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The Effect of Sexual Counseling Based on BETTER and PLISSIT Model on Quality of Sexual Life in Women with Breast Cancer after Mastectomy

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ABSTRACT

Background & aim: Mastectomy as the most common treatment of breast cancer has many effects on the quality of sexual life. Since there are limited studies on quality of sexual life in breast cancer, this study was conducted to compare the effect of counseling based on two models of PLISSIT and BETTER on quality of sexual life in women with breast cancer after mastectomy.

Methods: This quasi-experimental study was conducted at Mashhad, Iran in 2021. A total of 78 women who underwent mastectomy were randomly allocated into two equal groups and received 4 weekly sessions of individual counseling of 60-90 minutes based on two models of BETTER and PLISSIT. The research tools included demographic and sexual quality of life questionnaire (SQOL-F). The changes in the mean scores of quality of sexual life between the two groups before and 4 weeks after the intervention were measured. Data were analyzed using SPSS software (version 25) with Kolmogorov-Smirnov, independent t-test, paired t-test, Mann-Whitney and Chi-square test.

Results: The mean change score of quality of sexual life before and after the intervention in the group who received counselling based on BETTER model (8.6±5.1) was significantly higher than the group were counselled by PLISSIT model (6.2±5.05) (P<0.001).

Conclusion: In cultures such as Iran, where the sexual problems of women with cancer are neglected and patients have a conservative approach to sexual issues, sexual counseling based on the BETTER model is more effective than the PLISSIT model in order to increase the quality of sexual life.

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Introduction

Breast cancer is the first most common cancer in women worldwide. Its prevalence has increased over the past decades. By 2020, there are an estimated 2,261,419 cases of breast cancer in the world, which accounts for 11.7% of all cancers (1). Breast cancer is also the most common cancer in Iran and its incidence in the country is 25 per 100,000 people; more than 30% of patients are under 30 years old. Research shows that the age of breast cancer in Iran is 10 years younger than other countries (2).

Breast cancer is one of the most important factors that endanger the physical, sexual and psychosocial health of women (3). Today, various treatments such as lumpectomy,

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mastectomy, chemotherapy, radiation therapy and combination therapies are used for treatment of patients with breast cancer that led to increased survival rate. However, breast cancer patients face a wide range of psychological problems, such as sexual problems, which affect different aspects of their quality of life (4). The results of a study showed that 50% of women suffered from sexual problems after breast cancer (5). These problems can be due to the cancer itself or its treatments, including mastectomy. Breast augmentation is considered as the destruction of a part of the body that is a symbol of gender, femininity and maternal dimensions (6). The sexual desire decreases after mastectomy surgery due to pain, scarring at the site of surgery and destruction of the person's mental image of the body. The level of satisfaction and sexual activity decreases after treatment because in addition to some side effects of treatment such as vaginal dryness, the feeling of reduced attractiveness, fear of recurrence and depression can also add to the problem (7, 8). Mastectomy is one of the most important factors in disrupting women's adaptation and reducing the quality of sexual life. Quality of sexual life includes the assessment and perception that a person has of sexual attraction, sexual interest and sexual function (9). Holmberg et al. (2010) in their study concluded that quality of sexual life is an important predictor of mental and physical health (10). Dugan and colleagues (2013) also stated that the quality of sexual life plays an important role in happiness and life satisfaction of women (9). The quality of sexual life is an interactive and dynamic state and can change over time as circumstances change. Rosen (1998) in his study describes the components of quality of sexual life, including sexual function, sexual ability, sexual self-efficacy, sexual satisfaction, relationship satisfaction, and overall satisfaction. Regarding the relationship between these components, he states that sexual function affects a person's sexual ability and increases sexual self-efficacy and leads to sexual satisfaction; acquisition of sexual satisfaction also results in relationship satisfaction and overall satisfaction in couples, which in turn has a positive effect on sexual performance and quality of life (11). The factors such as numbness of the breasts, fear of body deformity and fear of rejection by a sexual partner after mastectomy cause sexual dysfunction (12). Sexual dysfunction also leads to poor quality of sexual life, which can results in depression and frustration, and ultimately lower sexual satisfaction and family breakdown (13).

Therefore, it is necessary to use educational and counseling interventions to increase sexual awareness and improve the quality of sexual life in women with breast cancer. PLISSIT is one of the most commonly sexual counseling approaches in cancers, which focuses on therapeutic interventions and includes the steps of permission, limited information, Specific suggestions and Intensive Therapy (14). One of the benefits of PLISSIT is allowing patients to express sexual concerns freely in the first stage, which examines sexual problems at the outset of counseling without marginalization. In fact, it is a simple way to address sexual issues. Faghani and Ghaffari (2016) showed that health care providers can use the PLISSIT model to teach the use of problem-solving and coping strategies in women with breast cancer and their husbands. This model provides an opportunity for women to express their feelings and experiences in a safe environment in order to easily identify their sexual problems and ways to solve the problem, thereby helping to increase the quality of sexual life and improve sexual function(15). However, PLISSIT has a linear format, and entering from one stage to the next stage prevents the therapist from recognizing that it may be necessary to return the previous stage to address the patient's sexual concerns (16, 17).

The BETTER model is the other approach that was first introduced for sexual counseling in cancers and chronic diseases, which focuses on both aspects of sexual evaluation and intervention. This model consists of 6 steps including: (Bring up): The counselor raises the issue of sexual relations with the patient, (Explain): The counselor explains the importance and impact of sexual issues on quality of life, (Tell): The counselor assures the client to provide complete information on sexual problems, (Timing): The counselor determines the counseling time, (Education): The counselor teaches the clients about changes in sexual

function due to cancer and its treatments, recognizing and correcting misconceptions, (Record): The counselor records the important aspects of discussions, evaluations, and interventions. The BETTER model is a tool to improve the sexual discourse between the client and the therapist and is defined as a client-centered model. On the other hand, it may be difficult to adapt in terms of ideas and attitudes for the consultant and the client in this model. In other words, service providers need to be trained to know their beliefs and attitudes about the patient's sexual issues and to know how their beliefs may affect their professional counseling process (18, 19).

There is increasing concern about the impact of invasive breast cancer treatments such as mastectomy on quality of sexual life and sexual function in patients, and the need for continuous study on the sexual consequences in these patients has increased. Considering the cultural beliefs of the Iranian society about the difficulty of talking about sexual problems, especially after changes in the appearance of sexual organs, and the uncertainty about the effectiveness of the PLISSIT model and on the other hand the simplicity of the BETTER model, the present study was conducted to compare the effect of sexual counseling based on the BETTER and PLISSIT model on the quality of sexual life in women with breast cancer after mastectomy.

Materials and Methods

This quasi-experimental study was conducted on 78 women who underwent mastectomy and referred to the cancer clinic of Omid Hospital in Mashhad, Iran from May 2021 to January 2022.

Inclusion criteria were: being literate, married, with age range of 18-49 years, being in the time period of at least one year after mastectomy, having sexual function score <28 based on FSFI questionnaire, not using of drugs and alcohol by wife and husband, not using of drugs which affect sexual function by the wife and husband, not receiving sexual counseling during the last 6 months, not having psychiatric illness and moderate to severe depression and lack of experiencing accidents in the last 1 month. Exclusion criteria were: Absence from one counseling session, recurrence of breast cancer symptoms or metastasis or other cancers, and death of the patient.

The sample size was calculated according to the study of Karimi et al. (2017) (20) using the average formula of two independent societies, and considering the 95% confidence interval and 80% test power. The sample size was determined as 33 participants in each group, taking into account the probability of 20% loss, the final sample size was considered as 40 people in each group.

Sampling was performed after obtaining the approval of the Ethics Committee of the University and submitting a written referral letter from the School of Nursing and Midwifery to the Breast Cancer Clinic of Omid Hospital and obtaining their consent. Initially, about 400 cases of breast cancer patients referred to the breast cancer clinic from 2011 to 2020 were recruited and about 250 patients with early selection conditions were selected.

Then they were contacted by phone and 80 people who met the inclusion criteria were selected. Written informed consent was obtained after giving the necessary information about the study and its objectives. After providing information on how to respond to each questionnaire and assuring the participants in terms of confidentiality of information, demographic information questionnaires and sexual quality of life questionnaire (SQOL-F) were completed by participants in the Breast Cancer Clinic.

After selecting the eligible individuals, the individuals were randomly allocated to the two groups of BETTER and PLISSIT by random blocking using a table of random numbers from www.randomization.com.

The created sequences were recorded on small sheets and placed in sealed envelopes. According to the order of arrival of the participants, the envelopes were opened in order and the assigned group was revealed. The final analysis was performed on 78 people and 2 subjects were excluded from the study (one in the BETTER group due to death and one in the PLISSIT group due to absence from counseling sessions).

The demographic questionnaire included 37 questions in three sections (demographic characteristics, marital life-related data and breast cancer-related data), which were developed by studying new and valid literature.

The Quality of Sexual Life Questionnaire (SQOL-F) consists of 18 questions and has a scoring range of 0-90 or 18-108. Higher scores illustrate higher quality of sexual life (21). Maasoumi et al. (2013) reported a Cronbach's alpha coefficient of 0.73 for the SQOL-F (22). In the present study, the reliability of the SQOL-F was calculated using Cronbach's alpha coefficient ($\alpha = 0.79$)

Validity of all Questionnaires was confirmed by seven faculty members of Mashhad University of Medical Sciences, Mashhad, Iran.

In the BETTER counseling group, four sessions of individual counseling of 60-90 minutes were performed based on the BETTER model with one-week interval. Stages 1 and 2 were performed in the first week, stages 3 and 4 in the second week, stage 5 in the third week, and stage 6 in the fourth week. The counselling was carried out through the following stages: Stage1, Bring up: In this stage, the counselor first discusses sexual relations with the patient and reassures her that can talk about sexual problems. The patient introduced herself and then evaluated her current sexual beliefs and activities. Stage 2, Explain: The counselor explained the importance and impact of sexual issues on quality of life and reminded the client that she is completely free to talk about it. This helps normalize sexual discourse and reduce the client's sense of shame. Stage 3, Tell: The counselor assures the client to provide complete information on sexual problems using the available scientific resources. Stage 4, Timing: The counselor focused on scheduling and discussing when the person was ready. Because sexuality is an ongoing process, counselors were available at any time to address concerns and answer the clients' questions. Stage 5, Education: The counselor provided information to the patient about potential changes in sexual function due to cancer and its treatments, recognizing and correcting the client's misconceptions about sex after cancer. Stage 6, Record: The counselor recorded important aspects of discussions, evaluations and interventions. In both groups the first session was held in the breast cancer clinic of Omid Hospital and the next sessions were held in WhatsApp space by video call.

In the PLISSIT counseling group, four individual counseling sessions of 60-90 minutes were held with one-week interval. In the first session, stage 1, in the second session, stage 2, in the third session, stage 3, and in the fourth session, stage 4 was held. The counselling was carried out through the following steps: Step 1, permission: The counselor in a safe and trusting environment allowed the client to talk about sexual issues and express their concerns and problems. Step 2, limited information: The counselor provided limited, factual, and fact-based information in response to a question or potential client sexual problems. Third stage, specific suggestions: In this stage, the counselor provided specific and appropriate suggestions for the patient's sexual problem. In fact, the main solution to solve the problem is done at this stage by the decision of the client and the guidance of the consultant. Step 4, specific treatment: If the problem persists, the client was referred to a sex therapist or specialist.

The intervention was performed by the trained researcher with the support of clinical psychologist in both groups. Four weeks after the last consultation session, the sexual quality of life questionnaire was completed by the participants.

Data were collected and coded and entered into the computer and analyzed by SPSS software (version 16) and Kolmogorov-Smirnov, Chi-square, paired t-test, independent t-test and Mann-Whitney tests. $P<0.05$ was considered statistically significant.

Results

The mean age of women was 41.3±4.6 years in the BETTER group and 42.2±4.3 years in the PLISSIT group. The mean duration of marriage was 18.8±6.8 years in the BETTER group and 19.8±6.8 years in the PLISSIT group. The two groups were homogeneous in terms of other demographic characteristics which were examined and compared before the intervention (Table 1) and (Table 2).

Table 1. Demographic characteristics of the participants in the BETTER and PLISSIT groups

Variable	BETTER group N (%)	PLISSIT group N (%)	P-value
Women's educational level			
Under Diploma	10(25.6)	10(25.6)	**0.867**
Diploma	18(46.2)	16(41.0)	
University	11(28.2)	13(33.3)	
Spouse's educational level			
Under Diploma	12(30.8)	12(30.8)	
Diploma	15(38.5)	13(33.3)	**0.862**
University	12(30.8)	14(35.9)	
Occupational status			
Housewife	29(74.4)	31(79.5)	
Worker	6(15.4)	1(2.6)	**0.122**
Employed	4(10.3)	7(17.9)	
Spouse's occupational status			
worker	24(61.5)	27(63.9)	
Employed	11(28.2)	8(20.9)	
Retired	2(5.1)	0(0)	**.348**
Unemployed	2(5.1)	4(10.3)	
Separate room for sexual intercourse			
yes	27(69.2)	23(59)	**0.345**
No	12(30.8)	16(41)	
Taking drugs affecting sexual function			
yes	4(10.3)	3(7.7)	**1.000**
No	35(89.7)	36(92.3)	
Chemotherapy			
yes	35(89.7)	36(92.3)	
No	4(10.3)	3(7.7)	**1.000**
Radiation therapy			
yes	24(61.5)	25(64.1)	**0.815**
No	15(38.5)	14(35.9)	
Hormone therapy			
yes	28(71.8)	26(66.7)	**0.624**
No	11(28.2)	13(33.3)	
Vaginal dryness			
yes	28(71.8)	34(87.2)	**0.092**
No	11(28.2)	5(12.8)	
Hot flash			
yes	36(92.3)	33(84.6)	**0.481**
No	3(7.7)	6(15.4)	
Vaginal burning			
yes	14(35.9)	15(38.5)	**0.815**
No	25(64.1)	24(61.5)	

The mean score of sexual quality of life before the intervention was 41.8±9.6 in the BETTER group and 41.2±10.6 in the PLISSIT group. Independent t-test did not show a significant difference between the two groups in terms of sexual quality of life before the intervention (P =0.764). However, 4 weeks after the intervention, the sexual quality of life score

increased in both groups (50.5±9.1 in the BETTER group and 46.2±10.9 in the PLISSIT group), but independent t-test did not show a significant difference between the two groups in terms of mean score of sexual quality of life after the intervention (P =0.063). The quality of sexual life after the intervention increased as 8.6±5.1 in the BETTER group and 5.05±6.2 in the PLISSIT group. Mann-Whitney test showed this difference was significant (p <0.001) (Table 3).

Table 2. Mean of Age, Weight and Marriage date in the PLISSIT and BETTER groups

Variable	BETTER group	PLISSIT group	T	P
Age	4.6±41.3	4.3±42.2	-0.860	0.393
Weight	12.3±73.5	9.3±69.8	1.524	0.132
Marriage date	6.8±18.8	6.8±19.8	-0.642	0.523

Table 3. Mean of sexual quality of life before and after the intervention in the PLISSIT and BETTER groups

Sexual Quality Of Life	BETTER N=39	PLISSIT N=39	P-value
Before the intervention	9.6±41.8	10.6±41.2	0.764 independent t-test
After the intervention	9.1±50.5	10.9±46.2	.063· independent t-test
Changes before and after the intervention between the groups	5.1±8.6	6.2±5.05	< 0.001 Mann-Whitney
Results of Paired T-Test	p<0.001 t=-10.46 , df=38	p<0.001 t=-5.02, df=38	

Discussion

The aim of this study was to compare the effect of sexual counseling based on BETTER and PLISSIT model on the quality of sexual life in women undergoing mastectomy. The results showed significant difference between the two groups in terms of mean changes in the sexual quality of life after the intervention (P< 0.001). The BETTER model can improve talking about sexual issues by creating a safe and intimate atmosphere between the counselor and the client. Since BETTER is a client-centric model, it provides a wide range of sexual negotiation based on the client's personal schedule and information. Cultural considerations about talking about sexual problems seem to be more important than the content of counseling sessions, and the BETTER model has been able to overcome the shame of Iranian women and encourage them to talk about their sexual problems.

In this regard, Shahin et al. (2021) found that nursing counseling with BETTER model has a high impact on improving sexual desire, sexual satisfaction and psychological status of women with breast cancer. They states that although the BETTER model is designed for a specific group of patients and specialists, it has also been considered in other chronic diseases due to its simplicity and focus on sexual discourse (23). Zamani et al.(2020) reported that couple training and counseling based on BETTER model was effective on sexual satisfaction of women with type 1 diabetes; this effect lasted up to 3 months after the intervention (24), which is in line with the results of the present study. Karakas et al. (2019) in their study stated that the BETTER model improves the sexual function and sexual satisfaction of infertile women. They reported that the BETTER model provides a suitable treatment environment for solving sexual function problems and helps women to express sexual problems more easily (25), which is consistent with the findings of the present study.

Given the widespread psychological needs of breast cancer patients and the impact of these

needs on various aspects of their life, as well as the lack of psychological support centers along with physical therapy, it seems that the presence of psychologists and midwives together in the research team improves the sexual quality of their life. The results of the study by Faghani and Ghaffari (2016) showed that psychological sexual counseling improves the sexual quality of life and sexual function of women surviving breast cancer (15). They also reported that health care providers can use the PLISSIT model for problem-solving training and coping strategies in women with breast cancer and their husbands. This model provides an opportunity for women to express their feelings and experiences in a safe environment and can easily identify their sexual problems and ways to solve these problems, thereby helping to increase the sexual quality of life and improve sexual function. The study by Saboula and El-Sayeds (2015) also showed that the implementation of the PLISSIT model is effective in improving sexual function, sexual satisfaction and body image in breast cancer patients undergoing various treatments (26), which is consistent with the findings of the present study. However, the study of Khoei et al.(2020) to compare sexual counseling based on the PLISSIT model and group sexual education in Iranian women with breast cancer showed that although the PLISSIT model is an effective and well-known model, but group counseling based on the sexual health model is more effective and efficient to improve sexual behaviors in Iranian culture (27). The results of their study are consistent with the results of the present study and showed the effectiveness of a counseling model such as BETTER which is more consistent with Iranian culture.

BETTER model's view of sexuality is more than just having sex, it is in fact a discussion of the role of sexuality, intimacy in life, and most importantly the recording of these conversations to expand and advance the sexual discourse between the client and the counselor. In the BETTER model, the counselor starts the dialogue, clarifies the importance of sexual issues for clients, encourages the women to talk more about their sexual problems, and tries to remove the taboo of talking about sexual concerns with their husbands that can act as an impetus to sexual assertiveness and sexual self-disclosure, and consequently, the removal of barriers to communicate about sex between couples that can be effective on sexual satisfaction.

One of the strengths of the present study is that for the first time, it compared the two counseling methods of BETTER and PLISSIT in women with breast cancer who underwent mastectomy. One of the limitations of this study was the absence of spouses in the study, so their reports about the absence of a sexual problem in their husbands were included in this study. It is recommended to perform further investigation on the effectiveness of the BETTER and PLISSIT models on the quality of sexual life of women.

Conclusion

The results of the present study indicated that the BETTER model had a significant effect on increasing the quality of sexual life in women with breast cancer undergoing mastectomy. Although the PLISSIT model is an effective and well-known approach worldwide, the BETTER model can be more efficient in cultures such as Iran and can be used by health care providers as an easy-to-use framework.

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Conflicts of interest

Authors declare no conflicts of interest.

References

1. Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: a cancer journal for clinicians. 2021; 71(3): 209-249.
2. Jafari A, Goudarzian AH, Nesami MB. Depression in women with breast cancer: A systematic review of cross-sectional studies in Iran. Asian Pacific journal of cancer prevention 2018; 19(1): 1-10.

3. Asghari Ebrahim Abad MJ, Kareshki H. Psychological consequences of breast Cancer in Iran: a systematic review. Journal of Fasa University of Medical Sciences. 2019; 8(4): 986-999.
4. Sharbafchi MR, Rajabi F, Sheshboluki F, Ghaderi S, Fayazi M, Mousavi SZ. The Effect of Educational Sessions for Couples on Quality of Life among Patients with Breast Cancer Undergoing Mastectomy. Journal Of Isfahan Medical School. 2019; 37(513): 1-8.
5. GHASEMI L, JABALAMELI S. Effect of Acceptance and Commitment Therapy on Sexual Desire in Women with Breast Cancer after Mastectomy. Iranian Quarterly Journal of Breast Disease. 2019; 12(4): 39-51.
6. Molavi A, Hekmat K, Afshari P, Hoseini M. Evaluation of couples' sexual function and satisfaction after mastectomy. The Iranian Journal of Obstetrics, Gynecology and Infertility. 2015; 17(134): 17-24.
7. Barni S, Mondin R. Sexual dysfunction in treated breast cancer patients. Annals of Oncology. 1997; 8(2): 149-153.
8. Thors CL, Broeckel JA, Jacobsen PB. Sexual functioning in breast cancer survivors. Cancer Control. 2001; 8(5): 442-448.
9. Dogan T, Tugut N, Golbasi Z. The relationship between sexual quality of life, happiness, and satisfaction with life in married Turkish women. Sexuality and Disability. 2013; 31(3): 239-247.
10. Holmberg D, Blair KL, Phillips M. Women's sexual satisfaction as a predictor of well-being in same-sex versus mixed-sex relationships. Journal of Sex Research. 2010; 47(1): 1-11.
11. Rosen RC. Quality of life assessment in sexual dysfunction trials. International journal of impotence research. 1998; 10(Suppl 2) :S21-3; discussion S4-6.
12. Zee B, Huang C, Mak S, Wong J, Chan E, Yeo W. Factors related to sexual health in Chinese women with breast cancer in Hong Kong. Asia-Pacific Journal of Clinical Oncology. 2008; 4(4): 218-226.
13. Sayyadi F. Investigating The Relationship Between Sexual Assertiveness and Sexual Quality of Life in Married Women. Nursing And Midwifery Journal. 2020; 18(9): 750-758.
14. Annon JS. The PLISSIT Model: A Proposed Conceptual Scheme for the Behavioral Treatment of Sexual Problems. Journal of Sex Education and Therapy. 1976; 2(1): 1-15.
15. Faghani S, Ghaffari F. Effects of sexual rehabilitation using the PLISSIT model on quality of sexual life and sexual functioning in post-mastectomy breast cancer survivors. Asian Pacific journal of cancer prevention. 2016; 17(11): 4845.
16. Almeida NGd, Britto DF, Figueiredo JV, Moreira TMM, Carvalho REFLd, Fialho AVdM. PLISSIT model: sexual counseling for breast cancer survivors. Revista brasileira de enfermagem. 2019; 72: 1109-1113.
17. Davis S, Taylor B. From PLISSIT to ex-PLISSIT. Rehabilitation: The use of theories and models in practice Edinburgh. Elsevier. 2006: 101-129.
18. Cohen MZ. Using the BETTER model to assess sexuality. Clinical Journal of Oncology Nursing. 2004; 8: 84-86.
19. Mick J, editor Sexuality and Cancer: How Oncology Registered Nurses Assess Patients'sexuality In Clinical Practice. Oncology Nursing Forum. 2007.
20. Karimi F, Babazadeh R, Roudsari RL, Asgharipour N, Esmaily H. Comparing the Effectiveness of Sexual Counseling Based on PLISSITand BETTER Models on Sexual Selfdisclosure in Women with Sexual Problems after Childbirth: A Randomized Trial. Iranian Journal of Nursing and Midwifery Research. 2021; 26(1): 68-74.
21. AJ N, Samiee Rf, Kalhor M, Hasanpour K, Alipour M, MontazerI A. Sexual quality of life in pregnant women: A cross sectional study. Iranian Journal of Nursing and Midwifery Research. 2021; 26(1): 68.
22. Maasoumi R, Lamyian M, Montazeri A, Azin SA, Aguilar-Vafaie ME, Hajizadeh E. The sexual quality of life-female (SQOL-F) questionnaire: translation and psychometric properties of the Iranian version. Reproductive health. 2013; 10(1): 1-6.
23. Shahin MA, Gaafar HAA, Alqersh DLA. Effect of Nursing Counseling Guided by BETTER Model on Sexuality, Marital Satisfaction and Psychological Status among Breast Cancer Women. Translational andrology and urology. 2021; 4(2): 160-168.
24. Zamani N, Rezaee Jamaoei H, Peikari HR. Evaluation of the Effect of Intervention Based on Sexual Concerns (Couple Counseling Based on BETTER Model) on the Sexual Satisfaction of Women with Type 1 Diabetes. Navid No. 2020; 23(75): 1-12.
25. Karakas S, Aslan E. Sexual counseling in women with primary infertility and sexual dysfunction: Use of the BETTER model. Journal of sex & marital therapy. 2019; 45(1): 21-30.
26. Saboula N, El-Sayed S. Effectiveness of application of PLISSIT counseling model on sexuality for breast cancer's women undergoing treatment. American Journal of Nursing Science. 2015; 4(4): 218-230.

27. Khoei EM, Kharaghani R, Shakibazadeh E, Faghihzadeh S, Aghajani N, Korte JE, et al. Sexual health outcomes of PLISSIT-based counseling versus grouped sexuality education among Iranian women with breast cancer: A randomized clinical trial. Sexual and Relationship Therapy. 2020; 1-12.