

The Relationship of Family Support with Psychological Conditions and Body Image of Breast Cancer Patients

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Abstract--- *Patients with breast cancer will experience psychological stress in the form of depression and anxiety and changes in body shape that will affect the body image of breast cancer patients. Breast cancer patients need external support that can improve their psychological conditions and body image is undergoing treatment that requires a long time. The purpose of this study is to analyze the relationship between family support and psychological conditions and body image of breast cancer patients. The samples obtained were 116 breast cancer patients using purposive sampling. The independent variable is the family support. The dependent variable is a psychological condition and body image. The instruments in this study were in the form of family support questionnaire, psychological distress inventory (PDI) and body image scale (BIS), the data were analyzed with Spearman's Rho. Breast cancer patients with positive family support were 98 (84.5%) respondents, positive psychological conditions were 91 (78.4%) respondents and positive body image were 94 (81.0%) respondents. There is a relationship between family support with the psychological condition of breast cancer patients ($p=0.000$, $r=0,470$) and family support with the body image of breast cancer patients ($p=0,000$, $r=4,00$). The role of family support greatly affects the psychological condition and body image of breast cancer patients. Therefore, nurses and other health services can convey to family members to continue to support, motivate and help the needs of breast cancer patients to improve their psychological condition and body image.*

Keywords--- *body image, breast cancer, family support, psychological condition*

I. INTRODUCTION

Breast cancer is a disease that often occurs in women from both developed and developing countries, therefore breast cancer is still a global problem and an international health issue [1]. Someone who is diagnosed with cancer considered will have a very sad experience because cancer is a life-threatening disease that causes discomfort, possibly do death and it can also cause stress [2]. Cancer becomes the most frightening disease and tends to reduce the quality of life of a person. Therefore, it is not only medical care that needs to be done but also psychological care [3]. Various kinds of treatments performed by breast cancer patients can also cause problems such as physiological, psychological and social [4]. Besides psychological disorders, breast cancer patients also experience some changes such as appearance, or function of their body so that it causes changes in body image [5].

The study of Cancer Epidemiology Biomarker in 2014 stated that of the 3 million breast cancer incidents in the world, 39% were founded in Asia, 29% in Europe, 15% in America, 8% in Africa and 1.1% in Australia [6]. The prevalence of cancer in Indonesia is 1.4% or an estimated 349,793 people [7]. In 2006, in East Java, there were 2,091 or around 19.70% of breast cancer cases [8]. In 2017, Surabaya occupies the highest number of cases of breast cancer in the past 5 years, namely from all non-transmitted diseases consisting of 181 cases or around 8.6% [9].

The psychological reaction is the most important factor in the quality of life of cancer patients [2]. Maintaining psychological conditions in making adjustments and adaptations to undergo treatments carried out by cancer patients is a positive action because the effects of the negative psychological condition will affect nerves and hormones that can cause a decrease in immunity and will adversely affect cancer patients who are undergoing treatments [10]. Changes in body structure in post-mastectomy can occur due to breast loss which is a symbol of sexuality for a woman [11]. Breast removal is very influential, especially on body image, which is potentially reducing sexual function and sexual attraction [12].

The patients who are depressed and anxious have a higher risk of undergoing treatment, the treatment that is inconsistent even to the point of stopping the treatment will harm the health of cancer patients and it can even cause death, therefore in maintaining the psychological condition of cancer patients, the support of the family is needed [13]. In addition, the positive body image that is formed in patients can not be separated from family support [14]. Proper cancer treatment plus family support can improve the quality of life of patients to facilitate the healing process [15].

Family support will make it easier for patients to do various activities including helping in the treatment process they are undergoing [13]. Especially for patients with outpatient care. The role of the family not only affects the patient but also the condition of the resources around the family [16]. Feeling valued, motivating, feeling loved, being able to share burdens, being able to express feelings openly and helping in dealing with problems that occur makes cancer patients have very high expectations and forms such actions that families need to the patients [17]. This study aims to analyze the relationship of family support with psychological conditions and body image of breast cancer patients.

II. METHODS

This correlational study aims to analyze the relationship of family support to the psychological condition and body image of breast cancer patients. This study uses a cross-sectional approach with research that emphasizes the measurement of time, where the assessment of dependent and independent variables is only one time and is not followed by further actions.

The population of this study were breast cancer patients who were undergoing treatment in hematology. This study uses a purposive sampling technique, The researchers conducted this study about 3 weeks and included 116 respondents with inclusion criteria, namely breast cancer patients who live with nuclear families or extended families, breast cancer patients undergoing outpatient and inpatient care, and exclusion criteria which is patients who were uncooperative during the study.

The dependent variable of this study is the psychological condition and body image. The independent variable in this study is family support. The data collection instruments used in this study were psychological distress inventory (PDI) questionnaires related to the psychological condition of breast cancer patients, and body image scale (BIS) related to body image in breast cancer patients. The data analysis uses the Rank Spearman test.

The family support questionnaire consists of 12 questions with 3 domains. Each domain consisted of 4 questions with the highest total score (3x12) which is 36 and the lowest score is 0. The score categories as follows: Always (3); Frequent (2); Sometimes (1); and Never (0). The PDI questionnaire consisted of 13 questions, with the highest total score (5x13) which is 65 and the lowest score is 13. The score categories as follows: Never (1); Sometimes (2); Often (3); Always (4). The BSI questionnaire consisted of 10 questions with the highest total score (3x10) which is 30 and the lowest value is 0. The score categories as follows: Never (0); Sometimes (1); Often (2); Always (3).

The procedure of the research starts with the researcher explaining the purpose of the study and coordinating the research time to be carried out by the researcher. The study was conducted when the patients arrived or waited for the treatment queue. The researcher selected the respondents by meeting the respondents directly, introducing, explaining

the purpose of the study, and conveying inclusion criteria. Respondents who did not meet the criteria were not selected to fill out the questionnaire. Then, the researcher explained how to fill out the questionnaire, the benefits of the study, the right of resignation, research ethics, and information sources that can be contacted. Respondents were given the right to refuse or be willing to be the subject of the study. After the respondents agreed, the researcher gives an informed consent sheet. Some patients asked for help to be read aloud to the questionnaire questions. The researcher assists the respondents directly in filling out the questionnaire so that if there are unclear questions, the respondents can ask the researcher directly. There are 3 questionnaires given to the respondents, namely, demographic data, psychological distress inventory (PDI), and body image scale (BIS). The type of data collected is primary data, i.e. data obtained by the researcher directly from respondents. This study has implemented the ethical principle and received consent from participants.

III. RESULTS

Table 1. The distribution of breast cancer respondents according to demographic characteristics

Characteristics	n	%
Age		
Late Adulthood (36-45 years)	29	25,0
Early Elderly (46-55 years)	47	40,5
Late Elderly (56-65 years)	40	34,5
Total	116	100,0
Education Level		
Elementary	19	16,4
Junior High	23	19,8
Senior High	51	44,0
College	23	19,8
Total	116	100,0
Marital Status		
Married	79	68,1
Single	2	1,7
Widow	35	30,2
Total	116	100,0
Occupations		
Government employees	16	13,8
Entrepreneur	18	15,5
Housewife	29	25,0
Private Worker	32	27,6
Unemployed	21	18,1
Total	116	100,0
Mastectomy Surgery		
Yes	108	93,1
No.	8	6,9
Total	116	100,0
Duration of treatment		
≤ 12 months	15	12,9
>12 months	101	87,1
Total	116	100,0

Based on table 1, the characteristics of respondents indicate that from the age of the majority of respondents aged 46-55 years (early elderly) consist of 47 respondents (40.5%), the majority of the latest level of education consists of 51 respondents (44%), the majority of respondents who are married consist of 79 respondents (68.1%). The majority of respondents work as private employees consist of 32 respondents (27.6%). The majority of respondents who have had mastectomy consist of 108 respondents (93.1%) and the majority of respondents who had treatment for more than a year consist of 101 respondents (87.1%).

Table 2. The distribution of respondents based on family support, psychological condition, and body image of breast cancer patients

Family Support	n	%
Positive	98	84,5
Negative	18	15,5
Total	116	100,0
Psychological Condition		
Positive	91	78,4
Negative	25	21,6
Total	116	100,0
Body image		
Positive	94	81,0
Negative	22	19,0
Total	116	100,0

Based on table 2, family support for breast cancer patients with positive family support category consists of 98 (84.5%) respondents and negative family support consists of 18 (15.5%) respondents. The data shows that respondents of this study dominantly have positive family support. Most psychological conditions of breast cancer patients are positive psychological conditions which consist of 91 (78.4%) respondents. This shows that the psychological condition of breast cancer patients who are undergoing treatment have a good psychological condition. There are 94 respondents (81.0%) have a positive body image category with positive body image while 22 respondents (19%) have body image category with negative body image, it can be concluded that the majority of breast cancer patients who are undergoing treatment do not have problems with body image.

Table 3. The analysis of the relationship of family support with the psychological condition and body image of breast cancer patients

Variables	Family Support				Total	
	Positive		Negative		n	%
	n	%	n	%		
Psychological Condition						
Positive	85	86,7	6	33,3	91	78,4
Negative	13	13,3	12	66,7	25	21,6
Total	98	100	18	100	116	100
Spearman's Rho (p): 0,000 Correlation Coefficient (r): 0,470						
Body Image						
Positive	86	87,8	8	44,4	94	81,0
Negative	12	12,2	10	55,6	22	19,0
Total	98	100	18	100	116	100
Spearman's Rho (p): 0,000 Correlation Coefficient (r): 0,400						

Based on table 3, it shows that the most of positive family support was found in respondents who experienced positive psychological conditions which consist of 85 respondents (86.7%) and the most of negative family support was found in respondents who have a negative psychological condition which consists of 12 (66.7%). The result of data analysis using *Spearman* statistical test shows that the proportion coefficient (p) is 0,000 and the correlation coefficient is 0,470 which means the hypothesis was accepted, that is, there is a relationship between family support and the psychological condition of breast cancer patients with sufficient correlation strength. The correlation coefficient value is positive, which means the higher the family support provided, the better the psychological condition of breast cancer patients. The most of positive family support was found in respondents who experienced positive body image that consist of 86 respondents (87.8%) and the most of negative family support was found in respondents who experienced negative body image that consist of 10 (55.6%). The results of data analysis using *Spearman* statistical test shows that the proportion coefficient (p) is 0,000 and correlation coefficient is 0,400 which means that the hypothesis (H1) was accepted, that is, there is a relationship of family support and the body image of breast cancer patients with sufficient correlation strength. The correlation coefficient value is positive, which means that the greater the family support, the higher the body image of breast cancer patients.

IV. DISCUSSION

The results of the study based on family support obtained by breast cancer patients who are undergoing treatment show that most breast cancer patients received positive family support which consists of 98 respondents (84.5%). This shows that the majority of breast cancer patients who are undergoing treatment received support from the patients' family. According to Friedman, 3 types of family support can be provided to breast cancer patients, including emotional support and self-esteem, instrumental support, and financial support [18].

Based on the research results of the relationship family support with psychological condition shows that $p=0,000$ and $r=0,470$ which means there is a relationship between family support with psychological condition with a moderate correlation value. The correlation coefficient is positive, which means the relationship between family support and psychological condition is unidirectional. So it can be interpreted that if family support increases, the psychological condition also increases and vice versa. If family support is low, the psychological condition will be lower. This is in line with Friedman's statement which states that the level of family support will affect the psychological condition of breast cancer patients, the higher the family support, the psychological condition of breast cancer patients will be higher, conversely, low family support will make the psychological condition of the patients lower [18]. This is supported by the research conducted by Hakim, Baskoro, and Aida Rusmarina, who examined the relationship of family support and the quality of life of cancer patients who undergo chemotherapy at RSUD Kraton Pekalongan, which shows a significant relationship between family support and the quality of life of cancer patients who undergo chemotherapy at RSUD Kraton Pekalongan [19]. Latif and Irwan's research also stated that family support can improve the life quality of patients in physical, psychological, social, and environmental aspects [20].

Based on the results of the study it is found that breast cancer patients who get positive family support with positive psychological conditions consist of 85 (86.7%) respondents. This is supported by research conducted by Salonen, which states that breast cancer patients who receive family support will have an influence on changes in sexual function, quality of life, and health function [21]. This research is in line with Prastiwi's research, which states that family support from people around the patients gives great motivation and enthusiasm for the patients to recover and be stronger in living life [22]. Other studies from Sari, Dewi, and Daulay also show that patients with breast cancer have good family support along with good coping strategies so that the anxiety levels are low [23]. The researcher argues that the impact of family support such as caring, giving affection, helping to pay for medical expenses that are being undertaken as well as giving praise to breast cancer patients make these patients feel cared for, do not feel alone, and the concern for the patients' make the patients' psychological condition is stable and even increased, which later on, will make the patients more motivated and passionate in doing the treatments.

Family is a source of practical and concrete help by providing direct assistance such as financial assistance or assistance in carrying out certain tasks [18]. Rosnani stated in her research that the whole family provided support to patients, adjusted to the abilities of each family, from moral and material support. Every support that is received has a positive impact on the patients to continue their lives [24]. Prastiwi also mentioned the indicators that influence the psychological condition of cancer patients, one of which is family support, support from the closest person is very important and affects the healing of cancer patients in reducing stress and depression [22]. The researcher argues that family support can meet the needs of breast cancer patients both physically and psychologically, such as reducing anxiety, feeling helpless, hopeless, and can improve the psychological condition of an individual. So, family support is needed to achieve these conditions.

Based on the *spearman rank* statistical test results obtained p -value is 0,000 which means p -value $< \alpha$ (0,05). This means that H_0 is rejected and it can be concluded that there is a relationship between family support and body image of breast cancer patients, this study is line with Tasripiyah' research which stated that there is a meaningful

relationship between social support and body image of breast cancer patients in surgical oncology of Hasan Sadikin Bandung Hospital [25].

Based on the results of the study, it is found that positive family support with positive body image consists of 86 (87.8%) respondents. The results of this study are supported by the research of Sriwahyuningsih and Askar, that there is a significant relationship between family support and the body image of post-mastectomy breast cancer patients [26]. The researcher argues that family support felt by patients such as understanding the physical form after undergoing the surgery, giving love and attention to make breast cancer patients more confident so that the patients do not care much about their appearance anymore because the family has accepted the condition of breast cancer patients.

Other research results found that breast cancer patients who have positive family support with negative body image consist of 12 (12.2%) respondents. The majority of patients with this condition are in late adulthood (36-45 years). This is supported by research conducted by Melliana, which stated that women under the age of 40-60 years have dissatisfaction with a higher body image [27]. The researcher assumes that good family support does not necessarily make the patients' body image good, it is influenced by one factor which is age factor, young adult women see their body as an important object because it relates to the level of satisfaction with themselves, respect from other people, and sexual qualities.

Based on the results of the study that has been done, it is found that patients who had a mastectomy are 108 (93.1%). Mastectomy performed on breast cancer patients can cause physical, psychological, psychosocial and sexual disorders, so the patients who have done mastectomy need the support of the family and the people who are close to them. The data obtained that breast cancer patients who have done mastectomy surgery and have positive family support are 90 respondents and there are 88 respondents have positive body image who have performed mastectomy surgery. The results of this study are reinforced by the theory stated by Niven, that family support can be a very influential factor in determining the beliefs and health of individuals and can also determine the treatment programs they can receive [28]. The researcher assumes that with the full support of the family or the people around on mastectomy that the patients experienced will make the patients have a good perception about their body so that they will not have body image problems.

V. CONCLUSION

Family support can affect the psychological condition of breast cancer patients. The higher the family support is given, the psychological condition of breast cancer patients will increase. Family support can make affect the body image of breast cancer patients. The higher the family support, the more positive the breast cancer patients' body image.

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