Anxiety Education Based on Community Nursing and Islamic Values in Chronic Disease Patients

Nur Andani, Rasdiyanah, Ilhamsyah
Nursing Study Program, Faculty of Medicine and Health Sciences, UIN Alauddin Makassar
E-mail: nur.andani@uin-alauddin.ac.id

Abstract
Anxiety in patients with chronic diseases often affects treatment adherence and quality of life. The purpose of this community service was to improve knowledge and skills in anxiety management based on community nursing and Islamic values among patients with chronic diseases. The partners were patients and families temporarily residing at Shelter Harapan (Patient Shelter) Dompet Dhuafa South Sulawesi, with a total of 27 participants. The methods included group education, interactive discussions, demonstration of deep breathing relaxation techniques, and spiritual reinforcement through Islamic values. Evaluation was conducted using pre-test and post-test as well as participatory observation. The results showed an increase in the mean knowledge score from 56.3 to 82.7 (46.9%), and an improvement in relaxation technique practice skills from 40.7% to 85.2%. In addition, 88.9% of participants reported a decrease in subjective anxiety levels after the intervention. This activity indicates that integrated education is effective in enhancing the capacity of patients and families in managing anxiety in chronic disease conditions.
Keywords: Anxiety, Community Nursing, Chronic Disease Management, Islamic Values

Abstrak
Kecemasan pada penderita penyakit kronis seringkali memengaruhi kepatuhan terapi dan kualitas hidup. Tujuan pengabdian ini adalah meningkatkan pengetahuan dan kemampuan manajemen kecemasan berbasis keperawatan komunitas dan nilai Islam pada penderita penyakit kronis. Mitra pengabdian adalah pasien dan keluarga yang tinggal sementara di Shelter Harapan (Rumah Singgah Pasien) Dompet Dhuafa Sulawesi Selatan dengan jumlah peserta sebanyak 27 orang. Metode yang digunakan meliputi edukasi kelompok, diskusi interaktif, demonstrasi teknik relaksasi napas dalam, serta penguatan spiritual melalui pendekatan nilai-nilai Islam. Evaluasi dilakukan menggunakan pre-test dan post-test serta observasi partisipatif. Hasil menunjukkan peningkatan rerata skor pengetahuan dari 56,3 menjadi 82,7 (peningkatan 46,9%), serta peningkatan kemampuan praktik teknik relaksasi dari 40,7% menjadi 85,2%. Selain itu, sebanyak 88,9% peserta melaporkan penurunan tingkat kecemasan subjektif setelah intervensi. Kegiatan ini menunjukkan bahwa edukasi terintegrasi efektif dalam meningkatkan kapasitas pasien dan keluarga dalam mengelola kecemasan pada kondisi penyakit kronis.
Kata Kunci: Kecemasan, Keperawatan komunitas, Manajemen Penyakit Kronis, Nilai Islam

A. INTRODUCTION

Chronic diseases remain a major global health problem that significantly affects individuals' quality of life, including physical, psychological, social, and spiritual aspects. Patients with chronic conditions such as diabetes mellitus, hypertension, chronic kidney disease, and cancer often experience anxiety due to prolonged illness, uncertainty about prognosis, and the demands of long-term treatment. Unmanaged anxiety can reduce treatment adherence, worsen health outcomes, and increase the burden on families. Evidence indicates that approximately 30–50% of patients with chronic diseases experience varying levels of anxiety, which contributes to a significant decline in overall well-being (World Health Organization, 2021).

The target population of this community service activity consisted of patients with chronic diseases and their accompanying family members. Quantitatively, a total of 27 participants were involved, with 63% being patients and 37% family members. Most participants were adults to older adults, with diverse educational backgrounds and predominantly middle-to-lower socioeconomic status. The majority had been living with chronic illness for more than one year and demonstrated limited ability to manage anxiety independently. This condition is further compounded by limited access to comprehensive health information, low health literacy, and the lack of integration of spiritual approaches in routine care.

From a social and environmental perspective, the temporary residential setting of patients provides a strong potential for building group-based social support. Interactions among patients and families create opportunities for participatory educational interventions. In addition, religious values embraced by most participants represent an important resource for strengthening psychosocial and spiritual approaches to anxiety management. A community nursing approach that integrates biological, psychological, social, and spiritual dimensions is therefore highly relevant to enhance the capacity of individuals and families in coping with chronic illness.

The main problem identified is the suboptimal level of knowledge and skills among patients and families in managing anxiety independently and sustainably. Existing interventions tend to focus primarily on medical aspects, while community-based educational and spiritually integrated approaches are not yet widely implemented in a structured manner. Therefore, a community service initiative is needed to address this gap through structured, contextual, and value-based education.

The objective of this community service activity is to improve the knowledge and skills of patients and families in managing anxiety through a community nursing approach integrated with Islamic values. Specifically, this activity aims to provide an understanding of anxiety in chronic illness, train participants in anxiety management techniques such as deep breathing relaxation, and strengthen spiritual aspects as adaptive coping mechanisms.

A review of the literature indicates that community-based health education is effective in improving self-management among patients with chronic diseases (Lorig & Holman, 2024). Psychosocial interventions, including relaxation techniques, have been shown to significantly reduce anxiety levels (Varvogli & Darviri, 2024). In nursing practice, a holistic approach that includes spiritual dimensions plays a crucial role in

enhancing patient well-being (Puchalski et al., 2022). The integration of Islamic values, such as trust in God (tawakkul), patience (sabr), and remembrance (dhikr), can serve as effective psychological coping resources in managing stress and anxiety (Koenig, 2022). Therefore, this community service represents the translation of research findings into practice by integrating community nursing and spirituality to improve the quality of life of patients with chronic diseases.

In conclusion, this activity is expected to contribute significantly to enhancing the capacity of patients and families in managing anxiety independently and to serve as a replicable model for similar community based interventions.

B. METHODS

The community service employed a participatory educational approach based on community nursing integrated with Islamic values. The implementation consisted of three main stages: preparation, implementation, and evaluation. During the preparation stage, participants' needs were identified through initial observations and brief interviews to assess their level of knowledge and anxiety conditions. Educational materials, learning media, and evaluation instruments were then developed according to participants characteristics.

The implementation stage was conducted through group-based education involving both patients and their families actively. The methods included interactive lectures, group discussions, demonstrations, and hands-on practice. The materials covered concepts of anxiety in chronic diseases, the impact of anxiety on health, anxiety management techniques such as deep breathing relaxation, and strengthening spiritual coping through Islamic values such as patience (sabr), trust in God (tawakkul), and remembrance (dhikr). The activity was delivered in a structured session complemented by guided practice.

The knowledge questionnaire on anxiety consisted of 15 multiple-choice items covering the definition, causes, symptoms, impacts, and management of anxiety. Each correct answer was scored as 1 and incorrect answers as 0, resulting in a total score ranging from 0 to 15. Prior to implementation, the questionnaire underwent content validation by three experts in community nursing and mental health nursing. The content validity index (CVI) was reviewed to ensure the relevance and clarity of each item. A pilot test involving participants with similar characteristics was also conducted to assess readability and comprehensibility.

Anxiety levels were measured using a simple subjective anxiety rating scale ranging from 0 to 10, where 0 indicated no anxiety, 1–3 mild anxiety, 4–6 moderate anxiety, 7–8 severe anxiety, and 9–10 very severe anxiety. Participants were asked to self-rate their current anxiety level before and after the educational intervention and relaxation practice.

Relaxation practice skills were assessed using an observation checklist completed by trained observers, namely community nursing lecturers and nursing students who participated in the program implementation. The checklist was developed based on the standard procedural steps of progressive muscle relaxation and deep breathing techniques. It consisted of 10 observable indicators, including preparation, body positioning, breathing technique, muscle contraction and relaxation sequence, concentration during practice, and completion of the session. Each indicator was scored as "performed correctly" (1) or "not performed correctly" (0), yielding a total score range of 0–10.

The observation checklist was developed using established procedural guidelines for relaxation techniques from mental health nursing references and relevant clinical practice manuals. Before use, the checklist was reviewed by experts to ensure content validity and consistency with the intervention protocol. Observers were provided with standardized assessment guidelines to maintain uniformity in scoring during data collection.

Evaluation of the outcomes was conducted using both quantitative and qualitative approaches. Quantitatively, pre-test and post-test assessments were used to measure improvements in participants' knowledge, while skills were evaluated through direct observation during practice. Qualitatively, evaluation was based on participant feedback regarding changes in perception, comfort, and ability to manage anxiety.

The level of achievement of the program was measured through indicators such as increased knowledge, positive changes in attitudes toward anxiety management, and improved skills in practicing relaxation techniques. Additionally, success was assessed from social aspects, including enhanced peer support among participants, and from spiritual aspects, reflected in increased awareness of utilizing religious values as coping mechanisms. This method is expected to produce a comprehensive impact on improving the capacity of individuals and families in managing anxiety associated with chronic diseases.

C. RESULTS AND ACHIEVEMENT OF OUTCOMES

The results of this community service activity indicate a significant improvement in participants' knowledge, skills, and anxiety levels after the implementation of a participatory educational intervention based on community nursing integrated with Islamic values. The activity involved 27 participants consisting of patients with chronic diseases and their family members. Evaluation was conducted by comparing pre-test and post-test results.

Table 1. Pre- and Post-Intervention Measurement Results and Score Interpretation

Indicator	Instrument Score Range (Min–Max)	Interpretation of Higher Score	Pre-Test Mean Score	Post-Test Mean Score	Absolute Change	Percentage Change
Knowledge of anxiety	0–100	Higher score indicates better knowledge	56.3	82.7	+26.4	+46.9%
Deep breathing relaxation skills	0–100	Higher score indicates better relaxation practice skills	40.7	85.2	+44.5	+109.3%
Subjective anxiety level	0–100	Higher score indicates greater anxiety	72.5	48.3	−24.2	−33.4%

The table above illustrates a comparison of participants' conditions before and after the intervention using pre-test and post-test measurements. The knowledge of anxiety indicator shows a substantial increase from a mean score of 56.3 in the pre-test to 82.7 in the post-test, reflecting a 46.9% improvement. This indicates that participants gained a better understanding of anxiety, including its causes, symptoms, and impact on chronic illness. The deep breathing relaxation skills also demonstrated notable improvement, increasing from 40.7% before the intervention to 85.2% after the intervention, with a 44.5% increase. This suggests that most participants were able to correctly practice the relaxation technique following education and guided training sessions.

The subjective anxiety level showed a decrease from 72.5 in the pre-test to 48.3 in the post-test, indicating a reduction of 33.4%. This decline reflects a positive outcome, as lower scores represent reduced anxiety levels among participants after receiving the intervention. Overall, these results confirm that the participatory educational approach based on community nursing and integrated Islamic values was effective in improving

knowledge, enhancing practical skills, and reducing anxiety among participants with chronic diseases and their families.

Figure 1. Education of anxiety Integration of Islamic Values

Figure 2. Breathing Relaxation Skills

Figure 3. Participants and Organizing Team in a Group Photo Session

This community service activity represents the dissemination of knowledge, particularly in the field of community nursing integrated with Islamic values, aimed at improving the ability of patients with chronic diseases and their families to manage anxiety. The results demonstrate significant improvements in knowledge, skills, and a reduction in anxiety levels among participants. This indicates that the participatory educational intervention not only facilitates knowledge transfer but also contributes to behavioral change and enhances individuals' adaptive capacities in dealing with chronic conditions.

This activity provided direct benefits in the form of increased understanding of anxiety and its management. The 46.9% increase in knowledge scores indicates that the educational methods applied were effective in improving participants' health literacy. This finding is consistent with the theory that community-based health education enhances self-efficacy and self-management among patients with chronic diseases (Lorig & Holman, 2017). Furthermore, the 44.5% improvement in deep breathing relaxation skills suggests that demonstration and hands-on practice are effective strategies for enhancing participants' psychomotor abilities.

The 33.4% reduction in anxiety levels serves as a key indicator that the intervention had a positive impact not only on cognitive and skill aspects but also on participants' psychological well-being. This aligns with evidence that relaxation techniques, particularly deep breathing exercises, are effective in reducing anxiety by activating the parasympathetic nervous system (Varvogli & Darviri, 2024). The integration of Islamic values such as remembrance, patience, and trust in God also played a significant role in strengthening spiritual coping mechanisms, which are known to promote emotional stability and reduce stress (Koenig, 2022).

From a social perspective, the activity enhanced interaction and support among participants. The group-based approach facilitated the sharing of experiences and the development of social support systems, which are essential factors in the successful management of chronic diseases. This is in line with community nursing principles that emphasize community empowerment through active participation and social support as key elements in health promotion (Stanhope & Lancaster, 2022).

In terms of added value, this activity contributed to positive behavioral changes, particularly in promoting independent and sustainable anxiety management practices. Economically, improved self-management has the potential to reduce reliance on curative healthcare services, thereby lowering long-term treatment costs. From a policy perspective, the outcomes of this activity may serve as a basis for developing community-based educational programs integrated with spiritual approaches in healthcare services.

The indicators of achievement of the activity's objectives include: (1) increased knowledge as measured by pre-test and post-test scores, (2) improved relaxation skills, (3) reduced anxiety levels, and (4) positive changes in attitudes and awareness toward self-management. The success of the program was also supported by active participant engagement throughout the educational sessions.

Compared to similar community service activities and studies, these findings are consistent with evidence showing that community-based and holistic interventions effectively improve the quality of life of patients with chronic diseases. An integrative approach that combines physical, psychological, social, and spiritual dimensions is more effective than approaches focusing solely on medical aspects (Puchalski et al., 2024).
This activity is expected to foster sustainable adaptive behaviors among patients and their families in managing chronic conditions. The findings of this program are consistent with previous studies demonstrating that structured health education interventions significantly improve patients' knowledge, self-management abilities, and adherence to treatment recommendations (Allegrante et al., 2019; Lorig & Holman, 2003). Similarly, community-based health promotion programs have been shown to enhance self-efficacy and empower families to actively participate in disease management, thereby improving health outcomes and quality of life (World Health Organization [WHO], 2022).

Compared with similar community service initiatives focusing solely on patient education, this program emphasized the active involvement of both patients and family members. Family participation is considered a key factor in sustaining behavioral changes because family members often serve as primary caregivers and sources of emotional support for individuals living with chronic illnesses (Rosland et al., 2022). Therefore, the educational approach implemented in this activity may provide greater long-term benefits in promoting treatment adherence and preventing disease-related complications.

The broader societal impact of this initiative includes increased community awareness regarding chronic disease management, reduced dependence on curative health services, and strengthened community capacity to engage in preventive health behaviors. In the long term, improved self-management among patients with chronic conditions may contribute to reduced healthcare expenditures, lower rates of hospitalization, and enhanced community well-being. Furthermore, the educational model applied in this program has the potential to be replicated in other communities with similar characteristics, thereby supporting sustainable public health development and community empowerment. Thus, this community service initiative contributes not only to individual outcomes but also to broader improvements in population health and healthcare system efficiency.

D. CONCLUSION

This community service activity demonstrates that a participatory educational approach based on community nursing integrated with Islamic values is effective in improving knowledge, skills, and reducing anxiety levels among patients with chronic diseases and their families. Improvements across cognitive, psychomotor, and affective domains indicate that the intervention successfully addressed the primary issue of limited capacity for independent anxiety management.

Overall, the activity achieved its intended objectives, as evidenced by significant improvements in pre-test and post-test results, enhanced ability to perform relaxation techniques, and positive changes in participants' attitudes toward anxiety management. Furthermore, the integration of Islamic values strengthened spiritual coping mechanisms, which are essential components of a holistic community nursing approach.

This community service program contributes to strengthening community-based chronic disease management through the integration of patient and family education. The program highlights the important role of nursing interventions in enhancing health literacy, fostering family engagement, and promoting self-management practices among individuals living with chronic conditions. Furthermore, the educational approach implemented in this initiative provides a practical model that can support community nursing services and health promotion programs in similar settings. The integration of patients and family members within the educational process represents an innovative strategy for empowering communities and supporting sustainable public health efforts. This contribution may serve as a valuable reference for healthcare providers, nursing educators, and policymakers seeking to develop family-centered interventions for chronic disease management at the community level.

E. ACKNOWLEDGEMENT

Gratitude was to all parties who supported the implementation of this community service activity. Appreciation is extended to all participants for their active involvement throughout the program. Gratitude is also conveyed to the management of the patient shelter for facilitating the activity effectively. In addition, the authors acknowledge the contributions of the implementation team for their dedication in the planning, execution, and evaluation stages of the program. The support from all these parties was invaluable to the success of this activity.

REFRENCES

Alligood, M. R. (2018). *Nursing theorists and their work* (9th ed.). Elsevier.

American Psychological Association. (2024). *Publication manual of the American Psychological Association* (7th ed.). American Psychological Association. https://doi.org/10.1037/0000165-000

Bulechek, G. M., Butcher, H. K., Dochterman, J. M., & Wagner, C. (2022). *Nursing interventions classification (NIC)* (7th ed.). Elsevier.

Koenig, H. G. (2022). *Religion and mental health: Research and clinical applications*. Academic Press. https://doi.org/10.1016/C2015-0-04102-6

Hickman, R. L., & Douglas, S. L. (2023). Chronic illness and family caregiving: Challenges and interventions. *Journal of Family Nursing, 26*(3), 180–192. https://doi.org/10.1177/1074840720921190

Kozier, B., Erb, G., Berman, A., & Snyder, S. (2014). *Fundamentals of nursing: Concepts, process, and practice* (10th ed.). Pearson.

Lorig, K. R., & Holman, H. (2024). Self-management education: History, definition, outcomes, and mechanisms. *Annals of Behavioral Medicine, 26*(1), 1–7. https://doi.org/10.1207/S15324796ABM2601_01

Moorhead, S., Johnson, M., Maas, M. L., & Swanson, E. (2014). *Nursing outcomes classification (NOC)* (6th ed.). Elsevier.

NANDA International. (2024). *NANDA International nursing diagnoses: Definitions and classification 2021–2023*. Thieme.

Polit, D. F., & Beck, C. T. (2024). *Nursing research: Generating and assessing evidence for nursing practice* (11th ed.). Wolters Kluwer.

Potter, P. A., Perry, A. G., Stockert, P. A., & Hall, A. M. (2023). *Fundamentals of nursing* (10th ed.). Elsevier.

Puchalski, C. M., Vitillo, R., Hull, S. K., & Reller, N. (2022). Improving the spiritual dimension of whole person care: Reaching national and international consensus. *Journal of Palliative Medicine, 17*(6), 642–656. https://doi.org/10.1089/jpm.2014.9427

Stanhope, M., & Lancaster, J. (2024). *Public health nursing: Population-centered health care in the community* (10th ed.). Elsevier.

Taylor, S. E. (2018). *Health psychology* (10th ed.). McGraw-Hill Education.

Varvogli, L., & Darviri, C. (2022). Stress management techniques: Evidence-based procedures that reduce stress and promote health. *Health Science Journal, 5*(2), 74–89.

World Health Organization. (2021). *Noncommunicable diseases progress monitor*. World Health Organization. https://www.who.int