



## The Relationship Between Family Support and The Quality of Life of Cancer Patients Undergoing Chemotherapy at Santa Elisabeth Hospital Medan

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**Abstract.** A decrease in quality of life among cancer patients undergoing chemotherapy often involves psychological and emotional problems such as confusion, sadness, anxiety, helplessness, fear of death, concerns about disclosing illness to family members, reduced self-esteem, disturbed body image, and loss of hope, which reflect a diminished sense of meaning in life. In this condition, strong family involvement and support are essential to help patients cope with the physical and emotional burden of chemotherapy and to improve their overall quality of life. This study aims to determine the relationship between family support and the quality of life of cancer patients undergoing chemotherapy at Santa Elisabeth Hospital Medan in 2024. The research used a quantitative method with a cross-sectional design. A total of 72 respondents were selected using accidental sampling. Data were collected through questionnaires measuring family support and quality of life. The results showed that most respondents received good family support, with 37 respondents (51.4%), while the quality of life was mostly in the adequate category, with 34 respondents (47.2%). Statistical analysis using the Spearman rank correlation test showed a significance value of  $\rho = 0.002$  ( $\rho < 0.05$ ) and a correlation coefficient of  $r = 0.731$ , indicating a strong positive relationship between family support and quality of life. These findings confirm that better family support is associated with higher quality of life among cancer patients undergoing chemotherapy and highlight the importance of strengthening coping strategies and psychosocial support.

**Keywords:** Cancer; Chemotherapy; Family Support; Psychosocial Support; Quality Of Life.

### 1. INTRODUCTION

According to the Ika Suryani Syarief Report, in 2020, the number of cancer cases globally reached 19.3 million, which caused around 10 million deaths. This figure has increased from 2018, where 18.1 million cases were recorded with 9.6 million deaths. This information comes from the International Agency for Research on Cancer (IARC), an institution that focuses on cancer research and is part of the projections from the World Health Organization (WHO), the number of cancer cases is expected to continue to grow and reach a total of 30.2 million cases by 2040.

According to Globocan (2020), in Indonesia, there are 396,914 registered cancer cases, with deaths reaching 145 people per 100,000 population. In detail, there were 65,858 cases of breast cancer, followed by cervical cancer with 36,633 cases, lung cancer with 34,783 cases, followed by colon or rectal cancer with 34,189 cases, liver cancer with 21,392 cases, nasopharyngeal cancer with 19,943 cases, lymph cancer with 16,125 cases, blood cancer with 14,979 cases, uterine cancer with 14,896 cases, prostate cancer totaled 13,530 cases, thyroid cancer totaled 13,114 cases, and the rest were various other types of cancer (Ika Suryani Syarief, 2021).

Several studies in Indonesia show that a decrease in quality of life can lead to suffering. People with cancer experience impacts on their level of quality of life, including psychological effects such as spiritual dimensions, social support, well-being, and positive perceptions of health without dependence on drug consumption (Irawan et al., 2017).

The decline in quality of life felt by individuals with cancer can include various psychological aspects, such as feelings of confusion, sadness, anxiety, feelings of helplessness, fear of possible death, and worries about disclosing the condition to the family. In addition, there is also a decrease in self-esteem, body image disorders, and loss of hope, which indicate a lack of meaning in life (Yolanda et al., 2023). Cancer patients experience cognitive decline, which includes the ability to think, remember, and concentrate. They also experience decreased physical function, which is characterized by complaints of pain, difficulty sleeping, fatigue, hair loss, easy bruising and bleeding, risk of infection, anemia, nausea, vomiting, and changes in appetite after receiving treatment, especially for those undergoing chemotherapy therapy (Lestari et al., 2020).

Support from family is a resource that provides physical and emotional comfort to individuals facing cancer. This support provides the knowledge that they are loved, cared for, and valued by their families. The benefits of this family support are immense for individuals with cancer. This is because through this support, the individual realizes that they have people who care, appreciate, and love them. The type of assistance provided to cancer patients can include emotional support, recognition, as well as practical support and information (Sari et al., 2018).

This is when the role of family becomes crucial because when patients are experiencing physical difficulties and mental distress, it is difficult for them to accept the situation in a rational way. The family is expected to maintain rational thinking so that the patient feels that his or her existence is still highly expected by the family. Thus, the quality of life of cancer patients can improve and provide motivation for them to stay enthusiastic and try to improve their health conditions (Syolihan Rinjani Putri et al., 2023).

The results of data collection from the chemotherapy room at Santa Elisabeth Hospital Medan stated that there were around 5-7 cancer patients undergoing chemotherapy sessions every day, as conveyed by one of the nurses. Through interviews with six patients who were undergoing chemotherapy, researchers found that four of them faced difficulties in carrying out daily routine activities due to their illnesses and felt powerless. One of the patients also expressed a desire to stop chemotherapy treatment due to the great distance from his home and his family who were reluctant to take him to the hospital. There is also a patient who feels

hopeless about his or her condition, which leads to depression due to disharmonious relationships with family, and lack of family support during chemotherapy sessions. Meanwhile, the results of a preliminary survey conducted by researchers at Santa Elisabeth Hospital Medan using questionnaires from 10 participants, it was seen that 5 people (50%) experienced a poor quality of life, 3 people (30%) stated that their quality of life was moderate, while 2 of them (20%) had a high level of quality of life.

According to preliminary research conducted by researchers, of the cancer patients undergoing chemotherapy, 2 people (20%) stated that they had a good quality of life. The patient received excellent family support, including assistance during the chemotherapy process without complaints, timely administration of medication, creating a comfortable environment, actively seeking the latest information about cancer, providing positive emotional support, and providing motivation to undergo regular control and participate in social activities such as worship and other activities.

Based on that context, as a nursing student, I have an interest in understanding the feelings experienced by cancer patients. I felt sympathy and empathy for their condition, especially because during my studies at the Santa Elisabeth College of Health Sciences Medan, we were always emphasized on the values of Christ's love in every aspect of learning. I felt touched when I saw the suffering experienced by patients, both from the side effects of chemotherapy and the pain of the lack of support from those closest to them, especially their families.

## 2. LITERATURE REVIEWS

Causes of cancer incidence of more than 30 percent of this are caused by five behavioral and dietary risk factors including: (1) Being overweight, (2) Lack of fruit and vegetable intake, (3) Lack of physical activity, (4) Smoking habits, and (5) Excessive alcohol consumption. The condition of the individual suffering from cancer results in disturbances as well as changes in the individual's quality of life. Quality of life refers to the evaluation of both individuals and others regarding a person's state in daily life, which includes the cultural dimension, the norms that exist in the surrounding environment, and its relationship with individual goals, aspirations, and anxieties. Quality of life is generally interpreted as the level of happiness and satisfaction with life.

Markers that can be used to assess an individual's quality of life include physical function, physical limitations, severity of pain, overall health, physical fitness, social interactions, emotional limitations, and mental well-being. People with cancer generally

experience a decrease in quality of life, which can be reflected in symptoms such as feeling guilty for the condition they are experiencing, negative view of themselves, dissatisfaction with the situation at hand, and feelings of shame. However, this experience can vary depending on the characteristics of each patient.

### **3. METHODS**

The research design used by the researcher was the correlation method used by the Cross Sectional approach. The Cross Sectional approach is a type of research that emphasizes measurement, recording, or observation at a specific point in time, and independent and dependent variables are measured only once at that point in time. Therefore, there is no follow-up in this approach (Nursalam, 2020).

The population in this study refers to all individuals who underwent chemotherapy therapy at Santa Elisabeth Hospital Medan in the period from January to December 2023, with a total of 285 people (RM-Hospital Santa Elisabeth Medan in 2023).

In this study, because the total population could not be ascertained, a non-probability sampling method was used using accidental sampling techniques. With this technique, samples are selected at random, where anyone who potentially meets the criteria and provides the data needed by the researcher can be sampled when they meet with the researcher. The formula to calculate the sample size in this study, uses the Vincent formula, so the number of participants in this study is 72 respondents.

The inclusion criteria studied were: Outpatients and inpatients who are undergoing chemotherapy both oral and injectable, Patients in full consciousness (Composmentis), and Able to write and read. The independent variable is the support of the family of patients undergoing chemotherapy at Santa Elisabeth Hospital Medan. The dependent variable is the quality of life of cancer patients who are undergoing chemotherapy at Santa Elisabeth Hospital Medan.

The Family Support Questionnaire consisted of 15 questions adopted from Desy Nurwulan (2017) which had been carried out by the previous researcher's validity test and not carried out the validity test again. The measurement instrument for the quality of life value that has been set has been prepared by the researcher using a short version of a quality of life measurement tool called the World Health Organization Quality of Life Questionnaire (WHOQOL)-BREF consists of 4 main dimensions, namely Physical, Psychological, Social Relations, and Environment.

In this study, the researcher used a measurement instrument in the form of The World Health Organization Quality of Life (WHOQOL)-BREF questionnaire, consisting of 26 statements to measure quality of life. The author did not conduct a validity test because the questionnaire was used as a standard and was used as a quality of life measure with an alpha coefficient value of 0.902. Then, the questionnaire on family support is a valid instrument adopted from the research of Desy Nurwulan (2017) which is used as a tool to measure family support with an alpha coefficient value of 0.955 which confirms that all statements are valid and can be used.

The researcher did not test the reliability of family support because it used the results of the reliability test from the previous study, which showed an  $r$  value of 0.757, so it was considered valid and suitable for use. Meanwhile, the quality of life reliability test using the questionnaire (WHOQOL)-BREF has been carried out previously and is considered standard, with an  $r$  value of 0.409, so it is also considered valid and can be used in this study.

This research has also been ethically feasible from the health research commission of STIKes Santa Elisabeth Medan with letter number No: 110/KEPK-SE/PE-DT/IV/2024.

#### 4. RESULT AND DISCUSSIONS

**Table 1.** Distribution of Frequency and Percentage of Respondents Based on Age, Gender, Marital Status, Education, Religion, Occupation, and Chemotherapy Cycle (n = 72).

Characteristics	Frequency (f)	Percentage (%)
<b>Gender</b>		
Male	14	19.4
Female	58	80.6
<b>Total</b>	<b>72</b>	<b>100.0</b>
<b>Age (Ministry of Health Categories)</b>		
Early Adulthood (26–35)	3	4.1
Late Adulthood (36–45)	13	18.0
Early Elderly (46–55)	25	34.8
Late Elderly (56–65)	23	31.9
Senior (65–80)	8	11.2
<b>Total</b>	<b>72</b>	<b>100.0</b>
<b>Marital Status</b>		
Married	70	97.2
Single	2	2.8
<b>Total</b>	<b>72</b>	<b>100.0</b>
<b>Religion</b>		

<b>Characteristics</b>	<b>Frequency (f) Percentage (%)</b>	
Islam	18	25.0
Catholic	10	13.9
Protestant	41	56.9
Buddhist	3	4.2
<b>Total</b>	<b>72</b>	<b>100.0</b>
<b>Occupation</b>		
Civil servant/military/police/retired	8	11.1
Entrepreneur	23	31.9
Farmer/Fisherman	9	12.5
Housewife	32	44.4
<b>Total</b>	<b>72</b>	<b>100.0</b>
<b>Education</b>		
Elementary School	16	22.2
Junior High School	2	2.8
Senior High School	31	43.1
Diploma/Bachelor's Degree	23	31.9
<b>Total</b>	<b>72</b>	<b>100.0</b>
<b>Chemotherapy Cycle</b>		
Hormonal	30	41.7
Cycle 1	16	22.2
Cycle 2	4	5.6
Cycle 3	4	5.6
Cycle 4	5	6.9
Cycle 5	1	1.4
Cycle 6	4	5.6
Cycle 8	2	2.8
Cycle 9	1	1.4
Cycle 12	3	4.2
Oral	2	2.8
<b>Total</b>	<b>72</b>	<b>100.0</b>

**Table 2.** Distribution of Respondents Based on Family Support (n = 72).

<b>Family Support Category</b>	<b>Frequency (f) Percentage (%)</b>	
Poor	23	31.9
Moderate	12	16.7
Good	37	51.4
<b>Total</b>	<b>72</b>	<b>100.0</b>

**Table 3.** Distribution of Respondents Based on Quality of Life (n = 72).

Quality of Life Category	Frequency (f)	Percentage (%)
Poor	7	9.7
Moderate	34	47.2
Good	25	34.7
Very Good	6	8.3
<b>Total</b>	<b>72</b>	<b>100.0</b>

**Table 4.** Relationship Between Family Support and Quality of Life (n = 72).

Family Support	Poor QoL	Moderate QoL	Good QoL	Very Good QoL	Total
Poor	6 (26.1%)	17 (73.9%)	0	0	23 (100%)
Moderate	1 (8.3%)	8 (66.7%)	3 (25.0%)	0	12 (100%)
Good	0	9 (24.3%)	22 (59.5%)	6 (16.2%)	37 (100%)

Spearman Rank Test: p-value = 0.002 (<0.05) → significant

Correlation coefficient (r) = 0.731 → strong positive correlation

## Discussions

The results of this study show that the majority of cancer patients undergoing chemotherapy at Santa Elisabeth Hospital Medan received good levels of family support. This finding indicates that stronger family support contributes significantly to improvements in patients' overall quality of life. Respondents described receiving emotional support such as affection, attention, the presence of family members during treatment, a willingness to listen, and encouragement to maintain a positive mindset. They also received instrumental support in the form of assistance with daily tasks, help with transportation to medical appointments, and assistance in managing finances. Furthermore, informational support was provided through family members who sought information about cancer, accompanied patients during medical consultations, or encouraged involvement in spiritual and support-group activities. These forms of support appear to play an essential role in helping patients cope with the physical, psychological, social, and environmental burdens associated with chemotherapy.

Despite some respondents receiving lower levels of appraisal and instrumental support, several still demonstrated a good quality of life. This suggests that family support, while important, is not the only factor influencing quality of life among cancer patients. Other contributing factors may include support from cancer survivor communities, social networks, religious or spiritual engagement, and the effectiveness of individual coping mechanisms.

Patients who are able to maintain strong coping strategies may be better equipped to manage the emotional and physical challenges of their illness, regardless of variations in family support.

These findings are consistent with previous studies. Mukwato et al. (2010) emphasized that effective coping strategies supported by social, spiritual, and informational resources can substantially enhance the quality of life of cancer patients. Similarly, research by Nurhikmah et al. (2018) found that strong coping strategies enable patients to achieve better well-being and engage in more positive health behaviors. In this study, the statistical analysis using Spearman's rank correlation revealed a significant and strong positive relationship ( $r = 0.731$ ;  $p = 0.002$ ) between family support and quality of life. This demonstrates that as family support increases, the quality of life of patients tends to improve accordingly. Overall, the study reaffirms the central role of family involvement in supporting cancer patients through the physical and emotional challenges of chemotherapy, while also acknowledging the complementary influence of external support systems and coping strategies.

## 5. CONCLUSION AND SUGGESTION

Based on the results of the study involving 72 respondents, the following conclusions were obtained: Most cancer patients undergoing chemotherapy at Santa Elisabeth Hospital Medan in 2024 received good family support, totaling 37 respondents (51.4%). Most cancer patients had moderate quality of life, totaling 34 respondents (47.2%). There is a significant relationship between family support and the quality of life of cancer patients undergoing chemotherapy, with a p-value of 0.002 ( $<0.05$ ) and a correlation coefficient of 0.731, indicating a strong positive correlation. This means the better the family support, the better the patient's quality of life.

Patients with lower quality of life are encouraged to participate in social and spiritual activities and join support groups available at Santa Elisabeth Hospital Medan. Strengthening coping mechanisms can improve their quality of life.

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