



## The Relationship Between Self Care Behavior and Quality of Life of Breast Cancer Patients Undergoing Chemotherapy in the Chemotherapy Room of Bali Mandara Hospital

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### Abstract

**Introduction:** Breast cancer patients with chemotherapy treatment have a negative impact on physical and psychological quality of life. This impact can be influenced by self care behavior. This study aims to determine the relationship between Self Care Behavior and the quality of life of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital

**Method:** The study was conducted with an analytical observational design with a cross sectional approach conducted from February to March 2025 with a total sample of 34 respondents selected by purposive sampling technique. Data were collected using the Self Care Behavior questionnaire and the ORTC QLQ BR-23 questionnaire. Data were analyzed using the spearman's rho test.

**Results:** The results showed that the majority had self care behavior dependence as much as 67.6% and most of the functional quality of life and symptoms in the moderate category as much as 73.5%. Analysis of the relationship between self care behavior and the quality of life of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital obtained a p value <0.001.

**Conclusion:** It can be said that there is a relationship between self care behavior and the quality of life of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital. The recommendations of this study are expected to be input for nurses to always provide counseling to patients with diabetes mellitus to improve quality of life.

**Protocol registration:** This research has previously passed ethical review with the number: 015/EA/KEPK.RSBM.DISKES/2025

**Keywords:** Breast cancer, Quality of Life, Self Care Behavior

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### INTRODUCTION

Breast cancer is one of the priority health problems both in the world and in Indonesia. The prevalence of breast cancer ranks second in the world after lung cancer (Rifda et al., 2023). According to GLOBOCAN data (2020), breast cancer is the type of cancer with the highest number of new cases in the world at 201.58 per 100,000 population with a percentage of 11.7%, followed by lung cancer and prostate cancer at 11.4%, and 7.3% (GLOBOCAN, 2020). Data from the Ministry of Health of the Republic of Indonesia (2021), The number of breast cancers detected in Indonesia is 6.83% of the total population of Indonesia. Meanwhile, in Bali Province, the number of breast cancer patients is 18.82%. Data from Bali Mandara Hospital shows that the number of breast cancer patients in 2023 is 1,208 people and will increase in 2024 to 1,670 people.

Breast cancer patients with long-term chemotherapy treatment can achieve recovery, extend the disease-free period and extend the length of life (Gayatri et al., 2021; Silaen, 2019). However, the chemotherapy process has side effects on the patient's physique and chemotherapy also has a bad impact on the psychological that can affect the patient's quality of life (Mahmuddin et al., 2020). Research conducted by Javan Biparva et al., (2022), shows that globally research results as many as 95% of breast cancer patients experience a moderate quality of life. As a result, breast cancer treatment is often associated with psychological distress and a decrease in health-related quality of life (Wulandari & Wahyunadi, 2019).

The problem of quality of life of cancer patients needs to be improved. Improving the quality of life of breast cancer patients undergoing chemotherapy by improving self-care practices in managing the side effects of chemotherapy (Arunachalam et al., 2021). According to Prayitno (2022), one of the factors that affects the quality of life is self-care. Self-care refers to preventive practices and perspectives that aid in the management and maintenance of psychological, social, and physical needs (Chin et al., 2021). Several studies have shown that self-care in breast cancer patients improves physical health and well-being (Zhang et al., 2015). Self-care can support individuals to regulate their emotions and lead to a decrease in negative emotions in difficult conditions that can improve quality of life (Abdollahi et al., 2022).

One of the studies conducted by Abdollahi et al., (2022) with the findings of this study shows that self-care behaviors partially mediate the relationship with quality of life. Research (Chin et al., 2021) shows positive self-care behaviors help breast cancer patients manage stress and help speed recovery in their treatment and help patients improve a higher quality of life. Silalahi et al., (2024), stated that the results of research on self-care behavior refer to the ability of individuals to improve and maintain health, prevent diseases, and to overcome health problems or diseases can improve the quality of life.

A preliminary study conducted in November 2024 at Bali Mandara Hospital obtained data on 40 breast cancer patients in October 2024. Interviews were conducted on 10 breast cancer patients, data was obtained as many as 6 (60%) patients felt afraid and anxious when chemotherapy was going to be done and were unable to take care of themselves when the effects of chemotherapy nausea and vomiting appeared, and 4 (40%) patients said they still did not believe in their disease and were embarrassed due to physical changes so they rarely gathered with neighbors and felt weak because they could not take care of themselves if the effects of chemotherapy appeared. Based on the above problems, the researcher is interested in conducting a study on "The Relationship between Self Care Behavior and the Quality of Life of Breast Cancer Patients Undergoing Chemotherapy in the Chemotherapy Room of Bali Mandara Hospital".

## METHOD

This study uses a quantitative design with an analytical observational design with a cross sectional approach, which is a type of research that determines the time of measurement or observation of independent and dependent variable data only once at a time (Nursalam, 2017b). This means that each subject was only observed once with a quantitative approach aimed at determining the relationship between Self Care Behavior and the quality of life of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital

## RESULTS

Analysis of the relationship between self-care behavior and quality of life of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital can be seen in the table below:

**Table 1.** Analysis of the relationship between self-care behavior and functional quality of life of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital

		Functional quality of life						r	P-value		
		Bad		Keep		Good					
		f	%	f	%	f	%				
self care behavior	Self-sufficient	0	0	2	18.2	9	81.8	11	100		
	Dependency	0	0	23	100	0	0	12	100		
	Total	0	0	25	73.5	9	26.5	34	100		

**Table 2.** Analysis of the relationship between self-care behavior and quality of life of patients with breast cancer symptoms undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital

		Quality of life Symptoms						r	P-value		
		Bad		Keep		Good					
		f	%	f	%	f	%				
self care behavior	Self-sufficient	0	0	2	18.2	9	81.8	11	100		
	Dependency	0	0	23	100	0	0	23	100		
	Total	0	0	25	73.5	9	26.5	34	100		

Based on the table above, the majority of self-care behavior dependency with moderate quality of life is 23 people (100%). The results of the Rho sperm test obtained a significant value of  $p = 0.001$ . So the

significance value ( $p=0.001$ ) is smaller than the significance value of the table ( $p<0.05$ ). This means that there is a relationship between self-care behavior and the quality of life of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital. Based on the rho sperm test  $p>0.05$ , the Correlation Coefficient results were obtained with a value of 0.868 which means that the correlation is very strong. So it can be concluded that there is a very strong relationship between self-care behavior and the quality of life of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital. The direction of the relationship is positive or in the same direction, which means that the better self-care behavior will improve the quality of life of breast cancer patients undergoing chemotherapy.

## DISCUSSION

The results of the study show that there is a strong and one-way relationship between self-care behavior and quality of life both symptomatically and functionally of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital. This shows that the better self-care behavior in breast cancer patients will improve the quality of life in breast cancer patients. The results of the study are supported by research conducted by Abdollahi et al., (2022) with the findings of this study showing that self-care behaviors partially mediate the relationship with quality of life. Research (Chin et al., 2021) shows positive self-care behaviors help breast cancer patients manage stress and help speed recovery in their treatment and help patients improve a higher quality of life. Silalahi et al., (2024), stated that the results of research on self-care behavior refers to the ability of individuals to improve and maintain health, prevent diseases, and to overcome health problems or diseases can improve the quality of life. The problem of quality of life of cancer patients needs to be improved. Improving the quality of life of breast cancer patients undergoing chemotherapy by improving self-care practices in managing the side effects of chemotherapy (Arunachalam et al., 2021). According to Prayitno (2022), one of the factors that affects the quality of life is self-care. Self-care refers to preventive practices and perspectives that aid in the management and maintenance of psychological, social, and physical needs (Chin et al., 2021). Several studies have shown that self-care in breast cancer patients improves physical health and well-being (Zhang et al., 2015). Self-care can support individuals to regulate their emotions and lead to a decrease in negative emotions in difficult conditions that can improve quality of life (Abdollahi et al., 2022). According to the researcher's assumption, the better the self-care of breast cancer patients in terms of managing disease symptoms, treatment side effects, body image, sexual function and the special future perspective of breast cancer patients will improve the quality of life of breast cancer patients. Where every side effect that arises due to chemotherapy with good self-care behavior so that the patient is able to manage emotionally stable so as to improve the quality of life.

## CONCLUSION

It can be concluded that there is a very strong relationship between self-care behavior and the quality of life of breast cancer patients undergoing chemotherapy in the Chemotherapy Room of Bali Mandara Hospital. The direction of the relationship is positive or in the same direction, which means that the better self-care behavior will improve the quality of life of breast cancer patients undergoing chemotherapy.

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