Effectiveness of an Instructional Program on Health-Related Quality of Life for Breast Cancer Patients Undergoing Chemotherapy

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ABSTRACT:

Background: Breast cancer is one of the most common cancers among women in the world. This study aims to assess the effectiveness of the instructional program on Health-Related quality of life in breast cancer women undergoing chemotherapy in Al-Anbar, Iraq.

Methods: A quantitative study was conducted among 59 breast cancer patients, the 59 study sample has been exposed to the instructional program. The instrument used in this study were The European Organization for Research and Treatment of Cancer (EORTC) QLQ-C30 and QLQ-C23 questionnaire.

Results: The study finding shows, the patients appeared poor quality of life in the pre-test before the instructional program, but after the program in the post-test, the quality of life improved, which means that the effectiveness of the instructional program improved the patient's quality of life.

Conclusion: The majority of the sample have a low quality of life in the pre-test, the patients who were exposed to the instructional program noticed improved quality of life.

Recommendation: The study urges an increase in educational programs for patients to raise awareness about a healthy quality of life during chemotherapy, as well as to support patients psychologically and physically.

Keywords: Quality of Life, Breast Cancer, Chemotherapy, Two Original Scale

INTRODUCTION:

One of the major causes of death globally and the primary health issue still faced worldwide is cancer [2,9,]. Where the death rate from cancer will increase from 45% in 2007 to 65% in 2030 mortality, causing at least 8 million deaths yearly [8,16]. Breast cancer is the most prevalent cancer among adults with more than 2.3 million cases diagnosed each year. Breast cancer is the primary or secondary cause of mortality for women from cancer in 95% of the world's countries [5]. Breast cancer is a complex disease that often begins as a localized lesion in the breast and progresses to an invasive malignancy that targets the armpit lymph nodes and other organs [7].

Chemotherapy is a common breast cancer therapy that uses drugs to stop or slow the growth of breast cancer cells [4,14]. Chemotherapy shrink's tumors and decreases cancer symptoms, which helps treat or palliate the disease [3,15].

Quality of life (QOL) is a broad notion that refers to an individual's awareness of the way a disease and its treatment affects his or her health, well-being, or ability to perform in the physical, psychological, and social areas of life [6]. One of the health issues that oncology patients worry about the most is quality of life (QOL). Patients see it as a specific and multifaceted type of patient-reported outcomes (PROs) that includes the patients' social, financial, psychosocial, and physical activities [1].

Materials and Methods:

A quantitative design for study sample, was used to guide this study. That is stated earlier to assess the effectiveness of an instructional program on health-related quality of life for breast cancer patients undergoing chemotherapy. This study started from November 2022 to 10 Abril 2023, In a non-probability (purposive) sample of 59 patients who have breast cancer undergoing chemotherapy, the 59 study sample has been exposed to the instructional program. This sample is selected according to inclusion and exclusion

criteria, and the data were analyzed by the application of descriptive and inferential statistical methods.

Results:

Table 1: Descriptive Statistic of Sample Demographical Characteristics N=59 Patients:

Variables	Groups	Study Group	
		F	%
Age groups	18-27	1	1.7
	28-37	9	15.3
	38-47	26	44.0
	48-57	13	22.0
	58-67	8	13.6
	67 and above	2	3.4
	Total	59	100.0
Body Max Index	18.5-24.9	13	22.0
	25-29.9	21	35.6
	30 and above	25	42.4
	Total	59	100.0
Family history	Yes	11	18.6
	No	48	81.4
	Total	59	100.0

Table (4-1) illustrated the demographical data of the study groups the of study sample. The majority of the study sample age was within the age group 38-47 years accounted for (44.1%). The body mass index BMI 30 and above accounted for the study sample (42.4 %). Regarding the question of family history, most of the study sample respondents answer no. relationship of kinship questions the majority of all of the study sample respondents answers none.

Table (2): Comparison of Sub-Scales of Health-Related Quality of Life Scale of the Study sample at The Pre-Test and Post-Test Periods in The Studied Breast Cancer Samples Undergoing Chemotherapy

Sub-scales of Health Related, QOL	Pre Test			Post Test		
	M.S	SD.	Ass.	M.S	SD.	Ass.
1. Global Health Status (QLQ-C30)	3.54	1.103	M	4.77	0.744	M
2. Functional Scale (the QLQ-C30)						
Physical Functioning	1.66	0.555	L	2.03	0.673	M
Role functioning	1.54	0.631	L	2.09	0.878	M
Emotional functioning	1.94	0.725	L	2.72	0.939	M
Cognitive functioning	1.94	0.602	L	2.30	0.748	M
Social functioning	1.98	0.900	L	2.29	0.956	M
4. Symptom Scales/items (the QLQ-C30)						
Fatigue	2.60	0.638	M	1.79	0.404	L
Appetite loss	2.16	0.874	M	1.59	0.697	L
Insomnia	2.37	0.945	M	1.59	0.697	L
Pain	2.16	0.745	M	1.68	0.507	L
Nausea & vomiting	1.73	0.597	L	1.32	0.391	L
Constipation	1.64	0.905	L	1.40	0.619	L
Diarrhea	1.59	0.722	L	1.33	0.477	L
Dyspnea	1.98	0.955	L	1.42	0.593	L
Financial difficulties	2.98	0.918	M	2.88	1.035	M
5. Functional Scales/ items (the QLQ-PR23)						
Body image	1.41	0.375	L	2.30	0.830	M
Future perspective	1.40	0.619	L	2.40	1.205	M
Sexual enjoyment	1.49	0.626	L	1.66	0.709	L
Sexual functioning	1.72	0.638	L	1.94	0.735	L
6. Symptom Scales/ items (the QLQ-PR23)						
Systemic therapy side effects	2.36	0.543	M	1.92	0.362	L
Upset by hair loss	2.94	1.134	M	2.15	0.812	M
Arm symptoms	1.89	0.812	L	1.28	0.359	L
Breast symptoms	1.68	0.660	L	1.23	0.245	L

Table (2) presented a descriptive comparison of sub-scales of health-related quality of life scale of the study group at the pre-test and post-test periods in the studied breast cancer samples undergoing chemotherapy. It can be found from the current findings reported that the "Global Health Status" sub-scale mean score increased after applying for the instructional program in addition most functional sub-scales demonstrated increased mean scores after applying for the program as compared with the pre-test period. Furthermore, this table showed that symptoms sub-scales had low mean score levels after applying for the instructional program as compared with the pre-test period.

Discussion:

Table (1) illustrated the demographical data of the study groups the of study sample. The majority of the study sample age was within the age group 38-47 years accounted for (44.1%). Breast Cancer: demographic characteristics and clinic-pathological Presentation of Patients in Iraq. A Case recording and clinical examination design, at the Training Centre for Early Detection of Breast Tumours in the Medical City Teaching Hospital in Baghdad, Iraq. That find this study was carried out on (721) out of a total of 5044 patients (14.3%) presenting with breast cancer diagnosed at the age (of 40-49) years [12].

The body mass index BMI 30 and above accounted for the study sample (42.4 %). A study (Dietary Habits of Iraqi Women with Breast Cancer at Oncology Hospitals in Baghdad City: Comparative Study) shows the highest percentage is referring that women being overweight in both groups; the case and study 38% and 44% [10].

Regarding the question of family history, most of the study sample respondents answer no. relationship of kinship questions the majority of all of the study sample respondents answers none. A descriptive study (Assessment of Breast Tumors among Iraqi Women at Women Health Center in Baghdad City: Comparative Study Introduction), in the Al-Rsafa sector including (100) Iraqi women this study shows The highest percentage of women more than half (76%) had no known family history of breast cancer, (85%) had no prior incidence of breast cancer in their first-degree relatives, (84%) had no prior incidence of breast cancer in their second-degree relatives, (75%) had no current family members with cancer, (81%) had no other types of cancer in their families, and the highest percentage of women (76%) had no breast cancer at all [11].

Table (2) presented a descriptive comparison of sub-scales of health-related quality of life scale of the study group at the pre-test and post-test periods in the studied breast cancer samples undergoing chemotherapy. It can be found from the current findings reported that the "Global Health Status" sub-scale mean score increased after applying for the instructional program in addition most functional sub-scales demonstrated increased mean scores after applying for the program as compared with the pre-test period. Furthermore, this table showed that symptoms sub-scales had low mean score levels after applying for the instructional program as compared with the pre-test period.

Assessing the Quality of Life in Breast Cancer Women: A Cross-Sectional Descriptive Study, including 150 females diagnosed with breast cancer at the Oncology Teaching Hospital/ Medical City Complex in Baghdad, Iraq. The results show that in the case of the working participants, the emotional status was shown to be significant (P=0.027) [13].

Conclusion:

The majority of the sample in both the study and control group have a low quality of life before the instructional program. The patients who were exposed to the instructional program noticed improved quality of life, unlike the patients who were not exposed to the program and still have a limited quality of life. The result appeared (good and moderate) to assess the level of quality of life in follow-up for the study group after 21-day duration after the instructional program from the post-test.

Recommendations:

The study urges an increase in educational programs for patients to raise awareness about a healthy quality of life during chemotherapy, as well as to support patients psychologically and physically.

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Conflict of Interest: None

Ethical Clearance: Performed in compliance with accepted standards and approved by the Department of adult Nursing, College of Nursing, University of Baghdad.

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