JNK

JURNAL NERS DAN KEBIDANAN
(JOURNAL OF NERS AND MIDWIFERY)
http://ojs.phb.ac.id/index.php/jnk

Body Image and Social Support as Contributing Factors to the Quality of Life of Breast Cancer Patients

Elliza Puspika Sari, Yulia Indah Permata Sari, [CA]Yosi Oktarina
Universitas Jambi, Indonesia
[CA]Corresponding Author

Article Information

History Article:
Received, 29/08/2024
Accepted, 25/02/2025
Published, 01/04/2025

Keyword:
Body Image, Breast Cancer, Social Support, Quality of Life.

Abstract

Physical changes due to the disease and treatment of breast cancer affect patients' body image and cause significant emotional impacts. Social support is crucial in helping patients cope with these changes, reducing stress, and improving overall quality of life. The aim of the research was to determine the correlation between body image and quality of life, and to assess the relationship between social support and quality of life of breast cancer patients at the Surgical Polyclinic of Raden Mattaher General Hospital Jambi. The research used a quantitative method with a cross-sectional approach. The sample comprised 61 breast cancer patients, obtained by using the Lemeshow formula and purposive sampling method. The research instruments included the Body Image Scale questionnaire, the modified MOS Social Support questionnaire (MSS), and the EORTC-QLQ-BR23 questionnaire. The univariate results showed that the average quality of life score was 56.70 (moderate category), body image had an average score of 24.18 (moderate category), and social support had an average score of 62.80 (moderate category). The bivariate analysis found a correlation between body image and quality of life with a p-value of 0.000 < 0.05 and r = 0.940 and a correlation between social support and quality of life with a p-value of 0.003 < 0.05 and r = 0.371. Nurses can improve patients' quality of life by providing education about physical changes, offering emotional support, referring patients to support groups, and involving families in the healing process.

©2025 Journal of Ners and Midwifery

✉Correspondence Address:
Universitas Jambi – Indonesia
Email: oktarinayosi@gmail.com
DOI: https://doi.org/10.26699/jnk.v12i1.ART.p064-070
P-ISSN: 2355-052X
E-ISSN: 2548-3811
This is an Open Access article under the CC BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)

INTRODUCTION

Breast cancer has the highest number of cases worldwide, with approximately 2.2 million people (24.5%) diagnosed with the disease (Nurohmat et al., 2022). In 2022, Global Cancer Observatory mentioned that the number of breast cancer cases in Indonesia reached 66.271 cases, making it the most common type of cancer in the country (Ferlay et al., 2024). In Jambi Province, 28,370 women underwent early detection for breast cancer up to 2022 (Dinkes Provinsi Jambi, 2022). In Jambi City, the number of breast cancer cases varies, with 731 new cases reported in 2022 (Dinkes Kota Jambi, 2023).

The quality of life of breast cancer patients shows that they can perform daily activities. However, there are challenges in some activities depending on which health function scale is affected. For example, many of them experience weakness, fatigue, nausea, or other symptoms due to the cancer or the chemotherapy they undergo (Sudiasta et al., 2022). Quality of life plays a crucial role in the recovery process and overall health of breast cancer patients. After undergoing treatment, patients' quality of life is significantly influenced by body image, which increasingly becomes a significant factor (Sari et al., 2023). Body image in breast cancer patients is their response or reaction to their physical appearance. Threats to body image and self-esteem can lead to feelings of shame and dissatisfaction for breast cancer patients because their bodies do not meet their expectations in terms of structure, shape, or function (Alvarez-Pardo et al., 2023; Morsy et al., 2022). Physical changes due to treatment often disrupt patients' body image, decreasing their self-confidence and self-image. It significantly impacts the patient's quality of life (Nurohmat et al., 2018).

Body image is a psychosocial issue frequently encountered by breast cancer patients due to concerns about physical changes from therapy. This issue can affect treatment and medication adherence decisions, negatively impacting social function, overall function, and quality of life. Dissatisfaction with body image can lead to stress, anxiety, and depression, all of which contribute to a decline in the quality of life for breast cancer patients (Ahn & Suh, 2023). If it is not addressed promptly, low quality of life can worsen health conditions. It can affect the morbidity and mortality rates of breast cancer patients (Heidary et al., 2023).

Social support is crucial in enhancing positive feelings and self-esteem, especially when facing situations or events perceived as potentially problematic. Social support not only impacts emotional aspects but also has the potential to influence overall quality of life (Purwanti et al., 2021; Yunita, 2023). Support received by breast cancer patients is a key factor in predicting improvements in quality of life and acceptance of the disease. Patients have a more significant opportunity to develop self-confidence with support from their surroundings. This support can also serve as a source of motivation, helping them feel valued, and involvement from various support sources has the potential to influence patients' behaviors regarding their quality of life (Krok et al., 2024).

The specific problems (gaps) related to body image, social support, and quality of life among breast cancer patients at the research site have not been identified as areas needing further investigation. Research on the correlation between body image and social support and their impact on the quality of life of breast cancer patients remains limited. Therefore, this research aims to determine the correlation between body image and social support and their impact on the quality of life of breast cancer patients.

METHODS

This quantitative research was conducted using a cross-sectional approach at the Surgical Polyclinic of Raden Mattaher General Hospital in Jambi Province in February 2024. The population consisted of breast cancer patients. A sample of 61 respondents was selected using the Lemeshow formula and purposive sampling method based on inclusion criteria, namely cooperative communication ability, willingness to be a respondent by signing the informed consent, undergoing routine treatment, and having been

diagnosed with breast cancer for more than one month. The exclusion criteria included patients who were uncooperative or did not follow instructions and patients who experienced deteriorating conditions such as shortness of breath or other issues that prevented them from continuing to fill out the questionnaire. The measurement tool used in this research included the Body Image Scale questionnaire to assess patients' body image. It consisted of three items: affective, behavioral, and cognitive, using 10 questions with a score range of 10-40. The modified MOS Social Support Questionnaire was used to measure the social support received by patients. It consisted of five aspects: tangible support, emotional support, affectionate support, informational support, and positive social interaction, with a score range of 18-90 (Rand Health Care, 2024). The EORTC-QLQ-BR23 questionnaire was used to assess the quality of life of patients. It consisted of 23 items with a score range of 23-92, covering eight aspects: systemic therapy side effects, hair loss, arm symptoms, breast symptoms, body image, future perspective, sexual function, and sexual enjoyment (EORTC, 2024). Using the product moment correlation formula, the researcher conducted validity tests on 10 patients for the Body Image Scale questionnaire, the modified MOS Social Support Questionnaire, and the EORTC-QLQ-BR23. The results showed that all items had r-calculated > r-table (>0.570), indicating that the questionnaires were valid. Reliability testing revealed that all items had a Cronbach's Alpha value >0.60, confirming that all questionnaire questions were reliable. The data were collected through interviews with respondents lasting approximately 30 minutes, during which the researcher read the questions from the questionnaire and recorded the provided answers. The data processing was computerized and analyzed using univariate statistical methods for frequency of data description. Before performing bivariate analysis, the researcher conducted the Kolmogorov-Smirnov normality test to ensure normal data distribution. The researcher then analyzed the correlations between body image, social support, and quality of life using Pearson correlation tests. The research was conducted after the researcher obtained an ethical research approval letter from Raden Mattaher General Hospital Jambi with the number S.117/SPEI/I/2024 on January 23, 2024.

RESULTS

Characteristics of Respondents

Table 1. Frequency Distribution of Respondent Characteristics (n = 61)

Characteristics	Frequency	Percentage%
Age		
Pre-elderly: 45-59 Years	55	90,2%
Elderly: 60 Years and Over	6	9,8%
Gender		
Female	61	100%
Male	0	0%
Cancer Stage		
Stage 1	25	41,0%
Stage 2	12	19,7%
Stage 3	23	37,7%
Stage 4	1	1,6%
Duration of Treatment		
≥6 months	50	82,0%
<6 months	11	18,0%
Total	**61**	**100%**

Based on Table 1, the total number of respondents is 61. The largest group is pre-elderly individuals (45-59 years), with 55 people (90.2%). All respondents in this research are female, totaling 61 individuals (100%). The most common cancer stage is Stage 1, with 25 respondents (41.0%). Fifty respondents (82.0%) experienced treatment for ≥6 months.

Univariate Analysis

Table 2. Description of Quality of Life, Body Image, and Social Support According to Patient Perception at the Surgical Polyclinic, Raden Mattaher General Hospital, Jambi 2024 (n = 61)

Variable	Min-Max	Mean(±SD)
Quality of Life	49-65	56.70(±3.655)
Body image	14-35	24.18(±5.084)
Social Support	42-88	62.80(±11.262)

Based on Table 2, the overall average description of the respondent's quality of life in this research is 56.70 (moderate category), the average body image is 24.18 (moderate category), and the average social support is 62.80 (moderate category).

Bivariate Analysis

Table 3. Pearson Correlation Test

Variable	Correlation Coefficient (r)	*p-value*
Body image Quality of Life	0,940	0,000
Social Support Quality of Life	0,371	0,003

Based on Table 3, the significance value (p-value) is <0.05, indicating a correlation between body image and social support with quality of life.

DISCUSSION

The Correlation Between Body Image and Quality of Life of Breast Cancer Patients

Discussing the correlation between body image and quality of Life of Breast Cancer Patients is crucial, as body image plays a significant role in shaping patients' emotional and psychological well-being. Body image refers to how individuals perceive their physical appearance, particularly after undergoing treatments like mastectomy, chemotherapy, or radiation, which often lead to visible changes such as hair loss, weight fluctuations, and scarring. These changes can drastically affect self-esteem and self-concept (Wulandari et al., 2023).

The research results show a significant correlation between body image and quality of life in breast cancer patients, with many patients reporting dissatisfaction with their appearance, physical discomfort, and emotional distress due to treatment. This aligns with previous studies by (Haryati & Sari, 2019) and (Sari et al., 2023), which also found a correlation between body image and quality of life, with a p-value of 0.000 and an r-value of 0.966 (Haryati & Sari, 2019). Negative body image such as feeling unattractive or ashamed of one's appearance often leads patients to withdraw from social interactions and contributes to lower overall life satisfaction (Brunet et al., 2022; Nurohmat et al., 2022) .

On the other hand, patients with a more positive body image are better equipped to adapt to these physical changes and maintain a higher sense of self-worth, which contributes to an improved quality of life (Ahn & Suh, 2023). Nurses, family, and healthcare professionals play a crucial role in helping patients adapt to these changes by offering support and education. For instance, they can

educate patients about the disease, and treatment side effects, and encourage efforts to boost self-esteem (Della & Yudiarso, 2021; Li et al., 2022).

The Correlation Between Social Support and Quality of Life of Breast Cancer Patients

Social support is another critical factor influencing the quality of life for breast cancer patients. It encompasses emotional, tangible, and informational assistance from a patient's social network, including family, friends, healthcare professionals, and support groups. Studies, including this one and others such as (Celik et al., 2021), (Witdiawati et al., 2018) and (Lauren & Kolokotron, 2023), consistently show a positive correlation between social support and quality of Life of Breast Cancer Patients. The emotional and practical support patients receive helps them cope with the physical, emotional, and psychological challenges associated with their diagnosis and treatment, leading to better well-being and a more positive outlook. The research found that most patients received moderate levels of social support, particularly in the form of tangible support, such as help with transportation or daily tasks (Yunita, 2023). However, fewer patients reported receiving emotional and affectionate support, such as having someone to talk to or engage in social activities. This lack of emotional support can lead to feelings of isolation and negatively impact patients' mental health, further decreasing their quality of life (Wondimagegnehu et al., 2019). Social support not only improves emotional well-being but also enhances treatment outcomes (Celik et al., 2021; Khanuun & Makiyah, 2021). A supportive social environment can help reduce anxiety, pain, and social isolation, all of which contribute to improving the quality of life for breast cancer patients.

CONCLUSION

Based on the research findings, it was found that breast cancer patients were predominantly in the pre-elderly age group (45-59 years), all respondents were female, the majority of patients were found in Stage 1, and patients had experienced treatment for ≥6 months. A significant correlation was found between body image and social support with the quality of life of breast cancer patients at the Surgical Polyclinic of Raden Mattaher General Hospital in Jambi Province.

SUGGESTION

Nurses provided information about the disease and treatment side effects and assisted in enhancing the patient's self-esteem. Additionally, nurses were expected to strengthen social support by educating patients and their families about the importance of emotional support, connecting patients with support groups, and creating a supportive environment. Nurses also needed to encourage patients to participate in social activities and help them feel more involved in recovery.

ACKNOWLEDGEMENT

Thank you to the respondents for their participation and support in this research and to Raden Mattaher General Hospital in Jambi Province for granting permission to conduct this research.

FUNDING

The researcher personally funded this research, allowing complete independence and greater control over every aspect of the research process.

CONFLICTS OF INTEREST

The author declares no conflicts of interest in this research and publication.

AUTHOR CONTRIBUTIONS

All authors contributed fully to the research activities, including planning, data tabulation and management, manuscript drafting, and data analysis. Each author contributed positively to this work from start to finish, including publishing the article in this journal.

REFERENCES

Ahn, J., & Suh, E. E. (2023). Body image alteration in women with breast cancer: A concept analysis using an evolutionary method. *Asia-*

Pacific Journal of Oncology Nursing, *10*(5). https://doi.org/10.1016/j.apjon.2023.100214

Alvarez-Pardo, S., De Paz, J. A., Montserrat Romero-Perez, E., Portilla-Cueto, K. M., Horta-Gim, M. A., Gonzalez-Bernal, J. J., Fernandez-Solana, J., Mielgo-Ayuso, J., García-Valverde, A., & Gonzalez-Santos, J. (2023). Factors Associated with Body Image and Self-Esteem in Mastectomized Breast Cancer Survivors. *International Journal of Environmental Research and Public Health*, *20*(6). https://doi.org/10.3390/ijerph20065154

Brunet, J., Price, J., & Harris, C. (2022). Body image in women diagnosed with breast cancer: A grounded theory study. *Body Image*, *41*, 417–431. https://doi.org/10.1016/j.bodyim.2022.04.012

Celik, G. K., Cakir, H., & Kut, E. (2021). Mediating Role of Social Support in Resilience and Quality of Life in Patients with Breast Cancer: Structural Equation Model Analysis. *Asia-Pacific Journal of Oncology Nursing*, *8*(1), 86–93. https://doi.org/10.4103/apjon.apjon_44_20

Della, W., & Yudiarso, A. (2021). Studi Meta-Analysis: Body Image dan Self-Esteem (Body Image and Self-Esteem: Meta-Analysis Study). *Jurnal Psibernetika*, *14*(2), 105–110. https://doi.org/10.30813/psibernetika.v14i2.2943

Dinkes Provinsi Jambi. (2022). Profil Kesehatan Provinsi Jambi. https://dinkes.jambiprov.go.id/file/informasi_publik/PROFIL%20KESEHATAN%20PROVINSI%20JAMBI%202022_NG_repaired_compressed.pdf

Dinkes Kota Jambi. (2023). *Data Kanker Payudara Di Dinas Kesehatan kota Jambi*. https://dinkes.jambiprov.go.id/file/informasi_publik/UFJPRklMIEtFU0VIQVRBTiBQUk9WSU5TSSBUQUhVTiAyMDIyLnBkZgMTY5MTMyNDEyOQ_Wkt1691324129_XtLnBkZg.pdf

EORTC. (2024). *Breast Cancer (update of QLQ-BR23)*. https://qol.eortc.org/questionnaire/update-qlq-br23/

Ferlay, J., Ervik, M., Lam, F., Colombet, M., Mery, L., Pineros, M., Znaor, A., Soerjomataram, I., & Bray, F. (2024). *Global Cancer Observatory: Cancer Today*. Lyon, France: International Agency for Research on Cancer. https://gco.iarc.who.int/today

Haryati, F., & Sari, D. N. A. (2019). Hubungan body image dengan kualitas hidup pada pasien kanker payudara yang menjalankan kemoterapi. *Health Sciences and Pharmacy Journal*, *3*(2), 54. https://doi.org/10.32504/hspj.v3i2.138

Heidary, Z., Ghaemi, M., Hossein Rashidi, B., Kohandel Gargari, O., & Montazeri, A. (2023). Quality of Life in Breast Cancer Patients: A Systematic Review of the Qualitative Studies. *Cancer Control*, *30*. https://doi.org/10.1177/10732748231168318

Khanuun, L., & Makiyah, S. N. N. (2021). Social Support to Women with Breast Cancer Undergoing Treatment. *Media Keperawatan Indonesia*, *4*(3), 247. https://doi.org/10.26714/mki.4.3.2021.247-255

Krok, D., Telka, E., & Kocur, D. (2024). Perceived and Received Social Support and Illness Acceptance Among Breast Cancer Patients: The Serial Mediation of Meaning-Making and Fear of Recurrence. *Annals of Behavioral Medicine*, *58*(3), 147–155. https://doi.org/10.1093/abm/kaad067

Lauren, & Kolokotron. (2023). Trajectories of Quality of Life among an International Sample of Women during the First Year after the Diagnosis of Early Breast Cancer: A Latent Growth Curve Analysis. *Cancers*, *15*(7). https://doi.org/10.3390/cancers15071961

Li, M., Xie, X., Xu, H., & Li, H. (2022). A Psychological Nursing Intervention for Patients with Breast Cancer on Inflammatory Factors, Negative Emotions and Quali-ty of

Life. *Iran J Public Health*, *51*(9), 2041–2047. https://doi.org/10.18502/ijph.v51i9.10559

Morsy, Z. Y. A.-N., Zaki, R. A.-H., & Ahmed, F. M. (2022). Effect of Psycho-educational Nursing Program on Body Image, Self-esteem and Quality of Sexual Life among Women with Breast Cancer. *Journal of Nursing Science-Benha University*, *3*(3), 2022. https://doi.org/10.21608/JNSBU.2022.213771

Nurohmat, N., Hasim Asyari, Marsono, M., & Fikri, Moh. A. (2022). Deteksi Dini Kanker Payudara dengan Self Assessmen SADARI Berbasis Aplikasi Android pada Dinas Kesehatan Kabupaten Indramayu. *Jurnal Pengabdian Ilmu Kesehatan*, *9*(1), 22–31. https://doi.org/10.55606/jpikes.v2i3.476

Purwanti, S., Syukur, N. A., & Haloho, C. B. (2021). Faktor Risiko Berhubungan dengan Kejadian Kanker Payudara Wanita. *Jurnal Bidan Cerdas*, *3*(4), 168–175. https://doi.org/10.33860/jbc.v3i4.460

Rand Health Care. (2024). *Social Support Survey Instrument*. https://www.rand.org/health-care/surveys_tools/mos.html

Sari, D. A., Nasution, S. Z., & Zulfendri, Z. (2023). The Relationship Between Body Image and Quality of Life in Breast Cancer Patients at H. Adam Malik Center General Hospital Medan City. *Contagion: Scientific Periodical of Public Health and Coastal Health*, *5*(3). https://doi.org/10.30829/contagion.v5i3.15504

Sudiasta, D. G., Yanti, N. L. G. P., & Citrawati, N. K. (2022). Gambaran Kualitas Hidup Pasien Kanker Payudara yang Menjalani Kemoterapi Selama Masa Pandemi Covid-19. *Jurnal Keperawatan Dan Fisioterapi (JKF)*, *4*(2), 260–267. https://doi.org/10.35451/jkf.v4i2.986

Witdiawati, W., Purnama, D., & Eriyani, T. (2018). Dukungan Sosial Dalam Adaptasi Kehidupan Klien Kanker Payudara di Kabupaten Garut. *Indonesian Journal of Nursing Research*, *1*(1). https://doi.org/10.35473/ijnr.v1i1.10

Wondimagegnehu, A., Abebe, W., Abraha, A., & Teferra, S. (2019). Depression and social support among breast cancer patients in Addis Ababa, Ethiopia. *BMC Cancer*, *19*(1). https://doi.org/10.1186/s12885-019-6007-4

Wulandari, S. M., Yunitasari, E., Kusumaningrum, T., Myint, N. M. M., & Subu, M. A. (2023). Body image perception among breast cancer patients after mastectomy: A phenomenology study. *The Journal of Palembang Nursing Studies*, *2*(3). https://doi.org/10.55048/jpns87

Yunita, Y. (2023). Pengaruh Penyesuaian Sosial, Dukungan Sosial dan Keterampilan Sosial Sebagai Moderator Pembentukan Perilaku Sosial Siswa di Sekolah. *Indonesian Journal of Social Science Education (IJSSE)*, *5*(1), 41. https://doi.org/10.29300/ijsse.v5i1.9499