



The Relationship Between Family Caregiver Involvement in Cancer Patient Care and the Quality of Life of Cancer Patients

Wildan Azka Taslimi¹ Yulia Rizka² Sofiana Nurchayati³

Nursing Science Study Program, Faculty of Nursing, Riau University, Indonesia^{1,2,3}

Email: wildan.azka1031@student.unri.ac.id¹ yulia.rizka@lecturer.unri.ac.id²
sofiana.nurchayati@lecturer.unri.ac.id³

Abstract

Cancer is a global health issue that impacts the physical, psychological, and social well-being of patients. The quality of life of cancer patients is influenced by various factors, one of which is family support. This study aims to analyze the relationship between family caregiver involvement in cancer patient care and the quality of life of cancer patients at a Regional General Hospital in Riau Province. The study uses a correlational method with a cross-sectional approach, involving 82 samples selected through purposive sampling. Data were collected using a questionnaire, and univariate analysis showed that the majority of respondents were aged 41-60 years (67.1%), female (73.2%), had a last education of elementary school (32.9%), worked as housewives (35.4%), had a monthly income of less than IDR 3,200,000 (76.8%), and the majority had breast cancer at stage III (67.1%). The Pearson correlation test showed a p-value of 0.000 (< 0.05) and r-count 0.611 (> r-table 0.214), indicating a significant relationship between family caregiver involvement and cancer patients' quality of life. The higher the involvement of family caregivers in cancer patient care, the better the quality of life of the patients.

Keywords: family involvement, quality of life, cancer



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INTRODUCTION

Cancer is one of the major global health problems, with increasing incidence and mortality rates. According to data from the Global Burden of Cancer Study (Globocan, 2020) and the World Health Organization (WHO, 2020), the global prevalence of cancer in 2020 reached 50,550,287 cases, with 19.2 million new cases and nearly 10 million deaths from the disease. The three most prevalent cancers globally are breast cancer, lung cancer, and colorectal cancer. Breast cancer accounts for 11.7% of total new cases and 6.9% of deaths, while lung cancer contributes 11.4% of new cases and 18% of deaths. Colorectal cancer represents 10% of new cases and 9.4% of cancer-related deaths (Globocan, 2020; WHO, 2020). In Indonesia, cancer prevalence has also shown an increase. In 2013, cancer prevalence in Indonesia was recorded at 1.4 per 1,000 population, rising to 1.79 per 1,000 population in 2018. By 2020, Indonesia recorded 946,088 cancer cases, with 396,314 new cases and 234,511 cancer-related deaths. In Riau Province, cancer prevalence also increased from 1.3 cases per 1,000 population in 2013 to 1.67 per 1,000 population in 2018, with approximately 22.7% of cancer patients receiving chemotherapy (Ministry of Health of the Republic of Indonesia, 2018; Globocan, 2020). This rising trend in cancer patients has also been noted at one of the Regional General Hospitals in Riau Province, where the number of cancer patients increased from 2,123 in 2021 to 2,579 in 2022.

The quality of life of cancer patients is an important indicator in assessing the success of treatment. Quality of life encompasses physical, psychological, social well-being, and the daily



experiences of individuals that affect how they respond to their illness and treatment. Research by Sari et al. (2018) at a Regional General Hospital in Riau Province showed that most cancer patients had poor quality of life, with 51.2% of respondents categorized as having poor quality of life, and 48.8% categorized as having good quality of life. Cancer patients often experience a decline in quality of life, influenced by various physical and psychological symptoms, both from the disease itself and the treatment provided. Common physical problems include fatigue, pain, weight loss, sleep disturbances, nausea, and vomiting (Cahyono et al., 2023; Rizqi et al., 2020; Aisy & Sofiani, 2022). In addition, psychological issues such as anxiety, depression, and stress are also frequent (Sigalingging & Simorangkir, 2020; Widiyono et al., 2018; Raihan et al., 2022). In facing these physical and psychological challenges, the role of the family caregiver is crucial. A family caregiver is a family member who provides care and medical support to a cancer patient. They function as an extension of medical professionals in helping the patient undergo treatment and care. Family caregivers, which can include spouses, children, parents, or other relatives, are involved in various aspects of patient care, such as activities of daily living (ADLs), physical, social, emotional, psychological, and spiritual support (Kristanti et al., 2019; Rahmatiah et al., 2018). A study by Rahmatiah et al. (2018) found that family caregivers' involvement in cancer patient care is very high, particularly in addressing patients' psychological, social, and spiritual issues.

The involvement of family caregivers can significantly contribute to the quality of life of cancer patients. The support provided by family caregivers not only helps patients undergo treatment but also offers the emotional encouragement needed during the treatment process. This support is essential in reducing stress levels, increasing pain tolerance, and improving patients' social interactions with their surroundings (Wahyuni & Sallo, 2022). While many studies have assessed the general impact of family support on cancer patients' quality of life, research specifically examining the relationship between family caregiver involvement in cancer care and patients' quality of life is still limited. Therefore, this study aims to explore the relationship between family caregiver involvement in cancer patient care and the quality of life of cancer patients at a Regional General Hospital in Riau Province. This study is expected to contribute to a better understanding of the importance of family support in improving the quality of life for cancer patients and provide deeper insights into the role of family caregivers in cancer care.

RESEARCH METHODS

This study uses a quantitative method with a cross-sectional approach. The sample was selected using purposive sampling, consisting of 82 cancer patients accompanied by family caregivers at a Regional General Hospital in Riau Province. Data were collected using the WHOQOL BREF questionnaire to assess quality of life and the FCIC-C questionnaire to assess family caregiver involvement. The questionnaires used have been tested for validity and reliability. Data analysis involved univariate analysis and bivariate analysis using Pearson product moment correlation with a significance level of 0.05.

RESEARCH RESULTS AND DISCUSSION

The research results will be explained based on the respondent characteristics and the variables studied. This study presents univariate analysis in the form of frequency distribution and percentages of the demographic variables and characteristics studied.

Respondent Characteristics

Table 1. Frequency Distribution of Respondents Based on Respondent Characteristics

Characteristics	Frequency (n)	Percentage (%)
Age		
1. Early Adulthood (18-40 years)	27	67.1%
2. Late Adulthood (41-60 years)	55	32.9%
Gender		
1. Female	60	73.2%
2. Male	22	26.8%
Education		
1. Elementary School	27	32.0%
2. Junior High School	21	25.6%
3. Senior High School	23	28.0%
4. Higher Education	11	13.4%
Occupation		
1. Housewife	29	35.4%
2. Entrepreneur	23	28.0%
3. Employee	21	25.6%
4. Not Working	9	11.0%
Income		
1. < Minimum Wage (Rp 3,200,000)	63	76.8%
2. > Minimum Wage (Rp 3,200,000)	19	23.2%
Marital Status		
1. Married	72	87.8%
2. Not Married	10	12.2%
Type of Cancer		
1. Breast Cancer	33	40.2%
2. Nasopharyngeal Cancer	16	19.5%
3. Cervical Cancer	8	9.8%
4. Endometrial Cancer	7	8.5%
5. Rectal Cancer	5	6.1%
6. Thyroid Cancer	5	6.1%
7. Ovarian Cancer	4	4.9%
8. Leukemia	4	4.9%
Cancer Stage		
1. Stage II	18	22.0%
2. Stage III	55	67.1%
3. Stage IV	9	11.0%
Total	82	100

The characteristics of the 82 respondents in this study are as follows: based on age, the majority of respondents were in late adulthood (41-60 years), with 55 respondents (68.2%); based on gender, the majority were female, with 60 respondents (73.2%); the majority of respondents had completed elementary school, with 27 respondents (32.9%); the majority worked as housewives, with 29 respondents (35.4%); regarding monthly income, the majority earned less than Rp 3,200,000, with 63 respondents (76.8%); in terms of marital status, the majority were married, with 72 respondents (87.8%); the majority of respondents were diagnosed with breast cancer (ca mammae), with 33 respondents (40.2%); and most respondents were diagnosed with cancer at stage III, with 55 respondents (67.1%).

Family Caregiver Involvement Overview

Table 2. Distribution of Family Caregiver Involvement Data

Family Caregiver Involvement	N	Std. deviation	Mean	Minimum	Maximum
	82	11.301	60.80	41	79

The table above shows that the family caregiver involvement variable, with a total sample size (n) of 82, has a maximum questionnaire score of 79, while the minimum score is 41, with an average score of 60.80 and a standard deviation of 11.301.

Quality of Life Overview

Table 3. Distribution of Quality of Life Data

Quality of Life	N	Std. deviation	Mean	Minimum	Maximum
	82	16.066	188.59	151	225

The table above shows that the quality of life variable, with a total sample size (n) of 82, has a maximum questionnaire score of 225, while the minimum score is 151, with an average score of 188.59 and a standard deviation of 16.066.

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Table 4. Results of Pearson Product Moment Correlation Test

Family Caregiver Involvement	Quality of Life			P value
	n	r	p	
	82	0.611	0.000	<0.05

Based on the table above, the significance value for the correlation between family caregiver involvement and quality of life is 0.000. The decision rule is that if the significance value is <0.05, the two variables are correlated. The significance value of 0.000 is less than the significance level of 0.05. According to the table above, it is known that the calculated r value > the table r value (0.611 > 0.214). It can be concluded that there is a significant relationship between family caregiver involvement and quality of life. The calculated r value represents a positive number, which means that the relationship between family caregiver involvement and quality of life is one-directional, meaning that as family caregiver involvement increases, the quality of life also improves. The Pearson correlation value of 0.611 indicates a strong relationship or correlation..

Discussion

Family Caregiver Involvement Overview

The results of the study involving 82 respondents indicated that the level of family caregiver involvement in caring for cancer patients had an average score of 60.80 with a standard deviation of 11.301. This score reflects a relatively high level of involvement, meaning that the family, as a whole, was actively engaged in patient care. These findings are consistent with a study by Rahmatiah (2018), which reported that family caregiver involvement in cancer care at hospitals was also high, with an average score of 52.07 and a standard deviation of 14.01. This study emphasized the critical role of family members, including spouses, children, and parents, in caring for cancer patients, especially in helping them cope with symptoms and issues arising during treatment. The strong collectivist culture in countries such as Indonesia, where caring for the sick is seen as a family responsibility, strengthens the role of family caregivers. Family involvement includes various aspects, such as Activity of Daily Living (ADL), which includes helping with bathing the patient, physical aspects such as massaging the patient, and



autonomy aspects like accompanying the patient in decision-making. Additionally, families are involved in social aspects by accompanying patients, psychological aspects by offering motivation, spiritual aspects by supporting the patient in worship, and financial aspects by covering medical and accommodation expenses (Kristanti et al., 2019; Kurniawan et al., 2021; Park et al., 2022). This study found that family involvement was most significant in the social aspects of the patient's life, including emotional and social support while facing the illness. This finding aligns with Rahmatiah's (2018) research, which found that families were most frequently involved in the patient's social issues. Meanwhile, involvement in the patient's physical care, such as assisting with daily physical care, was lower in this study. Nonetheless, family caregiver involvement in other forms, such as providing necessary information and encouraging the patient to continue learning and seeking more knowledge about their illness, is crucial for the success of the treatment. Effective involvement from family caregivers is expected to help patients undergo treatment, maintain the continuity of care, and ultimately improve the patient's overall quality of life.

Quality of Life Overview

The results of the study involving 82 respondents revealed that the cancer patients' quality of life had an average score of 188.59 with a standard deviation of 16.066, indicating a moderate level of quality of life. This score is near the lower limit of the possible range, which could suggest suboptimal quality of life. These findings are consistent with Yolanda's (2023) study, which found that 77.4% of cancer patients had a low perception of their quality of life. This is also in line with the research of Oktaviani & Purwaningsih (2020), which indicated that most cancer patients experienced low quality of life (39.8%). The WHOQOL-BREF measures cancer patients' quality of life based on four domains: physical, psychological, social, and environmental. In this study, even though family caregiver involvement was high, the patients' quality of life, particularly in the physical and psychological aspects, remained suboptimal. Family involvement in the patient's care was largely focused on the social aspect, but the physical and psychological aspects remained under-addressed. This correlates with the physical challenges faced by cancer patients, such as pain, fatigue, and functional decline, which are often primarily managed by medical professionals like doctors and nurses rather than family members (Putranto, 2024).

Additionally, in the psychological aspect, cancer patients often experience depression, anxiety, and distress, which can hinder family involvement. Some patients tend not to want to burden their family with their psychological problems, a finding that also aligns with Putranto's (2024) observation of the tendency of cancer patients in Indonesia to conceal their depressive feelings from their families. Family involvement in the patient's psychological issues can be quite limited if the patient does not openly discuss their condition. Other factors influencing cancer patients' quality of life include age, marital status, education level, financial status, cancer stage, treatment side effects, and social support from friends or the community (Arna et al., 2024; Dewi, 2021). Dewi (2021) explains that patients with advanced cancer stages often experience lower quality of life, particularly in the psychological domain. Prolonged and intense treatment side effects also cause significant physical impacts, leading to weakened physical conditions and even depression, ultimately lowering the patient's quality of life. Moreover, good social support from the community outside the family, such as from friends and other cancer patients, can accelerate the patient's recovery process. This aligns with Putri's (2023) research, which highlighted that support from friends and communities with similar experiences can positively impact cancer patients' quality of life. Patients who feel cared for by their social environment, both family and friends, are more likely to experience improvements



in their quality of life. Overall, although family caregivers are involved in various aspects of cancer patient care, the physical and psychological issues experienced by patients remain the main challenges that impact their quality of life. Furthermore, external factors such as cancer stage, treatment effects, and social support play a crucial role in determining the optimal level of cancer patients' quality of life.

The Relationship Between Family Caregiver Involvement and Cancer Patient Quality of Life

The analysis of the relationship between family caregiver involvement and cancer patients' quality of life showed a significant correlation. Based on the Pearson correlation test, the calculated r value was 0.611, which is greater than the r table value of 0.214, indicating a strong correlation between family caregiver involvement and cancer patients' quality of life. This means that the higher the involvement of family caregivers in cancer care, the better the quality of life of the patient. This finding is consistent with the research by Oktaviani (2020), who stated that optimal family support could enhance the quality of life for cancer patients. Family support includes psychological, spiritual, social aspects, and overall patient well-being. Oktaviani (2020) emphasized that cancer patients' quality of life could be improved with family support that actively engages in psychological, social, and spiritual aspects, all of which are closely related to family caregiver involvement in patient care. Therefore, the presence and active involvement of family members in cancer care are crucial factors in determining the level of quality of life for cancer patients during hospital treatment. This study underscores the importance of family support and involvement in improving cancer patients' quality of life. Effective family caregiver involvement encompasses various aspects such as Activity of Daily Living (ADL), physical, psychological, social, autonomy, and spiritual care.

These aspects are closely linked to the type of family support, whether emotional, informational, instrumental, or evaluative. Family caregivers who actively provide direct support to the patient can help them cope with the various challenges faced during hospital treatment, such as physical, psychological, social, and economic issues, which may otherwise reduce their quality of life. This aligns with the findings of Kristanti et al. (2019), who stated that family involvement in cancer patient care covers many aspects, all of which influence the patient's quality of life. Although no studies have directly connected both of these variables before, the findings of this research indicate that family caregiver involvement has a significant impact on cancer patients' quality of life. The presence of supportive family members, both physically and emotionally, is crucial in helping patients navigate the difficulties arising from cancer and its treatment process. This corresponds with the fundamental principle that the family is a primary resource in providing support to cancer patients, ultimately improving their well-being physically, mentally, socially, and economically during treatment (Rahmatiah et al., 2018). As explained in this study, family involvement across various aspects significantly influences the quality of life for cancer patients. Family caregivers are involved in physical aspects such as assisting with daily activities, psychological aspects by providing motivation and emotional support, and social aspects by maintaining good relationships with the patient and the environment. These findings provide an understanding that cancer patients' quality of life is highly influenced by the direct support provided by family members in care (Rahmatiah et al., 2018; Kristanti et al., 2019).

CONCLUSION

Based on the research involving 82 respondents at a Regional Public Hospital in Riau Province, the majority of respondents were aged 41-60 years (55 respondents), female (60 respondents), with the last level of education being elementary school (27 respondents),



working as housewives (29 respondents), with an income below IDR 3,200,000 (63 respondents), married (72 respondents), with a majority diagnosed with breast cancer (33 respondents) and stage III cancer (55 respondents). The results showed that family caregiver involvement was at a relatively high level, while the quality of life for cancer patients was at a moderate level. Pearson correlation testing showed a significant relationship between family caregiver involvement and cancer patient quality of life (calculated $r = 0.611 > \text{table } r = 0.214$).

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