Community Service

IMPLEMENTATION OF MINDFULNESS THERAPY TO OVERCOME ANXIETY IN PATIENTS' FAMILIES IN THE INTENSIVE CARE UNIT (ICU)

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ABSTRACT

Family members of patients admitted to the Intensive Care Unit (ICU) often experience anxiety triggered by the critical condition of their relatives, limited information, and uncertainty about the patient's prognosis. If left unmanaged, this anxiety may reduce the family's ability to support the patient and disturb their own mental well-being. This community engagement activity aimed to improve family members' understanding of anxiety and to introduce mindfulness therapy as a simple, non-pharmacological strategy for managing emotional distress. The activity was carried out on 20 October 2025 in the ICU waiting room of RSUD Ulin Banjarmasin for 30 minutes, using lectures and interactive discussion supported by an X-Banner and leaflets. The material covered the concept of anxiety, mindfulness therapy, its benefits for families, the basic steps of practice, and tips for daily application. Evaluation was conducted through question-and-answer sessions and an observation sheet. The results showed that participants were enthusiastic, actively engaged, and able to answer more than 80% of the evaluation questions correctly, indicating that the educational objectives were achieved. Mindfulness-based health education is therefore considered effective in improving family knowledge and has the potential to serve as a psychological support strategy that is easy to apply in the ICU setting.

Keywords: Anxiety, Health Education, Intensive Care Unit (ICU), Mindfulness, Patient's Family

INTRODUCTION

Families of patients admitted to the intensive care unit (ICU) often face considerable psychological pressure because of the critical condition of their closest relatives (Halain et al., 2022). The fast-paced ICU environment, complex medical information, limited visiting access, and the uncertain condition of the patient make families vulnerable to anxiety, depression, and stress (Halain et al., 2022). This situation affects not only the emotional well-being of the family but also their ability to provide optimal support to the patient (Halain et al., 2022).

Anxiety is a feeling of fear, worry, or unease that arises from the perception of a threat or pressure, whether real or not (Gkintoni et al., 2025). This reaction is normal, but when it persists for a long time it can adversely affect physical and mental health (Gkintoni et al., 2025). Unmanaged anxiety can trigger negative perceptions, difficulty in decision-making, and obstacles to understanding the medical information conveyed by health workers (Halain et al., 2022). Therefore, interventions to reduce family anxiety become an important aspect of care in the intensive care unit (Halain et al., 2022).

The health education approach is one of the recommended non-pharmacological strategies and has been proven to reduce anxiety and increase the satisfaction of ICU patients' families (Lai et al., 2020). One technique that has the potential to support anxiety management is mindfulness therapy (Iskandar et al., 2025). Mindfulness is a technique of training oneself to be fully present in the current moment by being aware of thoughts, feelings, and bodily sensations without judgment (Ningsih, 2025). This concept originates from meditation practice that has been scientifically adapted to reduce stress and anxiety (Gkintoni et al., 2025).

Mindfulness practice performed regularly can lower stress hormones (cortisol), improve emotional control, enhance sleep quality, and create a calmer atmosphere (Allen et al., 2021). A study conducted by Haller et al. (2021) showed that mindfulness-based interventions are effective in reducing anxiety symptoms across various populations. Mindfulness significantly reduces anxiety, stress, and depression and improves the quality of life of family members who act as caregivers (Han, 2022). In addition to being beneficial, mindfulness is easy to teach and practice without requiring special equipment or cost, making it suitable to be combined with health education based on the needs of ICU patients' families (Iskandar et al., 2025). Based on these conditions, a community service activity in the form of health education about mindfulness therapy for patients' families in the ICU of RSUD Ulin Banjarmasin is needed.

Analysis Problem

Based on the data found and the results of The problem analysis was carried out through direct observation in the ICU waiting room of RSUD Ulin Banjarmasin, informal interviews with the patients' family members, and a literature study. The problems found among the patients' families in the ICU are as follows:

1. Families of patients in the ICU experience anxiety due to the critical condition of the patient, limited information, and uncertainty of the prognosis.
2. Unmanaged anxiety reduces the family's ability to provide support to the patient and disturbs the family's own mental health.
3. The anxiety of families accompanying patients in the hospital still rarely receives specific intervention or education.

Problem Solution

Based on The problem formulated, the

Based on these problems, the proposing team offers a solution in the form of health education and socialization about mindfulness therapy to help patients' families manage anxiety independently, considering that structured education has been proven to reduce the anxiety of ICU patients' families (Lai et al., 2020). This education aims to increase the family's knowledge about anxiety and mindfulness therapy, while equipping them with practical skills in the form of simple exercises that can be applied while accompanying the patient in the ICU.

Solution Which Offered

1. Health education on anxiety experienced by family members of ICU patients.
2. Socialization of mindfulness therapy as a non-pharmacological anxiety management strategy.
3. Demonstration and guided practice of simple mindfulness techniques.
4. Distribution of educational materials (leaflets/booklets/videos) to support independent practice.
5. Evaluation of participants' knowledge and anxiety levels before and after the intervention.

Method Implementation And Evaluation

The method of implementing this community service activity was health education (counseling) conducted face-to-face (offline) for patients' families in the ICU/ICCU of RSUD Ulin Banjarmasin. The activity was held on Monday, 20 October 2025 at 09.15–09.45 WITA and was attended by the families of patients waiting in the ICU waiting room. The material was delivered using lecture and question-and-answer discussion methods supported by X-Banner and leaflet media.

The activity was carried out in several stages. Planning included the preparation of the Counseling Session Plan (SAP), educational material, leaflet production, and X-Banner design. Coordination was carried out with the hospital, including permits, scheduling, and site preparation. The implementation of the education began with an explanation of anxiety, followed by an introduction to mindfulness therapy, a demonstration of the exercise steps (mindful breathing, awareness of thoughts and emotions, and mindful family time), and a short practice by the participants.

Evaluation was carried out on three aspects, namely input evaluation (readiness of the venue, team, media, and SAP), process evaluation (participation and attention of participants and the presenter's mastery of the material), and result evaluation. The result evaluation was measured from the participants' ability to answer questions in the question-and-answer session, with the success indicator being participants able to answer at least 80% of the questions correctly. The instruments used were observation sheets and direct question-and-answer sessions, which were then analyzed descriptively.

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Respondent Characteristics

Characteristic	Frequency (f)	Percentage (%)
Sex		
Male	5	33.3
Female	10	66.7
Age		
18–30	3	20.0
31–45	7	46.7
46–60	4	26.7
>60	1	6.6
Relationship with Patient		
Husband/Wife	6	40
Child	4	26.7
Parent	3	20.0
Sibling	2	13.3
Last Education		
Elementary School (SD)	1	6.7
Junior High School (SMP)	2	13.3
Senior High School (SMA)	8	53.3
Higher Education	4	26.7

Table 1. Respondent characteristics

A total of 15 ICU patient family members participated in the education activity. The majority of participants were female (66.7%), aged 31–45 years (46.7%), and were the patient's husband or wife (40%). Most respondents had senior high school (SMA) as their last level of education (53.3%).

Evaluation Activity Devotion Public

The mindfulness-based health education activity was carried out in the ICU waiting room of RSUD Ulin Banjarmasin and ran smoothly according to the planned schedule. The activity lasted 30 minutes and was divided into three stages, namely preparation and opening (09.15–09.20 WITA), delivery of material (09.20–09.35 WITA), and evaluation and closing (09.35–09.45 WITA). The activity was evaluated comprehensively through three aspects, namely input evaluation, process evaluation, and result evaluation, as described below.

Figure 1. Documentation of the education activity

Input Evaluation

The input evaluation showed that all preparation components were ready before the activity began. The Counseling Session Plan (SAP) and educational media in the form of leaflets and an X-Banner had been prepared one day before implementation, the counseling team arrived early to arrange the location, and the venue in the ICU waiting room was ready for use. This readiness became an important foundation so that the activity could run without technical obstacles and in accordance with the planned flow.

Process Evaluation

The process evaluation showed good participant involvement during the activity. Participants paid attention to the material delivered by the presenter, followed the course of the activity to completion, and participated actively by asking and

answering questions during the discussion session. Participant attendance met the set target, and no participant left the venue during the activity. From the presenter's side, the material was delivered clearly, interactively, and in accordance with what was attached in the SAP so that participants could more easily understand the content of the counseling. The relaxed discussion atmosphere also made the families feel comfortable sharing their experiences regarding the conditions they faced while accompanying the patient.

Result Evaluation

The result evaluation was measured from the participants' ability to answer the questions posed during the question-and-answer session. Participants were able to re-explain the meaning of mindfulness therapy as a technique to reduce stress and anxiety, mention its benefits in reducing feelings of worry, and mention the steps of the exercise, namely mindful family time and deep-breathing exercises. Participants were able to answer more than 80% of the questions correctly so that the established success indicator was achieved. The ability to re-explain the material shows that the information conveyed through the lecture, leaflet, and X-Banner was well received and understood by the patients' families.

Discussion

The achievement of the objective of this counseling is important considering that some participants may not have previously received information about anxiety management, especially mindfulness therapy. The increase in family understanding is expected to have an impact on reducing the level of anxiety, because better knowledge about the condition and how to manage emotions can reduce the uncertainty and worry that become the main source of family anxiety in the ICU (Lai et al., 2020).

Psychologically, mindfulness works by directing attention to the present experience and accepting circumstances without judgment, so that individuals do not become absorbed in excessive thoughts about bad possibilities in the future (Gkintoni et al., 2025). This exercise helps reduce ruminative thoughts that are one of the triggers of anxiety (Gkintoni et al., 2025). From the perspective of coping theory, anxiety arises when an individual judges the demands of a situation to exceed their own capacity (Lazarus & Folkman, 1984). Mindfulness helps families reframe this appraisal and manage emotions so that they are better able to adapt to critical situations they cannot change (Setyawan et al., 2025).

Physiologically, mindful breathing exercises activate the relaxation response that decreases sympathetic nervous activity and increases parasympathetic activity, so that heart rate and breathing rate slow down and the body feels more relaxed (Ebrahimi & Adib-Hajbaghery, 2022). This activation of the relaxation response is also associated with a decrease in stress hormone levels such as cortisol (Allen et al., 2021). This combination of psychological and physiological effects explains why mindfulness can provide a sense of calm to families facing critical situations (Paduli, 2025).

The effectiveness of mindfulness therapy in reducing the anxiety of patients' families in the ICU is also supported by empirical evidence from previous research (Setyawan et al., 2025). In that study, before the intervention all respondents experienced anxiety at a mild to moderate level, whereas after the mindfulness-based intervention most experienced a reduction, and some no longer experienced anxiety at all (Setyawan et al., 2025).

The Wilcoxon test in the supporting study showed a significance value of 0.000 ($p < 0.05$), meaning that there was a significant difference between the level of anxiety before and after the intervention (Setyawan et al., 2025). The change in the proportion of respondents from the moderate to the mild category, as well as the

emergence of a group without anxiety, shows that the improvement was not only statistically significant but also clinically meaningful. This finding strengthens the scientific basis that mindfulness-based education and exercise are relevant to be applied to ICU patients' families (Iskandar et al., 2025). Nevertheless, some respondents remained in the mild anxiety category after the intervention, indicating that family anxiety is also influenced by the patient's condition that has not improved and the stressful ICU situation, so that it can be fluctuating (Halain et al., 2022).

The three techniques taught in this activity play complementary roles. Mindful breathing calms the mind and body through slow and regular breath regulation, making it suitable as first aid when families feel anxious while waiting for information about the patient's condition (Ebrahimi & Adib-Hajbaghery, 2022). Even a short exercise of a few minutes has been proven to improve concentration and provide a calming effect (Jain & Markan, 2022). The exercise of being aware of thoughts and emotions trains families to recognize the feelings that arise without reacting excessively, for example by realizing "I am feeling anxious" without judgment, so that emotional responses can be managed better (Gkintoni et al., 2025). Meanwhile, mindful family time strengthens the relationships between family members and provides important social support during the treatment period (Iskandar et al., 2025). The simplicity of these three exercises makes them easy to practice independently without requiring special equipment or cost, so they are suitable to be applied in the limited ICU waiting room environment.

Mindfulness therapy is one of several non-pharmacological approaches that can be used to reduce the anxiety of families of critically ill patients (Iskandar et al., 2025). Benson's relaxation technique, for example, has been proven to reduce anxiety in family caregivers of patients with serious medical conditions (Ebrahimi & Adib-Hajbaghery, 2022). Educational activities based on Benson therapy for ICU patients' families in Banjarbaru also showed a fairly sharp increase in family knowledge after education (Hafifah et al., 2025), while the combination of mindfulness and dhikr was reported to be effective in reducing the anxiety of families of terminal-stage patients (Setyawan et al., 2025). The similarity of results among these various approaches shows that the core of intervention success lies in the structured training of the relaxation response and the strengthening of the psychological and spiritual aspects of the family. Therefore, mindfulness can be chosen as one option, or combined with spiritual elements according to the family's beliefs, to provide a more comprehensive calming effect.

The success of delivering the material was also inseparable from the choice of educational method and media. The use of structured educational media such as leaflets and an X-Banner combined with question-and-answer discussion can increase understanding while reducing the anxiety of patients' families in the intensive care unit (Lai et al., 2020). This combination of oral and visual information channels makes the message easier for the target audience to understand and remember, while also presenting more interactive two-way communication.

The level of understanding and the family's response to education is also influenced by several factors (Talibo, 2023). Participant characteristics such as age, education level, relationship with the patient, and previous experience in facing critical situations also influence emotional readiness and the ability to absorb the material (Halain et al., 2022). In addition to individual factors, the ICU environment full of medical equipment, alarm sounds, and limited access to visit the patient also increases the family's emotional pressure (Halain et al., 2022). This unchanging environmental condition confirms that the improvement of the family's psychological

condition is determined more by the coping strategies they possess, so that mindfulness education becomes relevant provision (Lazarus & Folkman, 1984).

The results of this activity indicate that mindfulness therapy education can be integrated into nursing practice in the ICU as part of care that pays attention to the psychological needs of the family (Halain et al., 2022). Nurses can act as facilitators by providing simple guidance on mindfulness practice to families in between services. With a better psychological condition, families are expected to be able to provide more optimal support to the patient during the treatment period.

To expand the sustainability and scalability of the program, hospitals can provide brief training for health workers on how to deliver mindfulness education, so that counseling can be carried out concisely (10–15 minutes) and integrated into the routine service flow, for example during visiting hours or before families receive information from the doctor. The use of supporting media such as leaflets, banners, or short videos can also support family understanding and ensure that the material remains accessible at any time. Because it does not require large costs and is easy to do, this approach has the potential to become a long-term investment in building family resilience while improving the quality of family-based services in hospitals.

This activity has several limitations that need attention. The evaluation carried out focused on increasing family understanding through the question-and-answer session, so that the reduction in participants' anxiety levels was not measured directly in this activity but was based on evidence from supporting research. In addition, the activity was carried out in a short time, without a comparison group, and with a limited number of participants, so that its long-term effect cannot yet be assessed. Therefore, further activities accompanied by measurement of anxiety levels before and after education as well as continuous mentoring are needed, so that the benefits of mindfulness therapy for ICU patients' families can be evaluated more comprehensively. Despite these limitations, mindfulness-based education is worth considering as a sustainable non-pharmacological approach for patients' families in the intensive care unit

Bibliography

Allen, J. G., Romate, J., & Rajkumar, E. (2021). Mindfulness-based positive psychology interventions: A systematic review. BMC Psychology, 9, 116. https://doi.org/10.1186/s40359-021-00618-2

Ebrahimi, B., & Adib-Hajbaghery, M. (2022). Effect of Benson's relaxation technique on anxiety in family caregivers of patients with cancer: A randomized controlled trial. Nursing and Midwifery Studies, 11(1), 37–43. https://doi.org/10.4103/nms.nms_22_21

Gkintoni, E., Vassilopoulos, S. P., & Nikolaou, G. (2025). Mindfulness-based cognitive therapy in clinical practice: A systematic review of neurocognitive outcomes and applications for mental health and well-being. Journal of Clinical Medicine, 14(5), 1703. https://doi.org/10.3390/jcm14051703

Hafifah, I., Pashar, I., Ayu, H. S., Prawira, R., Risdianto, Mursalin, M. K., Norwaqi'ah, Riza, M., & Nugroho, A. D. Y. (2025). Implementasi pendidikan kesehatan berbasis terapi Benson untuk mengurangi kecemasan keluarga pasien di ruang perawatan intensif. Jurnal Pesut: Pengabdian untuk Kesejahteraan Umat, 3(2), 75–84.

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

Haller, H., Breilmann, P., Schröter, M., Dobos, G., & Cramer, H. (2021). A systematic review and meta-analysis of acceptance-

and mindfulness-based interventions for DSM-5 anxiety disorders. Scientific Reports, 11(1), Article 20385. https://doi.org/10.1038/s41598-021-99882-w

Han, A. (2022). Effects of mindfulness-based interventions on depressive symptoms, anxiety, stress, and quality of life in family caregivers of persons living with dementia: A systematic review and meta-analysis. Research on Aging, 44(7–8), 494–509. https://doi.org/10.1177/01640275211043486

Iskandar, S., Rekawati, E., & Kuntarti, K. (2025). Mindfulness intervention reduces care burden status of family caregivers for the elderly: A systematic review. Indonesian Journal of Global Health Research, 7(2), 459–464. https://doi.org/10.37287/ijghr.v7i2.5375

Jain, M., & Markan, C. M. (2022). Effect of brief meditation intervention on attention: An ERP investigation [Preprint]. arXiv. https://doi.org/10.48550/arXiv.2209.12625

Lai, V. K. W., Ho, K. M., Wong, W. T., Leung, P., Gomersall, C. D., Underwood, M. J., Joynt, G. M., & Lee, A. (2020). Effect of preoperative education and ICU tour on patient and family satisfaction and anxiety in the intensive care unit after elective cardiac surgery: A randomised controlled trial. BMJ Quality & Safety, 30(3), 228–235. https://doi.org/10.1136/bmjqs-2019-010667

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company.

Ningsih, D. R. (2025). Penerapan Mindfulness dalam Menjaga Kestabilan Emosi. Al-Isyrof: Jurnal Bimbingan Konseling Islam,