Effectiveness of Nursing Counseling on Psycho-social Burdens of women after Mastectomy

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Abstract:

In surveys of the last 10 years, an increase has been reported in particular in breast surgery for breast cancer. Breast cancer can cause serious psychological problems due to many factors such as uncertainty in treatment, physical symptoms, fear of recurrence and death. To identify the effectiveness of nursing counseling on Psycho-social Burdens on women after mastectomy**,** a quasi-experimental design 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 which considered the main settings that provided health care for the patients from all types of cancer. Baseline data collection (pre-test), Post-test1 and Post-test2 took place and application of the nursing counseling on Psycho-social burdens after mastectomy. The questionnaire form is consisted of two parts which included demographic and reproductive characteristics, and Psycho-social 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. Results of the study showed that the highest of study sample 36.7 % were in age group (50-60) years old**,** 53.3% their age at menarche were 13-14 years old. The highest percentages of study group 46.7% their age at married were 20-24 years old. The highest mean of score related to the psycho-social burdens were referred to the thinking, anxiety, positive behavior, and sexual burdens. Highly significant differences had been obtained for the three matching (pre-post1, pre-post2, and post1-post2) related to psychological burdens, highly significant differences had been recorded for the two matched of testing (pre-post1, and pre-post2) except with the third matched (post1-post2) no significant differences was obtained related to the spiritual aspect, social and sexual burdens.

Keywords: Nurse, Breast cancer, Mastectomy, Counseling and Psycho-social burdens.

المستخلص

تهدف الدراسة إلى معرفة فاعلية المشورة التمريضية على الأعباء النفسية–الاجتماعية للنساء بعد استئصال الثدي .دراسة شبه تجريبيه، تم اختيار عينة غير احتمالية (عمدية) لثلاثين من النساء بعد استئصال الثدي ،خلال الفترة من 1 اب الى 10تشرين الاول /2011 . وتم إجراء الدراسة في ثلاثة مستشفيات في بغداد والتي تعتبر المستشفيات الرئيسية لمعالجة كل أنواع السرطان.تم أجراء اختبار قبلي واختبارين بعديين للعينة التجريبية مع إعطائهم المشورة فيما يخص كيفية تحسين الأعباء النفسية بعد أستئصال الثدي . تكونت الاستمارة الاستبيانية من جزأين ، تشمل الخصائص الديموغرافية والأنجابية والأعباء النفسية للنساء بعد أستئصال الثدي و تم تحديد صدق المحتوى وثبات الاستمارة الاستبيانين من خلال دراسة استطلاعية واستخدام تحليل الإحصاء الوصفي والاستنتاجي في تحليل البيانات .تشير نتائج الدراسة إن أعلى نسبة (36.7%) من أفراد عينة الدراسة تتراوح أعمارهن بين (50–60) سنة، أعلى قياس وسطي سجل للتركيز والأنتباه، الكابة، الشعور السلبي،القلق، التفكير،وأخيرا الشعور الايجابي توجد اختلافات كبيرة جدا في$P<0.01$ في مطابقة الاختبارات الثلاثة (اختبار قبل اعطاء المشورة –الأختبار الأول بعد اعطاء المشورة، أختبار قبل اعطاء المشورة –الأختبار الثاني بعد اعطاء المشورة، الأختبار الأول بعد اعطاء المشورة– الأختبار الثاني بعد اعطاء المشورة) فيما يتعلق في الأعباء النفسية.

كلمات مفتاحية: التمريض، سرطان الثدي، استئصال الثدي، المشورة والأعباء النفسية.

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 realization of the patients and may influence body presentation and feeling about themselves as persons [3]. Surgical procedures such as mastectomy are emotionally stressful. The loss of one or both breasts evokes feelings of mutilation and altered body image, diminished self-acceptance, loss of a sense of feminism, reduction of sexual attractiveness and function, anxiety, depression, hopelessness, guilt, shame and fear of recurrence and death [4]. The 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 bio-psychosocial

burdens that would bring to a higher life expectancy and may help the patients deal most successfully with their burdens ,come to a greater understanding of themselves and explore their natural strengths and in turn lead a more self-acceptance [8].

Methodology

A quasi-experimental design (one group pretest-posttest design) was carried out throughout the present study with the application of a pre-test, post –test 1 and post –test 2 their psycho-social 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 psycho-social burdens in women after mastectomy. The design was based on findings obtained from the initial assessment of women's psycho-social 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, Medical and surgical information, Previous history of breast problems, Family history, psychological burdens composed of 33 items, spiritual aspect composed of 9 items, social burdens composed of 18 items, and sexual burdens composed of 4 items An instrument was constructed through the use of (3) level type Likert scale to assess the psycho-social 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 psycho-social burdens of women after mastectomy . To evaluate the validity of the questionnaire form, the researchers presented it 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 psycho-social burdens after mastectomy, R = 0.95 for psychological burdens, R = 0.96 for social burdens, R = 0.91 for spiritual aspect, and R = 0.73 for sexual 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 Socio-demographical Characteristics of Women after Mastectomy in the study group

Variables	Groups	Study = 30		χ^2-test	P-value
		No	%		
Age / years	20 -	4	13.3	0.13	0.98
	30 -	7	23.3		
	40 -	8	26.7		
	50 - 60	11	36.7		
	$\bar{x} \mp SD$	43.67 ∓ 10.34			
Age at disease diagnosis /years	20 -	6	20.0	0.62	0.89
	30 -	6	20.0		
	40 -	8	26.7		
	50 - 60	10	33.3		
	$\bar{x} \mp SD$	41.93 ∓ 11.08			
Level of education	illiterate	3	10.0	7.97	0.24
	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	4.94	0.08
	Employed	17	56.7		
Occupation after incidence	House wife	13	43.3	4.94	0.84
	Employed	17	56.7		
Economic status	High	14	46.7	3.08	0.21
	Middle	11	36.7		
	Low	5	16.7		

This Table demonstrates that the highest percentage study sample 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.

The woman's occupation before and after breast cancer incidence was most often 56.7% were employed of study sample. The economic status, the highest percentage 46.7% of study sample at high level.

Table (2) Distribution Reproductive and Clinical Characteristics of Women after Mastectomy in the study group

Variables	Groups	Study = 30		χ^2-test	P-value
		No	%		
Age at menarche	12	5	16.7	1.49	0.47
	12 - 13	9	30.0		
	13 - 14	16	53.3		
	$\bar{x} \mp SD$	12.53 ∓ 1.01			
Age of married	< 20	10	33.3	2.29	0.51
	20 - 24	14	46.7		
	25 - 29	4	13.3		
	30 ≥	2	6.7		
	$\bar{x} \mp SD$	21.90 ∓ 4.35			
Age at first delivery	< 25	10	33.3	5.19	0.07
	25 - 29	17	56.7		
	30 ≥	3	10.0		
	$\bar{x} \mp SD$	24.276 ∓ 4.32			
Number of children	null	1	3.3	5.12	0.16
	1 - 2	7	23.3		
	3 - 4	13	43.4		
	≥5 - 6	9	30.0		
	$\bar{x} \mp SD$	4.00 ∓ 1.91			
Breast Feeding	Yes	22	73.3	0.000	1.00
	No	8	26.7		
Duration of breast feeding for all children in months	12 - 48	5	16.7	2.558	0.465
	49 - 96	4	13.3		
	97 - 144	12	40		
	145 ≥	1	3.3		
	$\bar{x} \mp SD$	100.36 ∓ 49.62			
Using of hormonal contraceptive	Yes	17	56.7	0.60	0.43
	No	13	43.3		
Duration of using of hormonal contraceptive in years	1 - 2	7	23.3	4.51	0.10
	3 - 4	4	13.3		
	5 - 6	2	6.7		
	$\bar{x} \mp SD$	2.85 ∓ 1.28			
Using of hormonal	Yes	1	3.3	0.35	0.55

replacement therapy	No	29	96.7		
Stage of incidence	Before menopausal age	7	23.3	9.77	0.00
	At menopausal age	23	76.7		
The affected breast	Left	18	60.0	0.00	1.00
	Right	12	40.0		
Radical mastectomy	Yes	23	76,7	2.85	0.09
	No	7	23.3		
Duration since mastectomy	≤ 2 m	3	10	10.17	0.01
	3 - 4 m	13	43.3		
	5 - 6 m	10	33.3		
	7 ≥ m	4	13.3		
	$\bar{x} \mp SD$	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) Distribution Previous History of Breast Problems of Women after Mastectomy in the study group

Variables	Groups	Study = 30		χ^2-test	P-value
		No	%		
Previous breast problems	Yes	10	33.3	0.07	0.78
	No	20	66.7		
(If Yes)	Cyst infection	5	50.0	2.56	0.27
	Nipple Secretion	5	50.0		
	pain	0	0		
(If Yes) The affected breast	Right	3	30.0	9.97	0.00
	Left	7	70.0		
(If Yes) Treatment	Surgically	4	40.0	7.41	0.06
	Medical	1	10.0		
	Both	3	30.0		
	None	2	20.0		

This table demonstrates that the highest percentage 66.7 % didn't have previous history of breast problems

Table (4) Distribution Family History of Women after Mastectomy in the study group

Variables	Groups	Study = 30		χ^2-test	P-value
		N	%		
Relative have cancer	Yes	6	20.0	0.88	0.34
	No	24	80.0		
Site of cancer	None	24	80.0	10.0	0.01
	Breast	0	0		
	Uterus	3	10.0		
	Lung	1	3.3		
	Prostate	2	6.7		
Relative relationship	None	24	80.0	7.50	0.27
	First degree	5	16.7		
	Second degree	1	3.3		

This table demonstrates that the highest percentage 80 % of study group their families didn't have a history of cancer.

Table (5) Assessment of Psychological Burdens and Spiritual Aspect of Women after Mastectomy related to the study group at Baseli

Domains		Item's No	Items	Yes				Never		Total	M
				Always		Sometimes					
				N	%	N	%	N	%		
Main	Sub										
Psychological Burdens	Thinking	1-	Thinking too much about what had happened to me	30	100.0	0	0	0	0	30	3
		2-	Thinking about the future of my disease(progress of disease)	30	100.0	0	0	0	0	30	3
		3-	Thinking too much about the future of my children and my family	30	100.0	0	0	0	0	30	3
		4-	Thinking too much about the cost of this disease	29	96.7	1	3.3	0	0	30	2.9
	Focus & Attention	1-	Suffering from forgetfulness	2	6.6	18	60.0	10	33.4	30	1.7
		2-	Can't follow up interview with the others	0	0	15	50.0	15	50.0	30	1.5
		3-	Don't have the ability to focus for a long time	1	3.3	12	40.0	17	56.7	30	1.4
		4-	Don't remember past events which happened to me	0	0	7	23.3	23	76.7	30	1.2
		5-	Don't remember all the events of the film when I finished it	0	0	1	3.3	29	96.7	30	1.0
	Anxious	1-	Feeling anxious for the future of my disease (progress of disease)	30	100.0	0	0	0	0	30	3
		2-	Feeling anxious for the future of my children	30	100.0	0	0	0	0	30	3
		3-	Feeling anxious for the cost of this disease	29	96.7	1	3.3	0	0	30	2.9
		4-	Feeling anxious, fear of the future	30	100.0	0	0	0	0	30	3
	Depression	1-	Feeling sad and depressed mood	13	43.3	17	56.7	0	0	30	2.4
		2-	Lack of desire to work	18	60.0	12	40.0	0	0	30	2.6
		3-	Lack of desire to speak	17	56.7	13	43.3	0	0	30	2.5
		4-	Feeling inactivity and lack of activity	25	83.4	5	16.6	0	0	30	2.8
		5-	Want to cry whenever I remember my disease	22	73.3	8	26.7	0	0	30	2.7
		6-	Want to loneliness and isolation	7	23.3	15	50.0	8	26.7	30	1.9
		7-	Become upset for no reason	22	73.3	8	26.7	0	0	30	2.7
		8-	Lack of interest in general appearance	24	80.0	6	20.0	0	0	30	2.8
	Positive Feels	1-	Breast tumors is a disease, like others it can be healed	20	66.6	10	33.4	0	0	30	2.6
		2-	Feeling that life is beautiful	13	43.3	17	56.7	0	0	30	2.4
		3-	Feeling that I'm still useful to my family and my society	15	50.0	15	50.0	0	0	30	2.5
		4-	The disease made me feel other patients suffering	28	93.4	2	6.6	0	0	30	2.8
		5-	The disease made me feel loved and supported by my family	28	93.4	2	6.6	0	0	30	2.8
		6-	The disease made me care about things I have neglected	29	96.7	1	3.3	0	0	30	2.9
	Negative Feels	1-	Lost my role and importance in my family	2	6.6	16	53.4	12	40.0	30	1.6
		2-	It made me hate myself	2	6.6	12	40.0	16	53.4	30	1.5
		3-	Lost interest in everything	14	46.7	16	53.4	0	0	30	2.4
		4-	Feeling that I cause my family sadness	28	93.4	1	3.3	1	3.3	30	2.9
		5-	Want to cry every time and thinking about the illness	25	83.4	5	16.6	0	0	30	2.8
		6-	Hate the way people feel sorry for me	30	100.0	0	0	0	0	30	3
Spiritual Aspect	Positive Beliefs	1-	It's a redemption for my sins	29	96.7	0	0	1	3.3	30	2.9
		2-	It taught me patience and endurance	29	96.7	0	0	1	3.3	30	2.9
		3-	It's a test for my faith	30	100.0	0	0	0	0	30	3
		4-	It made me want to help other people	30	100.0	0	0	0	0	30	3
		5-	Taught me not to envy or hate	30	100.0	0	0	0	0	30	3
	Negative Beliefs	1-	A punishment from god	1	3.3	14	46.7	15	50.0	30	1.5
		2-	Stopped doing my religious duties	1	3.3	22	73.3	7	23.3	30	1.8
		3-	Don't forgive peoples mistakes and flaws	5	16.6	14	46.7	11	36.7	30	1.8
		4-	Wonder what have done to deserve this	19	63.4	6	20.0	5	16.6	30	2.4

This Table depicts that the highest mean score(3) in items number 1, 2, and 3 related to the thinking, (1.7) in item number 1 related to the focusing and attention, (3) in items number 1, 2, and 4 related to the anxiety, (2.8) in items number 4and 8 related to the depression, (2.9) in item number 6 related to the positive feelings, (3) in item number 6 related to the negative feelings, (3) in items number 3, 4, and 5 related to the positive behavior of the spiritual aspect and (2.4) in item number 4 related to the negative behavior of the spiritual aspect.

Table (6) Assessment of Socio- sexual burdens of women after Mastectomy related to the study group at Baseline.

Domains		Item's No	Items	Yes				Never		Total	M
				Always		Sometimes					
Main	Sub			N	%	N	%	N	%		
Social Burdens	Family Relation ship	1-	More interactive with my family	20	66.6	9	30.0	1	3.3	30	2.6
		2-	Participate in solving my children's problems	21	70.0	9	30.0	0	0	29*	2.7
		3-	The disease didn't affect my family	18	60.0	12	40.0	0	0	30	2.6
		4-	Had moral and material support from family	7	23.3	16	53.4	7	23.3	30	2
		5-	Became very keen on my children	27	93.4	2	6.6	0	0	29*	2.9
		6-	Discomfort from my children because of my interference	1	3.3	8	27.5	20	68.9	29*	1.3
	Social Relation ship	1-	Doing my duties towards friends and relatives more than before	2	6.6	26	86.8	2	6.6	30	2
		2-	Feel comfortable while visiting friends and relatives	2	6.6	27	90.0	1	3.3	30	2.03
		3-	Became more willing to participate in family events and social occasions	1	3.3	26	86.8	3	10.0	30	1.9
		4-	Devoted my free time for charity	19	63.4	11	36.6	0	0	30	2.6
		5-	The illness had affected my job and my daily duties that I used to do	3	10.0	27	90.0	0	0	30	2.1
		6-	feel more comfortable when I am alone and away from people	0	0	25	83.4	5	16.6	30	1.8
		7-	stay away from amusing activities	1	3.3	27	90.0	2	6.6	30	1.9
	Married Relations hip	1-	My husband shows emotion and effecting towards me	22	73.3	8	26.7	0	0	30	2.7
		2-	The disease does not affecting the relationship with my husband	22	73.3	7	23.3	1	3.3	30	2.8
		3-	My husband listening to my anxiety	18	60.0	12	40.0	0	0	30	2.6
		4-	My husband doesn't care with my image as before	3	10.0	20	66.6	7	23.3	30	1.8
		5-	Does not care about my health progress and does not come with me...	3	10.0	12	40.0	15	50.0	30	1.6
Sexual Burdens		1-	Sex is a normal activity	29	96.7	1	3.3	0	0	30	2.9
		2-	Sex could be affected by the disease	27	90.0	3	10.0	0	0	30	2.9
		3-	Lack of sexual desire than before	25	83.4	5	16.6	0	0	30	2.8
		4-	Feeling discomfort and pain because of sex	21	70.0	9	30.0	0	0	30	2.7

This Table depicts that the highest mean score (2.9) in item number 5 related to the family relationship, (2.6) in item umber4 related to the social relationship, (2.8) in item number 2 related to the marital relationship, and (2.9) in items number 1 and 2 related to the sexual burdens.

Table (7) Effectiveness of Nursing Counseling on Psychological Burdens and Spiritual Aspect of study group at (pre, post-1 and post-2 periods).

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
	Depression	Pre	30	1.35	0.24	45.14	Pre X Post-1	0.000	HS
		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
	Positive Feels	Pre	30	1.02	0.07	33.89	Pre X Post-1	0.092	HS
		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
	Negative Feels	Pre	30	1.66	0.25	55.19	Pre X Post-1	0.000	HS
		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
Spiritual Aspect	Positive Believes	Pre	30	1.03	0.15	34.22	Pre X Post-1	1.000	NS
		Post-1	30	1.03	0.15	34.22	Pre X Post-2	0.326	NS
		Post-2	30	1.04	0.16	34.67	Post-1 X Post-2	0.725	NS
	Negative Believes	Pre	30	2.03	0.48	67.78	Pre X Post-1	0.000	HS
		Post-1	30	2.94	0.19	98.06	Pre X Post-2	0.000	HS
		Post-2	30	2.94	0.16	98.06	Post-1 X Post-2	1.000	HS

The findings of results according to the P-values for the three matching shows: Thinking and negative believes were highly significant differences had been obtained for the three matching (pre – post1, pre – post2, and post1 – post2), Anxious and Depression 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. Positive believes was no significant differences had been obtained for the three matching (pre – post1, pre – post2, and post1 – post2).

Table (8) Effectiveness of Nursing Counseling on Socio-Sexual Burdens of study group at (pre, post-1 and post-2 periods).

Sub Domains		Periods	No.	Grand MS	SD	RS %	Matched Paired	P-value	C.S.
Social Burdens	Family Relation ship	Pre	30	1.46	0.39	48.52	Pre X Post-1	0.266	NS
		Post-1	30	1.55	0.27	51.67	Pre X Post-2	0.159	NS
		Post-2	30	1.57	0.31	52.41	Post-1 X Post-2	0.752	NS
	Social Relation ship	Pre	30	1.76	0.13	58.75	Pre X Post-1	0.010	S
		Post-1	30	1.61	0.26	53.65	Pre X Post-2	0.000	HS
		Post-2	30	1.61	0.26	53.65	Post-1 X Post-2	1.000	NS
	Married Relation ship	Pre	30	1.37	0.26	45.78	Pre X Post-1	0.000	HS
		Post-1	30	2.02	0.28	67.33	Pre X Post-2	0.000	HS
		Post-2	30	1.99	0.27	66.22	Post-1 X Post-2	0.582	NS
Sexual Burdens		Pre	30	1.88	0.28	62.78	Pre X Post-1	0.000	HS
		Post-1	30	2.43	0.20	80.83	Pre X Post-2	0.000	HS
		Post-2	30	2.43	0.22	81.11	Post-1 X Post-2	0.876	NS

The findings of results according to the P-values for the three matching shows: Family Relationship was no significant differences had been obtained for the three matching (pre – post1, pre – post2, and post1 – post2). Social Relationship and Married Relationship and Social Relationship 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. 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 related to the sexual burdens.

Table (9) Effectiveness of nursing counseling on Main Domains of study group at (pre, **post-1 and post-2 periods)**

Main Domains	Periods	No.	Grand MS	SD	RS %	Matched Paired	P-value	C.S.
Psychological Burdens	Pre	30	1.44	0.07	47.98	Pre X Post-1	0.000	HS
	Post-1	30	2.11	0.16	70.23	Pre X Post-2	0.000	HS
	Post-2	30	2.26	0.15	75.26	Post-1 X Post-2	0.002	HS
Spiritual Aspect	Pre	30	2.50	0.22	83.44	Pre X Post-1	0.000	HS
	Post-1	30	2.96	0.12	98.58	Pre X Post-2	0.000	HS
	Post-2	30	2.95	0.11	98.36	Post-1 X Post-2	0.810	NS
Social Burdens	Pre	30	1.53	0.19	51.02	Pre X Post-1	0.000	HS
	Post-1	30	1.73	0.15	57.55	Pre X Post-2	0.000	HS
	Post-2	30	1.72	0.16	57.43	Post-1 X Post-2	0.914	NS
Sexual Burdens	Pre	30	1.88	0.28	62.78	Pre X Post-1	0.000	HS
	Post-1	30	2.43	0.20	80.83	Pre X Post-2	0.000	HS
	Post-2	30	2.43	0.22	81.11	Post-1 X Post-2	0.876	NS

The findings of results according to the P-values for the three matching shows: there were highly significant differences had been obtained for the three matching (pre – post1, pre – post2, and post1 – post2) related to ychological burdens, highly significant differences had been recorded for the two matched of testing (pre – post1, and pre – post2) except with the third matched (post1 – post2) no significant differences was obtained related to the spiritual aspect, social and sexual burdens.

Discussion

The study result shows that 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. 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 [10] 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 [11] who found that (67%) of

women with breast cancer had high level of education. Petro-Nustus [20] found that women's age, level of education, having heard or read about breast cancer, were found to be significant factors of communication and encourage health seeking behavioral change after mastectomy [12]. 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 a return to work rate of 82% of breast cancer survivors returned to work reported in a US breast cancer study [13]. Fismen and Stanghelle [14] conclude in his study that the counseling encouraged the patients to return to work and to become socially active again. Furthermore, the result regarding economic status have shown that the highest percentage of 46.7% of study sample at high level. This finding agree with study conducted by Robert et al. [15] 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 [15]. Pollon and Gustavasson, [16] also reported that breast cancer is the disease of the high socioeconomic class [16]. 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 [10] who stated that women having children after 30 years, have twice the risk of developing breast cancer, as women having children at age 20 years, 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 [17] also agree with Saudi study concluded that breast feeding in no way gives any protection to the patient [17]. American Cancer Society [18] 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 [18]. 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 [19] 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 [19]. 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 [20]. 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 [21].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 [22], which is consistent to results of this study. The study result shows that the highest percentage 66.7% didn't have previous history of breast problems. Benign breast disease is a generic term describing all non-malignant breast conditions, some of which carry an increased risk for breast cancer while others do not. Women with proliferative breast disease without atypia have a two-fold increased risk; whilst those with atypical hyperplasia have a more that four-fold increased risk [23].The study result shows that the highest percentage 80% their families didn't have a history of cancer. The finding of the study agree with Abeeret et al. [24] who reported in his study that over 85% of women who have a close relative with breast cancer will never develop the disease, and more than 85% of women with breast cancer have no family history of it. In developed countries it is estimated that hereditary factors contribute around a quarter of inter-individual differences in susceptibility to breast cancer, while environmental and lifestyle factors contribute the remaining three-quarters [24]. Regarding assess the psycho-social burdens of women after mastectomy related to the study group, the study result shows that the highest mean score (3) in items number 1, 2, and 3 related to the thinking, (1.7) in item number 1 related to the focusing and attention, (3) in items number 1, 2, and 4 related to the anxiety, (2.8) in items number 4 and 8 related to the depression, (2.9) in item number 6 related to the positive feelings, (3) in item number 6 related to the negative feelings, (3) in items number 3, 4, and 5 related to the positive behavior of the spiritual aspect and (2.4) in item number 4 related to the negative behavior of the spiritual aspect ,the highest mean score (2.9) in item number 5 related to the family relationship, (2.6) in item number 4 related to the social relationship, (2.8) in item number 2 related to the marital relationship, and (2.9) in items number 1 and 2 related to the sexual burdens. 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 [25]. Regarding effectiveness of nursing counseling on psycho-social 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) related to psychological burdens, highly significant differences had been recorded for the two matched of testing (pre – post1, and pre – post2) except

with the third matched (post1 – post2) no significant differences was obtained related to the spiritual aspect, social , and sexual burdens. The finding of the study agrees with Lieberman [26] reported that the participation in the counseling program leads to an improvement in the social-psychological functions in women with breast cancer [26]. 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 [27]. Margoosian [28] showed that the majority of strategies used by Iranian women to cope with breast cancer and accepted their disease was being positive on religious faith [28]. Many individuals extract positive meaning and benefit from their experience with cancer, reporting that it prompts enhanced family relationships, increased family relationships strength, deepened appreciation for life, greater spirituality, valued change in life priorities and goals [29]. The results of this study are similar to those of Matthews' research [30] who states that patients benefit from talking about their sexual issues and generally find more satisfaction in their life. It seems that the individual counseling is more effective for improving the sexual function because they can talk without shame about their sexual issues in a more relaxed environment [30].

Conclusion

-Approximately half of the study samples were at age range between (50-60) years old, third of them institute and college graduate.

-Two third of the study sample groups were at menopausal age, approximately three quarter of study sample groups were treated by radical mastectomy, and approximately half of them were the duration since mastectomy between 3-4 months.

-Highest mean of score related to the psycho-social burdens were refer to the thinking, anxiety, positive behavior, and sexual burdens.

- Highly significant differences had been obtained for the three matching (pre – post1, pre – post2, and post1 – post2) related to psychological burdens, highly significant differences had been recorded for the two matched of testing (pre – post1, and pre – post2) except with the third matched (post1 – post2) no significant differences was obtained related to the, socio- sexual burdens and spiritual aspect.

Recommendations

- Establishment of a counseling center in the breast cancer clinics to delegating caring responsibility to breast cancer patients.

- Construction of 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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