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Original Article

Quality of life of breast cancer patients

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ABSTRACT

Introduction: Breast cancer is a type of cancer with the highest incidence among women worldwide. It has an impact on the patient's physical, psychological, social, and functional health. Breast cancer patients have a greater burden of symptoms, which can lead to decreased quality of life. This study had the objective to describe breast cancer patients' quality of life in a hospital.

Methods: A descriptive observational study design was used. The research population was breast cancer patients in a public hospital. The sample in this study was based on the inclusion and exclusion criteria, with a total of 110 respondents obtained through the proportional sampling technique. The data were analyzed using descriptive analysis. Data were collected by referencing demographic data and distributing a quality-of-life questionnaire (FACT-B).

Results: Regarding the quality-of-life variable, findings show that 32 patients had very bad physical well-being (29.1%). Most of the social well-being relations were good, with 40 respondents in this category (36.4%). The majority were in the bad category in terms of functional well-being, with 52 respondents being identified (47.3%). Emotional well-being was considered good for 66 respondents (60.0%). In terms of additional concerns, as many as 60 respondents were in the bad category (54.2%).

Conclusions: Chronic conditions can negatively impact patients' physical health and quality of life. Low quality of life is related to the burden of symptoms experienced by patients, such as anxiety, depression, and fatigue. This suggests that social support can strengthen effective coping and improve patients' quality of life.

Keywords: breast cancer; breast carcinoma; health-related quality of life; quality of life; patients

INTRODUCTION

Breast cancer is the main cause of death with the highest incidence among women worldwide, numbering more than 2.2 million new cases at 684,996 deaths (Globocan, 2020). The World Health Organization (WHO) estimated that by the end of 2020, 7.8 million women were diagnosed with breast cancer in the last five years. Meanwhile, in Indonesia, 65,858 women were diagnosed with breast cancer with the number of deaths reaching 22,430, with 70% of these cases being detected at an advanced stage (Kementerian Kesehatan RI, 2022). Based on these data, breast cancer is an important health problem in society that will have an impact on the physical, psychological, and economic health of patients and their families (Gonzalez et al., 2021). More than 25% of breast cancer patients experience symptoms such as depression and anxiety, and are at high risk of experiencing psychological stress, which can reduce patients' quality of life (Phoosuwan & Lundberg, 2022).

Better quality of life is associated with longer survival among cancer patients (Zhou et al., 2020). The patient's survival rate coexists with the side effects of cancer therapy, such as chemotherapy, surgery, and radiotherapy (Ng et al., 2021). Chemotherapy can be related to poorer emotional, cognitive, and social functioning in patients with various problems. These problems include body image and work, as well as physical conditions including fatigue, pain, nausea, and vomiting (Di Meglio et al., 2022). Cancer patients experience a greater burden of symptoms than patients without cancer, which can lead to decreased function and increased disability (Danhauer et al., 2019). Breast cancer patients will have their ability to continue a normal lifestyle disrupted, which also has an impact on their physical and psychological health (Nababan, 2018). This study aimed to assess the quality of life (QOL) of women with breast cancer receiving treatment at the Bangil Hospital, East Java, Indonesia.

METHODS

Design

The design of this study was descriptive and observational. The research objective was to describe breast cancer patients' quality of life.

Sample and Setting

The population in this study was breast cancer patients in a public hospital. The sample was obtained according to inclusion and exclusion criteria, with a total of 110 respondents. The inclusion criteria were breast cancer

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patients who had undergone chemotherapy at least once; cancer stages I, II, and III; and patients who could read and write. The exclusion criteria for this study were patients who experienced decreased consciousness. The samples were selected using non-probability sampling with the purposive sampling technique.

Instruments

The data were collected by having participants fill out a questionnaire, with the researcher overseeing the process. Data on patient characteristics were assessed using a demographic questionnaire of age, education, marital status, how long they had suffered from cancer, income, cancer stages, and profession. Quality of life was assessed by the FACIT-B version 4 scale, which consisted of 37 questions. Based on its content, this questionnaire consisted of five categories: physical well-being (seven questions), social well-being (eight questions), emotional well-being (six questions), functional well-being (seven questions), and additional concerns (10 questions) (Cantril, 2006). From the validity and reliability test conducted, all questions were declared valid and reliable because they had an r-count higher than the r-table and r-value of Cronbach's alpha higher than the r-table.

Procedure

The data were collected in-person by giving participants a questionnaire. The questionnaire used had been tested for validity and reliability. An informed consent form was distributed, and respondents were given the freedom of rights to join the study or refuse their participation. The respondents who consented to be research subjects then continued to the next section in which they filled in a questionnaire about the demographic data and quality of life. The respondents were given 15 minutes to fill out the questionnaire sheet.

Data Analysis

Data obtained were analyzed using statistical software with the mean score of total scores through addition. Then, the scores were divided by the number of question items. The variable analysis was conducted on the percentage and frequency distribution of five quality of life categories (physical well-being, social well-being, emotional well-being, functional well-being, and additional concern).

Ethical Considerations

This study has been reviewed by the research ethics commission from the health research ethics committee of Bangil Hospital, with approval number 445.1/016/424.072.01/2022. The ethical aspects considered in this study included informed consent, anonymity, and confidentiality.

RESULTS

A total of 110 patients were recruited for this study. The patients' age range was quite wide from 20 years old to more than 60 years old (84.5%). There were 45 respondents whose educational background was with senior high school or equivalent (40.9%). Most respondents were not working, with a total of 77 unemployed participants (70%). A total of 87 respondents were married (79.1%). As many as 43

Table 1. The Demographic Characteristics of Quality of life

Characteristics	n	%
Ages		
Adolescent	0	0.0
Adult	93	84.5
Elderly	17	15.5
Educations		
Unschooled	6	5.5
Elementary school	32	29.1
Junior high school	10	9.1
Senior high school	45	40.9
University	17	15.5
Marital status		
Single	0	0.0
Married	87	79.1
Other	23	20.9
Length of cancer		
<1 year	43	39.1
1-2 years	42	38.2
3-5 years	25	22.7
>5 years	0	0.0
Income		
>Rp4,300,000	47	42.7
<Rp4,300,000	63	57.3

Cancer stage		
1	10	9.1
2A	18	16.4
2B	26	23.6
3A	23	20.9
3B	32	29.1
3C	1	0.9
Occupation		
Housewife	77	70.0
Private employee	18	16.4
Government employee	6	5.5
Retired	9	8.2

Table 2. Distribution and Frequency of Quality of Life

Characteristics	n	%
Physical well-being (PWB)		
Very bad	32	29.1
Bad	22	20.0
Fair	20	18.2
Good	32	29.1
Very good	4	3.6
Total	110	100.0
Social well-being (SWB)		
Very bad	0	0.0
Bad	18	16.4
Fair	26	23.6
Good	40	36.4
Very good	26	23.6
Total	110	100.0
Emotional well-being (EWB)		
Very bad	11	10.0
Bad	52	47.3
Fair	15	13.6
Good	25	22.7
Very good	7	6.4
Total	110	100
Functional well-being (FWB)		
Very bad	0	0.0
Bad	5	4.5
Fair	16	14.5
Good	66	60.0
Very good	23	20.9
Total	110	100.0
Additional concerns		
Very bad	24	21.8
Bad	60	54.5
Fair	20	18.2
Good	6	5.5
Very good	0	0.0
Total	110	100

respondents had been suffering from cancer for less than a year (39.1%). In terms of cancer stage, 32 respondents were in stage 3b (29.1%). Most respondents' incomes were below the regional minimum wage of Pasuruan City (Table 1).

Table 2 shows breast cancer patients' quality of life. The quality-of-life variable shows that 32 patients were in the good and very bad categories each in terms of physical well-being (PWB) (29.1%). The biggest proportion of respondents had good social well-being (SWB), with 40 in this category (36.4%). There were 52 respondents categorized as bad in terms of functional well-being (FWB) (47.3%), while 66 respondents were in the good category for emotional well-being (EWB) (60.0%). The additional concern variable was mostly found to be in the bad category, experienced by up to 60 respondents (54.2%).

DISCUSSION

These women's QOL was evaluated according to their sociodemographic and clinical characteristics to ascertain t the effects of these characteristics on their everyday lives. The QOL evaluation is a crucial part of clinical cancer research and trials. The degree to which a patient's anticipated level of physical, social, functional, or emotional wellness is altered by medical procedures or therapy is known as quality of life, which is a multidimensional construct (Ruiz-Rodríguez et al., 2022). The results showed that most respondents' physical well-being was very bad (29.1%), most respondents' social well-being was good (36.4%), most respondents' emotional well-being was bad (47.3%), most respondents' functional well-being was good (60%), and additional concerns were bad (54.5%). The patients' QOL showed that most patients' perceptions of pain were in the very bad category. In addition, the patients felt sad, were dissatisfied with their conditions, were afraid of deteriorating body conditions and death, and the patients could not disclose this to their families and become family burdens. The patients' assessments of body shape changes caused by breast cancer were largely in the bad category. Patients felt uncomfortable with changes such as hair loss and loss of breasts, causing patients to feel unattractive as women in general, especially patients who had partners. On the other hand, the patients generally regarded care from their families to be in the good category, which was also true of patients' ability to carry out daily activities. This is in line with previous research which states that chronic conditions can negatively impact the patient's physical health and quality of life (Ng et al., 2021). Many cancer patients experience symptoms that arise as a result of the infection process or treatment side effects, which results in pain, fatigue (Tolotti et al., 2021), nausea, and vomiting (Danhauer et al., 2019). Anxiety or depression symptoms that generally appear in patients can interfere with the patient's involvement in physical and social activities (Mur-Gimeno et al., 2021). Physical symptoms and psychological distress experienced by breast cancer patients harm their QOL. Psychological distress is described as a multifaceted emotional state that includes a person's psychological, social, and spiritual facets (Malakian et al., 2022). Other cancer effects include anger, grief, suffering, and pain, which can affect the patient's emotional well-being (Perry et al., 2007). Patients also feel tense due to uncertainty in treatment-related decisions, the possibility of recurrence, fear of death, and concerns regarding overall survival (Palmer Kelly et al., 2019). The breast cancer patients in this study often complained of feeling weak, nausea, vomiting, and pain when they finished chemotherapy. They also feared their condition worsening and passing on the same disease to their children. Patients were usually assisted by their families in carrying out their activities and meeting their needs at home.

This symptom burden is greater in adults with cancer than in patients without cancer and is associated with reduced function, increased disability, and poor quality of life (Danhauer et al., 2019). Research reveals that social support plays a crucial part in influencing breast cancer patients' health outcomes, including health-related quality of life. As a result, breast cancer patients require assistance in managing their condition (Kugbey et al., 2019). Research conducted by (Cui et al., 2021) states that social support is related to breast cancer patients' quality of life and had an average value of 96.05%. In this study, breast cancer patients were living with chronic conditions and relied on social support and religion as coping strategies to deal with their illness. Patients were usually assisted by their families in carrying out their daily activities and meeting their needs at home. Patients stated that they had difficulty finding information independently and only relied on information provided at healthcare facilities; therefore, social support from their family, community, or healthcare providers is needed to improve their quality of life.

In this current study, the respondents were in outpatient poly rooms with different patient characteristics, not only with breast cancer. This made it difficult to collect data from all respondents in the same room, and patients' environmental conditions during the data collection could not be ascertained as calm and conducive.

CONCLUSION

This study indicate that respondents had a good quality of life in the social well-being and functional well-being sub-variables, but not in the physical well-being, emotional well-being, and additional concerns. Low quality of life is related to the burden of symptoms experienced by patients, such as anxiety, depression, and fatigue. Cancer patients experience a greater burden of symptoms than patients without cancer, leading to decreased function and increased disability. As a result, social support is needed to assist patients in undergoing long-term care. Social support can strengthen effective coping which is the most important factor for the welfare of individuals who experience stress; therefore, improving patients' quality of life.

Future researchers are expected to investigate the effective social support approach as an effort to improve breast cancer patients' quality of life.

Declaration of Interest

The authors declares that there is no conflict of interest.

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Data Availability

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

REFERENCES

Cantril, H. (2006). Pattern of Human Concerns Data, 1957-1963. *Rutgers University Press, New Brunsw (November)*, 4–5.

Cui, C., Wang, L., & Wang, X. (2021). Health-related quality of life and social constraints among Chinese breast cancer patients: a cross-sectional study. H*ealth and Quality of Life Outcomes, 19*(1), 1–8. https://doi.org/10.1186/s12955-021-01871-0

Danhauer, S. C., Addington, E. L., Cohen, L., Sohl, S. J., Van Puymbroeck, M., Albinati, N. K., & Culos-Reed, S. N. (2019). Yoga for symptom management in oncology: A review of the evidence base and future directions for research. *Cancer, 125*(12), 1979–1989. https://doi.org/10.1002/cncr.31979

Di Meglio, A., Havas, J., Gbenou, A. S., Martin, E., El-Mouhebb, M., Pistilli, B., Menvielle, G., Dumas, A., Everhard, S., Martin, A. L., Cottu, P. H., Lerebours, F., Coutant, C., Lesur, A., Tredan, O., Soulie, P., Vanlemmens, L., Joly, F., Delaloge, S., Vaz-Luis, I. (2022). Dynamics of Long-Term Patient-Reported Quality of Life and Health Behaviors After Adjuvant Breast Cancer Chemotherapy. *Journal of Clinical Oncology, 385*, 1–16. https://doi.org/10.1200/JCO.21.00277

Globocan. (2020). The Global Cancer Observatory - Cancer Fact Sheets. International Agency for Research on Cancer - WHO, 419, 199–200.

Gonzalez, L., Bardach, A., Palacios, A., Peckaitis, C., Ciapponi, A., Pichón-Riviere, A., & Augustovski, F. (2021). Health-Related Quality of Life in Patients with Breast Cancer in Latin America and the Caribbean: A Systematic Review and Meta-Analysis. O*ncologist, 26*(5), e794–e806. https://doi.org/10.1002/onco.13709

Kementerian Kesehatan RI. (2022). Kanker Payudara Paling Banyak di Indonesia, Kemenkes Targetkan Pemerataan Layanan Kesehatan – Sehat Negeriku. Biro Komunikasi Dan Pelayanan Masyarakat, 8–9.

Kugbey, N., Meyer-Weitz, A., & Oppong Asante, K. (2019). Access to health information, health literacy and health-related quality of life among women living with breast cancer: Depression and anxiety as mediators. *Patient Education and Counseling, 102*(7), 1357–1363. https://doi.org/10.1016/j.pec.2019.02.014

Malakian, A., Mohammed, S., Fazelzad, R., Ajaj, R., Artemenko, A., & Mayo, S. J. (2022). Nursing, psychotherapy and advanced cancer: A scoping review. *In European Journal of Oncology Nursing (Vol. 56)*. Elsevier Ltd. https://doi.org/10.1016/j.ejon.2021.102090

Mur-Gimeno, E., Postigo-Martin, P., Cantarero-Villanueva, I., & Sebio-Garcia, R. (2021). Systematic review of the effect of aquatic therapeutic exercise in breast cancer survivors. *European Journal of Cancer Care, March*, 1–16. https://doi.org/10.1111/ecc.13535

Nababan, F. S. (2018). Dukungan Keluarga pada Wanita Penderita Kanker Payudara yang Menjalani Kemoterapi dan Faktor-Faktor yang Mempengaruhinya di RSUP H . Adam Malik Medan. Skripsi, 1–89.

Ng, S. man, Fung, M. H. Y., Chan, J. S. M., Chan, C. H. Y., & Chan, C. L. W. (2021). Physical activity, confidence and quality of life among cancer patient-carer dyads. *Sports Medicine - Open, 7*(1). https://doi.org/10.1186/s40798-021-00333-7

Palmer Kelly, E., Meara, A., Hyer, M., Payne, N., & Pawlik, T. M. (2019). Understanding the Type of Support Offered Within the Caregiver, Family, and Spiritual/Religious Contexts of Cancer Patients. *Journal of Pain and Symptom Management, 58*(1), 56–64. https://doi.org/10.1016/j.jpainsymman.2019.03.003

Perry, S., Kowalski, T. L., & Chang, C. H. (2007). Quality of life assessment in women with breast cancer: Benefits, acceptability and utilization. *Health and Quality of Life Outcomes, 5*, 1–14. https://doi.org/10.1186/1477-7525-5-24

Phoosuwan, N., & Lundberg, P. C. (2022). Tekanan psikologis dan kualitas hidup terkait kesehatan di antara wanita dengan kanker payudara : studi cross-sectional deskriptif. 3177–3186.

Ruiz-Rodríguez, I., Hombrados-Mendieta, I., Melguizo-Garín, A., & Martos-Méndez, M. J. (2022). The Importance of Social Support, Optimism and Resilience on the Quality of Life of Cancer Patients. *Frontiers in Psychology, 13(March)*. https://doi.org/10.3389/fpsyg.2022.833176

Tolotti, A., Bonetti, L., Pedrazzani, C., Bianchi, M., Moser, L., Pagnucci, N., Sari, D., & Valcarenghi, D. (2021). Nursing management of fatigue in cancer patients and suggestions for clinical practice: a mixed methods study. *BMC Nursing, 20*(1), 1–14. https://doi.org/10.1186/s12912-021-00699-9

Zhou, K., Wang, W., Zhao, W., Li, L., Zhang, M., Guo, P., Zhou, C., Li, M., An, J., Li, J., & Li, X. (2020). Benefits of a WeChat-based multimodal nursing program on early rehabilitation in postoperative women with breast cancer: A clinical randomized controlled trial. *International Journal of Nursing Studies, 106*, 103565. https://doi.org/10.1016/j.ijnurstu.2020.103565