Indonesian Journal of Global Health Research
Volume 7 Number 3, June 2025
e-ISSN 2715-1972; p-ISSN 2714-9749
http://jurnal.globalhealthsciencegroup.com/index.php/IJGHR

COPING STRATEGIES AND THE BURDEN OF CARING FOR FAMILY MEMBERS ON THE QUALITY OF LIFE OF FAMILIES OF LEUKEMIA PATIENTS

Niswatul Khaira*, Fahmi Ichwansyah, Zulfan
Master of Public Health, Postgraduate, Universitas Muhammadiyah Aceh, Jl. Muhammadiyah No.91, Batoh,
Lueng Bata, Banda Aceh, Aceh 23123, Indonesia
*niswatulkhaira385@gmail.com

ABSTRACT

The life of families caring for members with leukemia can be disrupted due to the high burden of care, thus risking a decrease in quality of life. This study aims to analyze the relationship between coping strategies and burden of care with the quality of life of families with leukemia at the Banda Aceh City Shelter. The study used a cross-sectional design with a total of 55 respondents taken through a total sampling technique from five shelters. Data collection was carried out through interviews using questionnaires from August 10 to September 10, 2023. Data analysis was carried out bivariately and multivariately using ordinal logistic regression. The results showed that 56.36% of respondents had a poor quality of life. Coping strategies, burden of care, social support, self-efficacy, education, employment, income, gender, and age were related to quality of life, while marital status was not. Respondents with low quality of life used more emotional focused coping strategies (65.85%) than problem focused coping (28.57%) (OR=4.82; p=0.020). In addition, heavy caregiving burden increases the risk of poor quality of life up to 11 times (OR=11; p=0.007). Multivariate analysis showed that the most dominant factor was family income. Therefore, the use of halfway houses is highly recommended to reduce the economic burden of cancer patients' families.

Keywords: burden of care; coping strategies; leukemia; quality of life

How to cite (in APA style)
Khaira, N., Ichwansyah, F., & Zulfan, Z. (2025). Coping Strategies and the Burden of Caring for Family Members on the Quality of Life of Families of Leukemia Patients. Indonesian Journal of Global Health Research, 7(3), 971-982. https://doi.org/10.37287/ijghr.v7i3.6236.

INTRODUCTION

Cancer is a non-communicable disease characterized by the presence of abnormal cells/tissues that are malignant, grow rapidly and uncontrollably and can spread to other places in the sufferer's body (Ministry of Health of the Republic of Indonesia, 2019). Cancer is a non-communicable disease characterized by the presence of abnormal cells/tissues that are malignant, grow rapidly and uncontrollably and can spread to other places in the sufferer's body (Azwaldi et al., 2022).Leukemia is the most common cancer suffered by children, accounting for 28% of Asian cases (Bray et al., 2018). In Indonesia, leukemia is the 9th most common case with 14,979 new cases and 11,530 deaths (ICCC, 2023). Aceh Province recorded cancer data reaching 1.2 per thousand in 2018. This number is spread across all hospitals in Aceh. The dr. Zainoel Abidin Regional General Hospital noted that the number of cancer sufferers in Aceh tends to increase from year to year.

Distant health facilities require family members to stop by elsewhere to be close to health facilities such as hospitals that accept services for cancer patients. As happened in the city of Banda Aceh, there is a foundation that was created for family members and patients to stop by. The halfway house is a place provided for cancer patients who are undergoing outpatient treatment to make it easier for patients to reach the hospital referred for patient treatment (Puspitasari, 2017).Childhood cancer is a fairly complex problem, because not only children have to bear the burden but also parents, the environment, schools and others (Mushyama, 2015). Various complaints faced by cancer patients cause a high level of patient dependence on others, in this case family members (Kurniawan et al., 2021).Families who act as caregivers for cancer patients have several problems to face, namely anxiety (rejection and negative treatment from the surrounding environment) and limited abilities of cancer patients (Fananni, 2021). Another problem that often arises is the financial burden, because it requires treatment for the disease or chemotherapy to reduce the tendency of cancer cells to spread to other parts of the body (Rahmatiah & Erika, 2018). This problem will have a negative impact on the quality of life related to the health of the patient and his family members (Klassen et al., 2008). Coping strategies are efforts made to control, reduce, or tolerate threats that cause stress. Coping strategies carried out by families have a significant impact on the psychological, physical, and quality of life of children with cancer and their families (Geni & Rahmania, 2013). Research conducted by Ivana and Jatmika (2017) showed that 16 respondents (30.8%) chose problem-focused coping in solving problems and making plans and real actions in solving problems. Continuous stress on family members can cause changes in quality of life (El-Jawahri et al., 2017). This study aims to analyze the relationship between coping strategies and the burden of caring for the quality of life of families with leukemia.

METHOD

This research is descriptive with Cross sectional Survey approach, aims to determine the relationship between independent and dependent variables studied at the same time when the research is conducted. Which aims to determine the relationship between types of coping strategies and the burden of caring for family members on the quality of life of families with leukemia in Banda Aceh City.The population in this study were all families of leukemia patients who lived in shelters in five cancer foundations totaling 55 people. The sample in the study was 55 families of leukemia patients with Total Sampling, namely all population numbers were sampled. However, respondents were examined if they met the requirements with criteria including inclusion criteria, namely the general characteristics of the subjects included in the study consisting of companion families who provide daily care assistance to leukemia patients who are willing to become respondents and live in shelters. This study conducted a bivariate analysis using a logistic regression test with a significance level of 95%. Furthermore, multivariate analysis was applied using multiple logistic regression. The variables included in the multivariate analysis showed a p-value of less than 0.20 in the bivariate analysis results.

RESULT

Table 1.
Univariate analysis of coping strategies and burden of caring for family members on the quality of life of families with cancer.

Variables	f	%	Mean (SD)	Min-Max
Quality of Life			47	47-96
Good	24	43,64	(15,46)	
Not good	31	56,36		
Coping Strategies				
PFC	14	25,45	53,29 (8,40)	31-63
EFC	41	74,55	102,52 (14,61)	69-118
The Burden of Caring for Patients			43,10	22-62
None	6	10,91	(18,40)	
Light	24	43,64		
Currently	12	21,82		
Heavy	13	23,64		
Social Support			48,27	22-62
High	36	65,45	(13,52)	
Low	19	34,55		
Self Efficacy			27,29	21-32

High	37	67,27	(3,26)	
Low	18	32,73		
Education				
College	18	32,73		
Intermediate	34	61,82		
Base	3	5,45		
Work				
Doesn't work	12	21,82		
Work	43	78,18		
Income			3.143.636	1.000.000-6.000.000
> Provincial Minimum Wage	21	38,18	(1.246.739)	
≤ Provincial Minimum Wage	34	61,82		
Status				
Single	4	7,27		
Marry	48	87,27		
Divorce	3	5,45		
Gender				
Man	21	38,18		
Woman	34	61,82		
Age			38,96	24-56
Young	6	10,91	(9,37)	
Mature	17	30,91		
Old	32	58,18		

Table 1, it shows that out of 55 respondents, most of them have poor quality of life, 31 respondents (56.36%), a few have good quality of life, 24 (43.64%). The variable of coping strategy, the highest is in the EFC strategy, 41 (74.55%) and the lowest is in the PFC strategy, 14 respondents (25.45%). In the variable of burden of caring for a patient, the highest is in light burden, 24 respondents (43.64%), followed by heavy burden, 13 respondents (23.64%), moderate burden, 12 respondents (21.82%) and the lowest is no burden, 6 respondents (10.91%). The variable of social support, respondents received high support, 36 (65.45%), the majority of respondents had high self-efficacy, 37 (67.27%).Based on the characteristic variables, it is known that the majority of respondents have secondary education 34 (61.82%), the income of respondents is more ≤ Provincial Minimum Wage 34 (61.82%), more respondents are employed 43 (78.18%), more respondents are married 48 (87.27%), more respondents are female 34 (61.82%) compared to male 21 (38.18%). The majority of respondents are old 32 (58.18%).

Table 2.
Bivariate analysis of coping strategies and burden of caring for family members on the quality of life of families with cancer

	Quality of Life				OR	95% CI	P-value
	Good		Not good				
Variables	f	%	f	%			
Coping Strategies							
PFC	10	71,43	4	28,57			
EFC	14	34,15	27	65,85	4,82	1,27-18,17	0,020
The Burden of Caring for Patients						0,002-0,016	0,007
None					1	0,14-6,67	1,000
Light					10	1,02-97,50	0,048
Currently	4	66,67	2	33,33	11	1,13-106,43	0,038
Heavy	16	66,67	8	33,33			
	2	16,67	10	83,33			
	2	2	11	84,36			
Social Support							
High	23	63,89	13	36,11			
Low	1	5,26	18	94,74	31,84	3,80-266,75	0,001
Self Efficacy							
High	23	62,16	14	37,84			

Low	1	5,56	17	94,44	27,92	3,34-233,46	0,002
Education							
College	12	66,67	6	33,33			
Intermediate	12	35,29	22	64,71	3,67	1,09-12,25	0,035
Base	0	0,00	3	100	1	*empty*	*empty*
Work							
Doesn't work	9	75,00	3	25,00	5,59	1,31-23,85	0,020
Work	15	34,88	28	65,12			
Income							
> Provincial Minimum Wage	15	71,43	6	28,57			
≤ Provincial Minimum Wage	9	26,47	25	73,53	6,94	2,05-23,41	0,002
Status							
Single	3	75,00	1	25,00			
Marry	19	39,58	29	60,42	4,57	0,03-3,20	0,202
Divorce	2	66,67	1	33,33	1,49	0,05-40,63	0,810
Gender							
Man	13	61,90	8	38,10			
Woman	11	32,35	23	67,65	3,39	1,09-10,58	0,035
Age						0,004-0,032	0,010
Young	5	83,33	1	16,67			
Mature	10	58,82	7	41,18	3,49	0,33-36,85	0,297
Old	9	28,13	23	71,88	12,77	1,30-125,06	0,029

Table 2 shows that there is a significant relationship between coping strategies, burden of care, social support, self-efficacy, education, employment, income, gender, and age with the quality of life of families with leukemia. Family members who use emotional focused coping (EFC), have a heavy burden of care, low social support and self-efficacy, and are low educated tend to have a worse quality of life. Low social support increases the risk of poor quality of life by almost 32 times, and low self-efficacy by almost 28 times. In addition, poor quality of life is also more often experienced by those who work, have incomes below the minimum wage, women, and are elderly.In contrast, marital status did not show a significant relationship to quality of life. Individuals who were married or divorced did not have significant differences compared to those who were unmarried in terms of quality of life risk. Dominant factors such as income, age, and social support have been shown to play a major role in influencing quality of life, so interventions targeting strengthening coping strategies, increasing social support, and economic empowerment are very important in supporting families caring for leukemia patients.

Table 3.
Multivariate analysis of coping strategies and burden of caring for family members on the quality of life of families with cancer.

	Model 1		Model 2		Model 3	
Variables	AOR 95% CI	p-value	AOR 95% CI	p-value	AOR 95% CI	p-value
Age						
Young	3,19(0,09-106,40)	0,516			12,17(0,06-2359,018)	0,352
Adult	8,37(0,26-262,37)	0,227			9,41(0,057-1538,42)	0,389
Old						
Gender						
Male						
Female	5,09 (0,89-29,14)	0,067			3,54(0,12-101,92)	0,460

Income						
> Provincial Minimum Wage	15,17 (2,18-105,58)	0,006			132,71(0,75-23422.6)	0,064
≤ Provincial Minimum Wage						
Job						
Not Working	22,85 (2,58-201,71)	0,005			21,19(0,65-681,35)	0,085
Working						
Education						
Higher						
Secondary	1,82(0,30-10,72)	0,507			14,62(0,13-1613,346)	0,264
Elementary	1(empty)	empty			1(empy)	
Self Efficacy						
High			4,12(0,27-60,44)	0,302	7,44(0,13-1613,346)	0,333
Low						
Social Support						
High						
Low			16,12(1,34- 193,61)	0,028	22,09(0,15-3184,82)	0,222
Burden of Caring for Patients						
None			0,63(0,06-5,88)	0,693	0,07(0,0006-9,42)	0,299
Light			7,70(0,59-99,89)	0,118	2,98(0,015-583,42)	0,685
Moderate			1,99(0,11-34,67)	0,635	4,10(0,017-937,82)	0,610
Heavy						
Coping Strategies						
PFC			1,87(0,02-1,90)	0,485	0,10(0,001-6,94)	0,052
EFC						
Pseudo R2	0,45		0,54		0,63	

Based on Table 3, the results of the multivariate statistical test of model 1 show that the most dominant variable of work is related to quality of life. Those who are not working are 23 times more at risk of experiencing poor quality of life compared to those who are working. The results of the statistical test show that Pseudo R2 is 0.44, meaning that this characteristic component is able to predict 45% of quality of life. In model 2, the most dominant variable of social support is related to quality of life. Low social support is 16 times more at risk of experiencing poor quality of life compared to those with high social support. The results of the statistical test show that Pseudo R2 is 0.54, meaning that this characteristic component is able to predict 54% of quality of life.In model 3, the income variable is seen to be the most dominant in relation to quality of life. Income ≤Provincial Minimum Wage is 132 times more at risk of experiencing poor quality of life compared to income >Provincial Minimum Wage. The results of the statistical test show that Pseudo R2 is 0.63, meaning that this characteristic component is able to predict 63% of quality of life.

DISCUSSION

Relationship between Coping Strategies and Quality of Life of Family Members of Leukemia Patients

The results of the study stated that almost half of all respondents used coping strategies that focused on emotions had poor quality of life (65.85%). According to Sumarsih et al. (2022) in coping strategies that focus on emotions will be effective depending on the environmental aspects that cause stress such as in situations that cannot be controlled by a person. This can be caused by parents who care for cancer patients often experience high levels of anxiety, depression, fatigue, hopelessness, fear, guilt, regret, sleep problems, and social isolation compared to parents who have healthy children (Yu et al., 2017).Individuals who use emotion-focused coping in this study tend to have a lower quality of life. This explains that the emotion-focused coping strategy is more effective for a short period of time (Pratama, 2018). The tendency of research respondents to choose emotion-focused coping is related to the condition of children with chronic care. However, this study is not in line with that conducted by Kitrungrote and Cohen (2006) where the tendency of individuals who use emotion-focused coping to have a high quality of life indicates that taking easy steps in dealing with family challenges is more effective in improving the quality of life of families caring for children with cancer. This difference could occur because this study did not measure the relationship between each sub-coping strategy and quality of life.

Meanwhile, respondents who tend to use problem focused coping in this study tend to have a high quality of life (28.75). Problem focused coping is more effective than emotional focused coping in improving stress management so that it can reduce anxiety (Amartiwi, 2008). This is in line with research conducted by Tokem et al. (2015) 30.8% of respondents who use problem focused coping have a high quality of life and have the ability to solve problems accompanied by emotional control so that the existing stress levels will begin to decrease. Therefore, the role of nurses is very important in developing and improving adaptive coping strategies for parents of children with acute lymphoblastic leukemia such as problem focused coping, one form of problem focused coping strategy is social support, namely the form of information and emotional support from husbands, family, friends, neighbors, friends who have children with cancer, health workers, as well as forms of instrumental support and assessment from husbands, family, neighbors, friends, health workers (Pratama, 2018).

Relationship between Caregiving Burden and Quality of Life of Family Members of Leukemia Patients

Based on the results of the analysis above, poor quality of life was higher in respondents who had a heavy burden (84.36%) compared to those with moderate burden (83.33%), light (33.33%) and no burden (33.33%). From the results of the statistical test, p = 0.007 was obtained, meaning that there was a relationship between the burden of caring for and the quality of life of leukemia family members with OR = 1; 10; 11, meaning that respondents who had a moderate burden were 10 times at risk of experiencing poor quality of life compared to those who had no burden, while those with a heavy burden were 11 times at risk of experiencing poor quality of life compared to those who had no burden.This study is in line with Fangzhi et al. (2014) where lower quality of life was found in family members of leukemia patients compared to the general population. This is because the heavy burden of caring for leukemia patients causes deterioration in physical health, immune function, and financial well-being, psychological problems, sleep disorders that have an impact on low quality of life in family members (L. Northouse et al., 2012).

The burden of caregiving is a factor that influences and negatively impacts quality of life because family members are the main source of support for cancer patients (Jacobsen et al., 2012). In addition, they provide psychological, physical, emotional, and financial support for cancer patients (Honea, 2008). More than 40% of family members are at risk of experiencing stress and depression due to their role in caring for patients with terminal illnesses (Akpan-Idiok et al., 2020), this is because after a diagnosis of cancer in children, anxiety and stress are also experienced by family members (L. L. Northouse et al., 2010). Leukemia patients really need support and care because of their complications that follow chemotherapy (pancytopenia and electrolyte imbalance. Therefore, these patients must be cared for at home by family members and this causes great mental and physical stress on those who care for them (Tamayo, 2009).

The Relationship between Social Support and Quality of Life of Family Members of Leukemia Patients

Based on the results of the analysis above, poor quality of life was higher in respondents with low social support (94.74%) compared to those with high social support (36.11%). The results of the statistical test showed that there was a relationship between social support and the quality of life of family members (OR = 31.84; 95% CI = 3.80-266.75; p = 0.001), the results of the linear regression value of OR = 31.84, meaning that every 1 increase in social support score can increase 32 times the good quality of life, the p-value is significant. Low social support is at risk of almost 32 times experiencing poor quality of life.This study is in line with Fetriyah et al. (2017) which shows that social support is one of the things that can influence the level of anxiety of mothers who have children with cancer because the higher the social support received, the lower the level of anxiety of mothers who have children with leukemia.

Social support can provide family members with knowledge about disease treatment, effective caregiving skills, financial and material assistance, and spiritual support, which can help reduce the psychological and financial burden of helplessness, hopelessness, and depression of caregivers, so that they can cope with caregiving tasks in a positive frame of mind, increase their confidence in caregiving, and easily feel positive changes. Therefore, health care workers understand and pay attention to the social support of family members during their interactions with caregivers and guide them to utilize more positive perceptions by increasing social support and reducing negative emotional perceptions.

The Relationship between Self Efficacy and Quality of Life of Family Members of Leukemia Patients

Based on the results of the analysis above, poor quality of life was higher in respondents with low self-efficacy (94.44%) compared to those with high self-efficacy (37.84%). The results of the statistical test showed that there was a relationship between self-efficacy and the quality of life of family members (OR = 27.92; 95% CI = 3.34-233.46; p = 0.002), the results of the linear regression value OR = 27.92 means that every 1 increase in self-efficacy score can increase 28 times the good quality of life, the p-value is significant. Low self-efficacy is at risk of almost 30 times experiencing poor quality of life.This study is in line with research conducted by Chen et al. (2022) and Streisand et al. (2010) showed that low self-efficacy also contributed to the high levels of stress experienced by parents who have children with chronic illnesses. The stress experienced by parents will affect parents in managing their child's illness, thereby worsening child care (Streisand et al., 2010). In a study conducted by Woolfolk and Shaughnessy (2004), it was stated that the implementation of family-centered care was greatly influenced by beliefs in parental self-efficacy. Parents who have high self-efficacy are expected to be able to carry out their duties in undergoing chemotherapy treatment for children with cancer well.

The Relationship between Education and Quality of Life of Family Members of Leukemia Patients

Based on the results of the analysis above, poor quality of life was higher in respondents whose last education was elementary school (100%) compared to those with secondary education (64.71%) and higher education (33.33%). From the results of the statistical test, p = 0.035 was obtained, meaning that there is a relationship between education and the quality of life of family members with leukemia with OR = 3.67 and 1, meaning that respondents whose last education was secondary school had almost 4 times the risk of experiencing poor quality of life compared to their last education of PT, while their last education was elementary school there was no difference or had the same risk as PT. Based on the level of education, these results are in line with research showing that parents who have poor quality of life are mostly elementary school graduates (81.8%) (Nurhidayah et al., 2020). These results differ from research conducted by Litzelman et al. (2011) which states that highly educated parents have a worse quality of life because they are actively involved in the medical decision-making process, which can increase stress and reduce quality of life. Muhammad and Risnah (2021) explained that someone who has a higher educational background is easier in the process of accepting new things so that in the end it will be easier to solve problems related to these new things. Likewise, the results of research from Aini et al. (2023) state that the education achieved by a person is a determinant factor in productivity, including knowledge, skills, abilities, attitudes and behavior that are sufficient in carrying out their activities.

Relationship between Family Income and Quality of Life of Family Members of Leukemia Patients

Based on the results of the analysis above, poor quality of life is higher in respondents whose income is ≤Provincial Minimum Wage (73.53%) compared to >Provincial Minimum Wage (28.57%). From the results of the statistical test, p = 0.002 was obtained, meaning that there is a relationship between income and quality of life of family members of leukemia patients with OR = 6.94, meaning that respondents with income ≤Provincial Minimum Wage are at risk of almost 7 times experiencing poor quality of life compared to income >Provincial Minimum Wage.This is in accordance with the statement of Dumont et al. (2006), parents who experience economic difficulties experience an increase in the burden of care and a decrease in the quality of life. Financial burden can cause parents to experience stress which can reduce their quality of life (Santo et al., 2011). Moreover, the cost of leukemia treatment is quite expensive so it can increase the financial burden on the family (Klassen et al., 2011). Hacialioglu et al. (2010) also stated that low income can lead to poor quality of service, while high income can significantly affect life satisfaction (Nurhidayah et al., 2020).

Relationship between Marital Status and Quality of Life of Family Members of Leukemia Patients

Based on the results of the analysis above, poor quality of life is higher in married status (60.42%) compared to divorced status (33.33%) and unmarried status (25%). From the results of the statistical test, p = 0.202 and p = 0.810 were obtained, meaning that there is no relationship between marital status and the quality of life of family members of leukemia sufferers with OR = 4.57 and 1.49, meaning that respondents with married status are at almost 5 times risk of experiencing poor quality of life compared to those who are unmarried and those who are divorced are at almost 2 times risk of experiencing poor quality of life compared to those who are unmarried. This study is in line with Yu et al. (2017) which states that marital status does not have a significant effect on the quality of life of family members of leukemia sufferers. Marital status does not always reflect financial stability; unmarried individuals can still have adequate economic conditions to cover medical expenses and daily needs. Although marriage can be a source of support, it does not guarantee a healthy or positive relationship, because in some cases, marriage can be accompanied by conflict or disharmony which can have a negative impact on the quality of life of family members (Herawati et al., 2018).

Researchers assume that marital status does not affect quality of life because the majority of family members are spouses (87.27) of the patient and are married. The quality of life of family members of leukemia patients is also greatly influenced by medical and professional support. These factors can be more significant than marital status in determining the quality of care and support received. Some unmarried people may have excellent quality of life due to strong support from their social environment and family, while some married people may face challenges and stress.

Relationship between Gender and Quality of Life of Family Members of Leukemia Patients

Based on the results of the analysis above, poor quality of life is higher in women (67.65%) compared to men (38.10%). From the results of the statistical test, p = 0.035 was obtained, meaning that there is a relationship between gender and the quality of life of family members of leukemia patients with OR = 3.39, meaning that female respondents are 3 times more at risk of experiencing poor quality of life than men.This study is in line with Franks and Stephens (1992) who found that although men provide care at a certain level such as finances and other tasks, women perform high-burden care tasks such as helping patients dress and provide more long-term care and other responsibilities to chronically ill patients than men (Akpan-Idiok et al., 2020). However, this study is not in line with Lau et al. (2014) and Pathirana et al. (2015) who stated that many male parents who have children with leukemia have a poor quality of life compared to women, this is because they have to take care of children and continue to pay for care costs, which can add to the burden and reduce the quality of life. According Lim et al. (2017), men have a role as the backbone of the family, so they find it difficult to divide their time between working and caring for their sick children, it is not easy for a father to play a dual role as a breadwinner and help his wife in caring for sick children (Khoury et al., 2013).

Relationship between Age and Quality of Life of Family Members of Leukemia Patients

Based on the results of the analysis above, poor quality of life is more common in old age (71.88%) compared to young age (16.67%). From the results of the statistical test, p = 0.010 was obtained, meaning that there is a relationship between age and the quality of life of family members with leukemia with OR = 3.49 and 12.77, meaning that adult respondents are almost 3.5 times more at risk of experiencing poor quality of life compared to young age and at old age they are almost 13 times more at risk of experiencing poor quality of life compared to young age. The results of this study are also in line with Nurhidayah et al. (2020) which shows that 50% of parents in the 17-25 year age range (late adolescence), experience poor psychological health conditions and quality of life. According to social role theory, younger parents may experience greater stress because they have to adjust to their new role as parents. In addition, more than 50% of parents aged 36-65 years experience poor psychological health conditions and quality of life. Rohmah and Bariyah (2012) stated that in old age, individuals may experience psychosocial changes. The results of this study also revealed that most parents in the late adult age category (36-45 years) experience social conditions with poor quality of life. During this period, individuals usually experience increased social activity. However, parents who care for children with leukemia will feel that their social relationships are disrupted because they only focus on the needs of the patient so that they have a poor quality of life (Stenberg et al., 2010).

CONCLUSION

Based on the research results, it was found that 31 of the 55 respondents (56.36%) had poor quality of life. Factors significantly associated with the quality of life of family members of leukemia cancer patients include: coping strategies (OR = 4.82; 95% CI = 1.27–18.17; p = 0.020), burden of caring for patients (OR = 1;10;11; 95% CI = 0.002–0.016; p = 0.007), social support (OR = 31.84; 95% CI = 3.80–266.75; p = 0.001), self-efficacy (OR = 27.92; 95% CI = 3.34–233.46; p = 0.002), education (OR = 3.67 and 1; 95% CI = 1.09–12.25; p = 0.035), employment (OR = 5.59; 95% CI = 1.31–23.85; p = 0.020), family income (OR = 6.94; 95% CI = 2.05–23.41; p = 0.002), gender (OR = 3.39; 95% CI = 1.09–10.58; p = 0.035), and age (OR = 3.49 and 12.77; 95% CI = 0.004–0.0032; p = 0.018). Based on multivariate analysis, the most dominant variable affecting quality of life was family income.

REFERENCES

Aini, L. N., Kartikaningtias, C., & Yustifa, E. (2023). Mother-Child Relationship with Mother’s Perception of Anxiety Level in Children with Acute Lymphoblastic Leukemia Undergoing Chemotherapy. Jurnal Ilmu Kesehatan Mandira Cendikia, 2(1), 37–49.

Akpan-Idiok, P. A., Ehiemere, I. O., Asuquo, E. F., Chabo, J. A. U., & Osuchukwu, E. C. (2020). Assessment of Burden and Coping Strategies among Caregivers of Cancer Patients in Sub-Saharan Africa. World Journal of Clinical Oncology, 11(12), 1045.

Amartiwi, A. (2008). Problem Focused Coping in Nurses Reviewed from Self Efficacy and Social Support. Unika Soegijapranata.

Azwaldi, A., Muliyadi, M., & Aisyah, P. A. (2022). Implementation of Nursing Care for Cancer Patients Undergoing Chemotherapy with Anxiety Problems. JKM: Jurnal Keperawatan Merdeka, 2(1), 73–80.

Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R. L., Torre, L. A., & Jemal, A. (2018). GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. Ca Cancer J Clin, 68(6), 394–424.

Chen, Q., Xiao, X., Zhang, Y., & Lin, C. (2022). [Retracted] Analysis of the Correlation between the Level of Posttraumatic Growth and Social Support among Caregivers of Children with Acute Leukemia. Contrast Media & Molecular Imaging, 2022(1), 7456284.

Dumont, S., Turgeon, J., Allard, P., Gagnon, P., Charbonneau, C., & Vezina, L. (2006). Caring for a Loved One with Advanced Cancer: Determinants of Psychological Distress in Family Caregivers. Journal of Palliative Medicine, 9(4), 912–921.

El-Jawahri, A., Greer, J. A., Pirl, W. F., Park, E. R., Jackson, V. A., Back, A. L., Kamdar, M., Jacobsen, J., Chittenden, E. H., & Rinaldi, S. P. (2017). Effects of Early Integrated Palliative Care on Caregivers of Patients with Lung and Gastrointestinal Cancer: a Randomized Clinical Trial. The Oncologist, 22(12), 1528–1534.

Fananni, M. R. (2021). The Relationship Between Coping Strategies and Psychological Distress in Cancer Family Caregivers. Prosiding Seminar Nasional UNIMUS, 4.

Fangzhi, Y., Jufang, F., Xiuping, Z., Hongmei, W., Meixia, W., Ling, T., Miao, G., & Sijin, G. (2014). Quality of Life of Family Caregivers of Patients with Advanced Cancer and Its Influencing Factors. J Nurs, 21, 1–6.

Fetriyah, U. H., Mulatsih, S., & Pangastuti, H. S. (2017). Relationship between Social Supports and Anxiety of Mothers Treating Child with Cancer. 2nd Sari Mulia International Conference on Health and Sciences 2017 (SMICHS 2017)–One Health to Address the Problem of Tropical Infectious Diseases in Indonesia, 286–297.

Franks, M. M., & Stephens, M. A. P. (1992). Multiple Roles of Middle-Generation Caregivers: Contextual Effects and Psychological Mechanisms. Journal of Gerontology, 47(3), S123–S129.

Geni, P. L., & Rahmania, Q. (2013). The Relationship between Coping Style and Anticipatory Grief in Parents of Children Diagnosed with Cancer. Humaniora, 4(1), 241–247.

Hacialioglu, N., Özer, N., Erdem, N., & Erci, B. (2010). The Quality of Life of Family Caregivers of Cancer Patients in the East of Turkey. European Journal of Oncology Nursing, 14(3), 211–217.

Herawati, T., Zubairi, B. K., Musthofa, M., & Tyas, F. P. S. (2018). Social Support, Family Interaction, and Marital Quality in Working Couple Families. Jurnal Ilmu Keluarga Dan Konsumen, 11(1), 1–12.

Honea, N. J. (2008). Putting Evidence into Practice®: Nursing Assessment and Interventions to Reduce Family Caregiver Strain and Burden. Number 3/June 2008, 12(3), 507–516.

ICCC. (2023). Blood Cancer/ Leukemia. https://iccc.id/kanker-darah

Ivana, S., & Jatmika, D. (2017). Relationship between Stress Coping and Quality of Life of Schizophrenia Patients During Symptom Remission. Psibernetika, 10(2).

Jacobsen, P. B., Holland, J. C., & Steensma, D. P. (2012). Caring for the Whole Patient: the Science of Psychosocial Care. Journal of Clinical Oncology, 30(11), 1151–1153.

Khoury, M. N., Huijer, H. A.-S., & Doumit, M. A. A. (2013). Lebanese Parents' Experiences with a Child with Cancer. European Journal of Oncology Nursing, 17(1), 16–21.

Kitrungrote, L., & Cohen, M. Z. (2006). Quality of Life of Family Caregivers of Patients with Cancer: a Literature Review. Oncology Nursing Forum, 33(3).

Klassen, A. F., Klaassen, R., Dix, D., Pritchard, S., Yanofsky, R., O'Donnell, M., Scott, A., & Sung, L. (2008). Impact of Caring for a Child with Cancer on Parents' Health-Related Quality of Life. Journal of Clinical Oncology, 26(36), 5884–5889.

Klassen, A. F., Raina, P., McIntosh, C., Sung, L., Klaassen, R. J., O'Donnell, M., Yanofsky, R., & Dix, D. (2011). Parents of Children with Cancer: Which Factors Explain Differences in Health-Related Quality of Life. International Journal of Cancer, 129(5), 1190–1198.

Kurniawan, A. R., Ilmi, B., & Hiryadi, H. (2021). Family Experience Caring for Cancer Patients in Tanjung City. Jurnal Health Sains, 2(2), 135–152.

Lau, S., Lu, X., Balsamo, L., Devidas, M., Winick, N., Hunger, S. P., Carroll, W., Stork, L., Maloney, K., & Kadan-Lottick, N. (2014). Family Life Events in the First Year of Acute Lymphoblastic Leukemia Therapy: a Children's Oncology Group Report. Pediatric Blood & Cancer, 61(12), 2277–2284.

Lim, H. A., Tan, J. Y. S., Chua, J., Yoong, R. K. L., Lim, S. E., Kua, E. H., & Mahendran, R. (2017). Quality of Life of Family Caregivers of Cancer Patients in Singapore and globally. Singapore Medical Journal, 58(5), 258.

Litzelman, K., Catrine, K., Gangnon, R., & Witt, W. P. (2011). Quality of Life among Parents of Children with Cancer or Brain Tumors: the Impact of Child Characteristics and Parental Psychosocial Factors. Quality of Life Research, 20, 1261–1269.

Ministry of Health of the Republic of Indonesia. (2019). Cancer Burden in Indonesia. Ministry of Health of the Republic of Indonesia.

Muhammad, I., & Risnah, R. (2021). Health Counseling Influences Family Knowledge About Stunting. Jurnal Pengabdian Kesehatan Komunitas (Journal of Community Health Service), 1(2), 126–133.

Mushyama, B. G. (2015). Family Social Support for Children with Blood Cancer at the Yayasan Kasih Anak Kanker Jogja. Jurnal Riset Mahasiswa Bimbingan Dan Konseling.

Northouse, L. L., Katapodi, M. C., Song, L., Zhang, L., & Mood, D. W. (2010). Interventions with Family Caregivers of Cancer Patients: Meta-Analysis of Randomized Trials. CA: A Cancer Journal for Clinicians, 60(5), 317–339.

Northouse, L., Williams, A., Given, B., & McCorkle, R. (2012). Psychosocial Care for Family Caregivers of Patients with Cancer. Journal of Clinical Oncology, 30(11), 1227–1234.

Nurhidayah, I., Hendrawati, S., & Hasriyadhi, D. P. (2020). Quality of Life of Family Caregivers of Children with Leukemia: A Descriptive Quantitative Study. Belitung Nursing Journal, 6(2), 52–58.

Pathirana, T. I., Goonawardena, C. S. E., & Wijesiriwardane, I. (2015). Quality of Life of Caregivers and Impact on the Nuclear Family of Children with Leukaemia in the National Cancer Institute of Sri Lanka. Journal of the Postgraduate Institute of Medicine, 2, 1–5.

Pratama, S. R. (2018). Relationship between Coping Strategies and Anxiety Levels in Parents of Children with Acute Lymphoblastic Leukemia in the Hematology Oncology Room of Ulin Regional Hospital, Banjarmasin. Program Studi Ilmu Keperawatan Dan Profesi NERS Sekolah Tinggi Ilmu ….

Puspitasari, S. (2017). Description of the Burden of Family Caregivers on Cancer Patients at the Cancer Foundation’s Shelter. State Islamic University of Jakarta.

Rohmah, A. I. N., & Bariyah, K. (2012). Quality of Life for the Elderly. Jurnal Keperawatan, 3(2).

Santo, E. A. R. do E., Gaíva, M. A. M., Espinosa, M. M., Barbosa, D. A., & Belasco, A. G. S. (2011). Taking Care of Children with Cancer: Evaluation of the Caregivers’ Burden and Quality of Life. Revista Latino-Americana de Enfermagem, 19, 515–522.

Stenberg, U., Ruland, C. M., & Miaskowski, C. (2010). Review of the Literature on the Effects of Caring for a Patient with Cancer. Psycho-oncology, 19(10), 1013–1025.

Streisand, R., Mackey, E. R., & Herge, W. (2010). Associations of Parent Coping, Stress, and Well-Being in Mothers of Children with Diabetes: Examination of Data from a National Sample. Maternal and Child Health Journal, 14, 612–617.

Sumarsih, T., Sulistya, C., & Widiyanto, B. (2022). Family Coping Strategies for Relapse of Mentally Ill Patients with Violent Behavior. Jurnal Ilmiah Kesehatan Keperawatan, 18(1), 54–59.

Tamayo, G. J. (2009). Caring for the Caregiver. Number 1/January 2010, 37(1), E50–E57.

Tokem, Y., Ozcelik, H., & Cicik, A. (2015). Examination of the Relationship between hopelessness Levels and Coping Strategies among the Family Caregivers of Patients with Cancer. Cancer Nursing, 38(4), E28–E34.

Woolfolk, A., & Shaughnessy, M. F. (2004). An Interview with Anita Woolfolk: The Educational Psychology of Teacher Efficacy. Educational Psychology Review, 16(2), 153–176.

Yu, H., Li, L., Liu, C., Huang, W., Zhou, J., Fu, W., Ma, Y., Li, S., Chang, Y., & Liu, G. (2017). Factors Associated with the Quality of Life of Family Caregivers for Leukemia Patients in China. Health and Quality of Life Outcomes, 15, 1–11.