

Effectiveness of Nursing Counseling on Reliefs Psychological Burdens upon women after Mastectomy

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الخلاصة:

الهدف: تهدف الدراسة إلى التعرف على فاعلية المشورة التمريضية على الأعباء النفسية للنساء بعد أستئصال الثدي **المنهجية:** شبه تجريبية اختيار عينة وغير احتمالية (عمدية) لثلاثين امرأة بعد أستئصال الثدي ، تشرين الاول 2011 وتم إجراء الدراسة في ثلاثة مستشفيات في مدينة بغداد والتي تعتبر المستشفيات الرئيسية لمعالجة كل أنواع السرطان وتم إجراء اختبار قبلي واختبارين بعديين للعينة التجريبية مع إعطائهم المشورة فيما يخص كيفية تحسين الأعباء النفسية بعد أستئصال الثدي ، وتكونت إستمارة الاستبانة من جزئين حيث شملت الخصائص الديموغرافية والأنجابية و الأعباء النفسية للنساء و تم تحديد صدق المحتوى وثبات الاستبانة من خلال دراسة استطلاعية واستعمال والاستنتاجي في تحليل البيانات . **النتائج:** أشارت نتائج الدراسة إن أعلى نسبة (36.7%) من أفراد العينة تراوحت أعمارهن بين (50-60) سنة وأعلى وسط حسابي سجل للتركيز والانتباه والكتابة والشعور السلبي والقلق والتفكير وأخيرا الشعور الإيجابي، وتم إيجاد فروقات معنوية بين الاختبار القبلي والبعدى في محاور الاعباء النفسية بمستوى خطأ $P \leq 0.01$ **التوصيات:** شعبية لتقديم المشورة في عيادات سرطان الثدي واعتماد المشورة كجزء من برنامج العلاج للحد من أعباء و أعراض مرض السرطان وتحسين نوعية الحياة لمرضى سرطان الثدي بعد أستئصال الثدي.

Abstract:

Objective: To identify the effectiveness of nursing counseling on psychological burdens on women after mastectomy. **Methodology:** A quasi-experimental design (one group pretest-posttest design) was conducted on non-probability (purposive) sample of thirty women who had received a mastectomy as an intervention group selected during period from 2nd August to 10th November 2011. The study was conducted at three hospitals in Baghdad city which considered the main settings to providing health care for the patients with all types of cancer. Baseline data collection (pre test), post-test 1 and post-test 2 and application of the nursing counseling on psychological burdens after mastectomy. The questionnaire form is consisted of two parts which included demographic and reproductive characteristics and psychological burdens after mastectomy. Content validity and reliability of the questionnaire determined through a pilot study, descriptive and inferential statistic is used to analyze the data. The psychological burdens measured by the scale developed by the researcher according to the literature review. **Results:** Results of the study showed that the highest of study sample 36.7 % were in age group (50-60) years old, the highest mean of score related to the psychological burdens were refer to the focus and attention, depression, negative feels, anxiety, thinking, and finally followed by positive feels, was found significant differences between pre and post test related to psychological burdens at standard error $P \leq 0.01$. **Recommendation:** The study recommends establishing the counseling center in the breast cancer clinics to providing the psychological support and advices for women. The counseling program should be based in treatment program to reduce the burdens and symptoms of cancer and improving the quality of life.

Key words: Nurse, Breast cancer, Mastectomy, Counselling, and Psycho-social burdens

INTRODUCTION:

Breast cancer is the most common cancer in women worldwide. It is estimated that more than 1.6 million new cases of breast cancer occurred among women worldwide in 2010⁽¹⁾. Rates of breast cancer around the world vary a great deal. In general, developed countries have higher rates than developing countries, and, women who live in developed countries tend to have a higher lifetime risk of breast cancer than women who live in developing countries ⁽²⁾. Breast cancer treatment alters body reality of the patients and may influence body presentation and feeling about themselves as persons. ⁽³⁾ The surgical procedures like mastectomy are emotionally stressful, the loss of one or both breasts evoked feelings of mutilation and altered body image, diminished self-acceptance, loss of a sense of femininity, reduction of sexual attractiveness and function, anxiety, depression, hopelessness, guilt, shame and fear of recurrence and death ⁽⁴⁾. Loss of roles at home or professional life caused by disease and swinging relations, feeling of dependency or strong pain, anxieties regarding life may cause breakdowns with immediate friends or marriages and they all adversely affect the life satisfaction and marital life of individuals. ⁽⁵⁾ In recent years, the counseling has emerged as an effective way to deliver psychosocial interventions to individuals with cancer. The counseling intervention acknowledges that each phase of the breast cancer experience (i.e., diagnosis, post surgery, adjuvant therapy, and ongoing recovery) is stressful and characterized by its own particular features ^(6,7). Counseling have beneficial effect on the quality of life, and biopsychosocial burdens that would bring to a higher life expectancy and may helps the patients deal most successfully with their burdens, come to a greater understanding of themselves and explore their natural strengths in turn lead a more self acceptance ⁽⁸⁾.

The study aim: to identify the effectiveness of nursing counseling on psychological burdens on women after mastectomy.

METHODOLOGY

A quasi-experimental design study (one group pre-test-post-test design) was carried out throughout the present study with the application of a pre-test, post –test 1 and post –test 2) on psychological burdens after mastectomy. A convenience sampling (non probability) was used to select the study samples, who were attending the hospital to receive scheduled supplementary treatment after mastectomy in Baghdad Teaching Hospital, Medical Nuclear Hospital and Institution of Radiation and AL Kahadymia Teaching Hospital. They are considered the main settings that provided health care for the patients from all the Iraqi governorates as well as for all types of cancer. A total of 30 women agreed to take part in the study. The counseling program was designed to improve psychological burdens in women after mastectomy. The design was based on findings obtained from the initial assessment of women's psychological burdens after mastectomy, as well as through a review of related

literatures in previous studies. The questionnaire form is consisted of Socio-Demographic characteristics, Reproductive and clinical characteristics, psychological burdens composed of 33 items. An instrument was constructed through the use of (3) level type Likert scale to assess the psychological burdens after mastectomy. A pilot study was conducted at AL Kahadymia Teaching Hospital of (10) women with mastectomy during the period of 15th Jun 2011, to 17th July 2011, to determine the reliability of the study and measuring the effectiveness of nursing counseling on psychological burdens of women after mastectomy. To evaluate the validity of the counseling program and questionnaire form, the researchers presented them to eleven experts in various fields. Reliability of the questionnaire was determined through the use of Pretest and Posttest approach, with an interval of about four weeks, for the determination of interval consistency of women's psychological burdens after mastectomy, R = 0.95 for psychological burdens. The statistical procedures include: Descriptive statistic (frequency, mean, percentage, relative sufficiency, and graph) and inferential statistic (chi-square) approach have been used.

RESULTS

Table 1: Distribution the Socio-demographical Characteristics of Women after Mastectomy

Variables	Groups	Study = 30	
		No	%
Age / years	20 -	4	13.3
	30 -	7	23.3
	40 -	8	26.7
	50 – 60	11	36.7
	$\bar{x} \pm SD$	43.67 \pm 10.34	
Age at disease diagnosis /years	20 -	6	20.0
	30 -	6	20.0
	40 -	8	26.7
	50 – 60	10	33.3
	$\bar{x} \pm SD$	41.93 \pm 11.08	
Level of education	illiterate	3	10.0
	Read and write	5	16.7
	Primary	1	3.3

	Intermediate	5	16.7
	Secondary	5	16.7
	Institute	5	16.7
	College & H.E.	6	20.0
Occupation before incidence	House wife	13	43.3
	Employed	17	56.7
Occupation after incidence	House wife	13	43.3
	Employed	17	56.7
Economic status	High	14	46.7
	Middle	11	36.7
	Low	5	16.7

This table demonstrates that the highest percentage of the study sample were (36.7 %) were in age group (50-60) years old and (33.3%) of study sample were in age at disease diagnosis group (50-60) years old; their educational level the highest percentage (20 %) were college graduate. Woman's Occupation before and after breast cancer incidence was most often (56.7 %) of study sample were employed. Regarding economic status, the highest percentage (46.7 %) of study sample at high level.

Table (2) Distributions of the Reproductive and Clinical Characteristics of Women after Mastectomy

Variables	Groups	Study = 30	
		No	%
Age at menarche	12	5	16.7
	12 - 13	9	30.0
	13 - 14	16	53.3
	$\bar{x} \pm SD$	12.53 \pm 1.01	
Age of married	< 20	10	33.3
	20 - 24	14	46.7
	25 - 29	4	13.3
	30 \geq	2	6.7
	$\bar{x} \pm SD$	21.90 \pm 4.35	

Age at first delivery	< 25	10	33.3
	25 - 29	17	56.7
	30 ≥	3	10.0
		24.276	4.32
Number of children	null	1	3.3
	1 - 2	7	23.3
	3 - 4	13	43.4
	≥5 - 6	9	30.0
		4.00	1.91
Breast Feeding	Yes	22	73.3
	No	8	26.7
Duration of breast feeding for all children in months	12 - 48	5	16.7
	49 - 96	4	13.3
	97 - 144	12	40
	145 ≥	1	3.3
		100.36	49.62
Using of hormonal contraceptive	Yes	17	56.7
	No	13	43.3
Duration of using of hormonal contraceptive in years	1 - 2	7	23.3
	3 - 4	4	13.3
	5 - 6	2	6.7
		2.85	1.28
Using of hormonal replacement therapy	Yes	1	3.3
	No	29	96.7
Stage of incidence	Before menopausal age	7	23.3
	At menopausal age	23	76.7
The affected breast	Left	18	60.0
	Right	12	40.0
Radical mastectomy	Yes	23	76,7

		No	7	23.3
Duration since mastectomy	≤ 2 m	3	10	
	3 - 4 m	13	43.3	
	5 - 6 m	10	33.3	
	7 ≥ m	4	13.3	
		4.5	1.72	

This table demonstrates that the highest percentage 53.3% their age at menarche were 13-14 years old, 46.7 % their age at married were 20-24 years old, 56.7 % their age at first child delivery were 25-29 years old and 43.4 %, their number of children 3-4, the highest percentage 73.3 % using breast feeding, 40 % of study sample their duration of breast feeding for all children from 97-144 months. The highest percentage 56.7 % using the hormonal contraceptive methods of family planning. The highest percentage 23.3 % of study sample were use the hormonal contraceptive for 1-2 years. The highest percentage 96.7% were didn't use hormonal replacement therapy. 76.7 % were at menopausal age, 60 % were the affected breast was the left. The highest percentages 76.7 % were treated by radical mastectomy and 43.3 % were the duration since mastectomy between 3-4 months.

Table 3 (Pre and post1 and 2 test) Nursing counseling program on psychological Burden of women

Sub Domains		Periods	No.	Grand MS	SD	RS %	Matched Paired	P-value	C.S.
Psychological Burdens	Thinking	Pre	30	1.01	0.05	33.61	Pre X Post-1	0.000	HS
		Post-1	30	1.79	0.24	59.72	Pre X Post-2	0.000	HS
		Post-2	30	2.25	0.45	75.00	Post-1 X Post-2	0.000	HS
	Focus & Attention	Pre	30	2.59	0.32	86.44	Pre X Post-1	0.016	S
		Post-1	30	2.78	0.27	92.67	Pre X Post-2	0.028	S
		Post-2	30	2.72	0.38	90.67	Post-1 X Post-2	0.445	NS
	Anxious	Pre	30	1.01	0.05	33.61	Pre X Post-1	0.000	HS

	Post-1	30	1.86	0.35	61.94	Pre X Post-2	0.000	HS
	Post-2	30	2.11	0.39	70.28	Post-1 X Post-2	0.025	S
	Pre	30	1.35	0.24	45.14	Pre X Post-1	0.000	HS
Depression	Post-1	30	2.60	0.44	86.67	Pre X Post-2	0.000	HS
	Post-2	30	2.80	0.21	93.19	Post-1 X Post-2	0.028	S
	Pre	30	1.02	0.07	33.89	Pre X Post-1	0.092	HS
Positive Feels	Post-1	30	1.17	0.46	38.89	Pre X Post-2	0.152	NS
	Post-2	30	1.13	0.40	37.59	Post-1 X Post-2	0.562	NS
	Pre	30	1.66	0.25	55.19	Pre X Post-1	0.000	HS
Negative Feels	Post-1	30	2.44	0.29	81.48	Pre X Post-2	0.000	HS
	Post-2	30	2.54	0.17	84.81	Post-1 X Post-2	0.113	NS
	Pre	30	1.89	0.30	63.07	Pre X Post-1	0.000	HS
Body image	Post-1	30	2.18	0.23	72.59	Pre X Post-2	0.000	HS
	Post-2	30	2.30	0.21	76.61	Post-1 X Post-2	0.012	S

The findings according to the P-values for the three matching shows: Thinking was a highly significant differences had been obtained for the three matching (pre – post1, pre – post2, and post1 – post2), Anxious ,Depression and Body image were a highly significant differences had been recorded for the two matched of testing (pre – post1, and pre – post2) and there were a significant differences had been recorded for the third matched of testing (post1 – post2). Negative Feels were a highly significant differences had been recorded for the two matched of testing (pre – post1, and pre – post2) except with the third matched (post1 – post2), as well as a non significant differences were obtained. Focus &

Attention were a significant differences had been recorded for the two matched of testing (pre – post1, and pre – post2) except with the third matched (post1 – post2), as well as a non significant differences were obtained. Positive Feels were a highly significant differences had been recorded for the matched of testing (pre – post1), except with the two matched of testing (pre- post 2, and post1–post2) non significant differences were obtained.

DISCUSSION

The highest percentage of study sample 36.7 % were in age group (50-60) years old with Mean and Standard deviation 43.67 10.34 of study groups, 33.3 % were in age at disease diagnosis in group (50-60) years old with Mean and Standard deviation 41.93 11.08 shows in present study This result was consistent with international study conducted by Beuth et al (2008) who reported that the Mean and Standard deviation of the age of study group was 44.63 10.16 ⁽⁹⁾. Smeltzer and Bare (2006) reported that the risk of developing breast cancer increases considerably with age. More than three-fourth of breast cancer develop in women who are over 50 years, and more than half occur in women age 65, young women get breast cancer, but less commonly⁽¹⁰⁾. Regarding level of education, the highest percentage 20 % were college graduate of study sample. This finding agrees with Graydon, (2004) who found that (67%) of women with breast cancer had high level of education ⁽¹¹⁾. Moreover, the women's Occupation before and after breast cancer incidence was most often 56.7 % were employed of study sample, These results are in contrast with Fismen and Stanghelle (2007) conclude in his study that the counseling encouraged the patients to return to work and to become socially active again⁽¹²⁾. Furthermore , the result regarding economic status shown that the highest percentage of 46.7 % of study sample at high level. This finding agree with study conducted by Robert et al. ,(2004) which concluded that the women living in the highest socioeconomic status communities had greater odds of having breast cancer than women living in the lowest socioeconomic status communities⁽¹³⁾.

The study result shows that the highest percentage of 53.3% their age at menarche was 13-14 years old, 46.7 % their age at married were 20-24 years old, 56.7 % their age at first child delivery were 25-29 years old and 43.4 % of them their number of children 3-4, the highest percentage of 73.3 % using breast feeding, and the highest percentage of study sample 40 % their duration of breast feeding for all children from 97-144 months. 56.7 % of study using the hormonal contraceptive. The highest percentage of study sample 23.3 % were use the hormonal contraceptive for 1-2 years. The highest percentage of 3.3 % were didn't use hormonal replacement therapy, the highest percentage 76.7 % were at menopausal age. 60 % the affected breasts were left. The highest percentages 76.7 % were treated by radical mastectomy and 43.3 % were the duration since mastectomy between 3-4 months. Finding of the study disagree with Smeltzer and

Bare, who stated that women having children after 30 yrs, have twice the risk of developing breast cancer, as women having children at age 20 yrs, while others stated that women with late age at first birth compared to an early age were at similar risk of having breast cancer ⁽¹⁰⁾. (Wohlfahrt, 2001), also agree with Saudi study concluded that breast feeding in no way gives any protection to the patient ⁽¹⁴⁾. American Cancer Society (2012) stated that, the primary factors that increase risk of breast cancer in women include along menstrual history (menstrual periods that started early and /or ended late in life), obesity, menopause, recent use of oral contraceptive, post-menopause hormonal therapy, nulliparity or having the first child after age of 30 years old, exposure to radiation, consumption of alcoholic beverages, and high breast tissue density ⁽¹⁵⁾. It is worthwhile, to mention that our country has exposed to unjust war and high explosion and fatal weapon, these critical situation led our population exposed to tremendous hazardous influences. Consequently some of our results are different, compared to international literature. Herfindal and Gourleg (2006) who stated that earlier age at first menstruation before age twelve and later menopause may increase the breast cancer risk, which means more estrogen exposure and more opportunities for cells to become malignant, which agree with this study findings ⁽¹⁶⁾. Breast cancer can occur anywhere in the breast, but the majority occurs in the upper quadrant where most breast tissue is located, breast cancer is more common in the left breast ⁽¹⁷⁾. Modified radical mastectomy consists of removing the entire breast, chest muscles under the breast, and all of where under arm lymph nodes and skin around the breast ⁽¹⁸⁾. The most effective evidenced by clinical experience shows 5 years survival rate is greater than 80%, while if the cancer cells have spread to the nodes of axilla, the 5 years survival rate falls to 60%. Therefore, it considers the most surgical approach to the breast cancer treatment ⁽¹⁹⁾, which is consistent to results of this study. All the previous studies were in agreement with the present study, with breast cancer the risk of long term physical and psychological problems increase as well as social consequences appears to experience considerable difficulties interpersonal relationship with others, social, cognitive and emotional aspects of family life, concerns in relation to femininity, fears of sexual relations, social function. ⁽²⁰⁾

Regarding effectiveness of nursing counseling upon psychological burdens of study group at (pre, post-1 and post-2 periods), the study result shows that that highly significant differences at $P < 0.01$ had been recorded for the three matching (pre – post1, pre – post2, and post1 – post2). The finding of the study agrees with Lieberman (2003) reported that the participation in the counseling program leads to an improvement in the social-psychological functions in women with breast cancer , and, showed that depression and anxiety are important problems for breast cancer patients and their relatives, and that psychosocial assistance that can be provided by counseling facilitates symptom management. ⁽²¹⁾ A variety of counseling types such as psychological, behavioral and formats such as group, individual, and telephone have demonstrated beneficial effect on the quality of life, symptom

management, and psychological functioning.⁽²²⁾ Margoosian (2004) showed that counseling used for Iranian women to cope with breast cancer and accepted their disease, and reported that the patients who were undergoing mastectomy there was a reduction in depression, anxiety, loneliness and physical symptoms such as anorexia, gastro-intestinal disorder and fatigue after participating in counseling groups in the experimental as compared to the control group⁽²³⁾. Cognitive-behavioral counseling has shown promise in helping the women to cope more effectively with body image alteration after mastectomy (Holland, 2009)⁽²⁴⁾.

CONCLUSION

- Approximately half of study samples were at age range (50-60)
- There were highly significant differences had been obtained for the three matching (pre – post1, pre – post2, and post1 – post2) related to psychological burdens

RECOMMENDATIONS

- Establishment of a counseling center in the breast cancer clinics to delegating caring responsibility to breast cancer patients.
- Construction a counseling program which should be included as part of the patients' treatment program with the aim of reducing the symptoms of cancer and improving the quality of life.
- Establish a basic post mastectomy rehabilitation program included 'all' in-patient breast cancer patients of multidisciplinary approach comprised a series of structural exercises, information and group therapy sessions which were conducted by a social worker, nurse or physical therapist.

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