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Self-care and quality of life among patients with breast cancer

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Abstract

Background: Breast cancer is the most common cancer found in women worldwide and is the second cause of cancer-related deaths after lung cancer. Breast cancer has several treatments including chemotherapy, radiotherapy, hormonal therapy, and mastectomy. Impaired physical mobility can cause self-care deficits, self-care dramatically affects the quality of life of Breast Cancer patients, but further research is needed to what extent self-care can affect the quality of life of patients.
Purpose: Knowing the relationship between self-care and the quality of life of Breast Cancer patients in the Surgery Room of Dr. Achmad Mochtar Hospital Bukittinggi.
Method: Mixed methods with explanatory design. The sampling technique used was a total sampling of 50 respondents for quantitative purposes and a purposive sampling technique of 5 participants for qualitative purposes. Quantitative Self-care measurement using the Barthel Index questionnaire, quality of life measurement using the SF-36 questionnaire, and qualitative using an in-depth interview guide. Qualitative data analysis using the chi square and qualitative statistical test using keywords, subcategories, categories and themes.
Results: The quantitative research results show a relationship between self-care and the quality of life of breast cancer patients by sig 0.011. In qualitative research, the lower the self-care of breast cancer patients, the worse the quality of life in breast cancer patients.
Conclusion: Self-care in breast cancer patients, qualitative research, the lower the self-care of breast cancer patients, the worse the quality of care. life in breast cancer patients.

Keywords: Breast Cancer; Mixed Methods; Quality of Life; Self Care.

INTRODUCTION

Breast cancer is the most common cancer and causes high mortality rates in women in the world. According to data from the Global Observatory Cancer (GLOBOCAN) in 2021, as many as 2.261.419 people suffered from breast cancer. Breast cancer is the most common cancer in women followed by cervical cancer. The number of women who died from breast cancer was 684.996 people, ranking second after lung cancer. The incidence and mortality rates due to cancer in the next 5 to 10 years are predicted to continue to increase (Sung Hyuna, Jacques Ferlay, Rebecca, & L. Siegel, 2021). Meanwhile, data from the International Agency for Research on Cancer for Indonesia in 2020, the number of new cases of breast cancer in Indonesia was 65.858 people with a death toll of 22.430 people (International Agency for Research on Cancer, 2022).

The highest incidence rate for women is breast cancer, which is 42.1 per 100.000 population with an average death rate of 17 per 100.000 population. The most common cancer cases in Indonesia are breast cancer, which is 58.256 cases or 16.7% of the total 348.809 cancer cases. And in 2020, the estimated incidence of cancer in Indonesia was 65.858 new cases of breast cancer, with the number

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of deaths due to breast cancer as many as 22.430 cases (Sung Hyuna, Jacques Ferlay, Rebecca, & L. Siegel, 2021).

The incidence of cancer in West Sumatra is in second place after the Special Region of Yogyakarta Province, which is 2.47 per 1000 population and is the third highest province for breast cancer incidence, which is 9 per 1000 population. 10.000 residents. Based on data from the West Sumatra Provincial Health Office, the coverage of early detection of breast cancer with clinical examination (CBE) in 2017 aged 30-50 years (662.686) with a total of 59.804 (9.0%) tumors/lumps 1.338 (2.2%) specifically Bukittinggi city 17.391 with a total of 1.220 (7%) with tumors/lumps 16 (1%). Based on data from the Surgery Room of Dr. Achmad Mochtar Bukittinggi Hospital in 2023, Ca Mammae is one of the most cases in the Surgery Room, in the last 3 months alone, there were 56 Ca Mammae cases in April 2024, 52 patients in May 2014 and 57 patients in June 2024 (Pangribowo, 2019).

Breast cancer is a malignant neoplasm which is an abnormal growth of breast tissue that is different from the surrounding tissue. This neoplasm can also spread to other parts of the body. This spread is called metastasis (Esmia Sembiring, 2023). The highest incidence of breast cancer occurs in the age of 40-49 years, while for ages under 35 years the incidence is only less than 5% (Cardoso, Kyriakides, Ohno, Penault, Poortmans, Rubio, & ESMO, 2019; Herdman T., 2018).

According to Prastiwi (2022) breast cancer can cause sufferers to experience a decline in physical and psychological conditions (Prastiwi, Ira, & Maria, 2022). Physical disorders can cause self-care deficits related to weakness which describes a condition in which a person experiences obstacles in the ability to carry out self-care activities, such as bathing, changing clothes, eating and eliminating (Nadiya Sarah, 2018).

Self-care is an individual's action that is threatened in order to control to maintain and improve health status and well-being (Raile Alligod & Marriner Tomey, 2014). Self-Care Theory It is a nursing theory developed by Dorothe Orem (Orem, 2001).

That aspects of quality of life include physical, emotional and functional components. Functional status refers to the ability to perform activities related to the needs and ambitions or social roles desired by the patient, at the most basic level referring to the ability to perform daily activities. This is also related to how a person accepts their physical condition (Prastiwi, 2022).

Quality of Life is an individual's assessment of the health conditions they are experiencing. Based on the opinion of Moghaddam (Behboodi Moghadam, Fereidooni, Saffari, & Montazeri, 2018) quality of life can be defined as a conceptual measure to assess the impact of a therapy performed on patients with chronic diseases. The measurements include well-being, survival, and a person's ability to independently carry out daily activities and activities. Breast cancer has several treatments including chemotherapy, radiotherapy, hormonal therapy, and mastectomy. Chemotherapy is recommended for breast cancer patients because it can increase life expectancy for recovery (Rahayuwati, Ibrahim, & Komariah, 2017). Chemotherapy can achieve recovery, prolong disease-free period and prolong life expectancy (Silaen, 2019).

The chemotherapy process has side effects that can affect the patient's quality of life such as physical changes, namely bone marrow suppression, gastrointestinal symptoms such as nausea, vomiting, weight loss, changes in taste, constipation, diarrhea, alopecia, fatigue and changes in the nervous system. Not only does it have an impact on the patient's physical, chemotherapy also has a bad impact on the patient's psychology itself. Such as experiencing self-esteem disorders, loss of self-confidence, and traumatizing patients so that it affects the treatment process that the patient will undergo (Mahmuddin, Lestari, & Rizani, 2019).

RESEARCH METHOD

Mixed Method with an explanatory sequential design was employed. The population in this study were patients undergoing treatment at Dr. Achmad Mochtar Bukittinggi Hospital with Breast Cancer who had met the inclusion and exclusion criteria with a total of 50 respondents and 5 participants. This study was conducted in the Surgery Room of Dr. Achmad Mochtar Bukittinggi Hospital and the research period was July-October 2024. Research instruments in the data collection instrument in this study, a questionnaire was used which consisted of 3

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questionnaires, namely: (1) The self- care questionnaire used was the Barthel Index which consisted of 10 items. questions to assess the level of daily activity that respondents can do, (2) The quality of life questionnaire used is the SF-36 questionnaire. This questionnaire consists of 36 statements divided into 8 dimensions, and (3) Interview techniques to support the accuracy and completeness of the questionnaire. Interviews are also used to broaden the researcher's view of other data that is not formulated in the questionnaire.

Research implementation procedures Stages of research implementation: (1) QUAL (Planning), planning quantitative research, (2) Survey, distributing questionnaires to breast cancer patients; (a) Self-care questionnaire (Barthel Index); (b) Quality of Life Questionnaire (SF-36); (3) Analyzing Quantitative Results; (4) Obtaining quantitative research results; (5) Formulating Planning (QUAL); (6) Survey (In-depth Interview) of Breast Cancer Patients; (7) Analyzing Qualitative Results; and (8) Obtaining Qualitative research results. This research has passed the ethical review published by the Health Research Ethics Committee of Prima Nusantara University Bukittinggi with letter number 561/KEPK/UPNB/VIII/2024.

RESEARCH RESULTS

Quantitative Research

Table 1. Frequency Distribution and Percentage of Self Care of Breast Cancer Patient (N=50)

Variable	Results
Self Care (n/%)	
Total Dependence	5/10.6
Highly Dependent	10/20.0
Partially Dependent	17/34.0
Needs Assistance	13/26.0
Independent	5/10.0
Quality of Life (n/%)	
Poor	13/26.0
Good	37/74.0

Based on the results of data processing in the Surgical Room of Dr. Achmad Mochtar Hospital Bukittinggi, the level of patient self-care shows variations in the level of independence. Of the total 50 patients, there are 5 patients (10%) who are in the "Total Dependence" category who require full assistance in daily activities. A total of 10 patients (20%) are in the "Very Dependent" category, and 17 patients (34%) are in the "Partially Dependent" category, indicating that they still need assistance in some activities, but have independence in other activities. In the "Needs Assistance" category, there are 13 patients (26%) who need assistance in some things, but are quite independent in certain activities. Meanwhile, only 5 patients (10%) are in the "Independent" category, meaning they can carry out daily activities without assistance.

Based on data on the Quality of Life of patients in the Surgical Room of Dr. Achmad Mochtar Hospital Bukittinggi, out of a total of 50 patients, the majority, namely 37 patients (74%), had a good quality of life, while 13 patients (26%) had a poor quality of life. These data indicate that the majority of patients in the surgical room have a good quality of life, which may reflect the health care and support received while in the hospital.

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Tabel 2. Relationship between Self care and Quality of Life of Breast Cancer Patient (N=50)

Self Care	Quality of Life		p-value
	Poor (n=13)	Good (n=37)	
Self Care (n/%)			
Total Dependence	1/2	4/8	0.011 < 0.05
Highly Dependent	7/14	3/6	
Partially Dependent	3/6	14/28	
Needs Assistance	1/2	12/24	
Independent	1/2	4/8	

Based on the processed data in the table above, there is a relationship between the level of self-care and quality of life. Respondents in the "Total Dependence" category consist of 5 samples, where 1 sample (2%) has a poor quality of life and 4 samples (8%) have a good quality of life. In the "Very Dependent" category, there are 10 samples, where 7 samples (14%) have a poor quality of life and 3 samples (6%) have a good quality of life. The "Partially Dependent" category has the largest number of respondents, namely 17 samples, with 3 samples (6%) having a poor quality of life and 14 samples (28%) having a good quality of life. In the "Needs help" category, there are 13 samples, where 1 sample (2%) has a poor quality of life and 12 samples (24%) have a good quality of life. Finally, in the "Independent" category there are 5 samples, where 1 sample (2%) has a poor quality of life and 4 samples (8%) have a good quality of life. Overall, there were 50 respondents with 13 samples (26%) having poor quality of life and 37 samples (74%) having good quality of life.

The table above shows that there is a significant relationship between Self Care and Quality of Life as shown by sig 0.011 sig is smaller than the specified value of 0.05 (0.011 <0.05).

Qualitative Research

Tabel 3. Distribution of Participant Characteristics

Initials	Age	Religion	Chemotherapy
Mrs. M	56	Islam	3rd
Mrs. R	48	Islam	2nd
Mrs. A	52	Islam	6th
Mrs. P	42	Islam	3rd
Mrs. L	45	Islam	2nd

Data analysis, the results of interviews with 5 participants showed a relationship with the theme. The themes discussed in the data analysis include: Self Care with Quality of Life of Breast Cancer patients has 2 categories, namely physical disorders and psychological disorders.

Physical Disorders

All participants who experience physical disorders. This can be shown in the following participant statements:

"...eating is still helped by my husband, ma'am... (P2)

"...eating is helped by ma'am, now (now) everything is helped by ma'am..." (P3) "...if eating can be done ma'am sometimes, sometimes also helped..." (P4) "...bathing is helped by ma'am, it's hard to bathe alone..." (P3) "...dressing (putting on clothes) is helped a little (a little) ma'am... (P1) "...dressing is helped by ma'am, help to put on..." (P3)

"...going out (when) from the toilet (bathroom/toilet) is helped by the child/husband (P1) (P2) (P3) (P4) (P5)

"...when (when) walking, helped (dad)..." (P1) (P2) (P3) (P4) (P5) "...didn't go up and down stairs

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while sick..." (P1) (P2) (P3) (P4) (P5) "...didn't Just defecate..." (P1) (P2) (P3) (P4) (P5)

"...BAK (pee) in the toilet (WC)…" (P1) (P2) (P3) (P4) (P5)

"...rasonyo tired (exercising) ma'am, weak too ma'am. Just do it ma'am..." (P1)

"...tired (exercising) ma'am, going back and forth to the hospital..." (P2)

"...now (now) I'm tired (exercising) ma'am. This is the 6th chemo, so I'm tired, ado jugo, so I'm giving in again ma'am..." (P3)

"...if now you are tired (exercising) ma'am..." (P4)

"... I'm tired (exercising) ma'am, I'm just trying to get better (healthy)..." (P5)

"...sometimes raso is not comfortable ma'am..." (P1)

"...I often wake up at night (acok tejago) ma'am, so I don't get enough sleep..." (P2)

"...do raso not comfortable, keep waking up, not getting enough sleep ma'am..." (P3)

"...at night, I sleep but often wake up in the middle of the night (acok tejago), it's hard to go back to sleep ma'am..." (P4)

"...don't sleep well, maybe it's not comfortable ma'am..." (P5) "...when you finish chemo, it's usually difficult to defecate ma'am..." (P1)

"...nausea now, maybe it's because I finished chemo..." (P2) "...the bowel movements became hard (kareh), the effect of chemo..." (P3)

"...now my stomach feels nauseous (raso2 maloyo) ma'am..." (P4) "...at home I work hard ma'am, it's hard to move..." (P1) "...now I'm weak (lamah) ma'am, my body is heavy..." (P2) "...I have to help my children everywhere, ma'am..." (P3) "...my body is not fit, so I feel weak (lamah)..." (P4) "...weak (lamah) ma'am when I finish chemo..." (P5) "...pain (pain) on the left side ma'am..." (P1)

"...sometimes the pain (sakik) nyo reaches my back (back) ma'am..." (P2)

"...pain (pain) sometimes ma'am, if it recurs ma'am..." (P3) "...after chemo there is no pain (pain), before Chemo pain (sick) ma'am..." (P4)

"...now I'm having pain (sick) ma'am, but I just took medicine..." (P5) "...hair (rambuik) has fallen out ma'am..." (P1)

"...the hair (rambuik) hasn't fallen out much, ma'am, just a little bit, ma'am..." (P2) "...the visible symptom is the hair (rambuik), the hair (rambuik) is gone, ma'am, luckily it's in the hijab..." (P3)

"...the hair (rambuik) has started, but it's not serious yet..." (P4) "...if it's possible now the hair (rambuik) ma'am, it's starting to fall out a lot, ma'am..."

"...weight loss ma'am, eating less..." (P1)

"... skinny now ma'am, losing weight. Oversized clothes (starting to get roomy) now (now) ma'am..." (P3)

"...sometimes I eat with appetite, sometimes I don't want to, so my body is a bit lacking, ma'am..." (P4)

Psychological Disorders

All participants stated that they experienced psychological disorders. This can be shown in the participant's statement as follows:

"...anxious (cameh) every time I want to go to chemo, ma'am..." (P1)

"...sometimes I worry (cameh), sometimes I worry, it's normal, isn't it..." (P2)

"...I'm definitely worried, confused about what to do next..." (P3)

"...every time you want to go to chemo, you get worried (cameh) with worry, ma'am..." (P4) "...everyone (sadonyo) must be worried (cameh), right, nervous..." (P5) "...sad (sadiah) when you remember your illness, ma'am..." (P1)

"...it's definitely sad (sadiah) ma'am, everyone feels it for sure..." (P2) "...sayo lah lamo right, this is the 6th chemo, I'm sad (sadiah) thinking about (mamikian) the family..." (P3)

"... the beginning of Keno was very sad, ma'am, now it's gone a bit (seketek) it's sad (sadiah)..." (P4)

"...sad (sadiah), sometimes I still cry (manangih) ma'am, just be strong for the sake of the children..." (P5)

"...embarrassed by the current situation ma'am..." (P2)

"...the breasts (breasts) have been removed, ma'am, so as a woman you must be embarrassed, ma'am..." (P3)

"... raso ado yang lacking ma'am with breasts (breasts) now (now)..." (P4)

"...I'm feeling insecure sometimes with my lack now (now) ma'am..." (P5)

"...since I've been sick, I've been staying at home ma'am, I've been going out and about..." (P1) "...I've rarely communicated with my neighbors..." (P2) "...meeting occasionally ma'am, I've rarely

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communicated during this illness..." (P3) "...just staying at home ma'am, so I've been meeting with they..." (P4) "...sometimes neighbors or family visit the house ma'am, I haven't been anywhere..." (P5)

"...there are no more obstacles ma'am..." (P1)

"...sometimes there are obstacles this month, next month there aren't..." (P4) "...the obstacles haven't been regular since chemo..." (P5)

"...since then there haven't been any obstacles, less when it comes to having sex with my husband ma'am..." (P1)

"...the husband and wife have started to decrease ma'am..." (P3)

DISCUSSION

Quantitative Research

Self care Based on the research that has been conducted, researchers show the results of self-care in Breast Cancer patients at the Surgery of Dr. Achmad Mochtar Bukittinggi Hospital with 50 respondents showing that some Breast Cancer patients have partial self-care, namely 17 (34%) respondents. This study is in line with Partial Self-Care because most patients are elderly and their physical condition is declining, this results in irregular self-care so that self-care is not carried out (Sulistyowati, 2020).

There are several factors that influence self-care, namely age, gender, and duration of illness. The first factor that influences self-care is age, the older a person's level of maturity, the more mature they are in thinking and working (Angela, Ardiansyah, & Suprabawati, 2022; Bonacho, 2020). Most Breast Cancer patients are Women with Elderly Age. In line with research (Astuti, 2019) states that the elderly group is a period where a person's psychological and intellectual abilities decline. Researchers argue that age can affect the body's metabolic system, so that the longer a person's life can have an impact on health so that they cannot carry out self-care adequately and disrupt the quality of life.

Self-care theory according to Orem is a nursing theory developed by Dorothe Orem. Orem developed the self-care nursing theory into self-care theory, self-care deficit theory and nursing system theory. Meanwhile, according to self-care is an individual action that is threatened in order to control and maintain and improve the health status of well-being. Self-care in Breast Cancer patients can increase daily activities, reduce dependency, reduce the burden of lifestyle due to disease, premature death in post-chemotherapy patients, and improve quality of life by 95% compared to regular care (Silaen, 2017).

According to the researcher's assumption, self-care has a great influence on breast cancer patients, especially patients who have undergone chemotherapy. One factor is age, most breast cancer patients are women of advanced age, whose knowledge of the disease is reduced, thus affecting self-care in these patients.

Quality of Life

Based on the results of the research that has been conducted, researchers can see the quality of life in Breast Cancer patients in the Surgery Room of Dr. Achmad Mochtar Hospital Bukittinggi with 50 respondents showing that almost half of Breast Cancer patients with Good quality of life are 37 (74%) respondents. This study is in line which found that most of the quality of life was moderate/high as many as 60 (78.9%) respondents. Quality of life according to the World Health Organization Quality of Life (WHOQOL) can be interpreted as an individual's perception of their position in life where in the context of culture and value systems they have one goal, hope, standard in life (Heidari, Shahbazi, & Ghodusi, 2015)

There are several factors that influence patients with moderate quality of life in Breast Cancer patients including age and marital status. Most Breast Cancer patients are Women with Elderly Age. This is supported by research by Uun Nuiva, who argues that age is an aspect that affects a person's quality of life, because at this age a person has faced shrinking body organs. According to researchers, age is a factor that can affect quality of life because the older a person's physiological and psychological functions will decrease (Uun Nuiva, 2024).

Quality of life is an individual's perception of their position in life as seen from the context of the culture and value system in which they live (Bariroh, Susanto, & Adi,2016). Quality of life related to health includes functional limitations that are physical and mental and positive expressions, physical, mental and spiritual well-being (WHO, 2016). Factors related to changes in quality of life are family social

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support. This is in line with (Hafdia, Arman, Alwi, & Asrina, 2018) which revealed that there is a relationship between family support and the quality of life of Breast Cancer patients at the Polewali Mandar District Hospital.

According to the researcher's assumption, marital status can improve the quality of life of patients because when patients have a family, it means that patients have a support system that can improve the quality of life of patients. In addition to the above factors, there are other factors that support the quality of life of Breast Cancer patients, namely economic factors where some patients argue that the cost of treatment so far has been entirely using BPJS funds. This is very helpful in dealing with the problem of costs that will be incurred when monitoring health at health facilities provided by the government.

Self care of Quality of Life

The results of the study found that there is a significant relationship between Self Care and Quality of Life as shown by sig 0.011 sig is smaller than the specified value of 0.05 (0.011 <0.05) for Breast Cancer patients in the Surgery Room of Dr. Achmad Mochtar Hospital Bukittinggi. This study is in line with (Djamaludin & Oktavia, 2020) research which states that there is a relationship between the level of dependence in fulfilling daily life activities and the quality of life of post-chemotherapy patients. The results of (Padila, 2019) study stated that there is a significant relationship between self-management and the quality of life of post-chemotherapy patients with a degree of significance of α = 0.00 obtained the result p = 0.000 where p <α.

According to Abdollahi's research, resilience can lead to self-care behavior and this behavior helps people take better care of themselves physically and psychologically and ultimately experience a higher quality of life. Psychologists, nurses and doctors can help patients by increasing their resilience to engage in self-care behaviors to improve their physical and mental health, as well as their quality of life. Increasing resilience, self-care in breast cancer patients will increase and they can experience a better quality of life. This is in line with Shafira's research, individuals who have high self-efficacy will achieve something better because these individuals have strong motivation, clear goals, stable emotions and the ability to perform activities or behaviors successfully. In contrast to low self-efficacy who tend not to want to try (Lembang, 2018).

The level of quality of life of breast cancer patients can be predicted by the patient's self-efficacy itself, both for long-term and short-term quality of life. The results of this study are in line with the research of Siregar (2018) The quality of life and self-efficacy of turkish brace cancer patients under going chemotherapy (self-efficacy results have a positive impact on the quality of life of cancer patients undergoing breast chemotherapy).

According to Nuiva's research, self-management education programs can improve the quality of life of breast cancer patients. Self-management programs in the form of symptom management, relaxation exercises, psychological support can accelerate recovery and improve the quality of life in prostate cancer (Watanabe, Yagata, Saito, & Okada, 2023; Nuiva's, 2024). Self-management programs in particular can also reduce fatigue and improve the general quality of life in cancer patients in general (Agbejule & Saarikoshi, 2006). These results are in accordance with other studies that state that self-management training can improve the quality of life, fitness and physical function, reduce fatigue and reduce sleep disturbances in patients with breast cancer and breast cancer patients who have undergone surgery (Liabalingka, 2020).

This is in line with Sun's research, which found that before being given an intervention for implementing an education system based on self-care orem, there were 7 (11.7%) respondents who had a quality of life in the poor category, there were 36 (60.0%) respondents who had a quality of life in the sufficient category, and the remaining 17 (28.3) respondents had a quality of life in the good category. After being given an intervention for implementing an education system based on self-care orem, it was found that 21 (35.0%) respondents had a quality of life in the sufficient category and most of the 39 (65.0%) respondents had a quality of life in the good category. The results of the statistical test analysis with Wilcoxon on the quality of life of breast cancer patients produced a significance value <alpha (5% or 0.05) which was 0.000. Therefore, it can be stated that there is a significant influence of providing an intervention for implementing an education system based on self-care orem on

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improving the quality of life of breast cancer chemotherapy patients at Graha Amerta Surabaya (Sun's, 2023).

According to Alligod, self-care is an individual action that is threatened in order to control and maintain and improve the health status of well-being. Self-care in breast cancer patients can increase daily activities, reduce dependency, reduce the burden of lifestyle due to disease, premature death in 95 post-chemotherapy patients, and improve quality of life by 95% compared to regular care (Prayoga, 2019; Alligod, 2014). This also causes the inability of breast cancer patients to carry out daily activity functions and limitations in carrying out social activities and causing dependency. Reduced levels of independence and mobility of patients can affect the quality of life of patients (Ismail, Watung, Sibua, & Astuti, 2024).

According to the researcher's assumption, self-care is a factor related to Quality of Life in breast cancer patients, because respondents who have self-care tend to have poor Quality of Life. So it can be concluded that the less self-care breast cancer patients have, the worse the quality of life of breast cancer patients. Decreased quality of life in breast cancer patients is often followed by the inability of these patients to carry out self-care independently.

Qualitative Research

Physical disorders

The results of in-depth interviews showed that five participants experienced physical disorders. These physical disorders include: assisted eating, assisted bathing, assisted dressing, assisted going to the toilet, assisted walking and no going up and down stairs. This is in line with Nurarif's research, which revealed that patients use more self-care behaviors to prevent infection, nausea/vomiting, bleeding, decreased appetite, difficulty sleeping, and constipation. This study revealed that almost half of the participants were in the 51-60 year age group with an average age of 54.7 ± 9.7. This suggests that breast cancer is more common among older age groups. This study is supported by another study which reported that 65.4% of participants with breast cancer were in the 46-65 year age group (Nurarif, 2016).

According to Alligod's theory self-care is an action by individuals who are threatened in order to control and maintain and improve their health and well-being status. Self-care in Breast Cancer patients can increase daily activities, reduce dependency, reduce the burden of lifestyle due to illness, premature death in post-chemotherapy patients, and improve quality of life by 95% compared to regular care (Sutinah, 2020).

Self-care theory describes the activities of individuals who carry out activities to meet the needs of self-care with the aim of maintaining life, maintaining health and well-being. In short, self-care makes oneself a concrete behavior. Self-care is generally done by adults, while if sick/unable can be helped by others (Alligoog &Tomey, 2014).

According to the researcher's assumption, self-care behavior is influenced by a series of skills and knowledge that a person uses to take action. Self-care actions include prevention, pain relief, definitive treatment or control of diseases and conditions that threaten life, health, and well-being. Self-care activities include seeking and participating in medical care, nursing, and other forms of health care. In cases of illness or changes in health status, self-care requires seeking medical services, referring to a doctor and performing prescribed services or reviewing the period of health status. Therefore, nurses must teach patients and clients how to solve their problems and make decisions. Self-care needs are related to the stages of human development. This means that these needs are commensurate with the stages of the life cycle in which the person lives. The stages of the life cycle are: intrauterine life and the birth process, Newborn, infancy, childhood and adolescence, adulthood, old age and pregnancy. A person's self-care capacity in their developmental cycle from childhood to old age lies in various parts of the spectrum and the amount varies depending on the health status, factors that influence the person's ability to be educated and life experiences because these are factors that enable the person. One of the main pillars of improving self-care is patient education. On the other hand, carrying out self-care requires self-healing abilities (drug therapy abilities) in breast cancer patients. self-care is a factor related to the quality of life in breast cancer patients. Good self-care does not necessarily have a good quality of life, one of which can be influenced by psychological factors where respondents feel anxious about the disease they are experiencing so that it affects their

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quality of life. Those who have poor self-care also tend to have poor quality of life, so it can be concluded that the lower the self-care of breast cancer patients, the worse the quality of life of breast cancer patients.

Physical disorders of quality of life include: Fatigue (tired, tired, and weak), sleep disturbances (lack of sleep and discomfort), Body complaints (difficulty defecating and nausea), muscle weakness (weak and slow to move), Breast pain, hair loss and weight changes.

This is in line with Fortier's, which stated that Quality of life with Health was lower in both clusters with severe fatigue compared to those with milder fatigue, and decreased further when severe sleep disturbances were present. In line with Sasmita's, which states that there is a significant relationship between sleep quality and physical fatigue. Researchers believe that the relationship is a reciprocal relationship where if sleep quality is good, physical fatigue becomes mild, while if sleep quality is poor, physical fatigue becomes severe (Fortiers, 2010; Sasmita, 2024).

This is in line with Timby's, which states that almost 99% of breast cancer patients with chemotherapy experience hair loss. The average time from chemotherapy to hair loss is 18 days. In line with Malika's which states that hair loss (alopecia), as an account of cancer treatment, has many significant and distressing effects on breast cancer patients. Appropriate interventions can help breast cancer patients feel more comfortable with themselves, after experiencing alopecia due to chemotherapy (Timby, 2009; Malika, 2024).

Psychological disorders

The results of in-depth interviews showed that five participants experienced psychological disorders. Psychological disorders include: anxiety, sadness, low self-esteem, not socializing, menstrual disorders and sexual dysfunction.

This is in line with Darwis's, which revealed that loss of muscle strength or decreased muscle strength in elderly subjects can result in decreased quality of life and is associated with poor functional ability of the subject. The researcher also said that elderly subjects with good muscle strength generally have better vitality and do not often feel pain in their bodies. In line with Saudah's, which said that the quality of life in women, better quality of life tends to have good physical and psychosocial health (Darwis, 2022; Saudah, 2024).

This is in line with Angela's, which said that pain affects a person's quality of life which focuses on patients undergoing chemotherapy using the SF-36 and Wong Baker instruments. Pain is likely to be influenced by several components such as a person's psychological condition, someone who experiences anger, depression, anxiety, will also experience pain in someone who is related to quality of life. In line with Kurniawati's, which states that neuropathic pain in breast patients will reduce the quality of life in the total quality of life score, physical condition domain and psychological condition domain (Angela, 2022; Kurniawati, 2007).

This is in line with Nurrohmah's, which states that there is a relationship between anxiety levels and the quality of life of breast cancer patients undergoing chemotherapy. Changes in life will trigger patients in unwanted adjustments and they must do in life such as role changes which will ultimately affect poor quality of life. In line with Anggeliki's, which states that cancer patients undergoing chemotherapy are at risk of experiencing stress in all aspects of daily life, accompanied by anxiety and depression, which reduces their quality of life (Nurrohmah, 2022).

This is in line with Heidari's, which states that patients have low self-esteem and their self-esteem score is 2.80 (1.14). Researchers found that breast cancer and its treatment including mastectomy have a negative impact on patients' self-esteem. In line with Amelia's, which states that most (51.4%) breast cancer patients are in the moderate self-acceptance category and almost all breast cancer patients have a quality of life in the moderate category. Self-acceptance correlates with quality of life (Heidari, 2015; Amelia, 2017).

This is in line with Malini's, which states that social function has a positive effect on physical and psychological health and quality of life in women with breast cancer. Researchers found that the more isolated women with breast cancer are from society, the worse their quality of life. In line with Wuriningsih's research (2019) which states that women with breast cancer experience increased physical and psychological function after surgery, but their social function decreases. Changes in physical appearance and discomfort during treatment affect

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their social interactions with others because they do not want to leave the house (Malini, 2020).

In theory, breast cancer patients experience various problems that are part of the effects of their disease, both physiological or physical problems that change, which affect individuals who suffer from breast cancer. In general, breast cancer patients will experience anxiety and depression at every stage, starting from pre-diagnosis to the terminal phase. Breast cancer occurs due to damage to the genes that regulate growth and differentiation so that cells grow and develop uncontrollably (Milenia, 2023).

The researcher's assumption is that the lack of patient movement causes psychological function disorders in breast cancer patients. Breast cancer patients will indeed experience breast pain and breast cancer patients undergoing chemotherapy will experience hair loss and weight changes due to the effects of chemotherapy drugs. Breast cancer patients experience anxiety and sadness due to their illness which interferes with the patient's emotions. Breast cancer patients experience low self-esteem because their illness affects one of the most important female organs, resulting in impaired self-esteem in the patient. With sick patients, patients spend a lot of time at home, this disrupts the patient's relationship with other people such as neighbors, relatives and the surrounding environment.

CONCLUSION

Self-care in breast cancer patients in the operating room of Dr. Achmad Mochtar Hospital, Bukittinggi with 50 Respondents indicated that some breast cancer patients had self-care depending on some of their namely 17 (34%) respondents.

Quality of life in breast cancer patients in the Surgery Room of Dr. Ahmad Mochtar Hospital, Bukittinggi with 50 respondents showed that almost half of the breast cancer patients had a good quality of life namely 37 (74%) respondents.

Quantitative research, there is a relationship between self-care and the quality of life of breast cancer patients in the operating room of Dr. Achmad Mochtar Hospital, Bukittinggi, which is shown by sig 0.011, sig is smaller than the specified value, namely 0.05 (0.011 <0.05). Qualitative research, the lower the self-care of breast cancer patients, the worse the quality of care. life in breast cancer patients.

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