

Jurnal Info Kesehatan

Vol. 23, No. 2, June 2025, pp. 359-370

P-ISSN 0216-504X, E-ISSN 2620-536X

DOI: [10.31965/infokes.Vol23.Iss2.1952](https://doi.org/10.31965/infokes.Vol23.Iss2.1952)Journal homepage: <https://jurnal.poltekkeskupang.ac.id/index.php/infokes>**RESEARCH****Open Access****Maternal and Child Determinants of Psychological Well-Being in Mothers Caring for Children with Chronic Conditions**

Rinik Eko Kapti^{1a*}, Muhammad Is'haq Sulaiman^{2b}, Nurona Azizah^{1c}, Sholihatul Amaliya^{1d}, Qori Ila Saidah^{3e}, Lilik Supriati^{1f}, Ridhoyanti Hidayah^{4g}

¹ Department of Nursing, Faculty of Health Sciences, Universitas Brawijaya, Malang, East Java, Indonesia

² Nursing Profession Study Program, Department of Nursing, Faculty of Health Sciences, Universitas Brawijaya, Malang, East Java, Indonesia

³ Department of Maternity and Pediatric Nursing, Faculty of Nursing, Sekolah Tinggi Ilmu Kesehatan Hang Tuah, Surabaya, Indonesia

⁴ National Taipei University of Nursing and Health Sciences, Taipei City, Taiwan, Republic of China

^a Email address: rinik.eko@ub.ac.id

^b Email address: mishaqsulaiman@student.ub.ac.id

^c Email address: nurona.azizah@ub.ac.id

^d Email address: liya.fk.psik@ub.ac.id

^e Email address: qorisaidah82@stikeshangtuah-sby.ac.id

^f Email address: liliks.83@ub.ac.id

^g Email address: 121187006@ntunhs.edu.tw

Received: 27 March 2025

Revised: 5 June 2025

Accepted: 22 June 2025

Abstract

Caring for a child with a chronic condition imposes significant physical and psychological burdens on mothers, including increased stress, anxiety, depression, and difficulties balancing daily caregiving responsibilities with personal and social roles, which negatively impact their overall psychological well-being. This study aims to analyze the factors (maternal and child characteristics) associated with the psychological well-being of mothers who care for children with chronic conditions. A cross-sectional correlation design was used with 204 mothers of chronically ill children at Hospital in Malang City, selected through purposive sampling. The research instruments in this study are a questionnaire. Data analysis was performed using ordinal logistic regression. A p-value of less than 0.05 was considered statistically significant. Most mothers have moderate psychological well-being (72,1%). Multivariate analysis showed that mothers aged 26–35 years (OR = 0.113, p = 0.020), treatment duration under 1 year (OR = 5.551, p = 0.001), living in a village (OR = 0.221, p = 0.009), high family income (reference group, OR = 1.00), low obstacles to care (OR = 5.948, p = 0.009), good partner support (OR = 16.609, p = 0.002), good family support (OR = 6.062, p = 0.031), and good health worker support (OR = 6.965, p = 0.036) were significantly associated with increased maternal psychological well-being. Health workers can actively provide psychosocial support for mothers caring for children with chronic conditions, such as counseling. In addition, health workers must work with partners and families to create an emotionally supportive environment for mothers.

Keywords: Chronic Illness in Children, Maternal Psychological Well-being, Social Support, Maternal Characteristics, Caregiving Obstacles.

Corresponding Author:

Rinik Eko Kapti

Department of Nursing, Faculty of Health Sciences, Universitas Brawijaya, Malang, East Java, Indonesia

Email: rinik.eko@ub.ac.id

©The Author(s) 2025. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

1. INTRODUCTION

A chronic condition refers to a health issue that lasts at least one year, necessitating continuous medical attention, symptom management, lifestyle adjustments, and often restricting the child's daily activities. Such conditions can be physical, psychological, or developmental, significantly influencing various aspects of a child's life, disrupting regular routines, and posing physical, emotional, and developmental challenges, which may strain familial relationships and financial stability (Spurr et al., 2023). The number of children with chronic diseases in the world is increasing every year. The prevalence of chronic conditions in childhood worldwide is around 10% (Silva et al., 2019). Other data also states that in the United States, 10 to 20 million children live with chronic diseases (Spurr et al., 2023). Data in Indonesia for all chronic conditions has not been found, but if seen from the figures, several chronic diseases in children have increased, including 1,249 children with type 1 diabetes mellitus (Pulungan et al., 2021) and a cancer prevalence of 16,291 cases each year (Al Kahfi et al., 2018). In addition, IDAI reported a 70-fold increase in the prevalence of children with type II diabetes compared to 2010, where it is now estimated that 2 out of 100,000 children have type 2 diabetes (Sicca, 2025) This shows that chronic conditions are widely experienced and are one of the leading causes of death in children in Indonesia.

The impact of chronic conditions on children affects not only the child's condition but also the family, especially the mother; one of the most significant impacts is the mother's psychological well-being. This condition occurs due to impaired family function and relationships and changes in roles, expectations and responsibilities (Spurr et al., 2023). Hospitalization often disrupts family routines because they must care for sick children and managing the child's condition daily causes stress (Fairfax et al., 2019). The responsibility for daily childcare generally lies with the mother, which requires the mother to balance this with other responsibilities and work, personal life or social relationships (Robertson et al., 2024). The results of a study conducted by Rusu revealed that chronic diseases have a negative impact on children and mothers (Rusu et al., 2025). This statement is in line with the results of a literature study (Taverna et al., 2021) showing that mothers have poor mental health, such as anxiety and depression. This was also revealed by previous research that mothers have a lower quality of life and psychological condition than mothers of healthy children (Bamber et al., 2023; Thomas et al., 2024).

Maternal characteristics, such as age, education level, employment status, and social support, are important in determining the mother's ability to manage the burden of care (Naziah et al., 2023; Sumiati et al., 2023). Maternal obstacles to care, such as health facilities and geographic location of residence, will affect the mother's psychological well-being (Bristow et al., 2018). In addition, child characteristics, such as age, severity of chronic conditions, and specific care needs, also affect the mother's stress level and psychological well-being (Hidayah et al., 2017; Sumiati et al., 2023). Another influencing factor is support. Support for mothers is an important aspect that contributes to reducing the burden felt by mothers caring for chronically ill children (Nurjanah et al., 2022; Yayah & Wanda, 2021). Mothers are traditionally the primary caregivers for a child with a chronic condition (Spurr et al., 2023). Support for mothers is an important aspect that contributes to reducing the burden felt by mothers caring for chronically ill children (Nurjanah et al., 2022; Yayah & Wanda, 2021). Including other family members, particularly fathers, in the care is vital as there is a high risk of caregiver burden for a mother who is caring for a child with a complex medical regimen (Spurr et al., 2023).

Understanding how factors affect maternal psychological well-being is essential to developing effective interventions for mothers. Various factors contribute to a mother's psychological well-being. Although many studies have examined the relationship between

factors and maternal mental health, few specifically explore how the combination of maternal and child characteristics affects maternal psychological well-being. This study aims to fill this gap by analyzing the factors associated with the psychological well-being of mothers who care for children with chronic conditions.

2. RESEARCH METHOD

This study used a correlational analytic research design with a cross-sectional form to examine factors associated with the psychological well-being of mothers who care for children with chronic conditions. The population in this study were mothers who care for children with chronic conditions at Dr. Saiful Anwar Hospital, Malang City, East Java. A total of 204 participants were included in this study. The sample was obtained using purposive sampling by approaching eligible mothers in pediatric inpatient wards at selected hospitals. Respondents were recruited consecutively during the study period, based on the inclusion criteria. Chronic conditions in this study were defined as illnesses diagnosed by a physician, persisting for at least three months, and requiring ongoing treatment or repeated hospital visits. The inclusion criteria were: (1) mothers who care for children aged 2–12 years with chronic conditions such; (2) the child had been undergoing treatment in the hospital for at least 3 consecutive days; (3) both the mother and child were in stable physical and mental condition; and (4) both biological parents were present. The exclusion criteria were mothers with children treated in the intensive care unit.

The research instruments used in this study were maternal demographic data, child demographic, instruments to measure barriers to care were modifications of previous studies, including financial obstacles, transportation obstacles and organizational obstacles (Wong, 2023), support instruments were sourced from the Medical Outcomes Study (MOS) Social Support Survey by RAND and the last instrument was the psychological well-being questionnaire from Psychological Well-Being By Ryff's. The validity test of the questionnaire used the Pearson product-moment test, while the reliability test used Cronbach's Alpha. Validity and reliability tests were conducted on 30 samples that had the same criteria as the research sample. The validity test of the questionnaire obtained an r value of psychological well-being of 0.363 - 0.973, partner support of 0.624 - 0.902, family support of 0.607 - 0.860, friend support of 0.787 - 0.955, health worker support of 0.549 - 0.837 and obstacles of 0.394 - 0.782. The calculated r value is greater than the r table value (30 samples) which is 0.361 so it is declared valid. The reliability test on the psychological well-being questionnaire is 0.834, partner support of 0.766, family support of 0.764, friend support of 0.772, health worker support of 0.760 and obstacles of 0.843. All reliability values are above 0.6 so they are declared reliable. Data was collected at Hospital, from August to December 2024. Univariate analysis was conducted to determine maternal factors, children factors, and maternal self-management. Data are presented using frequency distribution. Multivariate analysis was conducted to identify factors associated with psychological well-being using ordinal logistic regression. This test was carried out by entering all independent variables that were significant in the bivariate analysis into the regression model. The analysis produced odds ratios (OR), p -values, and 95% confidence intervals (CI) to determine the strength and significance of the relationships. A variable was considered statistically significant if the p -value was less than 0.05. In addition to examining associations, this test also identified the dominant factors influencing maternal psychological well-being by comparing the magnitude of the odds ratios among the significant variables. The ethical permit for this study has been approved by Dr. Saiful Anwar Hospital, Malang City with registration number 400/207/K.3/102.7/2024.

3. RESULTS AND DISCUSSION

Table 1. Distribution of Mothers' Characteristics

Variables	Categories	Frequency		Odds Ratio	p-value	95% CI
		n	%			
Experience of Caring	Never	190	93.1	1.011	0.99	0.178 – 5.752
	Ever	14	6.9	1		
Age (years)	17 - 25	10	4.9	0.376	0.532	0.017 – 8.095
	26 - 35	93	45.6	0.113	0.02	0.018 – 0.711
	36 - 45	83	40.7	1.701	0.548	0.301 – 9.606
	46 - 55	18	8.8	1		
Education	Elementary School	69	33.8	1.091	0.914	0.225 – 5.28
	Middle School	81	39.7	1.023	0.974	0.253 – 4.147
	High School	54	26.5	1		
Job	Civil servants	11	5.4	3.424	0.236	0.038 – 31.623
	Self-Employed	40	19.6	1.637	0.435	0.177 – 15.038
	Not working	153	75.0	1		
Number of Children	1	39	19.1	2.435	0.276	0.083 – 8.099
	2	127	62.3	0.769	0.682	0.219 – 2.694
	≥ 3	38	18.6	1		
Residence	City	62	30.4	0.221	0.009	0.071 – 0.684
	Village	142	69.6	1		
Family's Income	Low	116	56.9	0.08	0.016	0.01 – 0.625
	Moderate	73	35.8	0.177	0.069	0.027 – 1.148
	High	15	7.4	1		
Distance Home to Health Care	> 5 km	74	36.3	1.484	0.464	0.516 – 4.413
	< 5 km	130	63.7	1		
Obstacles to Care	Low	167	81.9	5.948	0.009	1.621 – 21.202
	Moderate	37	18.1	1		
	High	0	0.0			
Partner Support for Mother	Low	39	19.1	0.06	0.002	0.01 – 0.347
	Moderate	80	39.2	0.255	0.019	0.082 – 0.799
	Good	85	41.7	1		
Family Support	Low	61	29.9	0.165	0.031	0.032 – 0.844
	Moderate	69	33.8	0.517	0.286	0.154 – 1.738
	Good	74	36.3	1		
Friends Support	Low	68	33.3	1.224	0.762	0.331 – 4.525
	Moderate	79	38.7	1.154	0.817	0.345 – 3.866
	Good	57	27.9	1		
Health Worker Support	Low	51	25.0	0.144	0.036	0.023 – 0.885
	Moderate	91	44.6	0.434	0.134	0.144 – 1.714
	Good	62	30.4	1		

Table 1 present that from 204 respondents, it is known that in terms of maternal characteristics, some respondents have never had experience of caring child with chronic condition, the mother's age is 26-35 years, the last education is middle school, works as homemakers, labourer, and does not work, and has 2 children. In terms of the environmental conditions of the mother, it is known that most respondents who live in village areas have low incomes. The distance from home to health facilities is < 5 km, In the support variable, it is

known that most mothers receive support from their partners in the good category, receive support from family in the good category, receive support from friends in the moderate category, and receive support from health workers also in the moderate category.

Table 2. Distribution of Children's Characteristics

Variables	Categories	Frequency		Odds Ratio	p-value	95% CI
		n	%			
Child Gender	Male	115	56.4	0.436	0.062	0.176 – 1.083
	Female	89	43.6	1		
Child Age	2 - 4 years	60	29.4	1.587	0.44	0.195 – 12.885
	5 - 7 years	50	24.5	2.098	0.255	0.22 – 20.038
	8 - 12 years	94	46.1	1		
Treatment Duration	Less than 1 year	102	50.0			
	More than 1 year	102	50.0			
Diagnoses	Diabetes Mellitus	4	2.0	1.779	0.821	0.012 – 270.986
	Cancer	50	24.5	1.182	0.785	0.254 – 5.507
	Congenital Heart Disease	21	10.3	2.487	0.258	0.083 – 74.807
	Thalassemia	13	6.4	1.649	0.647	0.071 – 38.203
	Kidney failure	8	3.9	1.16	0.901	0.082 – 16.363
	Others	108	52.9	1		
Comorbidities	Yes	25	12.3	2.268	0.252	0.108 – 47.584
	No	179	87.7	1		

Based on Table 2, in terms of child characteristics, it is known that most children are aged 8-12 years, male; some have a treatment period of less than one year and some more than one year. Most children are diagnosed with other diseases, and there are no comorbidities.

Table 3. Distribution of Maternal Psychological Well-Being

Variables	Categories	Frequency	Percentage
Maternal Psychological Well-being	Low	18	8.8
	Moderate	147	72.1
	High	39	19.1

Based on Table 3, most mothers have moderate psychological well-being.

The result of the ordinal logistic regression analysis is that mothers' age, treatment duration, residence, family's income, obstacles to care, and support from partners, family, and health workers were significantly associated with maternal psychological well-being. The following is the ordinal logistic regression model produced, presented in the form of a logit equation based on significant variables (significance value < 0.05): Logit (Low Psychological Well-being) = -8.721 - 2.180 (mothers' age 26–35 years) + 1.714 (treatment duration <1 year) - 1.511 (city) - 2.527 (low family income) + 2.041 (low obstacles to care) - 2.810 (poor partner support) - 1.364 (sufficient partner support) - 1.802 (poor family support) - 1.941 (poor health worker support). This model indicates that negative coefficients (e.g., for mothers' age 26–35 years, urban residence, low family income, and low support from partners, family, and health workers) reduce the log-odds of being in the low psychological well-being category, which implies an increase in psychological well-being. In contrast, positive coefficients (e.g., for treatment duration <1 year and low obstacles to care) increase the log-odds of being in the low

psychological well-being category, suggesting a decrease in maternal psychological well-being. Therefore, although variables such as short treatment duration and low caregiving obstacles are generally expected to be protective, the positive coefficients in this model indicate they may be associated with higher odds of poor psychological well-being in this context, possibly due to underlying unmeasured stressors or other factors not captured in the model.

The results of this study are supported by previous studies, which explain that age is related to individual maturity, how individuals perceive life, and the level of stress experienced. Younger mothers (<20 years) may experience higher stress due to less-than-optimal maturity of thinking. In comparison, older mothers (≥ 35 years) tend to have more life experience, which can help them manage stress better (Winarni et al., 2024). Other studies show that age can affect maternal psychological well-being, with older mothers tending to have better psychological well-being (Puspitasari & Haksama, 2020). Age can affect an individual's mindset and comprehension, where the older the mother, the more the mother's mindset and maturity of thinking will develop through experiences experienced during life (Trisyani et al., 2020). In addition, maternal age is related to increased maturity and emotional readiness for the role of mother. Awareness of the mother's role can result in more effective coping and resilience strategies when raising children with chronic health problems (Ahmad et al., 2024). The results of this study indicate that the longer the mother cares for a child with a chronic condition, the lower the psychological well-being. Children with chronic conditions will often be hospitalized for an extended period when the child is treated and requires intensive care and treatment, resulting in increased levels of stress felt by parents because emotional stress tends to increase over time. Uncertainty regarding diagnosis and treatment, coupled with the lack of clear information from medical personnel, exacerbates the feelings of helplessness experienced by parents (Ulyah et al., 2023). During hospitalization, mothers will be faced with an uncomfortable hospital environment, such as a distinctive smell, the sound of medical equipment, and an unfamiliar atmosphere, also adding to the psychological tension felt by the mother (Lubis, & Siregar, 2023). Caring for a chronically ill child often requires additional care every day throughout his life. The increase in demand for care can lead to a reduction in time for maternal activities, potentially affecting the mother's work and "me time" activities (Gharaibeh & Gharaibeh, 2021; Smith et al., 2022). Other studies also state that a longer duration of care is associated with an increased burden felt by parents and a decreased quality of life of primary caregivers (Piran et al., 2017).

Resident factors, such as urban or rural environments, can also affect psychological well-being. The results of this study indicate that mothers' residence in village areas is higher than in urban areas. Social support in villages is generally closer because relationships between neighbours and extended families are often closer. The study results indicate that closer social interactions in villages provide a sense of togetherness that helps mothers deal with psychological stress. This is also supported by the culture of mutual cooperation, which is still strong in many city areas (Hardy et al., 2024; Zhang et al., 2021). In addition, city environments have many stressors; one of the main stressors is exposure to environmental pollution, which has a negative impact on psychological health, including increased levels of anxiety and depression (Adedoyin & Bekun, 2020; Castells-Quintana et al., 2021). Village environments have several advantages, such as green spaces, such as parks, gardens, or natural landscapes, which are more abundant than in urban environments. These green spaces can have a positive effect that will help influence the psychological well-being of mothers by reducing stress levels and improving mood (Leuwol et al., 2023). A more natural and quieter village environment can provide a good relaxation effect for mothers. The results of previous studies have shown that exposure to nature can reduce stress and improve psychological well-being (Lopes et al., 2020).

Differences in economic status are closely related to an individual's mental and physical well-being. Mothers with low financial status are often more easily stressed than mothers with high economic status (Long et al., 2022; Zonta et al., 2024). A sufficient economy will make it easier for mothers and families to access health resources and meet the daily needs of children with chronic conditions. In contrast, a mother with low economic status will make it more difficult for mothers and families to meet the daily care needs of children with chronic conditions. This condition will affect the psychological well-being of mothers who care for children with chronic conditions (Fisher et al., 2021; Samuel et al., 2025). High childcare costs or loss of income due to having to accompany children become a significant additional psychological burden for mothers. The main obstacles faced by mothers in caring for children include the demands of good care, social isolation, financial stress, and limited access to mental health support, which can have a significant impact on maternal mental health. Financial stress is another challenge faced by mothers who care for children with chronic conditions. The ongoing costs of medical care, therapy, and health insurance premiums can be overwhelming, especially for those without substantial financial resources. Increased financial instability can lead to mothers experiencing higher levels of anxiety and depression. Previous research has shown that financial hardships resulting from caring for a child with a chronic condition contribute to maternal psychological distress, affecting maternal psychological well-being (Smith et al., 2022; Zahl et al., 2024). Many mothers who experience barriers do not have the resources or insurance coverage necessary to seek help, which contributes to their psychological distress. The previous study showed that financial barriers and lack of health infrastructure contribute to mental health disorders (Patel et al., 2018).

The results of this study have shown a significant effect of partner support on maternal psychological well-being, showing that mothers with good partner support tend to have higher maternal psychological well-being. Partner support given to mothers who care for children with chronic conditions can make mothers feel cared for and loved, partners are a place to complain so that mothers can deal with stress and can solve problems that occur while accompanying children with chronic conditions (Zannah et al., 2024). This is in line with previous research, which has shown that gratitude and partner support are related to the psychological well-being of mothers who have mentally retarded children. In addition, partner support plays an important role because the husband is the closest person to the mother who can be trusted to help care for children and help solve problems, so that mothers can have a positive attitude towards themselves, be motivated, enthusiastic, able to make decisions, create and organize the environment according to needs so that mothers can care for children optimally (Asmarani & Sugiasih, 2020).

The results of the study showed a significant influence of family support on maternal psychological well-being; this shows that mothers with good family support tend to have higher maternal psychological well-being. Family support can be provided through emotional support, information support, and praise or by direct assistance to mothers caring for children with chronic conditions. The results of this study are in line with previous studies showing that the more family support received, the better the mother's psychological well-being (Kusnadi et al., 2021). Family support is important for parents who have children with special needs to maintain mental health in mothers (Aini & Wahyu, 2020). Emotional support and practical assistance from family members play an important role in helping mothers manage care needs and helping mothers overcome challenges in caring for their children (Baker & Claridge, 2023). Family support has four aspects: tangible support, affectionate support, and positive social interaction. The tangible support aspect is support given by providing direct assistance in the form of goods or services. The affectionate support aspect is support given by giving awards, encouragement, appreciation, praise, and entertainment to provide a sense of being cared for and loved. The positive social interaction aspect is support given by spending time and entertainment that can make mothers feel happy and can distract them from the difficult conditions they face (Werdani

& Prasetyani, 2023). The support provided by the family is very meaningful to mothers because they feel helped by the advice given, assistance in accompanying and caring for children with chronic conditions, and economic assistance (An et al., 2024). In addition, support for mothers can have a positive impact, namely feelings of comfort, self-confidence, being able to solve their problems and being able to manage the stress experienced (Wang et al., 2024). Family support, including emotional, informational, and practical assistance from the spouse, extended family, and friends, plays a significant protective role for fathers of chronically ill children. It helps reduce psychological stress, promotes engagement in caregiving, supports coping, and strengthens family relationships—ultimately improving the well-being of both the father and the family unit as a whole (Spurr et al., 2023).

The study's results showed a significant influence of the support of health workers on the psychological well-being of mothers; this shows that mothers with good support from health workers tend to have higher Psychological Well-being. Support from health workers is very important to be given to mothers; the support provided can be in the form of emotional support, information, affection/praise or direct assistance to mothers who care for children with chronic conditions (Nur et al., 2024). Support and motivation from health workers have an important role such as preventing the child's condition from declining, helping mothers manage stress, reducing anxiety and confusion in caring for children with chronic conditions (Yuliana et al., 2022), so that it can improve the psychological well-being of mothers who care for children with chronic conditions. A collaborative relationship between mothers and health workers is essential for providing adequate care through a family-centered approach emphasizing partnerships between families and health care professionals. This has been shown to improve maternal psychological well-being because it increases effective communication, reduces stress, and produces better health outcomes for children with chronic conditions (Chow et al., 2024).

4. CONCLUSION

This study shows that the psychological well-being of mothers caring for children with chronic conditions is significantly influenced by both maternal and child characteristics. Maternal characteristics that were found to be associated with better psychological well-being include being in the age group of 26–35 years, residing in a village area, having a high family income, experiencing low obstacles to care, and receiving strong support from partners, family, and health workers. Meanwhile, the only child-related factor significantly associated with maternal psychological well-being was treatment duration, where shorter treatment duration (less than 1 year) was linked to better maternal psychological outcomes. Based on these findings, health workers need to pay attention to these characteristics in providing interventions so that the goals of care will provide results to improve maternal psychological well-being. Health workers can actively provide psychosocial support for mothers caring for children with chronic conditions, such as counseling. In addition, health workers must work with partners and families to create an emotionally supportive environment for mothers. Families are also expected to provide emotional support, such as accompanying mothers in caring for children and helping to meet daily needs to ease the burden on mothers. From a practical perspective, health workers need to provide comprehensive education on childcare management and advocate for policies that increase access to psychological support service.

REFERENCES

- Adedoyin, F. F., & Bekun, F. V. (2020). Modelling the interaction between tourism, energy consumption, pollutant emissions and urbanization: renewed evidence from panel VAR. *Environmental Science and Pollution Research*, 27(31), 38881–38900.

- <https://doi.org/10.1007/s11356-020-09869-9>
- Ahmad, M., Sechi, C., & Vismara, L. (2024). Advanced Maternal Age: A Scoping Review about the Psychological Impact on Mothers, Infants, and Their Relationship. *Behavioral Sciences*, 14(3), 147. <https://doi.org/10.3390/bs14030147>
- Aini, N., & Wahyu, A. C. (2020). The correlation between family support and psychological well-being in patients with end-stage renal disease. *Journal of Nursing and Social Sciences Related to Health and Illness*, 22(4), 291–296. <https://doi.org/10.32725/kont.2020.041>
- Al Kahfi, R., Mahdiah, D., & Susilawati, E. (2018). Hubungan Dukungan Keluarga Dengan Tingkat Kecemasan Pada Anak Penderita Kanker Yang Menjalani Kemoterapi Di Ruang Hemato-Onkologi Anak Rsud Ulin Banjarmasin. *Dinamika Kesehatan*, 9(1), 630–643. Retrieved from: <https://ojs.dinamikakesehatan.unism.ac.id/index.php/dksm/article/view/310>
- An, J., Zhu, X., Shi, Z., & An, J. (2024). A serial mediating effect of perceived family support on psychological well-being. *BMC Public Health*, 24(1), 1–10. <https://doi.org/10.1186/s12889-024-18476-z>
- Asmarani, F. F., & Sugiasih, I. (2020). Kesejahteraan Psikologis pada Ibu yang Memiliki Anak Tunagrahita Ditinjau dari Rasa Syukur dan Dukungan Sosial Suami. *Psisula: Prosiding Berkala Psikologi*, 1, 45–58. <https://doi.org/10.30659/psisula.v1i0.7688>
- Baker, K., & Claridge, A. M. (2023). “I have a Ph.D. in my daughter”: Mother and Child Experiences of Living with Childhood Chronic Illness. *Journal of Child and Family Studies*, 32(9), 2625–2636. <https://doi.org/10.1007/s10826-022-02506-8>
- Bamber, M. D., Mahony, H., & Spratling, R. (2023). Mothers of Children With Special Health Care Needs: Exploring Caregiver Burden, Quality of Life, and Resiliency. *Journal of Pediatric Health Care*, 37(6), 643–651. <https://doi.org/10.1016/j.pedhc.2023.06.003>
- Bristow, S., Jackson, D., Shields, L., & Usher, K. (2018). The rural mother's experience of caring for a child with a chronic health condition: an integrative review. *Journal of clinical nursing*, 27(13-14), 2558-2568. <https://doi.org/10.1111/jocn.14360>
- Castells-Quintana, D., Dienesch, E., & Krause, M. (2021). Air pollution in an urban world: A global view on density, cities and emissions. *Ecological Economics*, 189(April), 107153. <https://doi.org/10.1016/j.ecolecon.2021.107153>
- Chow, A. J., Saad, A., Al-Baldawi, Z., Iverson, R., Skidmore, B., Jordan, I., ... & Potter, B. K. (2024). Family-centred care interventions for children with chronic conditions: A scoping review. *Health Expectations*, 27(1), e13897. <https://doi.org/10.1111/hex.13897>
- Fairfax, A., Brehaut, J., Colman, I., Sikora, L., Kazakova, A., Chakraborty, P., & Potter, B. K. (2019). A systematic review of the association between coping strategies and quality of life among caregivers of children with chronic illness and/or disability. *BMC Pediatrics*, 19(1), 1–16. <https://doi.org/10.1186/s12887-019-1587-3>
- Fisher, R. S., Sharp, K. M. H., Prussien, K. V., Himelhoch, A. C., Murphy, L. K., Rodriguez, E. M., Young-Saleme, T. K., Vannatta, K., Compas, B. E., & Gerhardt, C. A. (2021). Coping trajectories and the health-related quality of life of childhood cancer survivors. *Journal of Pediatric Psychology*, 46(8), 960–969. <https://doi.org/10.1093/jpepsy/jsab017>
- Gharaibeh, H. F., & Gharaibeh, M. K. (2021). Quality of life of working and non-working Jordanian mothers caring for chronically ill child and its associated factors. *Heliyon*, 7(3), e06320. <https://doi.org/10.1016/j.heliyon.2021.e06320>
- Hardy, R. Y., Boch, S. J., Davenport, M. A., Chavez, L. J., & Kelleher, K. J. (2024). Rural-urban differences in social and emotional protective factors and their association with child health and flourishing. *Journal of Rural Health*, 40(2), 314–325. <https://doi.org/10.1111/jrh.12802>
- Hidayah, R., Yusuf, A., & Fitryasari, R. (2017). Coping Strategy Used by Parents of Children with Autism Spectrum Disorder (ASD). *Ejournal UMM*, 8(2), 165–174. Retrieved from:

- <http://ejournal.umm.ac.id/index.php/keperawatan/issue/view>
- Kusnadi, S. K., Irmayanti, N., Anggoro, H., & Agustina, K. S. B. (2021). Hubungan Antara Dukungan Keluarga Dengan Psychological Well-Being Pada Orang Tua Yang Memiliki Anak Tunagrahita Sedang. *Jurnal Psikologi Insight*, 5(1), 79–86. <https://doi.org/10.17509/insight.v5i1.34240>
- Leuwol, F. S., Ramdan Yusuf, Eko Wahyudi, & Nunung Suryana Jamin. (2023). Pengaruh Kualitas Lingkungan Terhadap Kesejahteraan Psikologis Individu di Kota Metropolitan. *Jurnal Multidisiplin West Science*, 2(08), 714–720. <https://doi.org/10.58812/jmws.v2i08.592>
- Long, L., Ho, K., Ho, W., Li, C., Cheung, A. T., & Luo, Y. (2022). *Impact of Poverty on Parent – Child Relationships , Parental Stress , and Parenting Practices*. 10(April), 1–10. <https://doi.org/10.3389/fpubh.2022.849408>
- Lopes, S., Lima, M., & Silva, K. (2020). Nature can get it out of your mind: The rumination reducing effects of contact with nature and the mediating role of awe and mood. *Journal of Environmental Psychology*, 71(June 2019), 101489. <https://doi.org/10.1016/j.jenvp.2020.101489>
- Lubis, E. A., & Siregar, A.I.T. (2023). Tingkat Kecemasan Orang Tua Terhadap Anak Yang Menjalani Hospitalisasi Pada Anak Usia Toddler Di RU. Mekar RSUD Dr. RM Djoelham Binjai. *BEST JOURNAL (Biology Education Science & Technology)*, 6(2), 394–400. Retrieved from: <https://jurnal.uisu.ac.id/index.php/best/article/view/8002>
- Naziah, H. R., Sunarti, E., & Riany, Y. E. (2023). Pengaruh Manajemen Stres dan Status Pekerjaan Ibu terhadap Pengasuhan Anak Usia Sekolah saat Pandemi Covid-19. *Jurnal Ilmu Keluarga Dan Konsumen*, 16(1), 23–36. <https://doi.org/10.24156/jikk.2023.16.1.23>
- Nur, A. M., Fitriah, A., & Marsha, G. C. (2024). Pengaruh Dukungan Tenaga Kesehatan Terhadap Psychological Well-Being Ibu Menyusui Di Wilayah Kerja Puskesmas Kayu Tangi. *Jurnal Psikologi*, 1(4), 23-23. <https://doi.org/10.47134/pjp.v1i4.2825>
- Nurjanah, S., Septianingrum, Y., & Sari, R. Y. (2022). Family Life Experiences in Caring for Children with Leukemia: A Literature Review. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 7(S2), 273–284. <https://doi.org/10.30604/jika.v7is2.1439>
- Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., Chisholm, D., Collins, P. Y., Cooper, J. L., Eaton, J., Herrman, H., Herzallah, M. M., Huang, Y., Jordans, M. J. D., Kleinman, A., Medina-Mora, M. E., Morgan, E., Niaz, U., Omigbodun, O., ... UnÜtzer, Jü. (2018). The Lancet Commission on global mental health and sustainable development. *The Lancet*, 392(10157), 1553–1598. [https://doi.org/10.1016/S0140-6736\(18\)31612-X](https://doi.org/10.1016/S0140-6736(18)31612-X)
- Piran, P., Khademi, Z., Tayari, N., & Mansouri, N. (2017). Caregiving burden of children with chronic diseases. *Electronic Physician*, 9(9), 5380–5387. <https://doi.org/10.19082/5380>
- Pulungan, A. B., Fadiana, G., & Annisa, D. (2021). Type 1 diabetes mellitus in children: Experience in Indonesia. *Clinical Pediatric Endocrinology*, 30(1), 11–18. <https://doi.org/10.1297/cpe.30.11>
- Puspitasari, F., & Haksama, S. (2020). Perbedaan Kesejahteraan Psikologis Pada Ibu Berdasarkan Struktur Keluarga Di Desa Kaligung Kabupaten Banyuwangi. *Promotif: Jurnal Kesehatan Masyarakat*, 10(2), 116–123. <https://doi.org/10.56338/pjkm.v10i2.1039>
- Robertson, E. G., Kelada, L., Ilin, R., Palmer, E. E., Bye, A., Jaffe, A., ... & Wakefield, C. E. (2024). Psychological wellbeing among parents of a child living with a serious chronic illness: A cross-sectional survey study. *Journal of Child Health Care*, 13674935241238485. <https://doi.org/10.1177/13674935241238485>
- Rusu, P. P., Candel, O. S., Bogdan, I., Ilciuc, C., Ursu, A., & Podina, I. R. (2025). Parental

- Stress and Well-Being: A Meta-analysis. *Clinical Child and Family Psychology Review*, 0123456789. <https://doi.org/10.1007/s10567-025-00515-9>
- Samuel, L. J., Abshire Saylor, M., Choe, M. Y., Smith Wright, R., Kim, B., Nkimbeng, M., Mena-Carrasco, F., Beak, J., & Szanton, S. L. (2025). Financial strain measures and associations with adult health: A systematic literature review. *Social Science and Medicine*, 364, 100337. <https://doi.org/10.1016/j.socscimed.2024.117531>
- Sicca, S.P. (2025). *Diabetes pada Anak di Indonesia Meningkat 70 Kali Lipat [Internet]*. Diabetes Indonesia. Retrieved from: <https://diabetes-indonesia.net/2023/02/diabetes-pada-anak-di-indonesia-meningkat-70-kali-lipat/>
- Silva, N., Pereira, M., Otto, C., Ravens-Sieberer, U., Canavarro, M. C., & Bullinger, M. (2019). Do 8- to 18-year-old children/adolescents with chronic physical health conditions have worse health-related quality of life than their healthy peers? a meta-analysis of studies using the KIDSCREEN questionnaires. *Quality of Life Research*, 28(7), 1725–1750. <https://doi.org/10.1007/s11136-019-02189-7>
- Smith, S., Tallon, M., Clark, C., Jones, L., & Mörelius, E. (2022). “You Never Exhale Fully Because You’re Not Sure What’s NEXT”: Parents’ Experiences of Stress Caring for Children With Chronic Conditions. *Frontiers in Pediatrics*, 10(June), 1–12. <https://doi.org/10.3389/fped.2022.902655>
- Spurr, S., Danford, C. A., Roberts, K. J., Sheppard-LeMoine, D., Machado Silva-Rodrigues, F., Darezzo Rodrigues Nunes, M., Darmofal, L., Ersig, A. L., Foster, M., Giambra, B., Lerret, S., Polfuss, M., Smith, L., & Somanadhan, S. (2023). Fathers’ Experiences of Caring for a Child with a Chronic Illness: A Systematic Review. *Children*, 10(2), 1–17. <https://doi.org/10.3390/children10020197>
- Sumiati, N. T., Nufus, D. H., & Latifa, R. (2023). Resiliensi Orang Tua yang Memiliki Anak dengan Penyakit Kronis: Pengaruh Dukungan Sosial, Religiositas dan Faktor Demografi. *Journal Psikogenesis*, 10(1), 89–102. <https://doi.org/10.24854/jps.v10i1.2849>
- Taverna, L., Bellavere, M., Tremolada, M., Santinelli, L., Rudelli, N., Mainardi, M., Onder, G., Putti, M. C., Biffi, A., & Toso, B. (2021). Oncological children and well-being: Occupational performance and hrqol change after fine motor skills stimulation activities. *Pediatric Reports*, 13(3), 383–400. <https://doi.org/10.3390/PEDIATRIC13030046>
- Thomas, S., Ryan, N. P., Byrne, L. K., Hendrieckx, C., & White, V. (2024). Psychological Distress among Parents of Children with Chronic Health Conditions and Its Association with Unmet Supportive Care Needs and Children’s Quality of Life. *Journal of Pediatric Psychology*, 49(1), 45–55. <https://doi.org/10.1093/jpepsy/jsad074>
- Trisyani, K., Fara, Y. D., & Mayasari, A. T. (2020). Hubungan faktor ibu dengan kejadian stunting. *Jurnal Maternitas Aisyah (JAMAN AISYAH)*, 1(3), 189-197. Retrieved from: <https://journal.aisyahuniversity.ac.id/index.php/Jaman/article/view/126>
- Ulyah, Q., Murwati, M., & Rossita, T. (2024). The Relationship between Child Hospitalization Duration and Parent Anxiety Level at Rs Tiara Sella Bengkulu City 2023. *Student Scientific Journal*, 2(1), 41-48. Retrieved from: <https://jurnal.unived.ac.id/index.php/ssj/article/view/4841>
- Wang, Y., Qiu, Y., Ren, L., Jiang, H., Chen, M., & Dong, C. (2024). Social support, family resilience and psychological resilience among maintenance hemodialysis patients: a longitudinal study. *BMC Psychiatry*, 24(1), 1–12. <https://doi.org/10.1186/s12888-024-05526-4>
- Werdani, Y. D. W., & Prasetiani, A. G. (2023). Empat Aspek Dukungan Keluarga Mampu Meningkatkan Motivasi Pengobatan Pasien Kanker Dalam Menjalani Kemoterapi Dan Radiasi Selama Pandemi Covid 19. *Care: Jurnal Ilmiah Ilmu Kesehatan*, 11(1), 11–23. Retrieved from: <https://doi.org/10.33366/jc.v11i1.3259>
- Winarni, L. M., Arabella, S., Pratiwi, A., & Kusumastuti, N. A. (2024). Faktor-Faktor Yang Mempengaruhi Kesejahteraan Psikologis Pada Ibu Rumah Tangga Di Tangerang Tahun

2023. *Binawan Student Journal*, 6(2), 88–95. <https://doi.org/10.54771/7xh6y661>
- Wong, C. R. (2023). *Barriers to Care among Adults with Chronic Liver Disease in the United States*. University of California, Los Angeles. Retrieved from: <https://www.proquest.com/openview/b5b87ad2449251e5f7c9a8b29fc50ffd/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Yayah, Y., & Wanda, D. (2021). Pengalaman Orangtua Selama Anak Dirawat dengan Penyakit Akut dan Kritis: Literature Review. *Dunia Keperawatan: Jurnal Keperawatan Dan Kesehatan*, 9(1), 93. <https://doi.org/10.20527/dk.v9i1.9815>
- Yuliana, E., Murdiningsih, M., & Indriani, P. L. N. (2022). Hubungan Persepsi Ibu, Dukungan Suami, dan Dukungan Tenaga Kesehatan terhadap Pemberian Asi Eksklusif pada Ibu Menyusui di Wilayah Kerja Puskesmas Cahya Maju Lempuing Oki Tahun 2021. *Jurnal Ilmiah Universitas Batanghari Jambi*, 22(1), 614. <https://doi.org/10.33087/jiubj.v22i1.1921>
- Zahl, E., Willemen, A. M., Fredriksen, T., Kirchhofer, S. M., Vatne, T. M., Orm, S., Botta, M., Prentice, C., & Fjermestad, K. W. (2024). Mental health in mothers and fathers of children with chronic disorders. *PEC Innovation*, 5, 100331. <https://doi.org/10.1016/j.pecinn.2024.100331>
- Zannah, R., Fitriah, A., & Hariyono, D. S. (2024). Hubungan Dukungan Suami Terhadap Psychological Well-Being Ibu Menyusui Di Wilayah Kerja Puskesmas Kelayan Timur. *Jurnal Riset Kesehatan Modern*, 6(3), 242–259.
- Zhang, C., Zhang, S., & Niu, Q. (2021). A new perspective of urban–rural differences: The impact of social support on the mental health of the older adults: A case from Shaanxi Province, China. *Healthcare (Switzerland)*, 9(2), 112. <https://doi.org/10.3390/healthcare9020112>
- Zonta, J. B., Okido, A. C. C., de Lima, B. J., Martins, B. A., Looman, W. S., Lopes-Júnior, L. C., ... & Lima, R. A. G. D. (2024). Stress in Family Caregivers of Children with Chronic Health Conditions: A Case–Control Study. *Children*, 11(11), 1347. <https://doi.org/10.3390/children11111347>