

## Relationship between family support and quality of life of breast cancer patients undergoing chemotherapy at Santa Elisabeth Hospital

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### ABSTRACT

**Introduction:** The decline in the quality of life of breast cancer patients undergoing chemotherapy causes suffering, and the suffering experienced by chemotherapy can be a decrease in the ability to think, remember and concentrate. Generally, breast cancer patients undergoing chemotherapy will experience anxiety and fear of the possibility of death, and in the end, they lose their autonomy, reduce self-esteem, and lose hope, indicating that there is no meaning in life. Therefore, people with breast cancer undergoing chemotherapy need strong companions from the surrounding environment, especially their family support through supportive attitudes, actions, and acceptance, and are always ready to provide help and assistance. **Objectives:** To determine the relationship between family support and quality of life of breast cancer patients undergoing chemotherapy. **Methods:** This study was a non-experimental - a correlational research design with a Cross-Sectional approach. **Results:** The results of the study conducted by the researcher showed that the presence of family support could improve the patient's quality of life. **Conclusions:** The quality of life of breast cancer patients undergoing chemotherapy is getting more optimal. Researchers hope to improve the quality of life for breast cancer patients undergoing chemotherapy by providing positive support such as sincere care and affection, the motivation that builds the patient's spirit.

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## 1. Introduction

Today's world faces the problem of communicable and non-communicable diseases, whose cases are increasing and causing significant deaths worldwide. One of them is cancer. Cancer is a disease in which abnormal cells grow uncontrollably, invade and move between cells and tissues. Breast cancer originates from the glandular ducts and the supporting tissues of the breast. The number of cells in the breast grows uncontrollably, initially in the form of a small lump, but if not treated immediately, it will be challenging to treat and cause paralysis and even death (Utama 2019). Factors that cause breast cancer include eating fast food, lack of physical activity, body mass index, less consumption of vegetables, excessive consumption of cigarettes and alcohol, frequent exposure to radiation from electronic media, and changes in environmental conditions (Julaecha 2021).

Chemotherapy is a therapy that uses cytostatic drugs inserted into the body through an intravenous or oral route. Chemotherapy drugs can cause toxic effects and systemic dysfunction with a severity level of  $\gamma$ . Side effects caused by chemotherapy have an impact on decreasing the performance status of cancer patients, such as nausea, vomiting, lack of energy, decreased appetite, decreased physical endurance/decreased immune system (patient immune system), which of course, can affect quality of life and functional status (Aydiner A., Igcı A. 2019) Data from the Santa Elisabeth Hospital in Medan, according to data obtained from the medical records of the Santa Elisabeth Hospital in Medan, where on average from January to December 2021 data were

obtained for 572 people, namely 451 outpatients and 121 inpatient breast cancer patients undergoing chemotherapy (Medical Records), Santa Elisabeth Hospital.

Quality of life is a fundamental goal in cancer treatment, and concerns about physical and psychological conditions, body image disturbances, and symptoms that can cause suffering need to be anticipated to improve the quality of life of cancer patients. Improving the quality of life of cancer patients during treatment will increase patient compliance with care and treatment and provide strength to overcome various symptoms or complaints experienced by cancer patients (Putri, 2017). Family support is the family's attitude, action, and acceptance toward the sick. Family members are of the view that supports people are always ready to provide help and assistance if needed, especially in going through difficult times that a person is going through (Amalia and Listia, 2020).

## 2. Methods

This study was a non-experimental, correlational research design with a Cross-Sectional approach. Cross-Sectional research emphasizes the time of measuring/observing data on the independent and dependent variables only once at a time. This study aims to see the relationship between the independent variable and the dependent variable, while the independent variable in this study is family support, and the dependent variable is the quality of life of breast cancer patients. The population in this study were breast cancer patients undergoing chemotherapy at the Santa Elisabeth Hospital Medan in 2022, totaling 572 patients, while the sample in this study was taken by non-probability sampling with an accidental sampling technique totaling 45 respondents.

The data collected from this study was carried out by the researcher, who was taken directly from the respondents by filling out questionnaires. The family support questionnaire has four indicators: informational support, motivational support, instrumental support, and emotional support. This questionnaire uses 15 questions that are asked with the answers "Never = 1, Rarely = 2, Often = 3, Always = 4". Furthermore, the quality of life questionnaire consists of 26 statements; on the quality life questionnaire, there are four indicators, namely the physical health domain, the psychological domain, the social relationship domain, and the environmental domain. with the answer "Very bad = 1, Bad = 2, Mediocre = 3, Good = 4, Very good = 5. For the positive questions, there are 23 items (numbers 1, 2, 5-25), and three for negative questions (numbers 3,4, 26). Question number 1 is about the overall quality of life; question number 2 is about health in general, domain 1 (physical) is on questions number 3, 4, 10, 15, 16, 17, and 18, and domain 2 (psychological) has questions 5, 6, 7, 11, 19 and 26, domain 3 (social) is on questions number 20-22, and domain 4 (environment) is on questions number 8, 9, 12, 13, 14, 23, 24, and 25.

Data analysis used univariate and bivariate analysis. Bivariate analysis was carried out to test the two variables to know whether or not there was a relationship (correlation) between family support and quality of life. The statistical test used was the Spearman rank test, with (value) = 0.009 ( $\rho < 0.05$ ) with a value of  $r = 0.384$ , meaning that there is a strong relationship between family support and the quality of life of breast cancer patients undergoing chemotherapy; thus,  $H_a$  is accepted which means that there is a strong relationship between family support and the quality of life of breast cancer patients undergoing chemotherapy at Santa Elisabeth Hospital Medan in 2022.

### 3. Results and Discussion

#### 3.1. Family support and quality of life

Majority of respondents have good family support (75.6%), and overall of them also have relatively good quality of life (high QoL=53.3%, moderate QoL= 33.4%). Table 1 described the details of level of family supports and the respondents' quality of life.

Table 1. Distribution of Respondents Based on Family Support and Quality of Life for Chemotherapy Patients at Santa Elisabeth Hospital Medan in 2022.

Family support	frequency (f)	Percentage (%)
▪ High	34	75,6
▪ Moderate	8	17,8
▪ Low	3	6,7
Total	45	100
Quality of Life		
▪ High	24	53,3
▪ Moderate	15	33,4
▪ Poor	6	13,3
Total	45	100

#### 3.2. Relationship between family support and quality of life of breast cancer patients undergoing chemotherapy

Results in this study from Spearman test analysis indicate that family support and quality of life have a significant relationship ( $p < 0.05$ ,  $r = 0.384$ ). It highlights that the higher the family's support, the better the patient's quality of life.

Table 2 Relationship between family support and quality of life of breast cancer patients undergoing chemotherapy at Santa Elisabeth Hospital in 2022.

Family support	Quality of Life								$\rho$ -value
	Less		Enough		Well				
	f	%	f	%	f	%	$f_{total}$	%	
Low	2	4,4	1	2.2	0	0	3	6.7	$\rho = 0.009^*$  $r = 0.384$
Moderate	0	0	6	13.3	2	4.4	8	17.8	
High	4	8.9	8	17.8	22	48.9	34	75.6	
Total	6	13.3	15	33.3	24	53.3	45	100	

Note: \*significant in the alpha level of 0.05

### 4. Discussion

#### 4.1 Family Support

The results of the study conducted by researchers on 45 respondents in the study of the relationship between family support and quality of life in breast cancer patients undergoing chemotherapy at the Santa Elisabeth Hospital Medan the data obtained are as follows: high family support as many as 34 people (75.6%), adequate family support as many as eight people (17.8%), and less family support as many as three people (6.7%), these data indicate that the majority of respondents experience good family support (Marwin et al. 2021). From the results of the percentage of answers to the questionnaire answered by the respondents, the researcher saw that emotional support was very closely related to improving the quality of life of patients, namely that the family always accompanies, pays attention to, listens, and kindly helps sufferers during their treatment.

To strengthen the above findings where family support is needed, it can be in the form of providing a sense of pleasure, security, and comfort, and getting family support will also help patients in influencing mental health so that patients can feel the spirit of life and motivation in undergoing treatment (Setiyaningrum 2018). The results of this study are also closely related to the results of research obtained by researchers, namely the sense of security and comfort felt by the patients themselves, which dramatically affects their psychological health because they are always accompanied and accompanied in treatment, so they feel protected by the presence of their families, both it is their husbands, children, and parents. Merlin et al. (2021) said that family support affects the recovery of patients with breast cancer, so breast cancer patients undergoing chemotherapy getting support from their families are much more enthusiastic about undergoing chemotherapy, which can help speed up the healing process.

The results of research conducted by researchers show that family support can improve the quality of life of patients; it can be seen from family support in the information dimension in the form of developments about their health; families also always provide 46% of the information, including the results of doctor's examinations, reminding patients to control, taking medication, information about things that can worsen the patient's illness, as well as information about things that the patient does not understand related to his illness, which makes sufferers more confident about their healthy development. The family also always provides information to the sufferer about suggestions and constructive discussions and also solves a problem faced in the treatment process, whether in the form of the patient's health development or health decline.

In family support, the assessment dimension with an average of 50% can be in the form of positive expressions from the family itself; even though, in this case, the family sometimes experiences difficulties, the family continues to provide positive and constructive expressions that make sufferers continue to rise and be enthusiastic in undergoing treatment. Instrumental support can be in the form of material assistance; sufferers say things that the patient's family does to fulfill this instrumental support, is to find a house for temporary housing for those whose homes are far from Santa Elisabeth's hospital, the family is also trying to meet the funds needed in treatment, both by borrowing and giving money to sufferers.

In family support, the emotional dimension experienced by the patient is where the family is friendly in helping the sufferer to meet the sufferer's needs, and the family always tries to listen whenever the patient complains. They also experience support through the warmth of the family who comes to visit and also from nurses who have been willing to provide care, the positive expression so that sufferers feel loved and respected, family support in emotional, instrumental, informational, and rewarding support given to respondents is very useful and very good for accelerating recovery in treatment.

The results percentage of respondents who answered the results of the questionnaire with low percentage are in the information domain, namely that the respondent's family was never informed about the results of the doctor's examination; this is very closely related to where the patient keeps the patient from giving up hope when they hear their condition is getting worse by examination and also from the doctor's diagnosis, so in this case, the family is sometimes not honest with the respondent about their health information. Then the family is also less involved in explaining to respondents about things that are not understood by sufferers related to their illness. From the results of the percentage of respondents' answers from the results of the questionnaire with a low percentage is in the information domain, namely that the respondent's family never informs about the results of the doctor's examination, this is very closely related where the patient keeps the patient from giving up hope when they hear their condition is getting a worse following examination and also from the doctor's diagnosis, so in this case, the family is sometimes not honest with the respondent about their health information. Then the family is also less involved in explaining to respondents about things that the patient does not understand about his illness, so sometimes sufferers experience stress with unclear information from the sufferer's family.

## 4.2 Quality of Life for Breast Cancer Patients.

Based on the results of the study showed that from 45 respondents who had a good quality of life, there were 24 respondents (53.3%), who had sufficient quality of life, 15 respondents (33.3%), and six respondents (13.3%) who had poor quality of life. This study showed that the quality of life of breast cancer patients who underwent chemotherapy at the Santa Elisabeth Hospital in Medan was in the category of good quality of life (53.3%), with 24 respondents. The quality of life of breast cancer patients is in a suitable category because of their self-acceptance in the situation during treatment, namely, even though the patient is undergoing a chemotherapy process which is indeed not an easy thing to do, but because the patient himself always has hope that he will recover and is also motivated always to stay motivated is in the patient, and this is what results in the high quality of life of breast cancer patients who are undergoing chemotherapy.

The high quality of life found by researchers at the Santa Elisabeth Hospital in Medan can also be influenced by a high level of education where the majority are with undergraduate education, where the higher a person's education, the easier it will be to adjust and accept these new things, according to the assumptions of researchers. Higher education will be able to change the behavior of a person or group's behavior and mature the individual through teaching and the experience he gains related to the disease that the sufferer is experiencing.

Based on the results of the study, the quality of life in breast cancer patients undergoing chemotherapy, seen from a physical point of view where breast cancer patients undergoing chemotherapy at the Santa Elisabeth Hospital in Medan, mainly experienced dissatisfaction with their ability to carry out daily activities, psychologically many breast cancer patients who undergo chemotherapy from the results of the data obtained are sufficient, with economic problems and do not have time for recreation and some also say that the support of the people closest to them is very influential in improving the quality of life, in terms of distance of treatment is also very influential in improving the quality of life their lives, because when they will follow the chemotherapy cycle that has been scheduled by their doctor, they are a little overwhelmed by the distance from the hospital which sometimes makes them tired, and for other alternatives they must stay / boarding in order to carry out optimal treatment.

This study also obtained data with poor quality of life, namely six respondents (13.3%). The quality of life that is poor / or lacking is also a matter that needs to be considered regarding how to solve a problem so that respondents who still have a poor quality of life hope that the future will be promising, even though they suffer but remain enthusiastic and have hope, because with a good quality of life well then of course because there is enthusiasm and hope due to internal factors and external factors if the researcher sees from the results of the questionnaire data that it is seen in the psychological domain and the physical domain more sufferers experience a decline and this is in the researcher's opinion from physical factors, namely, the possibility of this happening. as a result of side effects caused by chemotherapy drugs, such as nausea, vomiting, dizziness, diarrhea, decreased sleep quality, severe pain they experience, which causes sufferers to feel uncomfortable.

The above situation causes the patient's quality of life to be reduced. Other things that make the sufferer experience a decrease in the quality of life are psychological factors, including lack of enthusiasm and inability to carry out activities, and can also be influenced by loneliness, anxiety, and even despair. Need treatment from the patient's family and the health team to provide motivation and enthusiasm and a comprehensive approach, good communication, and cooperation from all parties involved.

## 4.3 Relationship Between Family Support and Quality Of Life For Breast Cancer Patients

Based on the results of the study 34 respondents (75.6%), the results showed that the quality of life of breast cancer patients was influenced by several factors, one of which was family support. The family support level will affect breast cancer patient's quality of life. The higher the

family support, the better the quality of life; conversely, the lower the family support, the quality of life will also decrease.

Based on the results of the Spearman rank test analysis, it was found that respondents who had high family support with good quality of life, 34 respondents with moderate family support and good quality of life, eight respondents with less family support, and three of them with less quality of life showed that there was a relationship between family support and quality of life of breast cancer patients at Santa Elisabeth Hospital Medan with a strong relationship level ( $\rho$  value  $0.009 < 0.05$ ). The relationship between family support and the quality of life of breast cancer patients undergoing chemotherapy obtained by researchers is very closely related to the support of the closest family in emotional and informational support.

So that the quality of life of breast cancer patients undergoing chemotherapy is more optimal if the family also supports it optimally. Researchers hope to improve the quality of life for breast cancer patients undergoing chemotherapy by providing positive support such as sincere attention and affection, the motivation that builds the patient's spirit. The support is also given through religiosity, namely praying for the patient during the treatment. It is hoped that support should not stop in the middle of the treatment process because the patients themselves need this support until they are finished in treatment, whether it is the involvement of the family/people closest to the sufferer, as well as the entire medical team during their stay care.

## 5. Conclusion

This study highlights that family supports were vital in improving the quality of life of a patient undergoing chemotherapy. The results of this study have practical impacts on healthcare practice, mainly in nursing care to improve the quality of life of cancer patients undergoing chemotherapy, and the results can be used in the patient's health education by engaging their patients in care.

## 6. Acknowledgments

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## 7. References

- Amalia, Irma Nur, and Mia Listia. 2020. "Perawatan Paliatif Terhadap Kualitas Hidup Pasien Kanker Payudara." *Jurnal Keperawatan Silampari* 4 (1): 281-92. <https://doi.org/10.31539/jks.v4i1.1328>.
- Aydiner A., Igcı A., Soran A. 2019. Nonepithelial Malignancies of the Breast, *Breast Disease. Journal of Medical Screening*. Vol. 2.
- Julaecha, Julaecha. 2021. "Pendidikan Kesehatan Tentang Deteksi Dini Kanker Payudara Melalui Pemeriksaan Payudara Sendiri (SADARI)." *Jurnal Abdimas Kesehatan (JAK)* 3 (2): 115. <https://doi.org/10.36565/jak.v3i2.162>.
- Marwin, Marwin, Dyah Aryani Perwitasari, Susan Fitri Candradewi, Bayu Prio Septiantoro, and Fredrick Dermawan Purba. 2021. "Kualitas Hidup Pasien Kanker Payudara Di Rsup Dr. Kariadi Semarang Menggunakan Kuisisioner Eortc Qlq-C30." *Jurnal Ilmu Farmasi Dan Farmasi Klinik* 18 (01): 16. <https://doi.org/10.31942/jiffk.v18i01.4895>.
- Merlin, Ni Made, Yulianti Toba, Fance Roynaldo Pandie, and Antonius Rino Vanchapo. 2021. "Hubungan Konsep Diri Dengan Penerimaan Diri Pasien Kanker Payudara Correlation between Self-Concept with Self-Acceptance in Breast Cancer Patient" 12: 273-79.
- Putri, Riska Hediya. 2017. "Kualitas Hidup Pasien Kanker Ginekologi Yang Menjalani Terapi." *Jurnal Aisyah : Jurnal Ilmu Kesehatan* 2 (1): 69-74. <https://doi.org/10.30604/jika.v2i1.34>.

- Setiyaningrum, Karina Dea. 2018. "Hubungan Dukungan Keluarga Terhadap Kualitas Hidup Pasien Kanker Payudara Yang Menjalani Kemoterapi Di Rumah Sakit Umum Daerah Dr.Moewardi Surakarta." Universitas Muhammadiyah Surakarta, 1-25.
- Utama, Yofa Anggriani. 2019. "Hubungan Dukungan Keluarga Terhadap Kualitas Hidup Pasien Kanker Payudara Di Rumah Sakit Islam Siti Khodijah Palembang Tahun 2018." *Jurnal Ilmiah Universitas Batanghari Jambi* 19 (3): 529. <https://doi.org/10.33087/jiubj.v19i3.698>.