


ORIGINAL RESEARCH

Stress levels and coping mechanisms among patients' caregivers whose family members are hospitalized in the Intensive Care Unit in Indonesia: an observational study

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Abstract

The stress levels and coping mechanisms experienced by families of patients in the Intensive Care Unit (ICU) often contribute to significant psychological distress. This heightened stress among caregivers is a critical concern that warrants further investigation to mitigate its negative consequences. While the impact of stress on ICU patient families is recognized, research specifically addressing this issue within the Indonesian population remains limited. This study aimed to address this gap by investigating the stress levels and coping mechanisms employed by caregivers of ICU patients at RS Universitas Tanjung Pura, Indonesia. This observational study involved 50 participants; all family members of patients admitted to the ICU. Data collection utilized three standardized instruments: the Perceived Stress Scale (PSS) to assess stress levels, the Brief COPE Questionnaire to evaluate coping strategies, and the Family Support Questionnaire to measure perceived social support. The findings revealed a concerning high prevalence of severe stress among the participants, with 84% experiencing stress levels classified as severe. Interestingly, a substantial majority (82%) of the caregivers also demonstrated strong coping mechanisms. Statistical analysis revealed a significant positive and strong correlation ($r = 0.790$, $p < 0.05$) between stress levels and coping strategies. This suggests that as stress increases, caregivers are more likely to engage in coping behaviours, though the effectiveness of these strategies may vary. The results underscore the crucial role of family support and individual coping mechanisms in navigating the intense stress associated with having a loved one in the ICU. These findings emphasize the urgent need for targeted nursing interventions designed to enhance emotional resilience and provide comprehensive support for families of ICU patients.

Keywords: Coping mechanism, family caregivers, Intensive Care Unit, mental health nursing, stress levels

Introduction

The critical condition of patients in the Intensive Care Unit (ICU) often places immense pressure on the patients themselves and their families (Halain et al., 2022). Families of ICU patients face various emotional challenges which ranging from uncertainty about the patient's condition to the burden of providing physical and mental support (Asadi & Salmani, 2024). Additionally, they must adapt to changing routines and maintain constant communication with the medical team to stay informed about the patient's progress (Rustam & Chaidir, 2023). This situation places families in a vulnerable position, requiring both support and effective coping strategies to manage stress (Siddiqui et al., 2024). According to data from the Indonesian Ministry of Health in 2020, levels of anxiety and depression in the population have continued to rise, with over 23.000 cases of depression and 1.193 recorded suicide attempts. While this data does not specifically address families of ICU patients, it highlights the significant need for emotional support in dealing with serious medical situations (Azizi et al., 2023). Families of ICU patients are particularly susceptible to extremely high levels of stress due to the unpredictability of the patient's condition and the risk of death (Barth et al., 2016). When family stress is not managed properly, they may struggle to provide the necessary support for the patient. Although these figures do not specifically target families of ICU patients (**Figure 1**), they underscore the pressing need for emotional and psychological support in high-stress healthcare environments (Scott et al., 2019). Coping mechanisms play a vital role in mitigating the

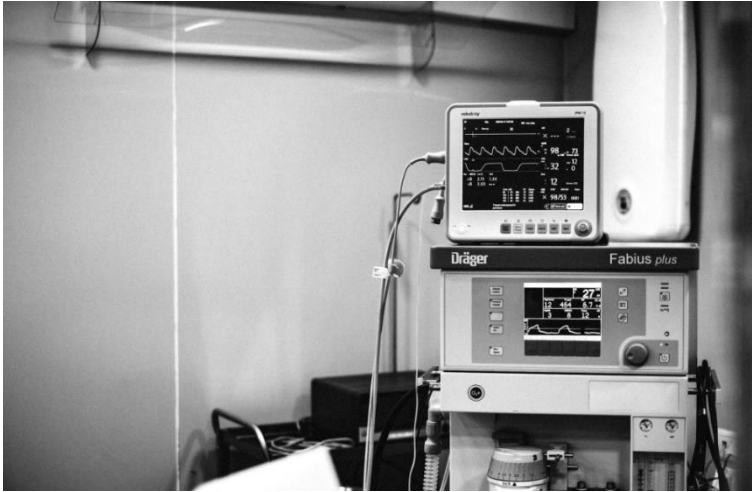


Figure 1. Illustration of ICU (Courtesy of www.pexels.com).

negative impacts of stress (Frota et al., 2021). Effective coping strategies can help families navigate stressful circumstances constructively such as seeking emotional support, accepting difficult realities, and setting realistic expectations for care (Harlan et al., 2020). Family support and coping mechanisms—how families handle stress—are crucial. Effective coping allows families to deal with stressful situations in positive and constructive ways (Yang et al., 2022). This includes seeking support from others, accepting challenging situations, and adjusting expectations regarding the care of the ICU patient (Suprayitno et al., 2020). Conversely, ineffective coping mechanisms can exacerbate stress and hinder families' ability to make important decisions regarding the patient's care.

Despite the critical importance of understanding stress and coping mechanisms among ICU patient families, research in this area remains limited. Existing studies tend to focus more on patients' anxiety or stress which leaving a gap in the literature regarding the experiences of their families (McAdam et al., 2010). Families of ICU patients often report high levels of stress, with research indicating that 63.3% experience severe anxiety (Pitoy et al., 2023). A study highlights the importance of healthcare providers' awareness of the psychological and physiological stress experienced by the families of ICU patients (Zanetti et al., 2013). The study emphasizes the role of coping mechanisms in managing stress and suggests that enhanced support from nurses can improve the overall experience of families during their loved one's hospitalization in the ICU. Active engagement in coping strategies has been associated with better emotional outcomes, reducing symptoms of anxiety and depression. Healthcare providers should prioritize family engagement to reduce stress and enhance coping mechanisms (Park et al., 2018). A study underscores the critical role of healthcare professionals in providing emotional support to the families of ICU patients (Zanetti et al., 2013). It highlights the importance of recognizing the stress experienced by family members, enabling nurses to deliver care that adequately addresses their emotional needs. Proper support from nurses can help families feel more reassured and better equipped to cope with the challenges of their loved one's ICU stay.

Research on how stress affects the coping mechanisms of ICU patients' families is still limited. Most previous studies have focused on patient anxiety or the impact of stress on patients, with little exploration of its effects on families. This study aims to fill that gap by assessing the relationship between stress levels and coping mechanisms in the families of ICU patients at RS Universitas Tanjungpura. This study is important because there is limited research on the psychological burden and coping strategies of caregivers in ICU settings in Indonesia, despite the critical role they play in patient care. While global studies have highlighted the emotional distress and adaptive mechanisms of caregivers, cultural, social, and healthcare system differences in Indonesia may influence their experiences in unique ways. Additionally, many ICU environments prioritize patient-centered care, focusing on medical interventions, monitoring, and recovery while often neglecting the emotional and psychological well-being of family caregivers. The intensive nature of critical care settings can create a highly stressful environment for caregivers, who are frequently left to navigate uncertainty, complex medical information, and difficult decision-making processes with minimal emotional support. Prolonged exposure to high levels of stress and anxiety can lead to caregiver fatigue, emotional exhaustion, and even long-term psychological distress, which may, in turn, affect their ability to provide effective support to their hospitalized loved ones. Without adequate coping resources, caregivers may struggle to maintain their well-being, leading to feelings of helplessness, burnout, and decreased involvement in the patient's recovery process. Furthermore, the lack of structured psychosocial support systems within ICU settings means that caregivers often rely on informal coping mechanisms which may not always be effective in mitigating stress. Addressing this gap by incorporating family-centered care models, providing clear communication, and offering psychological support services can enhance caregivers' resilience, improve their coping abilities, and family well-being. Understanding the specific stressors and coping strategies of caregivers in Indonesia can inform the development of culturally relevant interventions. It is hoped that the results of this study can assist healthcare services in designing more appropriate support for ICU patients' families, helping them better cope with stressful situations.

Method

This study employs a quantitative correlational design with a cross-sectional approach to examine the relationship between stress levels and coping mechanisms in the families of ICU patients at RS Universitas Tanjungpura. A cross-sectional design (Figure 2) was chosen to capture data at a single point in time which allowing for the identification of patterns and correlations without intervening in participants' experiences (Wang & Cheng, 2020). The study population consisted of family members of ICU patients currently receiving treatment at RS Universitas Tanjungpura. The inclusion criteria included family members aged 18 years or older who were accompanying ICU patients, individuals willing to participate by providing informed consent, and those who had been present at the hospital for at least 24 hours during the patient's ICU stay. Exclusion criteria included family members with diagnosed cognitive, auditory, or visual impairments that could affect their ability to complete the questionnaire, as well as those with prior mental health conditions affecting their perception of stress. Sampling was conducted using a purposive sampling method, with a total of 50 respondents. The sample size was determined using Cohen's formula for correlational studies, ensuring sufficient statistical power ($\geq 80\%$) to detect relationships at a significance level of $p < 0.05$. Three validated instruments were used in this study. The Perceived Stress Scale (PSS), developed by Sheldon Cohen, was utilized to measure individuals' perceptions of stress, with a rating scale ranging from 0 to 4. Responses were used to categorize stress levels as mild, moderate, or severe. The Brief COPE Questionnaire was employed to assess the coping strategies used by family members in managing stress, evaluating both adaptive and maladaptive coping methods. Additionally, the Family Support Questionnaire, consisting of 20 Likert-scale statements, was used to measure the quality of social support from family members. Scores ranged from 0 to 3, with higher scores indicating stronger family support.

Prior to participation, all respondents provided written informed consent, ensuring voluntary participation and adherence to ethical research guidelines. Data collection was conducted in the ICU waiting area at RS UNTAN over a six-month period. Participants were invited to complete the questionnaires through guided interviews to ensure clarity and accuracy in responses. Each interview lasted approximately 20–30 minutes, allowing researchers to collect comprehensive and reliable data. Data analysis was conducted in two stages. Univariate analysis was performed using descriptive statistics to summarize stress levels, coping mechanisms, and family support. For bivariate analysis, Pearson's correlation test was used to evaluate the relationship between stress levels and coping mechanisms. A p -value of < 0.05 was considered statistically significant, and the results were interpreted based on effect size and clinical relevance. Ethical approval for this study was obtained from the Ethics Committee of RS Tanjungpura under Approval No. 6346/UN22.9/PG/2024. This process ensured that the research adhered to established ethical guidelines for human subject research. The approval process involved a thorough review of the study's objectives, methodology, data collection procedures, and potential risks to participants (Fletcher, 2015). Informed consent was a critical component of the ethical approval process which requiring that all participants be provided with detailed information regarding the study's purpose, procedures, potential risks, and benefits before voluntarily agreeing to participate (Manti & Licari, 2018). Confidentiality and anonymity were strictly maintained, with all personal data securely stored and accessible only to authorized researchers (Dougherty, 2021). Additionally, participants were informed of their right to withdraw from the study at any time without consequences. The study followed all institutional and national ethical guidelines which reinforcing its commitment to conducting responsible and ethically sound research in a clinical setting.

Results

Univariate analysis was conducted to describe each variable independently without considering its relationship with other variables. In this study, univariate analysis was used to depict and summarize the levels of family support, stress, and coping mechanisms among the families of patients hospitalized in the ICU at RS Universitas Tanjungpura. The findings revealed that a significant majority of family members experienced high levels of stress while accompanying their

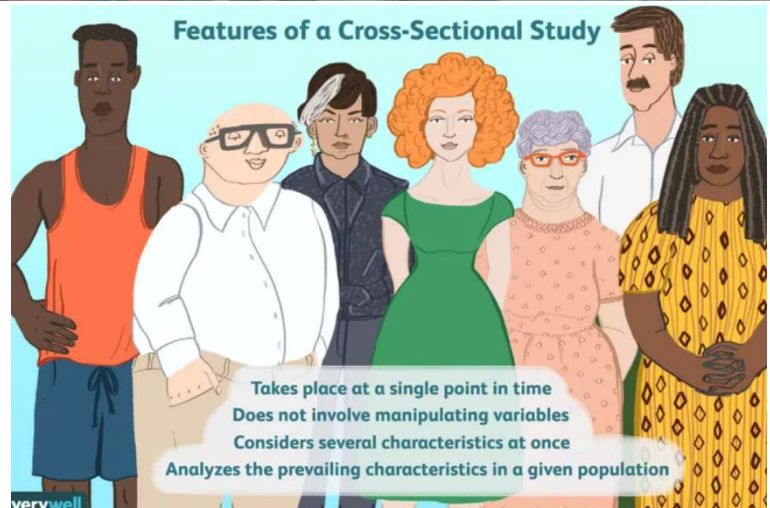


Figure 2. Illustration of cross-sectional design
(Courtesy of www.verywellmind.com).

loved ones in the ICU. Specifically, 8 individuals (16%) reported experiencing moderate stress, whereas 42 individuals (84%) suffered from severe stress (**Table 1**). These results highlight the immense psychological burden faced by families in critical care settings which emphasizing the need for adequate emotional and psychological support. The high percentage of severe stress indicates that many families struggle with anxiety, uncertainty, and emotional distress when their loved ones are critically ill. Additionally, the analysis of family support levels revealed a positive trend, with most family members providing strong emotional and practical assistance to their hospitalized relatives. Among the study participants, 37 individuals (74%) were categorized as providing good family support, demonstrating their active role in offering emotional reassurance, financial assistance, and decision-making support. Meanwhile, 7 individuals (14%) provided adequate support, and 6 individuals (12%) fell into the poor support category (**Table 2**). These findings suggest that while the majority of families play a significant role in supporting their loved ones during hospitalization, a small proportion may struggle to provide sufficient assistance due to various personal, financial, or emotional constraints.

Bivariate analysis was conducted to examine the relationship between stress levels and coping mechanisms among family members of ICU patients. This analysis aimed to determine whether a significant correlation existed between the two variables, providing insight into how family members manage stress during a critical care experience. Pearson's Correlation test was employed to assess the strength and direction of this relationship. The results show that the p-value (2-tailed) is 0.000, which is less than 0.05 ($0.000 < 0.05$). This indicates a significant relationship between stress levels and coping mechanisms. The Pearson correlation value is 0.790, which falls in the range of 0.71 – 0.90, indicating a strong relationship between stress levels and coping mechanisms in the families of ICU patients. The findings suggested that individuals who had stronger coping mechanisms were better able to manage their stress levels, whereas those with weaker coping strategies exhibited higher levels of stress and emotional distress (**Table 3**). These results underscore the importance of providing psychological and emotional support to families of ICU patients, ensuring that they have access to effective coping strategies to mitigate stress.

Table 1. Distribution of stress levels among families.

Stress Level	Frequency (n)	Percentage (%)
Moderate Stress	8	16.00%
Severe Stress	42	84.00%

Table 2. Distribution of respondents based on family support.

Description	Number	Percentage (%)
Poor	6	12%
Adequate	7	14%
Good	37	74%

Table 3. Analysis between stress levels and coping mechanism.

Variables	Stress Level	Coping Mechanism
Stress Level	Pearson Correlation	1
	Sig. (2-tailed)	
	N	50
Coping Mechanism	Pearson Correlation	0.790
	Sig. (2-tailed)	0
	N	50

Discussion

The analysis shows that the majority of families of patients treated in the ICU at RS Universitas Tanjungpura experience severe stress, with 84% of participants reporting high stress levels. This heightened stress may be attributed to the changes within the family, particularly the shift in roles and responsibilities when caring for a critically ill patient. Such role transitions can contribute significantly to increased stress levels (Harianto, Murtaqib, & Kushariyadi, 2022). Stress affects the patient and their family members, especially in ICU settings, where uncertainty and emotional distress are prevalent. The psychological burden on families often includes feelings of anxiety, guilt, confusion, and even depression (Utama, Dwidianti, & Wijayanti, 2020). Since ICU admissions are typically associated with life-threatening conditions, families frequently experience heightened anxiety (Azizi, Oktarina, & Nasution, 2023). Different coping strategies emerge

in response to this stress, with some families adopting emotion-focused coping mechanisms to manage their feelings, while others rely on problem-focused strategies to address logistical challenges (**Figure 3**). The choice of coping strategy is likely influenced by factors such as the patient's condition, the availability of support networks, and cultural or individual differences (Dev et al., 2024). For example, families with strong support systems may be more inclined to employ problem-focused coping, while those with limited support may rely more on emotional coping mechanisms (Pinheiro et al., 2022).



Figure 3. Illustration of problem-focused strategies (Courtesy of www.pexels.com).

support contributes to psychological well-being during an ICU stay (Wolf & Fisher, 2023). Understanding these dynamics is essential, as it sheds light on how stress levels fluctuate and which coping strategies are most effective (Milas et al., 2021). Recognizing the emotional and psychological effects of ICU hospitalization on family members can lead to better interventions and support systems that promote resilience and effective coping mechanisms (Rai et al., 2019). Studies have shown that effective communication within families can significantly reduce stress, improve a supportive environment, and the overall well-being of both the patient and their loved ones (Geçer & Yildirim, 2023; Huang et al., 2023). Additionally, strong communication between healthcare providers and families ensures that all parties are well-informed and actively involved in the decision-making process regarding the patient's care (Anderson et al., 2019).

The analysis further reveals that 82% of the respondents exhibit high coping mechanisms which suggesting that many family members actively engage in strategies to manage their stress. Coping mechanisms develop as a response to anxiety and serve as defensive strategies to handle internal and external changes (Azizi, Oktarina, & Nasution, 2023). The presence of high coping mechanisms indicates that family members are making conscious efforts to manage the psychological distress caused by their loved one's critical condition. The fear of losing a patient in the ICU contributes to heightened stress levels, which in turn drives the development of coping strategies (Rustam & Chaidir, 2023). Emotional well-being and resilience play a crucial role in navigating these difficult situations. Family support systems are particularly influential in shaping coping responses, as they provide emotional stability and enhance resilience in the face of challenges. Recognizing these coping mechanisms allows healthcare providers to offer tailored support which improving the experience of families during critical care situations (Rückholdt et al., 2019). Effective coping strategies contribute to healthier family dynamics and better emotional adjustment such as open communication, seeking social support, and engaging in self-care activities (Prates et al., 2024). Understanding how families manage the stress of having a loved one in the ICU can design interventions that promote resilience, facilitate communication, and ensure that families receive the emotional support they need throughout the patient's recovery journey. The statistical analysis demonstrates a significant relationship between stress levels and coping mechanisms among families of ICU patients, with a p-value of 0.000 ($p < 0.05$) and a strong positive correlation of 0.790. The sudden admission of a patient to the ICU is an unexpected and distressing event that often leads to anxiety among family members which affecting their ability to provide support during treatment (Azizi, Oktarina, & Nasution, 2023). High stress levels can impair rational thinking and make it difficult for individuals to focus on problem-solving and decision-making (Córdova et al., 2023). Consequently, families experiencing severe stress may also exhibit high coping efforts as they attempt to manage the emotional and logistical challenges associated with ICU hospitalization. Each individual employs different coping mechanisms based on their

This study aligns with the theoretical framework proposed by Lazarus and Folkman, which explains how an individual's perception of a stressful situation—as either a threat or a challenge—impacts their stress levels and coping mechanisms (Lazarus & Folkman, 1984). Families who perceive the ICU experience as a threat are more likely to experience anxiety and feelings of helplessness. Whereas those who approach it as a challenge may adopt proactive strategies, such as seeking information and support, to reduce their stress levels (Wolf & Fisher, 2023). The concept of communal coping, also emphasized in this theory, is particularly relevant to this study. Families often come together to support one another during the intensive care period and strengthen their emotional resilience. Research conducted at RS UNTAN highlights the role of social dynamics in stress management and demonstrate how collective family

personal experiences, psychological resilience, and available support systems (Ding et al., 2021). Coping mechanisms encompass cognitive and behavioral strategies that individuals use to manage problems, adapt to changes, and navigate stressful situations (Rustam & Chaidir, 2023). Variations in coping styles among family members lead to differences in stress management approaches. The findings of this study align with prior research indicating a significant relationship between coping mechanisms and anxiety levels among families of ICU patients (Azizi, Oktarina, & Nasution, 2023).

Understanding the stress dynamics within families during a critical health crisis is essential, as these dynamics can significantly influence both the family's well-being and the patient's recovery outcomes (Rosenberg, 2022). Effective coping mechanisms enable families to navigate these challenges and improve resilience of emotional bonds (Rhoads et al., 2022). Healthcare providers play a crucial role in supporting families by encouraging open communication, offering counseling services and finding resources on coping strategies. Implementing structured interventions that address the psychological needs of families can enhance emotional resilience and improve their ability to manage stress (Varghese et al., 2020). The findings of this study underscore the importance of family support in mitigating stress among ICU patients' families. Nurses, in particular, play a pivotal role in strengthening coping mechanisms by promoting emotional resilience and guiding families on how to manage anxiety and stress effectively (Imanigoghary et al., 2017). Effective communication between nurses and families is critical, as it provides reassurance and reduces uncertainty. Improving strong family-centered care can ensure that both patients and their families receive comprehensive support during hospitalization. Furthermore, training programs focused on stress management and coping strategies for families can further empower them to navigate the emotional challenges of having a loved one in the ICU. Prioritizing family support in ICU settings can improve patient outcomes and enhance the emotional well-being of caregivers.

Conclusion

This study highlights the significant stress experienced by families of ICU patients at RS UNTAN. The condition is primarily driven by the emotional burden and role changes associated with having a loved one in critical care. Despite these high stress levels, families demonstrated strong coping mechanisms that helped them navigate these challenges. The findings underscore the importance of understanding family dynamics in critical care settings. Implementing targeted interventions and support strategies can enhance family members' coping abilities and overall emotional well-being. A holistic approach that actively involves the family in the recovery process can strengthen emotional bonds and improve a more supportive environment. Future studies should explore the long-term psychological effects of ICU-related stress on family members and evaluate the effectiveness of various coping strategies. Research should also focus on developing and investigating structured support programs to the needs of families in critical care settings. Additionally, exploring the role of nursing interventions could provide valuable insights into improving family well-being and patient outcomes such as family-centered communication and emotional support initiatives.

Author's declaration

All authors contributed to the manuscript writing process and approved the final version.

AI statement

The author did not use any generative text artificial intelligence algorithms during the manuscript development.

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Availability of data and materials

All data are available from the authors.

Competing interests

The authors declare no competing interests.

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References

- Anderson, R. J., Bloch, S., Armstrong, M., Stone, P. C., & Low, J. T. (2019). Communication between healthcare professionals and relatives of patients approaching the end-of-life: A systematic review of qualitative evidence. *Palliative medicine*, 33(8), 926–941. <https://doi.org/10.1177/0269216319852007>
- Asadi, N., & Salmani, F. (2024). The experiences of the families of patients admitted to the intensive care unit. *BMC nursing*, 23(1), 430. <https://doi.org/10.1186/s12912-024-02103-8>
- Azizi, P. D., Oktarina, Y., & Nasution, R. A. (2023). The Relationship Between Coping Mechanisms and Anxiety Levels of Families of Patients Hospitalized in the ICU of RSUD Raden Mattaher Jambi. *Jurnal Ners*, 7(25), 1815–1823.
- Barth, A. A., Weigel, B. D., Dummer, C. D., Machado, K. C., & Tisott, T. M. (2016). Stressors in the relatives of patients admitted to an intensive care unit. *Estressores em familiares de pacientes internados na unidade de terapia intensiva. Revista Brasileira de terapia intensiva*, 28(3), 323–329. <https://doi.org/10.5935/0103-507X.20160055>
- Córdova, A., Caballero-García, A., Drobnic, F., Roche, E., & Noriega, D. C. (2023). Influence of Stress and Emotions in the Learning Process: The Example of COVID-19 on University Students: A Narrative Review. *Healthcare (Basel, Switzerland)*, 11(12), 1787. <https://doi.org/10.3390/healthcare11121787>
- Dev, R., Agosta, M., Fellman, B., Reddy, A., Baldwin, S., Arthur, J., Haider, A., Carmack, C., Hui, D., & Bruera, E. (2024). Coping Strategies and Associated Symptom Burden Among Patients with Advanced Cancer. *The oncologist*, 29(2), 166–175. <https://doi.org/10.1093/oncolo/oyad253>
- Ding, Y., Fu, X., Liu, R., Hwang, J., Hong, W., & Wang, J. (2021). The Impact of Different Coping Styles on Psychological Distress during the COVID-19: The Mediating Role of Perceived Stress. *International journal of environmental research and public health*, 18(20), 10947. <https://doi.org/10.3390/ijerph182010947>
- Dougherty, M. V. (2021). The use of confidentiality and anonymity protections as a cover for fraudulent fieldwork data. *Research Ethics*, 17(4), 480–500. <https://doi.org/10.1177/17470161211018257>
- Fletcher J. (2015). Ethical approval for all studies involving human participants. *CMAJ: Canadian Medical Association journal = journal de l'Association medicale canadienne*, 187(2), 91. <https://doi.org/10.1503/cmaj.141538>
- Frota, O. P., de Sene, A. G., Ferreira-Júnior, M. A., Giacon-Arruda, B. C. C., Teston, É. F., Pompeo, D. A., & Martins de Paula, F. (2021). Coping strategies of family members of intensive care unit patients. *Intensive & critical care nursing*, 63, 102980. <https://doi.org/10.1016/j.iccn.2020.102980>
- Geçer, E., & Yıldırım, M. (2023). Family Communication and Psychological Distress in the Era of COVID-19 Pandemic: Mediating Role of Coping. *Journal of family issues*, 44(1), 203–219. <https://doi.org/10.1177/0192513X211044489>
- Halain, A. A., Tang, L. Y., Chong, M. C., Ibrahim, N. A., & Abdullah, K. L. (2022). Psychological distress among the family members of Intensive Care Unit (ICU) patients: A scoping review. *Journal of clinical nursing*, 31(5-6), 497–507. <https://doi.org/10.1111/jocn.15962>
- Harianto, D., Murtaqib, M., & Kushariyadi, K. (2022). Gambaran Stres Keluarga dalam Merawat Anggota Keluarga yang Menjalani Kemoterapi di Rumah Sakit Tingkat III Baladhika Husada Jember. *Jurnal Ilmiah Ners Indonesia*, 2(1), 01-13. <https://doi.org/10.22437/jini.v2i1.10093>
- Harlan, E. A., Miller, J., Costa, D. K., Fagerlin, A., Iwashyna, T. J., Chen, E. P., Lipman, K., & Valley, T. S. (2020). Emotional Experiences and Coping Strategies of Family Members of Critically Ill Patients. *Chest*, 158(4), 1464–1472. <https://doi.org/10.1016/j.chest.2020.05.535>
- Huang, X. C., Zhang, Y. N., Wu, X. Y., Jiang, Y., Cai, H., Deng, Y. Q., Luo, Y., Zhao, L. P., Liu, Q. L., Luo, S. Y., Wang, Y. Y., Zhao, L., Jiang, M. M., & Wu, Y. B. (2023). A cross-sectional study: family communication, anxiety, and depression in adolescents: the mediating role of family violence and problematic internet use. *BMC public health*, 23(1), 1747. <https://doi.org/10.1186/s12889-023-16637-0>
- Imanigoghary, Z., PhD, Peyrovi, H., PhD, Nouhi, E., PhD, & Kazemi, M., PhD (2017). The Role of Nurses in Coping Process of Family Caregivers of Vegetative Patients: A Qualitative Study. *International journal of community based nursing and midwifery*, 5(1), 70–81.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing.
- Manti, S., & Licari, A. (2018). How to obtain informed consent for research. *Breathe (Sheffield, England)*, 14(2), 145–152. <https://doi.org/10.1183/20734735.001918>
- McAdam, J. L., Dracup, K. A., White, D. B., Fontaine, D. K., & Puntillo, K. A. (2010). Symptom experiences of family members of intensive care unit patients at high risk for dying. *Critical care medicine*, 38(4), 1078–1085. <https://doi.org/10.1097/CCM.0b013e3181cf6d94>

- Milas, G., Martinović Klarić, I., Malnar, A., Saftić, V., Šupe-Domić, D., & Slavich, G. M. (2021). The impact of stress and coping strategies on life satisfaction in a national sample of adolescents: A structural equation modelling approach. *Stress and health: journal of the International Society for the Investigation of Stress*, 37(5), 1026–1034. <https://doi.org/10.1002/smi.3050>
- Park, M., Giap, T. T., Lee, M., Jeong, H., Jeong, M., & Go, Y. (2018). Patient- and family-centered care interventions for improving the quality of health care: A review of systematic reviews. *International journal of nursing studies*, 87, 69–83. <https://doi.org/10.1016/j.ijnurstu.2018.07.006>
- Pinheiro, I., Kohlsdorf, M., & Pérez-Nebra, A. R. (2022). Analysis Of Stress and Coping in Relatives Of Patients Admitted To The ICU. *Paidéia (Ribeirão Preto)*, 32. <https://doi.org/10.1590/1982-4327e3204>
- Pitoy, F. F., Manoppo, M. W., & Hutagalung, I. H. (2023). Family Anxiety While Waiting for a Hospitalized Family Member in the Intensive Care Unit. *Mahesa: Malahayati Health Student Journal*, 3(9), 2718–2726. <https://doi.org/10.33024/Mahesa.V3i9.10930> [In Bahasa]
- Prates, P. E. G., Correa-Júnior, A. J. S., Russo, T. M. D. S., Paraizo-Horvath, C. M. S., Teles, A. A. D. S., & Sonobe, H. M. (2024). Effectiveness of Family Coping Interventions in Improving Problem-Solving Skills in the Care of Children and Adolescent Cancer Survivors during and after Treatment: A Scoping Review. *Nursing reports (Pavia, Italy)*, 14(3), 2153–2178. <https://doi.org/10.3390/nursrep14030161>
- Rai, S., Brown, R., van Haren, F., Neeman, T., Rajamani, A., Sundararajan, K., & Mitchell, I. (2019). Long-term follow-up for psychological stress in Intensive Care (PRICE) survivors: study protocol for a multicentre, prospective observational cohort study in Australian intensive care units. *BMJ open*, 9(1), e023310. <https://doi.org/10.1136/bmjopen-2018-023310>
- Rhoads, L. S., Trikalinos, T. A., Levy, M. M., & Amass, T. (2022). Intensive Care Based Interventions to Reduce Family Member Stress Disorders: A Systematic Review of the Literature. *Journal of critical care medicine (Universitatea de Medicina si Farmacie din Targu-Mures)*, 8(3), 145–155. <https://doi.org/10.2478/jccm-2022-0014>
- Rosenberg K. (2022). High Stress Levels Among Families of ICU Patients Critically Ill with COVID-19. *The American journal of nursing*, 122(8), 62. <https://doi.org/10.1097/01.NAJ.0000855016.54920.76>
- Rückholdt, M., Tofler, G. H., Randall, S., & Buckley, T. (2019). Coping by family members of critically ill hospitalised patients: An integrative review. *International journal of nursing studies*, 97, 40–54. <https://doi.org/10.1016/j.ijnurstu.2019.04.016>
- Rustam, J., & Chaidir, R. (2023). Spirituality and Coping Mechanisms of Patients' Families in the Intensive Care Unit: A Correlation Study. *Jurnal Ners*, 7(2), 1327–1332. <https://doi.org/10.31004/Jn.V7i2.17257> [In Bahasa]
- Scott, P., Thomson, P., & Shepherd, A. (2019). Families of patients in ICU: A Scoping review of their needs and satisfaction with care. *Nursing open*, 6(3), 698–712. <https://doi.org/10.1002/nop2.287>
- Siddiqui, M. A., Rath, L., Pattojoshi, A., Garg, S., & Tikka, S. K. (2024). Stress management in family environment. *Indian journal of psychiatry*, 66(Suppl 2), S245–S254. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_600_23
- Suprayitno, S., Yuniarsih, S. M., & Martani, R. W. (2020). The Relationship Between Family Social Support and Family Coping in Caring for Patients in the Intensive Care Unit. *Pena Jurnal Ilmu Pengetahuan Dan Teknologi*, 34(2), 50–50. <https://doi.org/10.31941/jurnalpena.v34i2.1212> [In Bahasa]
- Utama, M., Dwidiyanti, M., & Wijayanti, D. Y. (2020). Overview of Family Stress Levels of Schizophrenia Patients Based on Demographic Characteristics at RSJD dr. Amino Gondohutomo. *Jurnal Riset Media Keperawatan*, 3(1), 11–17. <https://doi.org/10.51851/jrmk.v3i1.72> [In Bahasa]
- Varghese, M., Kirpekar, V., & Loganathan, S. (2020). Family Interventions: Basic Principles and Techniques. *Indian journal of psychiatry*, 62(Suppl 2), S192–S200. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_770_19
- Wang, X., & Cheng, Z. (2020). Cross-Sectional Studies: Strengths, Weaknesses, and Recommendations. *Chest*, 158(1S), S65–S71. <https://doi.org/10.1016/j.chest.2020.03.012>
- Wolf, B. M., & Fisher, C. L. (2023). Stress, appraisal, and coping theory. In E. Y. Ho, C. L. Bylund, J. C. M. van Weert, I. Basnyat, N. Bol, & M. Dean (Eds.), *The International Encyclopedia of Health Communication*. Wiley. <https://doi.org/10.1002/9781119678816.iehc0669>
- Yang, C., Gao, H., Li, Y., Wang, E., Wang, N., & Wang, Q. (2022). Analyzing the role of family support, coping strategies and social support in improving the mental health of students: Evidence from post COVID-19. *Frontiers in psychology*, 13, 1064898. <https://doi.org/10.3389/fpsyg.2022.1064898>
- Zanetti, T., Stumm, E., & Ubessi, L. (2013). Stress And Coping in Families of Patients in An Intensive Care Unit. *Revista De Pesquisa: Cuidado É Fundamental Online*, 5(2), 3608–3619. <https://doi.org/10.9789/2175-5361.2013v5n2p3608>

Authors' insight

Key points

- Caregivers of ICU patients in Indonesia experience significant stress due to emotional distress, uncertainty about their loved one's condition, and increased caregiving responsibilities.
- Despite the high stress levels, caregivers employ different coping strategies, including seeking social support, relying on religious or spiritual beliefs, and adapting to their changing roles.
- The findings highlight the importance of providing structured emotional and psychological support for caregivers in ICU settings.

Emerging nursing avenues

- What are the primary sources of stress identified among caregivers of patients hospitalized in the ICU in Indonesia settings?
- What coping mechanisms are most commonly employed by caregivers to manage stress related to their family members' hospitalization in the ICU?
- How do the stress levels and coping strategies of caregivers vary based on demographic factors such as age, gender, and relationship to the patient?

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