# Correlation between social support and quality of life among women with breast cancer 

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Objectives: To find out the correlation between social support and quality of life among women with breast cancer.
Methodology: inferential correlational study was started at 1 October, 2022 to 5 April, 2023, A non-probability (purposive) sample consist of (150) women diagnosed with breast cancer who attending oncology teaching hospital was chosen based on a set of criteria. The questionnaire was constructed based on prior studies and a review of relevant literature. It was assessed by a direct supervisor and a panel of specialists, who recommended that some items be changed, and thereafter all of the suggested adjustments were implemented. The data were analysed and interpreted through use of the application of Statistical Package for Social Sciences (SPSS), version 26.0.
Results: Findings depicts that there is a high significant correlation (strong positive) between social support and quality of life among women with breast cancer as seen with high significant positive correlation at p-value $=0.001$.
Conclusion: There is high significant correlation (strong positive) between social support and quality of life among women with breast cancer as seen with high significant positive correlation.
Recommendations: The quality of life of patients with breast cancer needs more attention by the health care facilities, especially that of community health.
Key words: quality of life, social support, breast cancer

[^0]Word count: 3682 Tables: 03 Figures: 01 References: 21

Received:- 15 April, 2023, Manuscript No. OAR-23-98047
Editor assigned:-18 April, 2023, Pre-QC No. OAR-23-98047 (PQ)
Reviewed:- 25 April, 2023, QC No. OAR-23-98047 (Q)
Revised:- 02 May, 2023, Manuscript No. OAR-23-98047 (R)
Published:- 20 May, 2023, Invoice No. J-98047

## INTRODUCTION

The concept of "social support" has been used to describe the buffering effects of interpersonal interactions in the face of adversity [1]. Although the benefits of social support for both patients and careers may vary depending on the stage and location of cancer, research shows that it is generally beneficial throughout treatment [2].
Women with breast cancer who have social support are less likely to worry about dying and more likely to recover [3]. Women with breast cancer who have strong social networks are better able to cope with the disease and its treatment. Patients' long-term emotional and physical functioning improves significantly while their social support decreases [4].

Quality of Life (QoL) refers to a person's level of health and happiness relative to their current social and material circumstances. People's degree of functionality, health, and psychological factors affect their QoL [5]. Life satisfaction is intrinsically linked to overall happiness. Since there are commonalities between the two in how they approach the idea of happiness [6].

Quality of life ( QoL ) is a complex, multifaceted notion that reflects patients' impressions of the influence of diagnosis and commencement of treatment on daily life. QoL encompasses patients' judgements of their physical, psychological, social, and spiritual well-being. Because of its importance in managing patients' symptoms and treatments and assessing treatment outcomes, the quality of life of breast cancer patients has recently been the subject of greater research. The quality of life of breast cancer survivors has been linked to factors such as social support, self-efficacy, and hope. The promotion of healthy coping techniques and access to professional medical or social service care are examples of the more formal forms of social support. The presence of caring friends and family members can make all the difference in the world when dealing with adversity. The quality of life for breast cancer patients can be enhanced by increasing their social support networks [7].

## METHODOLOGY

## Design of the study

Inferential correlational study was started at 1 October, 2022 to 5 April, 2023,

## Ethical considerations

The first ethical approval was obtained from the Research Ethical Committee at the University of Baghdad / College of Nursing, No. (3) Date. 4/12/2022. Before starting to collect data from the sample participating in the study, a brief explanation was provided about the scientific background of the research and the purpose of conducting it. The women were informed of the objectives of the study and asked to participate, and this participation was voluntary. A signed consent was taken from the participating women, and they were informed that the information would be strictly confidential and for scientific research purposes only.

## Setting of the study

The study was conducted in the Medical City Department/ Teaching Oncology Hospital. The hospital opened in 2020, after it was a specialized center in the treatment of oncology, to transform into an integrated hospital in terms of furniture, medical and administrative staff, and provides the best medical and health services to patients and auditors. It annually receives more than 65,692 patients in various consultations, including: breast tumors and gynecological diseases, dental and digestive system, blood diseases and tumors, and oncology consultants for thyroid diseases, in addition to that the medical staff is fully qualified to use different types of treatment provision, as it is very dangerous in If misused, this hospital is considered one of the leading hospitals in the treatment of cancerous tumors of all kinds, and is not limited to one specific type.

## Sample of the study

A non-probability (purposive) sample consist of (150) women diagnosed with breast cancer who attending oncology teaching hospital was chosen based on a set of criteria, which include the following:
Inclusions criteria:

1. Women who are diagnosed with breast cancer.
2.Women who are different age groups (Reproductive and menopause).
3.Women without mastectomy.

Exclusion criteria:
1.Women with mastectomy.

## The study instrument

The questionnaire was constructed based on prior studies and a review of relevant literature. It was assessed by a direct supervisor and a panel of specialists, who recommended that some items be changed, and thereafter all of the suggested adjustments were implemented.

## Data collection methods

The data was collected through the use of a questionnaire. The interview techniques which used on individual bases, and each interview ( 20 minutes- 25 minutes) after taking the important steps that must be included in the study design.

## Data analysis

The data were analyzed and interpreted through use of the application of Statistical Package for Social Sciences (SPSS), version 26.0.

## RESULTS

The descriptive analysis shows that average age for women with breast cancer refers to 31.8 years $\pm 9$ years in which the highest percentage seen with age group of " 50 -less than 60 years" among $38.7 \%$ of them (Table 1).
Regarding monthly income, $74 \%$ of women perceive barely sufficient monthly income. The marital status reveals that $86 \%$

Tab. 1. Distribution of women according to
their socio-demographic characteristics

| List | SDVs | Classifications | f | \% |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Age (years) $\mathrm{M} \pm \mathrm{SD}=31.8 \pm 9$ | Less than 40 | 2 | 1.3 |
|  |  | 40 - less than 50 | 30 | 20 |
|  |  | 50 - less than 60 | 58 | 38.7 |
|  |  | 60 - less than 70 | 53 | 35.3 |
|  |  | 70 and more | 7 | 4.7 |
|  |  | Total | 150 | 100 |
| 2 | Perceived Monthly income | Insufficient | 18 | 12 |
|  |  | Barely sufficient | 111 | 74 |
|  |  | Sufficient | 21 | 14 |
|  |  | Total | 150 | 100 |
| 3 | Marital status | Unmarried | 2 | 1.3 |
|  |  | Married | 129 | 86 |
|  |  | Divorced/separated | 7 | 4.7 |
|  |  | Widowed/er | 12 | 8 |
|  |  | Total | 150 | 100 |


| 4 | Level of education | Doesn't read \& write | 14 | 9.3 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Read and write | 25 | 16.7 |
|  |  | Primary school | 33 | 22 |
|  |  | Intermediate school | 26 | 17.3 |
|  |  | Preparatory school | 26 | 17.3 |
|  |  | Diploma degree | 16 | 10.7 |
|  |  | Bachelor degree \& more | 10 | 6.7 |
|  |  | Total | 150 | 100 |
| 5 | Occupation | Employee | 10 | 6.7 |
|  |  | Housewife | 125 | 83.3 |
|  |  | Retired | 8 | 5.3 |
|  |  | Free works | 7 | 4.7 |
|  |  | Total | 150 | 100 |
| 6 | Residency | Urban | 103 | 68.7 |
|  |  | Rural | 47 | 31.3 |
|  |  | Total | 150 | 100 |

f: Frequency, \%: Percentage, M: Mean, SD: Standard Deviation


Fig. 1. Scatter of quality of life by social support

| Tab. 2. Correlation between perceived social <br> support and quality of life among women <br> with breast cancer $(N=150)$ | Social support | Pearson correlation | p-value |
| :--- | :--- | :--- | :---: | :---: |
|  | Quality of life | $.497^{* *}$ | 0.001 |

${ }^{* *}$ Correlation is significant at the 0.01 level (2-tailed).

| Tab. 3. Significant difference in quality of life among women with breast cancer with regard to their age | Qol | Source of variance | Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Physical health | Between Groups | 537.2 | 4 | 134.3 | 5.473 | 0.001 |
|  |  | Within Groups | 3558.134 | 145 | 24.539 |  |  |
|  |  | Total | 4095.333 | 149 |  |  |  |
|  | Psychological health | Between Groups | 966.86 | 4 | 241.715 | 1.71 | 0.151 |
|  |  | Within Groups | 20490.614 | 145 | 141.315 |  |  |
|  |  | Total | 21457.473 | 149 |  |  |  |
|  | Social health | Between Groups | 853.475 | 4 | 213.369 | 5.067 | 0.001 |
|  |  | Within Groups | 6105.865 | 145 | 42.109 |  |  |
|  |  | Total | 6959.34 | 149 |  |  |  |
|  | Spiritual health | Between Groups | 796.707 | 4 | 199.177 | 5.969 | 0.001 |
|  |  | Within Groups | 4838.467 | 145 | 33.369 |  |  |
|  |  | Total | 5635.173 | 149 |  |  |  |
|  | Overall | Between Groups | 5335.766 | 4 | 1333.941 | 3.65 | 0.007 |
|  |  | Within Groups | 52986.607 | 145 | 365.425 |  |  |
|  |  | Total | 58322.373 | 149 |  |  |  |

df: Degree of Freedom, F: F-Statistic, Sig: Significance
of women are married and only $1.3 \%$ of them are still unmarried.
Concerning the level of education, the highest percentage refers to "primary school graduation" among $22 \%$ of women. The occupational status indicates that $83.3 \%$ of women are housewives while only $6.7 \%$ of them are working as governmental employee.

Regarding residency, about two third of women are resident in urbans ( $68.7 \%$ ) and $31.3 \%$ are resident in rural.
Table 2 exhibits that there is high significant relationship (strong positive) between social support and quality of life among women with breast cancer as seen with high significant positive correlation at p -value $=0.001$.
Figure 1 describes the positive relationship between social support and quality of life; the quality of life is increase by increasing social support.

Table 3 reveals that there is significant difference in overall score of quality of life with regard to women's age at p -value $=.007$. The significant differences are indicated among physical health, social health, and spiritual health with regard to women's age at p -values $=.001, .001$, and .001 .

## DISCUSSION

Discussion of the distribution of women according to their sociodemographic characteristics.
Findings show that average age for women with breast cancer refers to 42 years in which the highest percentage seen with age group of " 50 years-less than 60 years" among more than one third of them.

According to the researcher as women aging, their risk of developing breast cancer increases, which could explain why the majority of breast cancer cases are seen in women over the age of 50 . This is due to the accumulation of genetic mutations, hormonal changes, and lifestyle factors that increase the risk of breast cancer with age.
The result of the present study agrees with a study conducted in Malaysia were the mean age of the subjects is 55.1 years old [8]. Another study demonstrates that the highest percentage of the women (29\%) were in age group ( 40 years- 49 years) [9,10]. While in contrast with our study regarding age group a study conducted in Baghdad showed that the patients were mainly in the age group 20 years-29 years, 46 patients ( $39 \%$ ) [11].
The median age of the participants in a study that took place in Addis Ababa in 2019 was 40 years old, this result disagrees with that of the present study [12,13]. Also, a study conducted in China in 2016, found that the average age at diagnosis was 57.7 years [ 14,15 ], this agrees with that of the present study.
Regarding monthly income, two thirds of women perceive barely sufficient monthly income. According to the researcher this finding expected in the Iraqi society as most of the peoples live with middle monthly income and the burden of chronic disease and cancer effect their income sufficiency.
The results of the current study agree with that of a Brazilian study conducted in 2017, were the predominant monthly income was individuals with annual household income between US $\$ 447.00$ and US $\$ 672.00$ [16]. In the same line, about one third (29.4\%) of
the women mentioned in a study conducted in Addis Ababa were having financial crisis in their family in the last 1 year [17].
The marital status reveals that the vast majority of women are married and only $1.3 \%$ of them are still unmarried.

According to the researcher cultural norms and values play a significant role in shaping the marital status of women. In iraq, marriage is considered an essential social and cultural institution, and women are expected to get married and have children.
This result compatible to a study conducted in Baghdad, Iraq in 2019 were it showed that ( $84 \%$ ) of the women were married. In the same context a study conducted in Brazil in 2017 revealed that women who lived with their partners compose (69.4\%) of the participants [16].
While, out of the total 428 women included in a study took place in Addis Ababa, 242 ( $56 \%$ ) of them were married, 69 (16.1\%) were widowed and $50(11.7 \%)$ were divorced. This result disagrees with that of the present study, as it found that the vast majority of the participants are married. A chines study stated that the majority of breast cancer patients were married ( $90.5 \%$ ).

Concerning the level of education, the highest percentage refers to "primary school graduation" among one quarter of the women.
From the researcher's perspective women from disadvantaged backgrounds or rural areas may have limited access to educational opportunities due to financial constraints, cultural norms, and geographic barriers. In some cases, girls may be taken out of school early to help with household chores or to get married. These factors could contribute to the higher percentage of women who completed only primary school.
In agreement with our study, a study conducted in Baghdad, Iraq discovered that about half of the women ( $51 \%$ ) their education was primary school. Also, a study conducted in Brazil found that two thirds of the women had primary education (67.8\%) [18].
In contrast with the present study, a study took place in Ethiopia depicts that more than one fourth, (30.1\%), completed secondary school education. In the same ward a study in China stated that most of the women attained an education level higher than the middle school (79.0\%).

The occupational status indicates that most of women are housewives while only seven percent of them are working as governmental employee.
According to the researcher cultural norms and gender stereotypes can limit women's participation in the labour force. In many societies, women are expected to prioritize domestic and family responsibilities over paid work. This could be particularly true in more conservative or traditional societies, where gender roles are more rigidly defined.
A study conducted in Baghdad agree with our results, as regarding occupation ( $85 \%$ ) of the study sample were housewives. While a study conducted in Ethiopia disagree with our results as (19.4\%) are illiterate and nearly half ( $47 \%$ ) are housewives.
With regard to governmental employing the same study which conducted in Ethiopia found that one fifth (19.4\%), were governmental employees. In contrast with our study, a study in China found that most of the women are employed (78.4\%) [19].

Regarding residency, about two thirds of women are resident in related stress but not between social support and physical quality urbans and one third are resident in rural. of life.

This can be explained as economic opportunities are often In the same line with the current results a study on Malaysian concentrated in urban areas, which can attract people from rural breast cancer patients demonstrated the positive correlation areas seeking better job prospects and living conditions. This trend between quality of life and perceived social support. The higher of urbanization is particularly evident in developing countries, level of perceived social support among breast cancer subjects was where rapid urbanization is taking place due to the growth of associated with better quality of life. Also, a recent study found
industrialization and modernization.
This result is supported by the result of a study conducted in Baghdad, which found that most of the study sample (85\%) are living in urban areas [20].

In contrast, a study was done in Ethiopia found that more than half ( $52.6 \%$ ) of the women were living outside of Addis Ababa in rural areas. Discussion of the correlation between perceived social support and quality of life among women with breast cancer. There is high significant relationship (strong positive) between social support and quality of life among women with breast cancer as seen with high significant positive correlation, table.
According to the researcher the strong positive correlation between social support and quality of life among women with breast cancer can be explained by the potential benefits of social support on physical, psychological, and social well-being. As social support can enhance physical well-being by providing practical assistance, such as help with transportation to medical appointments or assistance with daily tasks, which can improve a woman's ability to manage the physical symptoms of breast cancer and its treatments.
Previous studies, such as that of Norwegian patients [21], have shown that social support affects patients' quality of life. This study's findings are at odds with those of an Ethiopian study that found a positive correlation between social support and cancer-
that social support had a strong and positive direct effect on quality of life (ie, social, physical, social, and emotional).
Contrarily, according to a study took place in Malaysia the correlations remained significant in partial correlation analysis after controlling for perceived social support scores. The correlation is also significant after controlling for the perceived social support scores.
Women with breast cancer in Malaysia who report a high level of perceived social support also have a good quality of life. Breast cancer patients may experience an improvement in their quality of life as a byproduct of carer support groups, educational programmes, and other activities aimed at strengthening their social support network.

## CONCLUSION

There is high significant correlation (strong positive) between social support and quality of life among women with breast cancer as seen with high significant positive correlation.

## RECOMMENDATIONS

The quality of life of patients with breast cancer needs more attention by the health care facilities, especially that of community health.

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