VOLUME - 13, ISSUE - 07, JULY - 2024 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

Oncology

CARCINOMA BREAST AND QUALITY OF LIFE - A PROSPECTIVE OBSERVATIONAL STUDY

Dr. S. Vasanth*	MD., DNB MNAMS, Senior Assistant Surgeon, Government Upgraded Primary Health Center, Chellampatti, Madurai, Tamilnadu. *Corresponding Author
Dr. V. Lakshmana Kumar	MD., DCH, Nodal Officer, Multi-Disciplinary Research Unit (MDRU), Associate Professor, Department of Microbiology, Government. Theni Medical College and Hospital, Theni, Tamilnadu.
Dr. S. Sopnajothi	MD, Senior Assistant Professor, Department of General Medicine, Government Theni Medical College & Hospital, Theni, Tamilnadu.
Dr. P. Jeyaprakash	Ph.D, Scientist 'B', Multi-Disciplinary Research Unit (MDRU), Government. Theni Medical College and Hospital, Theni, Tamilnadu.
Dr. P. Vijayabaskar	Ph.D, Scientist 'C', Multi-Disciplinary Research Unit (MDRU), Government. Theni Medical College and Hospital, Theni, Tamilnadu.

ABSTRACT Quality of life (QOL) has become an important outcome measure in the treatment of cancer patients. **Aim:** To evaluate the quality of life among breast cancer patients. **Methods:** It was a cross sectional, descriptive and hospital based study. Total duration of study was one year conducted in Department of General Surgery, Government Theni Medical College & Hospital, Theni, Tamilnadu. 84 breast cancer patients were selected as study subjects and were interviewed by a validated questionnaire. **Results:** A total of 84 breast cancer patients were included in the study, most of the patients were between 40-80 years, mean age being 43.32±10.2. Most were non tribal, belonging to Hindu Religion. Majority were married. None of the participants had above average or significantly high QOL. 20.2% had average QOL, 51.2% had below average and 28.6% had significantly poor QOL. Married patients were found to have a significantly better QOL. **Conclusions:** We found that majority of breast cancer patients had poor QOL. Married patients were leading a comparatively better QOL than unmarried.

KEYWORDS : Quality of life; cancer patients; carcinoma breast; married patients.

INTRODUCTION

QOL is defined by the World Health Organization as "an individual's perception of their position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards and concerns". Quality of life is an important endpoint in cancer clinical trials. It has been shown that assessing quality of life in cancer patients could contribute to improved treatment and could even be as prognostic as medical factors could be prognostic. The studies of quality of life can further indicate the directions needed for more efficient treatment of cancer patients. Carcinoma breast is the second most common cancer in the world and by far the most frequent cancer among women with an estimated 1.67 million new cancer cases diagnosed in 2019 (25% of all cancers). It is the most common cancer in women both in more and less developed regions with slightly more cases in less developed (883,000 cases) than in more developed (794,000) regions. Incidence rates vary nearly four-fold across the world regions, with rates ranging from 27 per 100,000 in Middle Africa and Eastern Asia to 92 in Northern America. Breast cancer ranks as the fifth cause of death from cancer overall (522,000 deaths) and while it is the most frequent cause of cancer death in women in less developed regions (324,000 deaths, 14.3% of total), it is now the second cause of cancer death in more developed regions (198,000 deaths, 15.4%) after lung cancer. The number of cases worldwide has significantly increased since the 1970s, a phenomenon partly attributed to the modern lifestyles (Montazeri, 2008; Yedukondala et al., 2015; Zamanian et al., 2015). We aimed this study to estimate the quality of life (QOL) of patients with carcinoma breast.

MATERIALS AND METHODS

It was a cross sectional study done in the department of general surgery, Government Theni Medical College & Hospital, Theni, Tamilnadu. All breast cancer patients above 18 years, who were undergoing treatment (chemotherapy), were included in the study. Ethical clearance was taken from institutional ethical committee. Data collection was done by personal interviews by the researchers after getting informed consent from participants. Total number of participants recruited for study was 84. The quality of life of patients was assessed using a QOL questionnaire designed under EORTC guidelines and validated in Indian scenario by Vidhubala et al., (2005) with a reliability of Cronbach alpha of 0.90 and Split-half reliability of 0.74 (using Alpha coefficient and Guttman Split half reliability method).

The questionnaire consisted of 10 factors.

- Factor 1 evaluated the physical well-being of the study population.
- Factor 2 of the QOL questionnaire included scores relating to psychological well-being of patients.
- Factor 3 contained questions about self adequacy.
- Factor 4 evaluated confidence in self ability.
- Factor 5 assessed the external support attained by the patient.
- Factor 6 evaluated the extent of pain experienced by the study population.
- Factor 7 assessed the mobility of the patients.
- Factor 8 evaluated the optimism and belief of study population.
- Factor 9 assessed the interpersonal relationship.
- Factor 10 assessed self-sufficiency and independence of the study population.

The responses obtained from the patients were scored as stated in the questionnaire and QOL was measured on the basis of it. Interpretation of QOL scale (Yedukondala et al., 2015) the maximum score for the questionnaire was 152 and the minimum score was 38.

- 88 and below=significantly poor QOL

- 89-108=below average QOL
- 109-132=average QOL
- 133-144=above average QOL
- Above 144=significantly high QOL

Statistical Analysis

Data were entered in MS Excel and analysis was done with SPSS statistical software (20.0 versions). Chi-square test was performed to find out the association between socio-demographic characteristics and QOL of the patients.

RESULTS

Participants of our study were from different religious, educational and socio-economic backgrounds. Out of 84 patients, 28.6% were below 40 years, 51.2% were between 40-60 years and 20.2% were above 60 yrs. Mean age of the patient was 43.32±10.2years. Most of them were non-tribal and Hindu. 76.2% was married. Most of them were housewives and had primary education. Majority of the patients 51.2% were leading below average QOL.20.2% had average QOL and 28.6% were having significantly poor QOL. In the study population, none of the patients were leading significant high or above average quality of life. There was no significant correlation between any socio-demographic characteristics like age, ethnicity, Religion, Education. Occupation and socio-economic status of patients and QOL ($p>0.05$). However married women were found to have a better QOL than unmarried women and this association was statistically significant ($p<0.05$) (Table. 1).

Table.1: Quality of Life (QOL) Frequency and Percentage

QOL	Frequency	Percentage
Average	17	20.2
Below average	43	51.2
Significantly poor	24	28.6
Total	84	100

DISCUSSION & CONCLUSION

In the present study maximum patients were between 40-60 years and those less than 40 years as well as elderly were comparatively less. Mean age was 43.32±10. Hindus were majority because of their predominance in the community. As far as area is concerned majority (54, 64.2%) patients belonged to rural area. There was a lower distribution of Breast cancer among those who had graduate/post graduate education. This could be due to higher awareness about screening methods, knowledge about preventive measures and appropriate caution to life management and life styles among them. In this study, quality of life was assessed on the basis of responses given by the participants to the questions related to 10 domains such as physical well-being, psychological well-being, self-adequacy, confidence in self ability, optimism and belief, inter personal relationship, extent of pain experienced by the patient, mobility, external support attained and independence of the patients. The scores of all domains were summed at the end to get the overall quality of life. None of the Breast cancer patients in the present study had above average or significantly higher quality of life. Most of the patients were leading below average and significantly poor quality of life. Some of the patients had an average quality of life. Similar to our study, in a study by Damodar et al., (2013) in India, it was found that QOL of breast cancer patients was poor. But contradictory to our result a study done by Dubashi et al., (2010) showed a good QOL in breast cancer patients. This could be because their study was done among young patients who were long-term disease-free survivors. Present study showed that patient's physical activity and sleep was affected badly by cancer and its treatment. Similar to this, in a study by Pandey et al., (2000) it was observed that surgery and adjuvant chemotherapy, duly interfere with general health-related parameters, sleep, appetite, mobility physical activity and the social life of cancer patients, thereby adversely affecting the QOL. In many studies in breast cancer as well as other cancers it was seen that QOL has no or minimal correlation with socio demographic characteristics of patients. However married women were found to be having significantly better QOL than unmarried. This could be because married women were feeling more secured and were getting more physical and mental support from their spouse and children. In our study most of the breast cancer patients were leading a poor QOL. Married women had a better QOL than unmarried and other socio-demographic characteristics had no association with QOL. In view of the high morbidity and short survival, assessment of QOL needs to be included as an end-point in evaluation and treatment of cancer.

Funding: Multi-Disciplinary Research Unit (MDRU), Department of Health Research (DHR), Government Theni Medical College & Hospital, Theni, Tamilnadu.

Conflict of Interest: None declared

Ethical Approval: The study was approved by the Institutional Ethics Committee.

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