	12	13.8
Treatment of breast cancer		
Mastectomy Alone	6	6.9
Mastectomy + radiotherapy	5	5.7
Mastectomy + chemotherapy	24	27.6
Mastectomy + hormonal therapy	7	8.0
Mastectomy + chemotherapy+ hormonal therapy	30	34.5
Mastectomy +chemotherapy +radiotherapy+ hormonal therapy	15	17.2

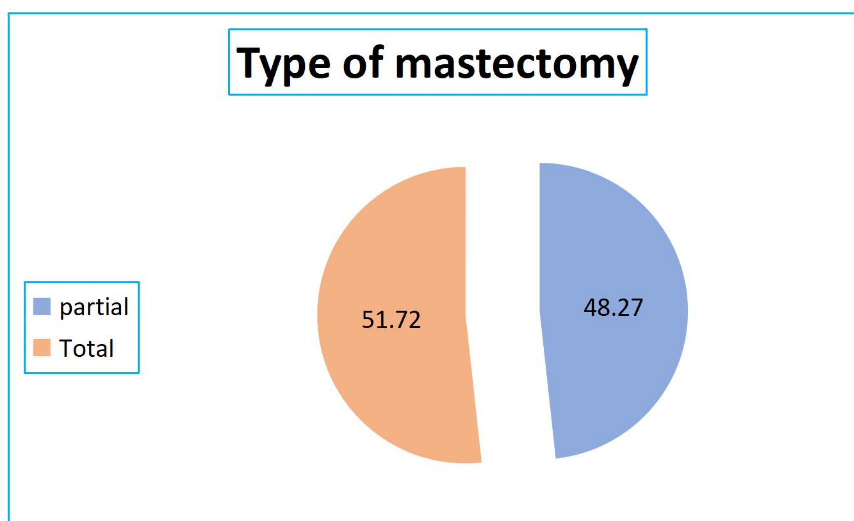

Figure 3: Types of mastectomies that study participants undergone (N=87)

Table 3: Sexual Dysfunction Items pre and post intervention among study participants (N=87)

Variable	Pre intervention		Post intervention		Fisher's Exact Test	P –value
	No	%	No	%		
Decrease desire	50	57.5%	32	36.8%	7.47	.006
Decrease arousal	49	56.3%	34	39.1%	5.18	.023
Decrease lubrication	57	65.5%	39	44.8%	7.52	.006
Orgasm failure	53	60.9%	37	42.5%	5.89	.105
Sexual dissatisfaction	65	74.7%	50	57.5%	5.77	.016
Dyspareunia	72	82.75%	48	55.2%	11.50	.001

Table 4: Sexual Functioning Score pre and post intervention among study participants (N=87)

Variable	Pre intervention		Post intervention		X^2	P –value
	No	%	No	%		
Sexually active	11	12.6%	20	23.0%		
Average sexual function	26	29.9%	40	46.0%	12.45	.002
Sexual dysfunction	50	57.5%	27	31.0%		

Table 5: Psychological status pre and post intervention among study participants (N=87)

Variable	Pre intervention		Post Intervention		X^2	P –value
	No	%	No	%		
Anxiety						
Mild	21	24.2%	40	46.0%	9.40	.009
Moderate	49	56.3%	37	42.5%		
Severe	17	19.5%	10	11.5%		
Stress						
Low stress	23	26.4%	45	51.7%	11.70	.003
Moderate stress	48	55.2%	32	36.8%		
High stress	16	18.4%	10	11.5%		

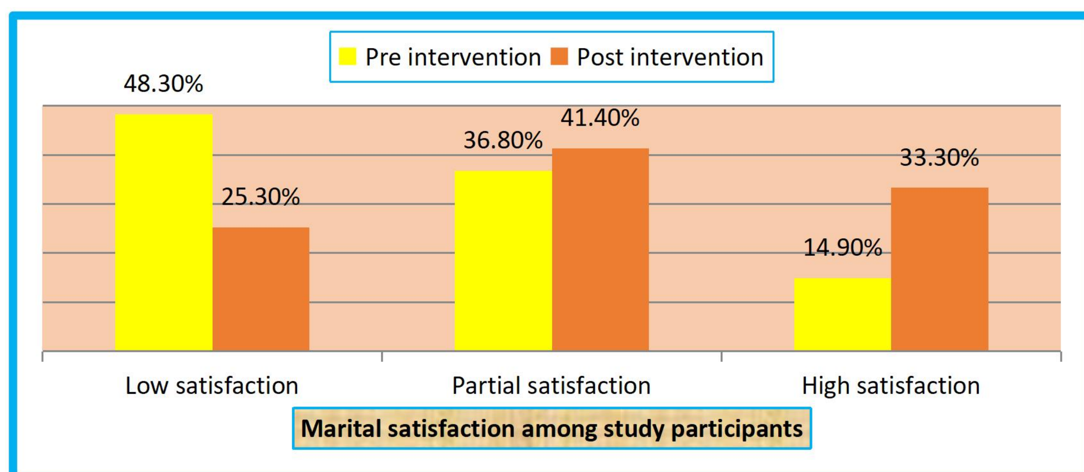

Figure 4: Marital satisfaction among study participants pre- and post-intervention (N=87)

Table 6: View of study participants regarding their body image before and after the intervention (N=87)

Variable	Pre-intervention		Post-intervention		X^2	P –value
	No	%	No	%		
Bad	39	44.8%	18	20.7%		
Considerable	24	27.6%	25	28.7%	13.64	.001
Good	24	27.6%	44	50.6%		

Discussion

Breast cancer and its therapies, which include resection, medication, radiotherapy, and hormone replacement, have side effects, including scarring, issues with how the body is perceived, and issues with sexual function. Additionally, it causes substantial emotional suffering like sorrow or depression, concerns with one's looks, stigma, and a detrimental impact on intimate relationships, all of which lower one's life quality **(Olcer, 2019)**. Consequently, the goal of this research was to assess nursing counseling's impact on breast cancer patients' sexuality, marital satisfaction, and psychological condition using a BETTER model.

The current study's findings about the demographic information of the study participants revealed that their ages ranged from eighteen to forty-five, that more than half of them were housewives, and that only twenty-three percent of them had a university education. This result is consistent with **Erdogan's (2019)** research, which examined the "study of breast cancer patients' marriage happiness and sexual life quality." She found that the women chosen for the study were above the age of eighteen, forty-six percent, were housewives, and only twenty-nine percent had a college degree.

Most study participants who had treatment for breast cancer were treated with mastectomy paired with chemotherapy plus hormone therapy, whereas the minority were treated with mastectomy along with radiotherapy. This result was consistent with research by Rock, et al. (2014) on "Hope and optimism's inverse relationship with patient marital satisfaction in spouses having advanced breast cancer." Most patients were undergoing both hormone treatment and chemotherapy, according to the study. The minority was receiving radiation, chemotherapy, or hormone therapy.

According to the current study's findings, most study participants exhibited decreased desire, decreased arousal, decreased lubrication, increased sexual unhappiness, and

dyspareunia before the intervention. This finding was in line with **Shankar et al. (2017)**'s study, "Female sexual dysfunction after cancer treatment: an unresolved problem," up to fifty percent of cancer-treated women experienced sexual dysfunction. According to Kowalczyk et al. (2016), "Predictors of sexual function in women following treatment for breast cancer" reported that women who had had breast surgery experienced worse female sexual function. In the second research, **Champion et al. (2014)**, compared the "specific and overall quality of life dimensions" of "Younger and older breast cancer survivors and age-matched controls". According to the research, having breast cancer has an adverse effect on one's sexual life, and women who have it often experience sexual problems. Additionally, they noted that breast cancer patients had worse sexual function than their healthy counterparts. This agreement guarantees that the sexuality of breast cancer patients experiences negative effects from treatment. Therefore, it is crucial to raise awareness of this problem.

The results of the current study demonstrated a marked improvement in sexual function following counseling, demonstrating the success of the intervention. The results of the current study were compared to those of **Fatehi et al. (2019)**, who examined the impact of sexual counseling on sexual function and life quality for Iranians with breast cancer and found that it improved all aspects of sexual function. These results concur with those of **Faghani and Ghaffari (2016)**, who investigated the "Effects of sexual rehabilitation utilizing the PLISSIT paradigm on post-mastectomy breast cancer survivors' quality of sexual life and sexual behavior" and found that, following the intervention, sexual function scores increased across the board for the female sexual function index (FSFI).

Comparable results were reported by **Karakas and Aslan, (2019)**, who conducted research on the "Application of the BETTER model in sexual therapy for females with sexual dysfunction" and concluded that BETTER model-based sexual counseling was beneficial in enhancing sexual function and sexual satisfaction. After a 6-week counseling intervention, a second study by **Young et al. (2011)** entitled "Outcomes of a sexual life reframing program on breast cancer survivors' marital relationship, self-perception, and sexual performance (BCS)" revealed an improvement in sexual satisfaction. This agreement shows the beneficial impact on sexual functioning of nursing therapy utilizing a better model.

Regarding pre- and post-marital satisfaction intervention, the present study's findings showed that preceding the intervention, half of the participants reported poor marital satisfaction, demonstrating how a cancer diagnosis and treatment can alter and strain spousal relationships. **Erdogan (2019),** who examined the "study of breast

cancer patients' marriage happiness and sexual life quality", validated this finding by finding that the patients' marital satisfaction was low on a scale of 1 to 10. They pointed out that the patients' poor changes in quality of life as a consequence of their cancer may have contributed to this and that because of breast cancer patients needed support. Furthermore, according to **Favez et al. (2016)**'s research, "Distress and body image alterations in women with breast cancer in the early post-surgical period: The role of attachment insecurity", women reported experiencing lower levels of couple satisfaction because of the psychological distress they experienced after their surgeries.

In the current study, an improvement in marital satisfaction was noted following the implementation of nursing counseling directed by the BETTER model. The improvement can be attributable to the counseling's psychological support and knowledge. In a similar line, **Favez et al. (2017)** reported that practitioners should focus on the couple relationship in breast cancer to improve couple satisfaction. They studied "Attachment and couple satisfaction as predictors of expressed emotion in women facing breast cancer and their partners in the immediate post-surgery period."

In relation to the psychological state of women before and after the intervention, the findings of the current study demonstrated that most women had a mild to moderate level of worry and stress before the intervention, which is consistent with the fact that a breast cancer diagnosis affects a study participant's psychological functioning. This result corroborated the findings of **Paterson et al. (2016)**, who investigated "younger breast cancer survivors' body image" and found that breast cancer survivors can have a bad psychological status. They continued by saying that it is critical to pinpoint preventative elements that could lessen the likelihood of this suffering. According to a study by **Huang et al. (2019)**, "Psychological resilience of women after breast cancer surgery: a cross-sectional study of associated affecting factors," psychological resilience in women following breast cancer surgery is low.

In the present investigation, improvement of psychological status (Anxiety - Stress) following the use of nursing counseling guided by the BETTER model was noted. These results were consistent with those of a study by **Todorov et al. (2019)**, entitled " Body image disruption and suffering among breast cancer survivors: self-compassion and hope," which found that psychosocial interventions positively address psychological distress concerns of women with breast cancer. This agreement shows the benefit of having a better model for nursing counseling on marital satisfaction.

According to the study's findings, many women had negative perceptions about their bodies before the intervention. This may be because

psychological discomfort is a risk factor for developing a perception of a body image disorder. Similarly, a study entitled "Body Image of Women with Breast Cancer after Mastectomy: a Qualitative Research" found that undergoing a mastectomy as a surgical treatment for breast cancer may negatively affect a woman's opinion of her body and sense of self. Additionally, **Brandao et al. (2017)**, who examined "Psychological adjustment after breast cancer: a systematic review of longitudinal studies," concluded that many cancer survivors suffer body issues disruption at a certain point during their illness.

The findings of the current research indicated that there was a statistically significant change in the body confidence scale between the two periods prior to and following the application of the BETTER model-based nurse counselling. A study by **Todorov et al. (2019)**, "Self-compassion and hope in the setting of body image disruption and distress in breast cancer survivors," found that psychosocial interventions effectively treat the body image issues of women with breast cancer. Meanwhile, **Begovic-Juhant et al. (2012)** examined the "Impact of body image on depression and quality of life among women with breast cancer," and they found that interdisciplinary health systems focused on women's physical beauty and femaleness may help them feel better about their bodies and lessen their depression. This agreement exemplifies the advantages of utilizing a more effective paradigm for body image nursing counseling.

Finally; the results of the current study showed that women who are subjected to nursing counseling guided by the BETTER model had an improvement in sexuality, marital satisfaction, and psychological state after the intervention than before. This improvement in sexual function, marital satisfaction, and psychological state may be due to information, support, and guidance gained through nursing intervention guided by the BETTER counseling model.

Conclusion

The study concluded that applying nursing intervention guided by the BETTER counseling model to women with breast cancer was effective in improving sexual functioning, enhancement of marital satisfaction, and improvement of the psychological status of the women which indicated that the study results support the three research hypotheses. No (1) which was: Breast cancer women who are subjected to nursing counseling guided by a BETTER model will have an improvement in sexuality after the intervention than before. No (2) which was: Breast cancer women who are subjected to nursing counseling guided by the BETTER model will have an enhanced level of marital satisfaction after the intervention than before. No (3) which was: Breast cancer women who are subjected to nursing counseling guided by the BETTER model will have an

improvement in psychological status after the intervention than before.

Recommendation:

- ❖ Adopt the BETTER sexual model of counseling for the treatment of psychological issues and sexual dysfunction in breast cancer facilities.
- ❖ Ongoing training for maternity nurses about the effects of breast cancer therapy regarding female empowerment and psychological well-being, as well as methods to deal with these issues.
- ❖ Implementing in-service counseling programs for breast cancer women to manage their sexual and psychological problems.
- ❖ Replication of the study with a large sample size to further settings.

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