Psychosocial Status Equality between Familial and Non-Familial Breast Cancer Patients

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Research Article

Psychosocial Status Equality between Familial and Non-Familial Breast Cancer Patients

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Abstract

Aims: To compare psychosocial status between familial and non-familial breast cancer patients.

Methods: This study used a descriptive analytic design with a cross-sectional approach. Population and sampling were taken at Baladika Husada Hospital Jember with a total sampling technique of 90 respondents. The inclusion criteria in this study were a native Jember Regency diagnosed since the end of 2021, histologically documented diagnosis of breast cancer, age range 30-55 years, has a partner (husband), can write and read and is an outpatient or inpatient at a hospital. Baladika Husada Kab. Jember. Patients were excluded if they had stage 4 metastases, were unmarried or divorced, and diagnosed with other chronic diseases. The instrument used was the DASS 21 questionnaire (Depression Anxiety Stress Scale 21) which consisted of 21 self-declaration items. The process of collecting, cleaning, editing and analyzing data was carried out with SPSS version 25.0 using the Mann Withney U Test statistical test.

Results: This study involved 90 total respondents consisting of 40 in the category of familial breast cancer and 50 non-familial breast cancer. The p-value >0.05 indicates that there is no significant difference between psychosocial status in familial breast cancer and non-familial breast cancer.

Conclusion: Psychosocial status of familial breast cancer patients was not different from that of non-familial. Clinically, these findings indicate the importance of the same model of nursing care between the two patient groups. In the next study, the researcher recommends experimental research that examines various nursing interventions on psychosocial status in both groups.

Keywords: Anxiety, breast cancer, depression, mutation, stress

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INTRODUCTION

Breast cancer is one of the most common types of cancer suffered by women and the main contributor to death in women worldwide (1). The World Health Organization (WHO) and the Center for Disease Prevention (CDC) (2016) stated that the high prevalence of breast cancer has reached 7.5 million people diagnosed in the last 5 years, making it a serious challenge to the world of health (2). Some phenomena of the occurrence of breast cancer include late diagnosis, lack of access to health facilities, lack of information and patient awareness in conducting independent screening (3).

Indonesia is one of the countries that contributes to the high number of breast cancer in Asia-Pacific after China and Japan, with a death toll of 42.1 per 100,000 population (4,5). Looking more specifically at the province of East Java, the number of breast cancer sufferers reached 61,230 people, the second largest in Indonesia after the province of Central Java (6). The Jember District Health Office stated that breast cancer is the most common type of cancer compared to other cancers with a total of 561 people. The results of the preliminary study found data on breast cancer patients diagnosed in 2021 at Baladhika Husada Hospital, reaching more than 100 new patients. This figure is predicted to continue to increase in the following year if promotive and preventive efforts are not carried out on an ongoing basis (7).

Genetically, breast cancer is caused by mutations in the BRCA1 and BRCA2 genes located on chromosome 17 (17q21.31) with the potential for inheritance of the disease following the Autosomal Dominant Mendelian Inheritance Pattern (8,9). This has an impact on the high risk of recurrent disease in other family members or passed on to the next generation (familial). However, there is also a pattern of non-familial breast cancer that occurs denovo without a previous family history of the disease (10,11). This difference in conditions can be determined based on the construction of the family pedigree which has implications for different nursing intervention models according to the results of the identification or nursing assessment both psychologically and sociologically (12).

In addition to causing physical health problems, breast cancer patients often experience psychosocial problems such as depression, anxiety and stress (13). The results showed that depression and anxiety symptoms were present in >33% of breast cancer patients. Breast cancer sufferers express feelings of fear and worry about the disease process, the impact of therapy, complications to death (14). In his research, (15) publishes high psychosocial problems, especially symptoms of depression in breast cancer patients, which are associated with low support from family, friends or the work environment (16). Therefore, nurses need to plan appropriate nursing interventions by involving the family as a source of individual coping (17). However, the classification of psychosocial conditions in familial and non-familial breast cancer needs to be measured and analyzed through research in order to obtain research-based certainty.

Assessing the psychological condition between familial breast cancer and non-familial breast cancer is an important assessment basis because it is closely related to the intervention that will be given (18). Through collaborative interventions, genetic counseling can be done to breast cancer patients to overcome nursing problems related to knowledge, adaptation, decisions and psychosocial problems (19,20). However, the intervention provided needs to be adjusted to the patient's psychosocial condition so as to allow differences in procedures between familial breast cancer and non-familial breast cancer. Based on this background, this study specifically aims to describe and analyze differences in psychosocial status in patients with familial and non-familial breast cancer in Jember.
METHODS

Study Design
This study used a descriptive analytic design with a cross-sectional approach.

Population and Sample
Population and sampling were taken at Baladika Husada Hospital Jember with a total sampling technique of 90 respondents. The inclusion criteria in this study were a native Jember Regency diagnosed since the end of 2021, histologically documented diagnosis of breast cancer, age range 30-55 years, has a partner (husband), can write and read and is an outpatient or inpatient at a hospital. Baladika Husada Kab. Jember. Patients were excluded if they had stage 4 metastases, were unmarried or divorced, and diagnosed with other chronic diseases such as heart disease, kidney failure, and infected with COVID-19.

Research Instrument
The instrument used was the DASS 21 questionnaire (Depression Anxiety Stress Scale 21) which consisted of 21 self-declaration items. Interpretation of the results of the questionnaire includes depression, anxiety and stress status. In this study, the researcher did not test the validity and reliability because it had been tested by previous researchers with valid and reliable results. Specifically, the Cronbach alpha coefficients with scores of 0.85, 0.84, and 0.84, while the Spearman-Brown coefficients with scores of 0.84, 0.83, and 0.85 (21).

Data Collection and Analysis
All the patients were subjected to the following: questionnaire for socio-demographic data: (1) personal data including age, marital status, education, occupation, and history of breast cancer and (2) disease data: stages, chemotherapy and type of operations that had been done. The disease staging was based on Tumor Node Metastasis (TNM) staging system and the patients were categorized into patients with early stage (stages I and II) and patients with advanced stage (stages III) disease.

The process of collecting, cleaning, editing and analyzing data was carried out with SPSS version 25.0 using the Mann Withney U Test statistical test. The results of data processing will be presented in the form of tables and diagrams. The study received ethical clearance approval at the Nursing Research Ethics Commission (KEPK) of the University of Jember (No. 1667/UN25.8/KEPK/DL/2022). Data were collected based on medical records and family pedigree construction and reported in the form of scientific publications.

RESULTS

Characteristic of Respondents
This study involved 90 total respondents consisting of 40 in the category of familial breast cancer and 50 non-familial breast cancer. All respondents are married women with an age range of 32-55 (with an average majority of 51.8 years) and all respondents are Muslim. The majority of respondents are housewives (93.3%) with the last education being elementary school (57.8%), the majority of the duration of diagnosis is 1-5 months (64.4%), cancer stage 2 (54.4%), and the presence of a partner is yes (68.9%). There is no difference in the characteristics of familial and non-familial as shown in Table 1.
Table 1. Characteristic of respondents

| Variables | Familial (n=40) | Non-familial (n=50) | Total (n=90) |
|-----------|----------------|---------------------|-------------|
|           | n   | %          | n   | %          | n   | %          |
| Sociodemographics |  |  |  |  |  |  |
| Sex       |     |           |     |           |     |           |
| Female    | 40  | 100.0     | 50  | 100.0     | 90  | 100.0     |
| Age       |     |           |     |           |     |           |
| Mean±SD   | 51.8±8.4 | 51.8±7.8   | 51.8±8.0 |     |           |
| Min-Max   | 32-55 | 36-67     | 32-67 |     |           |
| Marital status |     |           |     |           |     |           |
| Yes       | 40  | 100.0     | 50  | 100.0     | 90  | 100.0     |
| Occupation |     |           |     |           |     |           |
| Housewife | 38  | 95.0      | 46  | 92.0      | 84  | 93.3      |
| Entrepreneur | 2  | 5.0      | 4   | 8.0       | 6   | 6.7       |
| Education |     |           |     |           |     |           |
| Elementary school | 24  | 60.0    | 28  | 56.0      | 52  | 57.8      |
| Junior high school | 10  | 25.0    | 16  | 32.0      | 26  | 58.9      |
| Senior high school | 6   | 15.0    | 6   | 12.0      | 12  | 13.3      |
| Religion  |     |           |     |           |     |           |
| Islam     | 40  | 100.0     | 50  | 100.0     | 90  | 100.0     |
| Period of diagnosis |     |           |     |           |     |           |
| 6-12 months | 13  | 32.5    | 19  | 38.0      | 32  | 35.6      |
| 1-5 months | 27  | 67.5    | 31  | 62.0      | 58  | 64.4      |
| Disease phase |     |           |     |           |     |           |
| Stage 1   | 11  | 27.5      | 8   | 16.0      | 19  | 21.1      |
| Stage 2   | 21  | 52.5      | 28  | 56.0      | 42  | 54.4      |
| Stage 3   | 8   | 20.0      | 14  | 28.0      | 22  | 24.5      |
| DASS Interpretation |     |           |     |           |     |           |
| Depression |     |           |     |           |     |           |
| Normal    | 34  | 85.0      | 47  | 94.0      | 81  | 90.0      |
| Mild      | 3   | 7.5       | 3   | 6.0       | 6   | 6.7       |
| Moderate  | 3   | 7.5       | 0   | 0         | 3   | 3.3       |
| Severe    | 0   | 0         | 0   | 0         | 0   | 0         |
| Extremely Severe | 0  | 0     | 0   | 0         | 0   | 0         |
| Anxiety   |     |           |     |           |     |           |
| Normal    | 28  | 70.0      | 41  | 82.0      | 69  | 76.7      |
| Mild      | 5   | 12.5      | 6   | 12.0      | 11  | 12.2      |
| Moderate  | 7   | 17.5      | 3   | 6.0       | 10  | 11.1      |
| Severe    | 0   | 0         | 0   | 0         | 0   | 0         |
| Extremely Severe | 0  | 0     | 0   | 0         | 0   | 0         |
| Stress    |     |           |     |           |     |           |
| Normal    | 37  | 92.5      | 50  | 100.0     | 87  | 96.7      |
| Mild      | 3   | 7.5       | 0   | 0         | 3   | 3.3       |
| Moderate  | 0   | 0         | 0   | 0         | 0   | 0         |
| Severe    | 0   | 0         | 0   | 0         | 0   | 0         |
| Extremely Severe | 0  | 0     | 0   | 0         | 0   | 0         |

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Psychosocial status equality

In Table 2 below, we can confirm that the psychosocial status (depression, anxiety and stress level) of familial breast cancer patients is not different from non-familial breast cancer patients with p-value >0.05.

| Variables   | Familial (n=40) | Non-familial (n=50) | p-value |
|-------------|-----------------|---------------------|---------|
|             | Mean ± SD       | Min - max           | Mean ± SD | Min - max |         |
| Depression  | 7.4 ± 3.4       | 0 - 14              | 7.1 ± 3.0 | 0 - 14     | 0.935   |
| Anxiety     | 5.6 ± 4.1       | 0 - 14              | 5.3 ± 4.2 | 0 - 14     | 0.304   |
| Stress      | 8.9 ± 3.7       | 0 - 14              | 9.4 ± 4.8 | 0 - 14     | 0.623   |

DISCUSSION

The results obtained in this study, involved respondents who met the criteria as many as 90 patients with a documented history of familial breast cancer as many as 40 respondents, and non-familial breast cancer as many as 50 respondents. The youngest patient was 32 years old, while the oldest patient was 67 years old. Referring to the age classification according to the Ministry of Health of the Republic of Indonesia, this study shows that breast cancer cases occur in early adulthood to late elderly age (22). Previous research has strengthened the notion that breast cancer cases can occur at the age of under 40 and the prevalence increases more after the age of 40 (23). Therefore, an early conclusion that we can get from the characteristics of the respondents is the correlation of age as a risk factor for breast cancer cases in women.

Other sociodemographic characteristics, which are shown in Table 1, are not all related to risk factors. Sex, marital status, occupation, education, religion, period of diagnosis and stage of the disease were presented as basic data expressing the characteristics of respondents who had met the inclusion criteria. Although there is a strong suspicion that indicates the relationship between all these variables with psychosocial status (24,25), but in the case of breast cancer which is grouped based on family history, no correlation has been found.

Psychosocial status, which is shown in Table 1, indicates that the levels of depression, anxiety and stress in the two groups (familial and non-familial) are mostly in the lower score group (normal). Only 7.5% in the familial breast cancer group experienced moderate depression, and 17.5% in the familial group experienced moderate anxiety as the highest status. That is, almost all respondents have a good psychosocial status. These results are certainly different from previous studies which showed depression, anxiety and stress at high levels. More than 35.0% of breast cancer patients reported experiencing depression and anxiety in Greece with multifactor associated such as age, marital status, educational level, stage of cancer from univariate analyzes and place of residence, and religion (13). Socio-cultural differences are the reason why there are gaps in the results of the study. Religiosity and spiritualism, social and family support, interpersonal relations and community can improve the respondent's ability to adapt to health problems (12,26,27).

The researcher's hypothesis about the difference in psychosocial status in the two groups of breast cancer patients is answered by the statistical data in Table 2. The p-value >0.05 indicates that there is no significant difference between psychosocial
status in familial breast cancer and non-familial breast cancer. These results also confirm the same nursing intervention model for all breast cancer patients. Familial and non-familial status need not be an important consideration in planning and implementing nursing care. Genetic counseling, psychosocial education, and treatment management, which are planned to address psychosocial problems in patients are not associated with family history. Thus, the family pedigree construct was only used to identify the cause of breast cancer, plan genetic screening, and calculate the risk of disease recurrence (20,28).

**Strength and limitation of the study**

This study is a new finding that confirms the importance of nursing care management without considering family history based on pedigree construction. The research was carried out with standard procedures so that it met the required ethical standards. However, this study has not analyzed the influence of socio-demographic on psychosocial status as an exposure model for two groups of respondents.

**CONCLUSION**

The results of the study concluded that the psychosocial status of familial breast cancer patients was not different from that of non-familial. Clinically, these findings indicate the importance of the same model of nursing care between the two patient groups. In the next study, the researcher recommends experimental research that examines various nursing interventions on psychosocial status in both groups to be measured in pairs.

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**Ethical Approval**

The study received ethical clearance approval at the Nursing Research Ethics Commission (KEPK) of the University of Jember (No. 1667/UN25.8/KEPK/DL/2022)

**Conflict of Interest**

We declare that there is no conflict of interest.

**REFERENCES**

1. Azamjah N, Soltan-Zadeh Y, Zayeri F. Global trend of breast cancer mortality rate: a 25-year study. Asian Pacific journal of cancer prevention: APJCP. 2019;20(7):2015.
2. Kartika I. Hubungan Tingkat Pengetahuan Tentang Sadari Dengan Perilaku Sadari Pada Wanita Usia Subur (WUS) Di BPS Hj. Uum Sumiati, S. ST. M. Si Tahun 2016. JURNAL KESEHATAN BHAKTI HUSADA. 2016;2(1):4.
3. Wilkinson L, Gathani T. Understanding breast cancer as a global health concern. The British Journal of Radiology. 2022;95(1130):20211033.
4. van der Groep P, Bouter A, van der Zanden R, Siccama I, Menko FH, Gille JJP, et al. Distinction between hereditary and sporadic breast cancer on the basis of clinicopathological data. Journal of clinical pathology. 2006;59(6):611–7.
5. Dumitra S, Jones V, Rodriguez J, Bitz C, Polamero E, Loscalzo M, et al. Disparities in managing emotions when facing a diagnosis of breast cancer: Results of screening program of couples distress. Surgery. 2018;164(1):86–90.
6. Setiawan H, Ariyanto H, Khaerunnisa RN, Firdaus FA, Fitriani A. Yoga Improves Quality of Life among

[https://doi.org/10.33755/jkk](https://doi.org/10.33755/jkk)
Breast Cancer Patients. Faletehan Health Journal. 2021;8(01):1–9.
7. Dey S. Preventing breast cancer in LMICs via screening and/or early detection: The real and the surreal. World journal of clinical oncology. 2014;5(3):509.
8. Shiovitz S, Korde LA. Genetics of breast cancer: a topic in evolution. Annals of Oncology. 2015;26(7):1291–9.
9. Ruiz-Arenas C, Cáceres A, Moreno V, González JR. Common polymorphic inversions at 17q21. 31 and 8p23. 1 associate with cancer prognosis. Human genomics. 2019;13(1):1–9.
10. Weber-Lassalle N, Hauke J, Ramser J, Richters L, Groß E, Blümcke B, et al. BRIP1 loss-of-function mutations confer high risk for familial ovarian cancer, but not familial breast cancer. Breast Cancer Research. 2018;20(1):1–6.
11. Wendt C, Margolin S. Identifying breast cancer susceptibility genes—a review of the genetic background in familial breast cancer. Acta Oncologica. 2019;58(2):135–46.
12. Setiawan H, Lutfi YDS, Andarini E, Kurniawan R, Richard SD, Artyphon H. The effect of genetic counseling on depression, anxiety, and knowledge level among diabetes mellitus patients. Journal of nursing and social sciences related to health and illness. 2021;23(4):330–7.
13. Tsaras K, Papathanasiou I V, Mitsi D, Veneti A, Kelesi M, Zyga S, et al. Assessment of depression and anxiety in breast cancer patients: prevalence and associated factors. Asian Pacific journal of cancer prevention: APJCP. 2018;19(6):1661.
14. Wang L, Geng X, Ji L, Lu G, Lu Q. Treatment decision-making, family influences, and cultural influences of Chinese breast cancer survivors: a qualitative study using an expressive writing method. Supportive Care in Cancer. 2020;28(7):3259–66.
15. Abigiya W, Workeabeba A, Aynalem A, Solomon T. Depression and social support among breast cancer patients in Addis Abeba, Ethiopia. BMC Cancer. 2019;19(1).
16. Abigiya W, Workeabeba A, Aynalem A, Solomon T. Depression and social support among breast cancer patients in Addis Abeba, Ethiopia. BMC Cancer. 2019;19(1).
17. Setiawan H, Nantia Khaerunnisa R, Artyphon H, Fitriani A, Anisa Firdaus F, Nugraha D. Yoga Meningkatkan Kualitas Hidup Pada Pasien Kanker: Literature Review. Journal of Holistic Nursing Science. 2021;8(1):75–88.
18. Bergqvist C, Servy A, Valeyrice-Allanore L, Ferkal S, Combemale P, Wolkenstein P. Neurofibromatosis 1 French national guidelines based on an extensive literature review since 1966. Orphanet Journal of Rare Diseases. 2020;15(1):1–23.
19. Setiawan H, Roslianti E, Firmansyah A. Theory Development of Genetic Counseling among Patient with Genetic Diseases. International Journal of Nursing Science and Health Services. 2020;3(6):709–15.
20. Heri Ariyanto, Nurapandi A, Purwati AE, Kusumawaty J, Setiawan H. Genetic counseling program for patient with hyperglycemic syndrome. Journal of Holistic Nursing Science. 2021;8(2):2–9.
21. Arjanto P. Uji Reliabilitas dan Validitas Depression Anxiety Stress Scales 21 (DASS-21) pada Mahasiswa. Jurnal Psikologi Perseptual. 2022;7(1):60–80.
22. Komariah K, Rahayu S. Hubungan usia, jenis kelamin dan indeks massa tubuh dengan kadar gula darah puasa pada pasien diabetes melitus tipe 2 di klinik pratama rawat jalan proklamasi, Depok, Jawa Barat. Jurnal Kesehatan Kusuma Husada. 2020;41–50.
23. Sherman ME, Figueroa JD, Henry JE, Clare SE, Rufenbarger C, Storniolo AM. The Susan G. Komen for the Cure Tissue Bank at the IU Simon Cancer Center: A Unique Resource for Defining the “Molecular Histology” of the BreastKomen Tissue Bank: Normal Breast Biorepository. Cancer Prevention Research. 2012;5(4):528–35.

24. Padkapyeva K, Gilbert-Ouimet M, Bielecky A, Ibrahim S, Mustard C, Brisson C, et al. Gender/Sex differences in the relationship between psychosocial work exposures and work and life stress. Annals of work exposures and health. 2018;62(4):416–25.

25. Thomas K, Nilsson E, Festin K, Henrikssoon P, Lowén M, Lőf M, et al. Associations of psychosocial factors with multiple health behaviors: A population-based study of middle-aged men and women. International journal of environmental research and public health. 2020;17(4):1239.

26. Aghaei A, Mohraz M, Shamshirband S. Effects of media, interpersonal communication and religious attitudes on HIV-related stigma in Tehran, Iran. Informatics in Medicine Unlocked. 2020;18:100291.

27. Dewi DSE, Hamzah HB. The relationship between spirituality, quality of life, and resilience. In: 6th International Conference on Community Development (ICCD 2019). Atlantis Press; 2019. p. 145–7.

28. Arbon PM, Silva CNS, Jones DB, Jaccoud D, Gervis M, Jerry DR, et al. Development and validation of a SNP-based genotyping tool for pedigree establishment in Australian greenlip abalone Haliotis laevigata Donovan, 1808. Aquaculture Reports. 2021;20:100746.