

Determinants of Self-Esteem Among Breast Cancer Patients: A Literature Review

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ABSTRACT

Breast cancer patients often experience physical and psychological changes that may affect their self-esteem. Low self-esteem can influence treatment adherence, psychological well-being, and overall quality of life. This study aims to identify factors that influence self-esteem among breast cancer patients. The method used was a literature review following the PRISMA guidelines. Articles were searched from Google Scholar, PubMed, ScienceDirect, and Taylor & Francis Online, databases using the keywords "self-esteem", "breast cancer patients", and "determinants". Articles published between 2020–2025 were included. From 3,470 identified articles, 9 studies met the inclusion criteria and were analyzed descriptively. The results show that self-esteem in breast cancer patients is influenced by several factors, including family support, body image, meaning of life, self-efficacy, and anxiety. Family support was consistently reported as a significant factor associated with higher self-esteem. These findings highlight the importance of psychosocial support in improving the psychological well-being of breast cancer patients.

INTRODUCTION

Breast cancer is the most common cancer among women in 157 out of 185 countries. In 2022, an estimated 2.3 million new cases were diagnosed worldwide, with approximately 670,000 deaths reported (WHO, 2025). This condition contributes significantly to the global cancer burden, as the International Agency for Research on Cancer (IARC) (2022) recorded approximately 19.9 million new cancer cases globally across all types and both genders in the same year. The distribution of cases varies by region, with Asia accounting for the highest number at approximately 9.8 million, followed by Europe (4.4 million), North America (2.6 million), Latin America and the Caribbean (1.5 million), and Africa (1.1 million), while Oceania reported the lowest number at 269,088 cases. Within this global burden, breast cancer also represents a major health problem in Indonesia, with 66,271 new cases (16.2%) out of 408,661 total new cancer cases and more than 22,000 deaths attributed to the disease (Globocan, 2022).

Breast cancer, or carcinoma mammae, is a condition in which breast tissue cells lose control over their normal growth process, causing them to multiply rapidly, irregularly, and uncontrollably. These abnormal cells continue to proliferate and form a lump or tumor that can

potentially spread (metastasize) to other parts of the body if left untreated (Alfiyah & Susanti, 2024). Although the exact causes of breast cancer are not yet fully understood, several risk factors have been identified, including reproductive and hormonal factors (early menarche, late menopause, advanced age at first childbirth, fewer children, reduced breastfeeding, menopausal hormone therapy, and oral contraceptives), lifestyle factors (excess weight, physical inactivity, and alcohol consumption), and genetic predisposition (germline mutations of high-penetrance genes such as BRCA1 and BRCA2) (Hong & Xu, 2022; CDC, 2024).

Breast cancer may not present signs or symptoms in its early stages. Symptoms typically appear when the tumor grows large enough or when the cancer spreads to surrounding tissues and organs. The most common symptom is a hard lump in the breast, while other symptoms include a lump in the armpit, changes in breast and nipple shape, difficulty swallowing or loss of appetite, fatigue, chronic nausea and vomiting, pain, and constipation (Fatrida et al., 2022).

Once breast cancer is detected and diagnosed, appropriate treatment planning becomes essential to control disease progression and improve patient survival. Treatment strategies are generally determined based on tumor characteristics, disease stage, and the patient's overall clinical condition (Bastos et al., 2023). Breast cancer treatment is delivered through a multidisciplinary approach that combines locoregional therapies, such as surgery and radiotherapy, with systemic therapies, including hormone therapy, chemotherapy, anti-HER2 targeted therapy, and immunotherapy (R. Dewi et al., 2022; Smolarz et al., 2022). Although systemic therapies have significantly improved survival outcomes, they may also lead to various adverse physical and psychological effects that can affect patients' well-being and overall quality of life (Harbeck, 2022).

One of the psychological impacts experienced by breast cancer patients is a decline in self-esteem. Self-esteem refers to an individual's assessment of their own worth and abilities, encompassing feelings of value, confidence, and self-acceptance. In breast cancer patients, self-esteem often decreases due to physical and psychological changes that occur during the course of the disease and its treatment. Changes in body shape, loss of breasts, hair loss, and other therapy-related side effects can negatively affect body image, which in turn impacts self-esteem. Reduced self-esteem is also associated with feelings of helplessness, anxiety, depression, and diminished quality of life. Therefore, self-esteem is a critical psychological aspect that must be considered in breast cancer care, as it influences patients' adaptation processes, psychological well-being, and their ability to undergo treatment and continue daily life (Brajković & Babić, 2024).

Several studies have examined the relationship between various factors and self-esteem in breast cancer patients. Research has identified that family support, body image, meaning of life, self-efficacy, and anxiety play important roles in influencing self-esteem. However, most existing studies focus on one or two factors in isolation, without comprehensively examining how these determinants interact or collectively shape patients' psychological outcomes. Additionally, the majority of these studies are conducted in specific clinical settings with relatively small sample

sizes, limiting the generalizability of their findings. Furthermore, there has been limited effort to synthesize the available evidence through a systematic literature review that integrates these multiple determinants into a cohesive analytical framework. The absence of such comprehensive synthesis leaves a gap in understanding the relative importance and interplay of these factors across different treatment phases and cultural contexts. Given the multidimensional nature of self-esteem and its significance for patient outcomes, a literature review that consolidates the existing evidence on its determinants is urgently needed. This review aims to provide a more holistic understanding by identifying and synthesizing the key determinants of self-esteem among breast cancer patients, thereby informing the development of more effective psychosocial interventions. Therefore, the purpose of this study is to identify the determinants of self-esteem among breast cancer patients through a systematic literature review.

METHODS

Study Design

This study uses a literature review design, in which the author identifies and analyzes several previous studies with similar themes. The literature review process was conducted in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines.

Sample

The sample in this study consisted of nine scientific articles. The inclusion criteria were articles published between 2020 and 2025, articles in English and Indonesian, and articles that provided full text: abstract, introduction, methods, results, and discussion. The study search was conducted on breast cancer patients. The focus was on self-esteem, breast cancer patients, and influencing determinants. The study search was conducted on articles that used a cross-sectional design. Articles that did not match the keywords and outcomes were excluded. The quality of the articles was assessed using the Joanna Briggs Institute guidelines.

Data Collection Technique

The search strategy was conducted using databases and keywords. The databases used were Google Scholar, PubMed, ScienceDirect, and Taylor & Francis Online. The keywords used were "Self-Esteem" AND "Breast Cancer Patient" AND ("Determinants" OR "Factors").

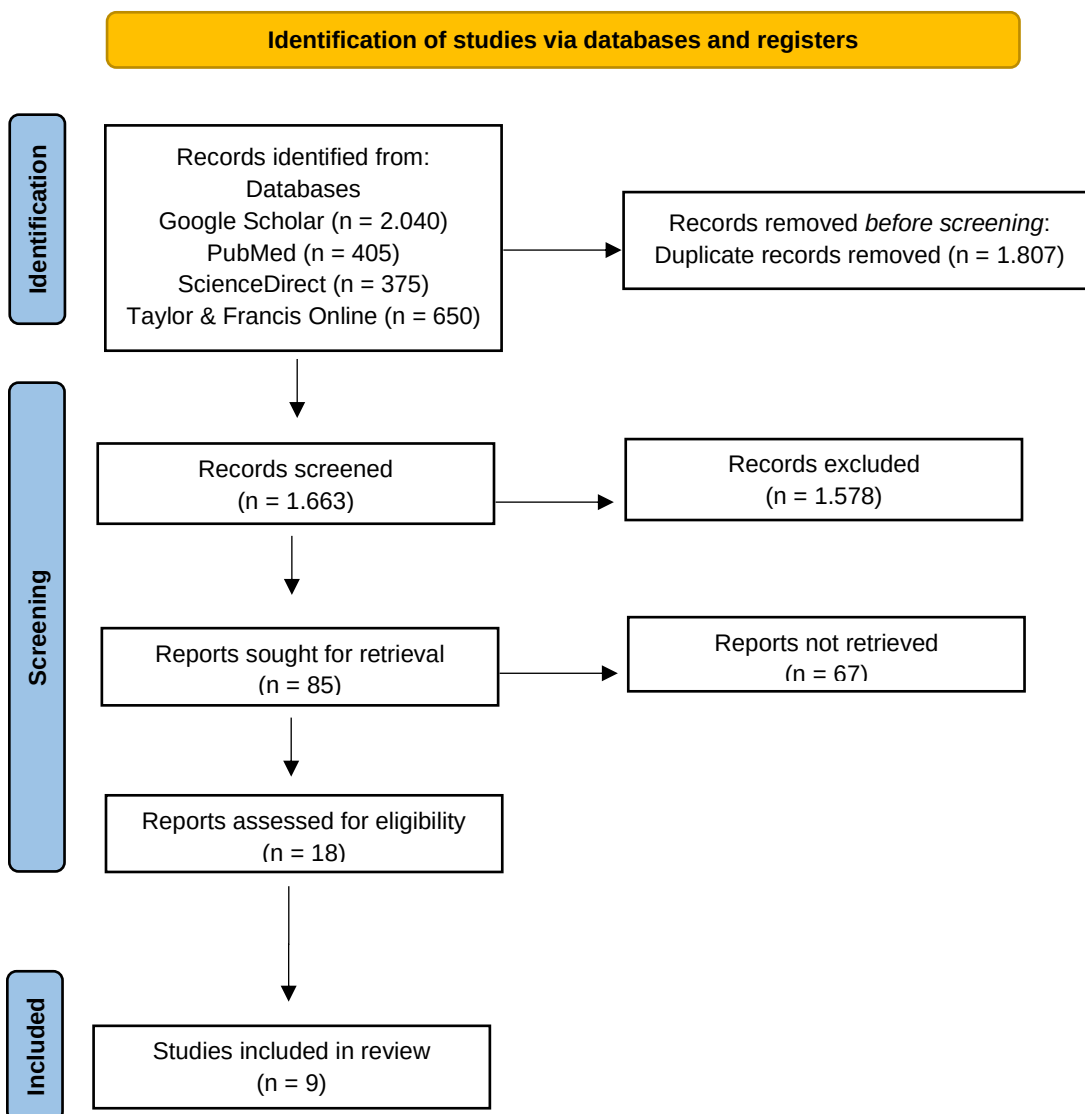


Figure 1. PRISMA Flowchart

Data Analysis Technique

The data analysis technique used was descriptive analysis. Data from the nine articles summarized were analyzed in depth to understand the self-esteem of breast cancer patients and the determinants that influence it. Each article was discussed separately, with careful analysis to ensure that all relevant and important information was identified.

Ethical Consideration

Ethical approval is not required for this research because it is a literature review and does not directly involve human participants. However, researchers still uphold the principles of research ethics, including respect for intellectual property rights by providing appropriate citations for each source used.

RESULTS AND DISCUSSION

Results

In the initial stage of literature search, 3,470 articles were obtained using relevant keywords from various databases. Next, duplication was removed, resulting in the elimination of 1,807 articles. After the removal process, screening of titles and abstracts was carried out, resulting in 85 articles relevant to the research topic. Of these 85 articles, 67 were inaccessible and the text was incomplete. Then, 18 articles were further evaluated through a review of the full text, but 9 articles did not meet the inclusion criteria or were not in line with the research objectives. Thus, 9 articles were used as the main sources in this literature review, as shown in Table 1.

Table 1. Article Search Results

Author	Title	Design	Sample	Result
Khairunnisa, Tina Handayani Nasution, Devi Rahmayanti (2025)	The Relationship between Family Support and Self-Esteem in Breast Cancer Patients Undergoing Palliative Care (A Correlational Study at Ulin Regional Hospital, Banjarmasin)	Cross-sectional	83 breast cancer patient pasien	The results show a relationship between family support and patient self-esteem, with a correlation coefficient of $r = 0.391$. The analysis produced a significance level of $p = 0.003$, indicating that the alternative hypothesis (H1) is accepted. A correlation coefficient of 0.391 indicates a moderate and positive relationship, meaning that higher family support is

Author	Title	Design	Sample	Result
				associated with higher patient self-esteem.
Srimis Leini Saragih, Dirayati Sharfina, Roza Cellia Purba (2025)	Hubungan Dukungan Keluarga Dengan Self-Esteem Pada Penderita Kanker Payudara di Rumah Sakit Haji Medan	Cross-sectional	32 breast cancer patient	The Chi Square test produced a p-value = 0.001 (< 0.05), indicating a significant relationship between family support and self-esteem.
Finna Rachma Agustin, Wita Oktaviana (2024)	Relationship of Family Support on Self-Esteem in Patients with Breast Cancer Who Are Undergoing Chemotherapy	Cross-sectional	78 breast cancer patient	The results show a significant relationship between family support and self-esteem with $p < 0.05$.
Erik Aprilianto, Sih Ageng Lumadi, Feriana Ira Handian (2021)	Family social support and the self-esteem of breast cancer patients undergoing neoadjuvant chemotherapy	Cross-sectional	56 breast cancer patient	Based on the Spearman Rho statistical test, it was found that the p-value was 0.000 with a correlation coefficient of 0.762. This indicates a strong positive correlation between family social support and patient self-esteem.

Author	Title	Design	Sample	Result
Ni Luh Putu Mahayani, Ni Komang Sukraandani, Ni Wayan Suniyadewi (2020)	Hubungan Dukungan Keluarga dengan Self Esteem pada Pasien Kanker Payudara di Poliklinik Bedah Onkologi RSUP Sanglah Denpasar	Cross sectional	188 breast cancer patient	The Spearman's rank test yielded a p-value of 0.000 ($p < \alpha$), indicating a relationship between self-esteem and family support in breast cancer patients with a calculated r value of 0.566 (positive relationship).
Menahil Ashfaq, Kiran Shahzadi, Intisam Zia, Zainab Ilyas, Saira Bano (2025)	A Cross-Sectional Study of Body Image Dissatisfaction and Self-Esteem Among Breast Cancer Patients in Rawalpindi/Islamabad	Cross-sectional	150 breast cancer patient	The results showed a significant negative correlation between body image dissatisfaction and self-esteem ($r = -0.490$, $p < 0.01$), confirming the main hypothesis.
Erti Ikhtiarini Dewi, Miftah Salsabila, Yeni Fitria (2024)	Relationship Between Self Esteem and Meaning of Life in Breast Cancer Patients at the Agricultural Regional Hospital of Jember Regency	Cross-sectional	86 breast cancer patient	Data analysis using Kendall Tau-C showed (p -value = 0.004 with r -value = 0.26), which means that there is a relationship between self-esteem and

Author	Title	Design	Sample	Result
Sudeepta Deep, Mamata Swain, Sasmita Das (2025)	Level of Self-esteem and Self-efficacy among Postoperative Breast Cancer Patients	Quantitative study	200 postoperative breast cancer patients	meaning of life in breast cancer patients. The results show that 65.5% have low self-esteem and 53% have low self-efficacy, with a phi value of 0.312 and a p-value of 0.001, indicating a positive correlation at a significance level of $p < 0.01$.
Shahrzad Yektatalab, Elaheh Ghanbari (2020)	The Relationship between Anxiety and Self-Esteem in Women Suffering from Breast Cancer	Descriptive correlation study	261 patients diagnosed with non-metastatic breast cancer	The mean scores for state anxiety and trait anxiety were 46.29 ± 11.745 and 46.61 ± 10.936 , respectively. The mean $\pm$ SD self-esteem score was 18.38 ± 5.08 . The results showed an indirect correlation between anxiety and self-esteem in women with breast cancer ($r = -0.690$).

Source: Data extracted and synthesized by the authors from the 9 included studies (2020–2025)

Discussion

Breast cancer is a chronic disease that not only affects physical condition, but also influences the psychological aspects of patients, including self-esteem. Changes in body shape, loss of breasts due to surgery, side effects of chemotherapy such as hair loss, and changes in social roles often give rise to feelings of worthlessness, inferiority, and withdrawal from social environments. In this context, family support is an important factor that can help patients maintain or improve their self-esteem during treatment.

A number of studies have shown a consistent relationship between family support and self-esteem in breast cancer patients. Research by Agustin & Oktaviana (2024) found that patients who received good family support during chemotherapy tended to have higher self-esteem than patients with low support. Similar results were also reported by Khairunnisa et al. (2025) in patients undergoing palliative care at the Ulin Banjarmasin Regional General Hospital, where emotional, informational, and instrumental support from family members was significantly associated with increased self-esteem. These findings show that even in the later stages of the disease, the presence and involvement of family members still play a major role in maintaining the psychological condition of patients.

Research by Saragih et al. (2025) at Haji Hospital in Medan and Mahayani et al. (2020) at Sanglah General Hospital in Denpasar also reinforces these findings. The critical role of family support in maintaining psychological well-being among breast cancer patients has been consistently demonstrated across various cultural contexts (Slamet & Suryani, 2021). Both studies show that patients with optimal family support in the form of attention, motivation, and assistance during check-ups and therapy have better self-esteem. Family support helps patients feel valued, accepted, and not alone in facing their illness. Meanwhile, Aprilianto et al. (2021) found a strong correlation between family social support and self-esteem in patients undergoing neoadjuvant chemotherapy, showing that the higher the support received, the higher the patient's self-esteem. In general, these findings confirm that the family plays a key role as the primary support system capable of strengthening the psychological resilience of breast cancer patients.

In addition to family support, several studies have also identified other psychological factors related to self-esteem. Ashfaq et al. (2025) reported that dissatisfaction with body image was significantly associated with low self-esteem in breast cancer patients. This is consistent with a recent qualitative study by Mateu et al. (2025), which found that body image concerns are a persistent challenge for breast cancer patients, affecting their psychological well-being and self-perception. Physical changes resulting from medical procedures often affect women's self-perception and confidence in their bodies. Dewi et al. (2024) found that self-esteem is also related to meaning in life, where patients with better self-esteem tend to have a more positive and meaningful perception of life. Meanwhile, Deep et al. (2025) showed that self-efficacy is related to the level of self-esteem in post-operative patients, indicating that belief in one's own abilities also strengthens self-esteem.

Emotional factors such as anxiety also play an equally important role. Yektatalab & Ghanbari (2020) found a negative relationship between anxiety and self-esteem in women with breast cancer, where high levels of anxiety were associated with low self-esteem. This finding is supported by a recent study by Barcelos de Souza et al. (2025), which demonstrated that anxiety is negatively correlated with self-esteem in women undergoing breast cancer surgery, emphasizing the need for psychological interventions to address emotional distress. This shows that unstable psychological conditions can worsen patients' self-perception. If left untreated, anxiety and emotional distress can hinder patients' adaptation to their illness.

Overall, various studies confirm that self-esteem in breast cancer patients is influenced by external and internal factors. Family support emerges as a consistent protective factor in various research settings, whether in the chemotherapy, neoadjuvant, or palliative phases. On the other hand, factors such as body image, meaning of life, self-efficacy, and anxiety also shape the psychological dynamics of patients. Therefore, the approach to breast cancer care should not only focus on medical aspects but also involve psychosocial interventions that strengthen family support, help patients accept their bodily changes, manage anxiety, and rebuild their self-confidence and sense of life's meaning. This comprehensive approach is expected to improve patients' psychological well-being and overall quality of life

CONCLUSION AND SUGGESTION

Conclusion

This literature review indicates that self-esteem among breast cancer patients is influenced by both internal and external factors. Family support consistently appears as an important determinant that helps maintain positive self-esteem during the treatment process. In addition, psychological factors such as body image, meaning of life, self-efficacy, and anxiety also contribute to shaping patients' self-esteem. Therefore, comprehensive breast cancer care should include psychosocial interventions that strengthen family support and address patients' psychological needs.

Suggestion

Healthcare professionals are expected to not only focus on medical management, but also conduct routine screening for psychological conditions, particularly the self-esteem of breast cancer patients. Family involvement needs to be optimized through education and guidance so that they are able to provide appropriate support. In addition, healthcare institutions are advised to develop psychosocial intervention programs such as counseling and support groups to help patients adapt to the changes they are experiencing.

REFERENCES

- Agustin, F. R., & Oktaviana, W. (2024). Relationship of family support on self-esteem in patients with breast cancer who are undergoing chemotherapy. *Indonesian Journal of Global Health Research*, 6(S5), 53–62. <https://doi.org/10.37287/ijghr.v6iS5.4271>
- Alfiah, S., & Susanti, M. (2024). Gambaran bakteri pada luka infeksi pasca operasi carcinoma mammae di RSUD Kraton. *Jurnal Medika Husada*, 4(1), 17–24. <https://doi.org/10.62383/demokrasi.v1i3.62>
- Aprilianto, E., Lumadi, S. A., & Handian, F. I. (2021). Family social support and the self-esteem of breast cancer patients undergoing neoadjuvant chemotherapy. *Journal of Public Health Research*, 10(2). <https://doi.org/10.4081/jphr.2021.2234>
- Ashfaq, M., Shahzadi, K., Zia, I., Ilyas, Z., & Bano, S. (2025). A cross-sectional study of body image dissatisfaction and self-esteem among breast cancer patients in Rawalpindi/Islamabad. *Pakistan Journal of Humanities and Social Sciences*, 13(1), 262–271. <https://doi.org/10.52131/pjhss.2025.v13i1.2707>
- Barcelos de Souza, J. C., et al. (2025). What are the effects of free dance and dance therapy on self-esteem, anxiety, body image and depressive symptoms of women undergoing breast cancer surgery? *Journal of Bodywork and Movement Therapies*, 42, 1159–1167.
- Bastos, M. C. S., Almeida, A. P. de, Bagnoli, F., & Oliveira, V. M. de. (2023). Early breast cancer: Concept and therapeutic review. *Revista da Associação Médica Brasileira*, 69(8). <https://doi.org/10.1590/1806-9282.2023S114>
- Brajković, M., & Babić, D. (2024). The connection between quality and self-esteem in patients with breast cancer. *Health Bulletin*, 10(1), 124–135. <https://doi.org/10.47960/2303-8616.2024.1.9.124>
- CDC. (2024). Breast cancer risk factors. Centers for Disease Control and Prevention. <https://www.cdc.gov/breast-cancer/risk-factors/index.html>
- Deep, S., Swain, M., & Das, S. (2025). Level of self-esteem and self-efficacy among postoperative breast cancer patients. *Indian Journal of Public Health*, 69(2), 211–213. https://doi.org/10.4103/IJPH.IJPH_535_23
- Dewi, E. I., Salsabila, M., & Fitria, Y. (2024). Relationship between self esteem and meaning of life in breast cancer patients at the Agricultural Regional Hospital of Jember Regency. *Jurnal Pendidikan Keperawatan Indonesia*, 10(2), 155–168. <https://doi.org/10.17509/jpki.v10i2.66896>
- Dewi, R., Panduragan, S. L., Umar, N. S., Yulianti, M., & Budhiana, J. (2022). The five-finger relaxation techniques on anxiety, stress and quality of life in breast cancer patients. *Malaysian Journal of Medicine and Health Sciences*, 18, 96–100. https://medic.upm.edu.my/upload/dokumen/2022022317260619_0932.pdf
- Fatrida, D., Elviani, Y., Mustakim, M., & Saputra, A. U. (2022). Asuhan keperawatan keluarga dan komunitas: Upaya pencegahan kanker payudara anak usia remaja. Penerbit Adab.

- Globocan. (2022). Global Cancer Observatory: Cancer Today. International Agency for Research on Cancer. <https://gco.iarc.who.int/media/globocan/factsheets/populations/360-indonesia-fact-sheet.pdf>
- Harbeck, N. (2022). Neoadjuvant and adjuvant treatment of patients with HER2-positive early breast cancer. *The Breast*, 62, 80–89. <https://doi.org/10.1016/j.breast.2022.01.006>
- Hong, R., & Xu, B. (2022). Breast cancer: An up-to-date review and future perspectives. *Cancer Communications*, 42(10), 913–936. <https://doi.org/10.1002/cac2.12358>
- International Agency for Research on Cancer (IARC). (2022). Cancer Today. <https://gco.iarc.fr/today/en/dataviz/tables?mode=population>
- Khairunnisa, K., Nasution, T. H., & Rahmayanti, D. (2025). The relationship between family support and self-esteem in breast cancer patients undergoing palliative care (A correlational study at Ulin Regional Hospital, Banjarmasin). *Dunia Keperawatan: Jurnal Keperawatan dan Kesehatan*, 13(2), 207–213. <https://doi.org/10.20527/dk.v13i2.646>
- Mahayani, N. L. P., Sukraandini, N. K., & Suniyadewi, N. W. (2020). Hubungan dukungan keluarga dengan self esteem pada pasien kanker payudara di Poliklinik Bedah Onkologi RSUP Sanglah Denpasar. *Jurnal Akademika Baiturrahim Jambi*, 9(2), 181–189. <https://doi.org/10.36565/jab.v9i2.210>
- Mateu, P., et al. (2025). A qualitative case study of body image in women with breast cancer participating in an exercise program. *Supportive Care in Cancer*, 33(10), 893.
- Smolarz, B., Nowak, A. Z., & Romanowicz, H. (2022). Breast cancer—Epidemiology, classification, pathogenesis and treatment (Review of literature). *Cancers*, 14, 1–27. <https://doi.org/10.3390/cancers14102569>
- Slamet, A., & Suryani, S. (2021). Family support and quality of life among breast cancer patients. *Enfermería Clínica*, 31 (2), S352-S355.
- WHO. (2025). Breast cancer. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/breast-cancer>
- Yektatalab, S., & Ghanbari, E. (2020). The relationship between anxiety and self-esteem in women suffering from breast cancer. *Journal of Mid-Life Health*, 11(3), 126–132. <https://doi.org/10.4103/jmh.JMH>