



Evaluation of Quality of Life for Women With Breast Cancer

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Abstract

Background/Aim: One of the therapeutic outcome metrics for women with breast cancer is quality of life (QoL). The purpose of the following study was to evaluate the QoL of women with breast cancer who were getting therapy or on follow-up at the Oncology Teaching Hospital in Medical City, Baghdad, Iraq.

Methods: A convenient sample of 100 women was selected from the Teaching Oncology Hospital at Medical City in Baghdad City. For the purposes of the study, a questionnaire was constructed. Physical, role, emotional, cognitive and social functioning were its five functional domains. Each study participant received a questionnaire explaining how to complete it, along with a form requesting their approval to remain anonymous. They also got the opportunity to leave the study at any time without being provided an explanation. A panel of 10 experts determined the questionnaire's content validity and its internal consistency reliability was calculated using the split-half method and the Cronbach α correlation coefficient of $r = 0.92$. Data were collected using the study questionnaire and analysed using a descriptive statistical data analysis approach based on frequency and percent.

Results: The study findings depict that most of the women with breast cancer were 31-49 year old and they accounted for 43 % of the studied sample. Most of these women had problems with their emotional, social and role functioning.

Conclusion: Breast cancer affects many elements of life, but it has the largest influence in modern culture on social and emotional functioning, as well as role functioning. A multidisciplinary team working with affected women would be advantageous in enhancing the QoL of breast cancer patients, particularly in the most compromised aspects of their health.

Key words: Evaluation; Quality of life; Women; Breast cancer.

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Introduction

Breast cancer is contributing for 12.5 % of all newly diagnosed cases of cancer every year. In many areas of the globe, breast cancer is the most common cancer in women and one of the major causes of cancer-related mortality.¹ A woman's risk nearly doubles if she has a first-degree fam-

ily with breast cancer (mother, sister or daughter). In 15 % of affected women a family member had a breast cancer.² Approximately 85 % of all incidences of breast cancer are caused by women who have no family history of the disease. They are produced by genetic alterations resulting



from aging and life in general, rather than inherited mutations.¹

One of the therapeutic outcome metrics for women with breast cancer is quality of life (QoL). QoL is influenced by a variety of factors in breast cancer patients. These variables include socioeconomic position, level of education, job status, mental issues and financial considerations.² The impact of the diagnosis, the impact of disease management and the development of the condition on everyday activities and recovery are all factors in the complicated and multifaceted assessment known as QoL. QoL is currently considered as a measure of the effectiveness of cancer care and treatment. QoL when used to assess psychological, physical and social health, gives insight into everyday life for patients receiving breast cancer therapy.³

Financial troubles that may have an impact on savings and property may be experienced by breast cancer patients. Income loss, increased health-care costs and reductions in paid and unpaid job are all major causes of financial burden for breast cancer patients, who could find it difficult to pay for needs like food and clothes.⁴ Good health is one of, if not the most significant element for excellent QoL.^{5,6}

Physical symptoms and psychological distress have a detrimental impact on breast cancer patients' QoL. Some of the components that comprise QoL in general include physical functioning, mental well-being (such as anxiety and depression symptoms) and social support.⁷

The purpose of the following study was to evaluate the QoL of women with breast cancer who were getting therapy or were on follow-up at the Oncology Teaching Hospital in Medical City, Baghdad, Iraq.

Methods

The present study used the descriptive design with application of evaluation approach. A convenient sample of 100 women, with breast cancer was selected from the Teaching Oncology Hospital at Medical City in Baghdad City, Iraq. Study was carried out from January 2023 to June 2023.

For the purposes of the study, a questionnaire was constructed. Physical, role, emotional, cog-

nitve and social functioning were its five functional domains. These domains were evaluated as low, moderate and high. Inclusion criteria included women with breast cancer, aged 18 years and older. Exclusion criteria included women aged 75 years and older, because these ages do not have stability in physical, role, emotional, cognitive and social functioning.

Each study participant received a questionnaire explaining how to complete it, along with a form requesting their approval to remain anonymous. They also got the opportunity to leave the study at any time without being provided an explanation. A panel of 10 experts determined the questionnaire's content validity and its internal consistency reliability was calculated by using the split-half method and the Cronbach α correlation coefficient of $r = 0.92$. Data were collected using the study questionnaire and analysed using a descriptive statistical data analysis approach based on frequency and percent.

Results

Out of 100 women, most of the women with breast cancer were 31-49 year old and they accounted for 43 % of studied sample, followed by 32 % of women aged 50-59 (Table 1).

Table 1: Distribution of the sample by age

Age (years)	Women with breast cancer	
	N	%
≤ 30	4	4
31 – 49	43	43
50 – 59	32	32
60 – 69	13	13
≥ 70	8	8
Total	100	100

N: number of patients; %: percentage;

Table 2: Evaluation of quality of life (QoL) in women with breast cancer

Domains	Low	Moderate	High
Physical functioning	20 (20 %)	30 (30 %)	50 (50 %)
Role functioning	56 (56 %)	24 (20 %)	20 (20 %)
Emotional functioning	90 (90 %)	10 (10 %)	0 (0 %)
Cognitive functioning	10 (10 %)	30 (30 %)	60 (60 %)
Social functioning	60 (60 %)	20 (20 %)	20 (20 %)

Most of the women with breast cancer had problems with their emotional, social and role functioning (Table 2).

Discussion

Throughout the course of data analysis, the study findings depict that women with breast cancer were mostly early to middle age. This may be due to genetic risk factors or may be due to infertility and the use of contraceptives. Breast cancer has a one in 69 probability of occurring in women between the age 40-60. That risk rises to one in 43 in age 50-60 and in 60-70 age group, the possibility is one in 29. Additionally, in women aged 70 and older, there is a one in 26 is at risk of contracting the disease.⁸

A cross-sectional research of 96 female breast cancer patients was carried out to examine the QoL of breast cancer patients who were sent to the Surgical Department of King Salman Armed Forces Hospital in Saudi Arabia for therapy and follow-up. According to the study, one-third of the patients (31.3 %) were over 48 years of age and 29.2 % were in the aged 18-27 years.⁴ Another cross-sectional research was performed on 100 breast cancer patients, the study depicts that the mean age was 60 year for these women.⁹

The study's results in terms of their QoL confirm that the domains of emotional, social and role functioning of such quality were affected due to emerging breast cancer. Such effect is well-noticed in the low levels of these domains. A comprehensive systematic review was conducted and meta-analysis has examined a total of 9012 patients with breast cancer. The results revealed that the domain of social functioning of the QoL is found to be highly influenced by breast cancer. Those who had finished the therapy scored better on QoL than those who were still undergoing treatment.¹⁰

A case-control study, on a total of 356 breast cancer survivors was conducted and breast cancer survivors reported poor QoL in the domain of cognitive performance.¹¹ A cross-sectional study of 140 patients with breast cancer was performed and the findings showed that breast cancer has a massive influence on the physical and role functioning components of these women's QoL.¹² Another cross-sectional research of 96 women with breast cancer revealed that cancer stage is significantly influenced the physical and social functioning.⁴

A cross-sectional study was carried out on 100 woman with breast cancer. The study depict that breast cancer has been identified as having negative impact upon the domains of QoL.⁹ Another cross-sectional study was steered on 112 woman with breast cancer. The findings show that the domains of physical and role functioning of these women's QoL are greatly affected by breast cancer.¹³ Another cross-sectional study was done in Saudi Arabia to measure the QoL in breast cancer patients. The study findings present that patients scored higher on the emotional functioning as the domain of such quality.¹⁴

Conclusion

Breast cancer affects many elements of life, but it has the largest influence in modern culture on social and emotional functioning, as well as role functioning. A multidisciplinary team working with affected women would be advantageous in enhancing the QoL of breast cancer patients, particularly in the most compromised aspects of their health.

Ethics

Written permission has not been sought from the local ethics committee, since it was a non-invasive and non-interventional study. This publication contains no data that could reveal the identity of the participating patients.

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None.

Conflicts of interest

The authors declare no conflict of interest.

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Data access

The data that support the findings of this study are available from the corresponding author upon reasonable individual request.

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References

- Garrido-Cano I, Céspedes MT, Carbonell-Asins J, Peña C, Burgues O, Tebar C, et al. 74P Transcriptomic profile identifies biological differences in very young women with breast cancer. *ESMO Open.* 2023;8(1):101297. doi:10.1016/j.esmoop.2023.101294.
- Yusoff J, Ismail A, Abd Manaf MR, Ismail F, Abdullah N, Muhammad R, et al. Quality of life of women with breast cancer in a tertiary referral university hospital. *Health Qual Life Outcomes.* 2022 Jan 29;20(1):15. doi: 10.1186/s12955-022-01921-1.
- Al Zahrani AM, Alalawi Y, Yagoub U, Saud N, Siddig K. Quality of life of women with breast cancer undergoing treatment and follow-up at King Salman Armed Forces Hospital in Tabuk, Saudi Arabia. *Breast Cancer (Dove Med Press).* 2019 May 27;11:199-208. doi: 10.2147/BCTT.S200605.
- Jhajharia S, Verma S, Kumar R. Quality of life in breast cancer survivors in India: factors and importance. *Int J Cancer Res.* 2017;13:36-40. doi: 10.3923/ijcr.2017.36.40
- Paterson C. Quality of life measures. *Br J Gen Pract.* 2010 Jan;60(570):53. doi: 10.3399/bjgp10X482121.
- Taay Y, Mohammed M, Abbas R, Ayad A, Mahdi M. Determination of some biochemical parameters in sera of normotensive and hypertensive obese female in Baghdad. *J Physics: Conf Ser.* 2021;1853:012037. doi:10.1088/1742-6596/1853/1/012037.
- Perry S, Kowalski TL, Chang C-H. Quality of life assessment in women with breast cancer: benefits, acceptability and utilization. *Health Qual Life Outcomes.* 2007 May 2;5:24. doi: 10.1186/1477-7525-5-24.
- Kahler-Ribeiro-Fontana S, Pagan E, Magnoni F, Vicini E, Morigi C, Corso G, et al. Long-term standard sentinel node biopsy after neoadjuvant treatment in breast cancer: a single institution ten-year follow-up. *Eur J Surg Oncol.* 2021 Apr;47(4):804-12. doi: 10.1016/j.ejso.2020.10.014.
- Lopes JV, Bergerot CD, Barbosa LR, Calux NMDCT, Elias S, Ashing KT, et al. Impact of breast cancer and quality of life of women survivors. *Rev Bras Enferm.* 2018 Nov-Dec;71(6):2916-21. doi: 10.1590/0034-7167-2018-0081.
- Chen X, Shi X, Yu Z, Ma X. High-intensity interval training in breast cancer patients: A systematic review and meta-analysis. *Cancer Med* 2023 Sep;12(17):17692-705. doi: 10.1002/cam4.6387.
- Carreira H, Williams R, Dempsey H, Stanway S, Smeeth L, Bhaskaran K. Quality of life and mental health in breast cancer survivors compared with non-cancer controls: a study of patient-reported outcomes in the United Kingdom. *J Cancer Surviv.* 2021 Aug;15(4):564-75. doi: 10.1007/s11764-020-00950-3.
- Park J-H, Jung YS, Kim JY, Bae SH. Determinants of quality of life in women immediately following the completion of primary treatment of breast cancer: A cross-sectional study. *PLoS One.* 2021 Oct 15;16(10):e0258447. doi: 10.1371/journal.pone.0258447.
- Tiezzi MF, de Andrade JM, Romão AP, Tiezzi DG, Leri MR, Carrara HA, Lara LA. Quality of Life in Women With Breast Cancer Treated With or Without Chemotherapy. *Cancer Nurs.* 2017 Mar/Apr;40(2):108-116. doi: 10.1097/NCC.0000000000000370.
- Kassem L, Alsirafy S. Adaptation of Arabic translations of cancer patient-reported outcomes assessment tools: an unmet need. *Res Oncol.* 2016;12(2):31-2. doi: 10.21608/RESONCOL.2017.697.1017