

## Relationship of Stress to *Self-Care* of Breast Cancer Patients Post Mastectomy Surgery at Genteng Hospital Banyuwangi

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### ABSTRACT

Currently there is a phenomenon of disease trends shifting from infectious diseases to non-communicable diseases such as cancer. Breast cancer is the main type of cancer that is most widely reported in Indonesia. One of the therapies for breast cancer patients is surgery or mastectomy. Treatment of breast cancer will result in emotional changes in the patient, such as stress. The purpose of this study was to determine the relationship between stress and self-care in post-mastectomy breast cancer patients. This type of research is quantitative using observational analytic method using cross sectional approach. The variables in this study consisted of independent variables and dependent variables. The independent variable is the level of stress. The dependent variable is self-care. The number of samples in this study were 21 patients, using the *total sampling technique*. The type of questionnaire used is the Perceived Stress Scale Questionnaire and the Self Care of CA Mamee Index Questionnaire. then the data obtained is processed and analyzed using the Spearman Rank statistical test. The test results obtained a significant correlation between the stress level variables on self care (sig 2 0.001 <0.05).

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**Keywords:** breast cancer, mastectomy, self-care, stress level

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### INTRODUCTION

Currently there is a phenomenon of disease trends, where public health problems shift from infectious diseases to non-communicable diseases such as diabetes mellitus, hypertension, and one type of PTM is cancer (Pangribo, S. 2019). Cancer or what is known as a malignant tumor is one of the diseases that causes the largest mortality rate worldwide. Cancer is a type of disease due to certain body cells proliferating uncontrollably or the growth of these cells multiplying rapidly, cells have the ability to attack, then infiltrate surrounding tissues, metastasize and can cause death (Guntari, et al. 2016).

Morbidity and mortality due to cancer is very high and is expected to continue to increase from year to year. So is the death rate caused by cancer. Data released by WHO from the Global Burden of Cancer (GLOBOCAN), states that the number of cases and deaths from cancer until 2018 was 18.1 million cases and 9.6 million deaths in 2018. Cancer deaths are expected to continue increase to more than 13.1 million by 2030 (Pangribo, S. 2019). If interpreted these data means that it is estimated that one in five male population and one in five female population worldwide will suffer from cancer in their lifetime. One in eight and one in eleven women will die of cancer (Pangribo, S. 2019). Based on data from the Ministry of Health of the Republic of Indonesia in 2014, the most types of cancer according to gender categories are breast cancer and cervical cancer, while in men, namely lung cancer and colorectal cancer (Ministry of Health RI. 2014). The results of Riskesdas (2018) show the same result that the prevalence of cancer in the female group is greater than that of the male group.

This can be due to the fact that female-specific cancers such as breast cancer and cervical cancer are the main types of cancer that are most commonly reported in Indonesia (Pangrifo, S. 2019). Therapy in breast cancer patients can be given surgery, hormonal therapy, chemotherapy and radiation. Surgery or removal of the cancerous breast with or without reconstruction and breast salvage surgery combined with radiation therapy is called a mastectomy (Puspitas, et al. 2017). Breast cancer patients will feel afraid, worried and frustrated. After being diagnosed, before surgery, during and after surgery and while undergoing therapy, patients will feel lost and experience stress (Putri, et al. 2017).

The impact will be felt more severe if it occurs at the reproductive age. Post-mastectomy, often the psychological aspect is not a major concern. Most patients who undergo this surgery will experience impaired body image and self-esteem because women experience a loss of symbol for themselves as a woman (Kanmaz & Aricak. 2019). Women who undergo mastectomy feel that half of themselves or their identity as individuals and women are lost, because according to them breasts mean femininity, beauty and motherhood (Koçan & Gürsoy. 2016). Changes in body image in women who have had a mastectomy are generally negative. A negative body image tends to experience anxiety, stress, depression and even suicide (Lisnawati, 2010). Then a person can experience stress if there are physiological and psychological changes. Stress can make the individual not have adequate ability to cope with something that can threaten the individual's *well-being* (Ogden, 2012). The ability of every human being to perform self-care or in activities to fulfill their needs which is carried out independently to maintain their life, welfare, and health is called self-care (Nurcahyati, 2016).

Self care in the Orem concept has explained clearly, in fact every individual with a certain condition and age according to his basic condition has instincts and the body's ability to be able to care for, protect, control, minimize and manage negative impacts in order to be able to carry out life optimally to live and be healthy, recovery from illness or trauma or coping and its effects (Fahmi & Hidayati. 2016). The increase in the incidence of chronic diseases, the increase in medical costs and the insufficient number of educators, currently patient self-care is the focus or concern of the world as an effort to improve the quality of life of chronic disease patients, families and communities (Taylor, 2011). The description above is the background for the author to identify the Relationship of Stress to Self-Care of Breast Cancer Patients Post Mastectomy Surgery at Genteng Hospital Banyuwangi.

## METHODS

This type of research is quantitative using observational analytic method using *cross sectional approach*. The variables in this study consisted of independent variables and dependent variables. The independent variable is the level of stress (an assessment of the stress response to the severity of the stress experienced). The dependent variable is *self-care* (assessment of the ability of post-mastectomy breast cancer patients to perform care independently). The number of samples in this study were 21 patients, using the *total sampling technique*. The data collection technique was done by distributing questionnaires. In this study, the questionnaires used were the Perceived Stress Scale Questionnaire and the Self care of CA Mame Index Questionnaire. then the data obtained were processed and analyzed using the spearmen rank statistical test.

**RESULTS**

Frequency Distribution of Respondents

**Table 4.1.** Frequency of Respondents by Age, Duration of Disease, and Education

Variable	Category	N	%
Age (X1)	20 - 30 Years	3	14.3
	31 - 40 Years	8	38.1
	> 40 Years	10	47.6
	Total	21	100
Job (X2)	< 6 months	6	28.6
	> 6 months	15	71.4
	Total	21	100
Knowledge (X3)	No school	2	9.6
	SD	9	42.8
	JUNIOR HIGH SCHOOL	7	33.3
Attitude	SENIOR HIGH SCHOOL	3	14.3
	PT	0	0
	Total	21	100

**Table 4.2.** Distribution of Univariate Analysis of Stress and Self Care Levels

Variable	Criteria	n	%
Stress level	Mild stress	2	9.5
	Moderate stress	4	19
	heavy stress	15	71.5
	Total	21	100
<i>Self Care</i>	Partially dependent	7	33.3
	Fully dependent	11	52.4
	Not depend	3	14.3
	Total	21	100

Based on table data 4.2. respondents' answers were obtained with more than half of respondents experiencing severe stress as many as 15 people (71.5%), while the remaining 4 people (19%) experienced moderate stress and 2 people (9.5%) experienced mild stress. While the level of care cells, is divided into three levels, namely partially dependent, fully dependent and not dependent, where more than some respondents said he was fully dependent as many as 11 people (52.4%), there were 7 people (33.3%) partially dependent. and the remaining 3 people (14.3%) did not depend at all.

**Table 4.3.** Cross Tabulation

Stress Level	Self Care							
	Depends Partially		Fully Depends		Not Depend		Total	
	N	%	N	%	N	%	N	%
Light	2	9.5	0	0	0	0	2	9.5
Currently	4	19.1	0	0	0	0	4	19.1
Heavy	1	4.8	11	52.4	3	14.3	15	71.4
<b>Total</b>	<b>7</b>	<b>33.4</b>	<b>11</b>	<b>52.4</b>	<b>3</b>	<b>14.3</b>	<b>21</b>	<b>100</b>

Source: Appendix

Based on the data in table 4.3, it is known that the cross tabulation between the level of stress and self-care shows that the largest number is at the level of severe stress of 11 people (52.4%) with self-care behavior that is fully dependent on family or health workers.

Coefficient of Determination Test

**Table 4.4.** Coefficient of Determination

Corelations	n
Correlation coefficient	,665
Sig 2 tailed	.001
N	21

Source: Appendix

Based on the data in table 4.4, the results of statistical tests using SPSS V22 obtained correlation coefficient data of 0.665 or 66.5%. This shows that the variables studied have a significant correlation of 66.5% and the rest is influenced by variables that are not examined. The table above also presents data N is 21 where the number of respondents is 21 and there is no missing data, then there is a 2 tailed sig in the table with a value of 0.001. Where the value of sig 2 is  $0.001 < 0.05$  which can be concluded that there is a significant correlation between the stress level variables and self care.

## DISCUSSION

### Characteristics of Respondents Based on Age and Education

Based on table 4.1 of the age characteristics of the 21 respondents, the majority of patients with breast cancer are above 31 years of age. In line with . WHO data shows that 78% of breast cancer occurs in women aged 50 years and over. Only 6% occurs in those aged less than 40 years (Widhigdo, 2018) . Other research also shows that breast cancer is generally dominated by women, aged 45-65 who are middle-aged or elderly (Elmika, 2020) . The number of patients aged 40 years and over due to this age the risk of breast cancer is getting bigger. Breast cancer begins to develop rapidly at the age of 40-49 years, while the risk of breast cancer itself develops until the age of 50 years with a ratio of 1 in 50 women (Lincoln, 2016). Likewise, research by Sulviana & Kurniasari (2021) showed significant results between viable age on the incidence of breast cancer (pvalue = 0.003) and education variable on the incidence of breast cancer (pvalue = 0.000) in East Kalimantan. Education is one of the risk factors for women suffering from breast cancer, due to the lack of education of women regarding their own health. Women with higher education tend to be able to know the symptoms of an early stage of breast cancer so that they can get breast cancer treatment earlier than women with low education who tend to get breast cancer treatment when the cancer she suffers has entered an advanced stage.

### Stress Level

Based on the distribution table of the univariate analysis of stress levels, it was obtained that respondents' answers were obtained with more than half of the respondents experiencing severe stress as many as 15 people (71.5%), while the remaining 4 people (19%) experienced moderate stress and 2 people (9.5%). ) experienced mild stress. Diagnosis and treatment of breast cancer will result in emotional changes in the patient. Stress conditions in patients with breast cancer because they are haunted by images of death and fear of the effects of treatment, (Agustin, 2020) . This is in line with other studies showing that the majority of cancer patients experience stress due to the therapy process they undergo (Pafitri, 2013). One type of treatment that is often used by breast cancer patients is mastectomy. Women who undergo mastectomy will lose breasts which are a symbol of sexuality (Nuril Nofiya Sari, 2021) . Complete loss of breast both on the right and the left will also change the body image of women, thereby changing the self-concept of breast cancer sufferers after surgery. Patients judge themselves negatively and tend to feel dissatisfied with their physical appearance, such as shame and low self-esteem towards others because their physical condition is felt to be imperfect and not as expected (Guntari & Suariyani, 2016) . However, the stress experienced by a person is an adjustment effort to balance the body and soul that is disturbed from the source of stress that occurs in a person. The psychological impact can be in the form of feelings of anxiety, worry, worry, fear, tension, distress, confusion, and concern about changes in husband's attitude or separation from the people he loves (Karyono, Kartika Sari Dewi, 2008).

### Self Care for Breast Cancer Patients Post OP Mastectomy

Based on table data 4.2. it is known that the level of self care is divided into three levels, namely partially dependent, fully dependent and not dependent, where more than some respondents said they were fully dependent as many as 11 people (52.4%), there were 7 people (33.3% ) partially dependent and the remaining 3 people (14.3%) did not depend at all. The data on the duration of illness also supports the respondents' self-care ability where the data on the duration of the disease shows that the

majority of respondents said they felt the disease > 6 months as many as 15 people (71.4%), and the rest felt the disease < 6 months as many as 6 people (28.6%). Patients with disease > 6 months have pain trauma so that their self-care behavior is disrupted, so that the respondent depends partially or completely on self-care behavior. Self care is the performance or practice of individual activities to take the initiative and shape their behavior in maintaining life, health and well-being (Muhlisin, 2010). From the results of the study above, more than some respondents feel fully dependent on their family or health workers in carrying out self-care, supported by data on the duration of illness, the majority of respondents feel their illness is more than 6 months which leaves psychological trauma so that respondents still feel the need to depend on family or health workers in their care. self-care behavior.

### **The Relationship of Stress to Selfcare of Breast Cancer Patients Post OP Masectomy**

Based on the data from table 4.6, it is known that the cross tabulation between the level of stress and self-care shows that the largest number is at the level of severe stress with self-care behavior which is fully dependent on the family or health workers. The results of the research statistical test can be concluded by knowing the Spearman rank correlation test formula with a value of  $\text{sig } 2 \text{ tailed} = 0.001$  which means that the value of  $\text{sig } 2 \text{ tailed}$  is  $0.001 < 0.05$  meaning that there is a relationship between stress and self-care for breast cancer patients after mastectomy surgery at Genteng Hospital Banyuwangi.

Cancer therapy management is useful for increasing the survival of cancer patients, but has a physical impact on various organ functions. This can trigger stress (Werdani, 2020). This condition is a big problem and is one of the factors that affect the implementation of *self-care* which can have an impact on treatment, social and economic (Novita, 2013). *Self-care* is the ability of individuals to initiate themselves in self-care with the aim of maintaining their health. Every individual has the ability to take care of himself so that he can meet the needs of life, maintain his health and well-being. *Self care deficit* occurs when the client is unable to meet the therapeutic self care demand (Mardiyansih, 2018). This is in line with research conducted by Putra (2019), where there is a significant relationship between stress levels and self-care behavior, the results show that the higher a person's stress level, the less ability and desire to do *self-care*.

Self care is the performance or practice of individual activities to take the initiative and shape their behavior in maintaining life, health and well-being (Muhlisin & Irdawati, 2010). According to Orem in Susanti (2010), self-care efforts are carried out to fulfill three kinds of self-care needs: universal (activities in meeting basic needs such as air, water, and food; elimination; rest and activity; seeking solitude and social interaction). development (focusing on processes and events of human development), and health deviation (activities that arise due to defects in the structure of the human body due to disease or medical action). If self care is formed effectively, it will help shape the integrity of human structure and function and is closely related to human development (Muhlisin & Irdawati, 2010). Appropriate education and support can help breast cancer survivors maintain or even increase their activity levels. Increasing evidence supports the idea that increased physical activity provides important benefits for improving psychological outcomes and physical well-being in cancer patients (Waluya, Rahayuwati, & Lukman, 2019).

## **CONCLUSION**

In accordance with the research objectives, namely the relationship between stress levels and self-care in post-op mastectomy breast cancer patients:

1. Most of the post-op mastectomy breast cancer patients at Genteng Banyuwangi General Hospital as many as 15 people (71.5%) experienced severe stress.
2. Most of the post-op mastectomy breast cancer patients at the Genteng Banyuwangi General Hospital as many as 11 people (52.4%) had self-care behavior who depended fully on their families or health workers.
3. Based on The cross tabulation table between stress levels and self-care shows that the largest number is at the level of severe stress of 11 people (52.4%) with self-care behavior that is fully dependent on family or health workers, this shows that there is a relationship between stress levels and self-care for breast cancer patients. post op mastectomy at Genteng Banyuwangi Hospital.

Self-acceptance is the main key for a person to be able to evaluate his life positively. Positive self-acceptance, coupled with good social support and effective stress management, can help individuals to have a positive evaluation of their lives, as well as improving the quality of life, especially the



psychological aspect, which is the target of providing care for cancer patients with the help of nurses as self agencies in carrying out various activities. self-care based activities. (Widhigdo, 2018). (Larasati, Nugroho, & Tei, 2020).

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