Family support and anxiety: A correlational study among women with stage III breast cancer

Narsiti Narsiti[1]* ⓘD
Feriana Ira Handian[2] ⓘD
Achmad Dafir Firdaus[2]

[1] Surgical Nursing Department at dr. Saiful Anwar Hospital, Malang, Indonesia
[2] STIKES Maharani Malang, Malang, Indonesia

*Correspondence:
Narsiti Narsiti
Dian Rahmawati, Surgical Nursing Department at dr. Saiful Anwar Hospital, Malang, Indonesia, Postal Code : 65111, Phone +62 898-9759-822, Fax 0341-369384, Mobile Phone +62 812-3526-2992,
Email: nar.siti74@gmail.com

ABSTRACT

Background: Breast cancer exerts a broad impact on psychological well-being, notably leading to heightened anxiety levels. Uncontrolled anxiety can interfere with planned therapy, making it crucial to understand its underlying factors.
Objective: This study aims to investigate the relationship between family support and anxiety in patients with stage III breast cancer.
Methods: The study employed a cross-sectional design and selected 41 respondents through purposive sampling. Family support was assessed using the Sarason Social Support Questionnaire, while anxiety levels were measured with The State-Trait Anxiety Inventory (STAI). Statistical analysis utilized the Spearman-Rho correlation.
Results: The majority of breast cancer patients in the sample exhibited low levels of family support (n=22, 53.7%). On average, respondents reported an anxiety score of 80.78. The analysis demonstrated a significant relationship between family support and anxiety in breast cancer patients ($p = 0.04$), with a correlation coefficient of -0.316.
Conclusions: These findings emphasize the importance of enhancing the quality of service in the treatment room and initiating early detection of patients experiencing psychosocial issues. Additionally, involving families in the therapy implementation process may prove beneficial. Nurses play a crucial role in addressing these aspects to better support patients throughout their breast cancer journey.

Keywords: family support; breast cancer; anxiety; cancer

INTRODUCTION

Breast cancer is a disease characterized by abnormal changes in breast cell structure and function, leading to uncontrolled cell division. These changes are triggered by various factors that alter gene expression, resulting in proliferation disorders (Kurniasari et al., 2017). Uncontrolled breast cancer can have significant impacts, including physiological consequences like pain and even death, as well as psychological effects, not only experienced by the patient but also affecting their family. The incidence of new breast cancer cases has risen by 57% globally, particularly in developing countries.

Nursing and Healthcare Practices

- *Family support is significantly related to anxiety levels among stage III breast cancer patients.*
- *Patient families can enhance and maintain family support by actively seeking information and meeting the patients' needs.*
- *Nurses play a crucial role in the early detection of anxiety in breast cancer patients by conducting interviews and gathering periodic medical history during each visit.*

Breast cancer affects patients in both early and advanced stages, causing physical and psychological challenges (Blackman et al., 2021). Pain is a common physical consequence experienced by breast cancer patients, and its persistent presence interferes with daily activities, diminishing their quality of life (Smith et al., 2015). Moreover, psychological impacts, such as depression and anxiety, are prevalent among cancer patients. Current research suggests that 20% of cancer patients suffer from depression, while 30% experience anxiety (Pitman et al., 2018). Neglecting these psychological conditions can significantly reduce the quality of life and survival rates of cancer patients. In the case of breast cancer patients undergoing chemotherapy, severe anxiety is observed in 52.3% of cases (Nurhidayati & Rahayu, 2018).

Anxiety reactions in breast cancer patients can emerge not only upon diagnosis but also after undergoing surgery. Patients diagnosed with stage III breast cancer, particularly those diagnosed 3-5 years ago, tend to exhibit higher levels of anxiety and depression compared to early-stage patients (Akel et al., 2017). Stage III patients often fear death and the possibility of unsuccessful therapy. Anxiety may also be linked to financial concerns and fears of social rejection within their family or community. The emotional burden can be evident in breast cancer patients undergoing mastectomy, as they show signs of anxiety, depression, and a negative attitude, leading to a shift in prognosis from positive to negative outcomes (Ningsih, 2015). The fear of death is reported by 51% of cancer patients, and this fear correlates with a reduced quality of life (Soleimani et al., 2017).

Family support plays a crucial role in cancer patients' lives, and the support of loved ones can significantly impact their well-being. Family members provide essential life support, and their involvement is highly meaningful. Proper family support can improve the quality of life of cancer patients significantly. Agustin & Supratman (2020) found that 60% of cancer patients received good family support. During a preliminary study, interviews with stage III breast cancer patients revealed anxiety about the upcoming treatment's side effects. Some patients expressed fear of being a burden to their families and the possibility of being abandoned. Additionally, some families were observed to be preoccupied with their own work and less attentive to the patient's needs. Based on the aforementioned, this study aims to investigate the relationship between family support and anxiety among women with stage III breast cancer.

METHODS

Design

This study adopts a descriptive-analytic method with a cross-sectional design approach.

Participants and Setting

The study population consists of breast cancer patients who are currently hospitalized at general hospital of dr. Saiful Anwar Malang, Malang, Indonesia. A total sampling technique is used to select 41 respondents who meet the inclusion criteria: (1) They belong to a nuclear family or live in the same household, (2) They possess good communication skills, and (3) They willingly agree to participate as respondents. Exclusion criteria encompass families with severe psychological issues that may hinder cooperation.

Instruments

The independent variable in this study is family support for patients suffering from stage III breast cancer. The Sarason Social Support Questionnaire (SSQ) is employed as the primary questionnaire for this variable. The validity test reveals no discarded items, with a coefficient value of p = 0.43, indicating that SSQ is a suitable tool. The reliability of the SSQ is assessed using Cronbach's alpha coefficient
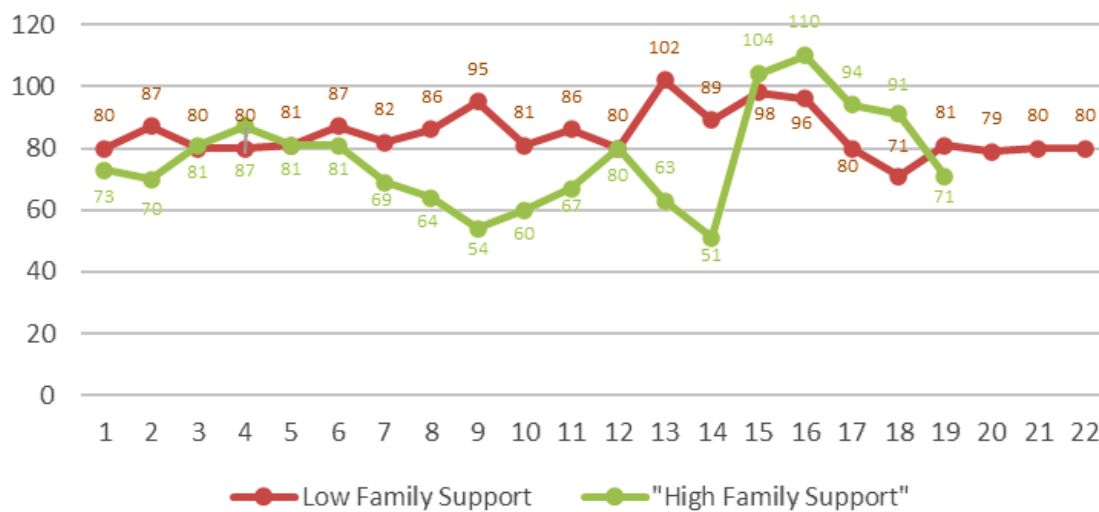
Figure 1. Graph of Family Support and Anxiety in Stage III Breast Cancer Patients

(α), yielding a result of 0.922, indicating high internal consistency. On the other hand, the dependent variable in this study is patient anxiety, assessed using The State-Trait Anxiety Inventory (STAI). This instrument has been validated and proven reliable in evaluating anxiety levels in adults, with a reliability range from 0.86 to 0.94 and a validity score of 0.69.

Data Analysis

Statistical tests were selected based on testing the normality of the data distribution. The Shapiro-Wilk test results showed a p-value of 0.002 for family support (p < 0.05) and a p-value of 0.288 for anxiety (p > 0.05). Given the outcome of the data normality test, the statistical analysis method chosen was the Spearman-Rho correlation.

Ethical Consideration

This research has received approval from the Ethics Committee of Dr. Saiful Anwar Hospital, Malang, with approval number 400/252/K3/302/2021. In this study, the researcher adhered to ethical principles, such as ensuring anonymity by providing a code on the questionnaire sheet. Additionally, informed consent was obtained in writing from all respondents. There was no element of coercion present, which allowed the respondents to withdraw from participating in this research at any time. Moreover, this research did not result in any physical or psychological effects on the respondents.

RESULTS

A majority of respondents fall within the age range of 41-50 years. Furthermore, most patients have completed their education up to junior high school, accounting for 16 respondents (39%). Regarding the duration of the breast cancer diagnosis, almost half of the research participants were diagnosed within the timeframe of 6 months to 1 year. Additionally, an overwhelming majority of the respondents are married, amounting to 38 respondents (92.7%). From the family support, more than 50% of respondents have low support from their family (Table 1 & Figure 1). The average anxiety score is 80.78, with the lowest recorded value being 51 and the highest reaching 110 (Table 2).

Based on Table 3, the analysis of the relationship between family support and anxiety in stage III breast cancer patients using Spearman's rho resulted in a p-value of 0.04 (p < 0.05). Therefore, it can be concluded that there is a significant relationship between family support and patient anxiety. The relationship is indicated by a correlation coefficient (r) of -0.316. This negative value suggests a weak relationship, meaning that family support is inversely proportional to the respondent's anxiety. In other words, as family support decreases, the anxiety levels of stage III breast cancer patients tend to increase.

DISCUSSION

The results of the study indicate that the majority of breast cancer patients have low

Narsiti, N., Handian, I. F., & Firdaus, A. D. (2023). Family support and anxiety: A correlational study among women with stage III breast cancer. *The Journal of Palembang Nuring Studies. 2*(3), 144-150. http://dx.doi.org/10.55048/jpns68

Table 1. Participants Characteristics (n=41)

Characteristics	n	%
Age		
20 – 40 years	9	22.0
41 – 50 years	31	75.6
>60 year	1	2.4
Education		
No school	1	2.4
Elementary School	11	26.8
Junior High School	16	39.0
Senior High School	12	29.3
College	1	2.4
Long Diagnosed with Cancer		
6 month – 1 year	24	58.5
1 – 5 year	16	39.0
>5 year	1	2.4
Marital Status		
Single	2	4.9
Married	38	92.7
Divorced	1	2.5
Family support		
Low	22	53.7
High	19	46.3

Table 2. Anxiety Score

Variable	n	Mean	SD	Min – Max
Anxiety	41	80.78	12.680	51 – 110

Table 3. Statistical Analysis between Family support and Anxiety

Family support	n	Anxiety Score	p-value	r
Low	22	70-100	0.04	-0.31
High	19	50-110		

family support. These findings align with a similar study, where reported that 75% of cancer patients had poor family support, resulting in 53.1% of patients experiencing anxiety and a diminished quality of life (Husni et al. 2015). Similarly, Setiyani & Ayu (2019) found that 24 patients had low family support, emphasizing the need to address this issue as a considerable number of patients are affected by insufficient family support. Low family support can heighten the risk of psychological disorders, reduce individual functioning and activity in the community.

Support from family plays a pivotal role in a patient's healing process, especially for those undergoing post-mastectomy treatment. Yusuf (2017) highlights that support from family, being readily available, holds significant psychological value in the healing journey. Low family support may be attributed to the family's level of knowledge, as Table 1 indicates that most respondents have completed junior high school education. Sari et al. (2020) have stated that knowledge significantly influences the level of family support, as families with limited knowledge may struggle to provide adequate support to their ill family members. Enhancing family support can prove immensely beneficial

in the management of chronic diseases. Wati & Yanti (2018) assert that positive direction in family support can lead to positive changes in the self-concept of patients undergoing treatment for chronic illnesses. The role of family support is crucial in the patient's healing process, aiding in problem-solving and enhancing individual coping mechanisms.

Furthermore, the duration since cancer diagnosis may impact family support. Most patients in the study were diagnosed within 6 months to 1 year. According to the loss theory mentioned by Kulber Ross in Yusuf (2017), stages of sequential loss include rejection, anger, bargaining, depression, and acceptance. Researchers argue that families might still be in the denial stage, making it difficult for them to cope, make decisions, and provide adequate support. The surgical procedures, especially those involving the removal of body organs, may be particularly challenging for families to accept, leading to a lack of expected resilience.

Family support plays a crucial role in a woman's life, especially during difficult times, providing value and adding a sense of peace. It encompasses emotional support, reward support, instrumental support, and informative support. The benefits of family support include making a woman feel more comfortable in dealing with problems (Cumayunaro, 2018).

The research findings indicate that the average anxiety level among patients is 80.78. Anxiety is an emotional condition characterized by fear without a clear source, involving worries about various aspects of life and deep, ongoing feelings of fear and worry (Hawari, 2016). Tania et al. (2019) reported that the prevalence of anxiety levels among breast cancer patients was 92.5%, with 34.2% experiencing mild anxiety and 58.3% experiencing moderate to severe anxiety. This finding is supported by Di Giacomo et al. (2016), who observed that a breast cancer diagnosis negatively impacts affective relationships, life expectancy, long-term plans, productivity, and social life. Furthermore, it leads to psychological effects such as depression, anxiety, anger, mood disturbances, social withdrawal, isolation, and aggressiveness (Di Giacomo et al., 2016).

The study's results revealed a significant relationship between family support and anxiety in stage III breast cancer patients. This relationship is weak and negatively directed, indicating that higher family support is associated with lower anxiety levels experienced by the patients. This aligns with Rinata & Andayani's (2018) research, which states that high family support can reduce anxiety, especially in women. Similarly, Mezy (2016) highlights that greater family support received by stage III breast cancer patients results in lower anxiety levels, while lower family support is associated with higher anxiety levels. Good family support contributes to a positive self-concept.

CONCLUSIONS

This study indicates that there is a significant relationship between family support and anxiety among stage III breast cancer patients. Patient families can play a crucial role in enhancing family support and maintaining it by actively seeking information and meeting the patients' needs. For stage III breast cancer patients, active participation in their treatment and attention to their psychological well-being are vital to prevent the development of psychosocial problems. Being active in this context means openly expressing feelings of sadness, worry, and other emotions to their closest family members or support system. Furthermore, nurses also play a crucial role in the early detection of anxiety in patients. During each visit, nurses should conduct interviews and gather periodic medical history using available instruments in the healthcare facility. This proactive approach will enable nurses to identify anxiety issues promptly and provide appropriate interventions to address them. To further advance our understanding of effective nursing interventions to reduce anxiety in breast cancer patients, more comprehensive and focused research is needed. Such research can explore various strategies and techniques that nurses can implement to effectively support patients' emotional well-being throughout their cancer journey. By continuously investigating and implementing evidence-based interventions, healthcare providers can improve the overall quality of care and support provided to breast cancer patients.

Narsiti, N., Handian, I. F., & Firdaus, A. D. (2023). Family support and anxiety: A correlational study among women with stage III breast cancer. *The Journal of Palembang Nursing Studies. 2*(3), 144-150. http://dx.doi.org/10.55048/jpns68

None

Data Availability

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

REFERENCES

Agustin, E., & Supratman, S. K. M. (2020). *Gambaran tingkat stres dan depresi pada penderita kanker mammae di RSUD dr. Moewardi Surakarta.* Universitas Muhammadiyah Surakarta.

Ahmad, A., & Gadgeel, S. (Eds.). (2015). *Lung cancer and personalized medicine: current knowledge and therapies.*

Akel, R., El Darsa, H., Anouti, B., Mukherji, D., Temraz, S., Raslan, R., Tfayli, A., & Assi, H. (2017). Anxiety, depression and quality of life in breast cancer patients in the Levant. *Asian Pacific journal of cancer prevention : APJCP, 18*(10), 2809–2816. https://doi.org/10.22034/APJCP.2017.18.10.2809

Blackman, E., Ashing, K., Gibbs, D., Kuo, Y. M., Andrews, A., Ramakodi, M., Devarajan, K., Bucci, J., Jean-Louis, G., Richards-Waritay, O., Wilson, B., Bowen, C., Edi, E., Tolbert, V., Noumbissi, R., Cabral, D. N., Oliver, J., Roberts, R., Tulloch-Reid, M., & Ragin, C. (2021). The cancer prevention project of Philadelphia: Preliminary findings examining diversity among the African diaspora. *Ethnicity & health, 26*(5), 659–675. https://doi.org/10.1080/13557858.2018.1548695

Cumayunaro, A. (2018). Dukungan keluarga dan mekanisme koping pasien gagal ginjal kronik yang menjalani hemodialisa. *Menara Ilmu, 12*(1), 16-25. https://doi.org/10.33559/mi.v12i1.483

Di Giacomo, D., Cannita, K., Ranieri, J., Cocciolone, V., Passafiume, D., & Ficorella, C. (2016). Breast cancer and psychological resilience among young women. *Journal of Psychopathology, 22*, 191–195.

Hawari, D. (2016). *Manajemen stress cemas dan depresi*. Jakarta: Badan Penerbit FKUI

Husni, M., Romadoni, S., & Rukiyati, D. (2015). Hubungan dukungan keluarga dengan kualitas hidup pasien kanker payudara di instalasi rawat inap bedah RSUP Dr. Mohammad Hoesin Palembang Tahun 2012. *Jurnal Keperawatan Sriwijaya, 2*(2), 77–83.

Kurniasari, F. N., Harti, L. B., Ariestiningsih, A. D., Wardhani, S. O., & Nugroho, S. (2017). *Buku ajar gizi dan kanker*. Malang: Universitas Brawijaya Press.

Mezy, B. (2016). *Manajemen emosi ibu hamil*. SAUFA.

Ningsih, S. F. (2015). *Efektivitas terapi emotional freedom technique (EFT) terhadap kecemasan pasien kanker payudara stadium II dan III* (Doctoral dissertation, Riau University).

Nurhidayati, T., & Rahayu, D. A. (2018). Dukungan pasangan pada pasien kanker payudara yang menjalani kemoterapi di RSI Sultan Agung Semarang. *Jurnal Keperawatan Soedirman, 12*(3), 156-162. http://dx.doi.org/10.20884/1.jks.2017.12.3.755

Pitman, A., Suleman, S., Hyde, N., & Hodgkiss, A. (2018). Depression and anxiety in patients with cancer. *Bmj, 361*. https://doi.org/10.1136/bmj.k1415

Rinata, E., & Andayani, G. A. (2018). Karakteristik ibu (usia, paritas, pendidikan) dan dukungan keluarga dengan kecemasan ibu hamil trimester III. *Medisains, 16*(1), 14–20. http://dx.doi.org/10.30595/medisains.v16i1.2063

Sari, Y. I. P., Waluyo, W., Firmanti, T. A., Sholihin, S., & Permana, R. A. (2020). Aspek psikologis pada layanan keperawatan pasien kanker payudara: A systematic review. *Jurnal Penelitian Kesehatan" SUARA FORIKES, 11*, 25–32. http://dx.doi.org/10.33846/sf11nk105

Setiyani, H., & Ayu, S. M. (2019). Hubungan tingkat pendidikan, pendapatan dan dukungan keluarga dengan kecemasan pada wanita menopause di Desa Jobohan, Bokoharjo, Sleman 2016. *Jurnal Medika Respati, 14*(2), 105–116. https://doi.org/10.35842/mr.v14i2.179

Smith, R. A., Manassaram-Baptiste, D., Brooks, D., Doroshenk, M., Fedewa, S., Saslow, D., Brawley, O. W., & Wender, R. (2015). Cancer screening in the United States, 2015: a review of current American cancer society guidelines and current issues in cancer screening. *CA: A Cancer Journal for Clinicians, 65*(1), 30–54. https://doi.org/10.3322/caac.21261

Soleimani, M. A., Lehto, R. H., Negarandeh, R., Bahrami, N., & Chan, Y. H. (2017). Death anxiety and quality of life in Iranian caregivers of patients with cancer. *Cancer*

Nursing, 40(1), E1–E10. https://doi.org/10.1097/ncc.0000000000000355

Tania, M., Soetikno, N., & Suparman, M. Y. (2019). Gambaran kecemasan dan depresi wanita dengan kanker payudara. *Jurnal Muara Ilmu Sosial, Humaniora, Dan Seni, 3*(1), 230–237. https://doi.org/10.24912/jmishumsen.v3i1.3469

Wati, D. F., & Yanti, Y. (2018). Gambaran dukungan keluarga terhadap perubahan konsep diri pasien pasca stroke di Poli Neurologi Hanafiah Batusangkar. *Real in Nursing Journal, 1*(1), 20-29. https://dx.doi.org/10.32883/rnj.v1i1.225

Yusuf, H. (2017). Masalah psikososial keluarga dan peranan psikoedukasi dalam peningkatan kualitas hidup bekas pesakit mental. *Asian Social Work Journal, 2*(2), 19–25.