

Menopause Health Education and Dhikr Techniques for Managing Menopausal Anxiety at 'Aisyiyah Member in Wonosari, Bondowoso

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Abstrak

Sebagai satu fase alami, menopause sering kali disertai perubahan fisik dan psikologis, termasuk munculnya kecemasan akibat fluktuasi hormon. Kurangnya pemahaman tentang menopause dan strategi untuk mengelola kecemasan dapat berdampak negatif pada kesejahteraan wanita. Program pengabdian masyarakat ini bertujuan untuk meningkatkan pengetahuan wanita tentang menopause dan memperkenalkan zikir sebagai metode spiritual untuk mengelola kecemasan. Peserta berjumlah 43 perempuan dari 'Aisyiyah Cabang Wonosari, Bondowoso, yang dipilih secara purposive, aktif dalam kegiatan dan berada pada usia perimenopause hingga menopause. Rekrutmen dilakukan melalui koordinasi dengan pengurus 'Aisyiyah dan bersedia mengikuti kegiatan ini. Program intervensi terdiri atas sesi pendidikan kesehatan menopause yang mencakup materi mengenai perubahan hormonal, gejala fisik dan emosional, risiko kesehatan, serta strategi penanganannya melalui ceramah interaktif dan tanya jawab, disertai media presentasi visual untuk memudahkan pemahaman. Selanjutnya, peserta mengikuti pelatihan praktik zikir yang dipandu secara langsung, mencakup teknik pernapasan dan repetisi lafaz zikir. Evaluasi dilakukan dengan menggunakan pretest dan posttest untuk menilai peningkatan pengetahuan dan perubahan tingkat kecemasan peserta. Hasil menunjukkan peningkatan pengetahuan yang signifikan, dengan jumlah peserta pada kategori pengetahuan baik meningkat dari 16 menjadi 35 orang. Intervensi zikir juga efektif menurunkan kecemasan, terlihat dari meningkatnya peserta tanpa kecemasan dari 10 menjadi 22 orang dan hilangnya kategori kecemasan berat. Temuan ini menegaskan bahwa kombinasi edukasi kesehatan menopause dan praktik zikir dapat menjadi strategi yang efektif dan aplikatif untuk membantu perempuan menghadapi perubahan hormonal dengan lebih adaptif dan percaya diri. Program ini memiliki potensi untuk direplikasi di komunitas lain sebagai upaya peningkatan kesejahteraan perempuan menopausal dalam cakupan yang lebih luas.

Kata kunci: kecemasan; layanan masyarakat; menopause; pendidikan kesehatan; zikir

Abstract

Hormonal fluctuations during menopause often cause physical and psychological changes, including increased anxiety. A lack of understanding about menopause and strategies for managing anxiety can negatively impact women's well-being. This community service program aims to increase women's knowledge about menopause and introduce dhikr (remembrance of God) as a spiritual method for managing anxiety. Participants were 43 women from the Wonosari of 'Aisyiyah, Bondowoso. They were purposively selected active women in the perimenopausal to menopausal age range. Recruitment was conducted through coordination with 'Aisyiyah administrators and those willing to participate in this activity. The intervention program consisted of a menopausal health education session covering

hormonal changes, physical and emotional symptoms, health risks, and coping strategies through interactive lectures and Q&A sessions, accompanied by visual presentations to facilitate understanding. Next, participants engaged in a guided dhikr practice session that covered breathing techniques and the repetition of dhikr phrases. We used pretests and posttests to assess increases in participants' knowledge and changes in their anxiety levels. Results showed a significant increase in knowledge, with the number of participants in the good knowledge category increasing from 16 to 35. The dhikr intervention was also effective in reducing anxiety, as evidenced by the increase in participants with no anxiety from 10 to 22 and the disappearance of the severe anxiety category. These findings confirm that the combination of menopausal health education and dhikr practice can be an effective and applicable strategy to help women navigate hormonal changes more adaptively and confidently. This program has the potential to be replicated in other communities to improve the well-being of menopausal women more broadly.

Keywords: *anxiety; community service; dhikr; health education; menopause*

INTRODUCTION

Wonosari is a sub-district in Bondowoso Regency, East Java Province, Indonesia. Several essential aspects that affect women's health and well-being in the 'Aisyiyah Member in Wonosari include limited access to health services, low levels of education and awareness, strong social support, the role of women in the community, mental and emotional health, prevention of serious diseases, cultural and traditional values, and efforts to improve women's quality of life. Wonosari is an area with limited access to complete health facilities. The level of awareness of women's health issues, such as menopause, in rural areas, such as Wonosari, Bondowoso, is still low. The lack of information disseminated and the taboos still in society cause women in this area to hold back from discussing the changes they experience. Many women may not have direct access to adequate information and care related to menopause.

According to the World Health Organization (WHO), menopause is defined as the permanent cessation of menstrual cycles for at least 12 consecutive months (Ambikairajah et al., 2022; Crandall et al., 2023; Ilankoon et al., 2021; Santoro et al., 2021). Menopause represents a natural biological transition marked by significant changes in women's physical, emotional, and mental health (Aljumah et al., 2023; Harper et al., 2022; Munn et al., 2022). Globally, the average age at which women experience menopause ranges between 49 and 52 years in high-income countries. Despite its universal occurrence, historical efforts to educate women about menopause have been limited, resulting in a long-standing knowledge gap. Recent evidence highlights the persistence of this education gap. A survey of women over 40 years old reported that many perimenopausal women felt uninformed about menopause and expressed frustration about having to undergo this transition with insufficient knowledge (Harper et al., 2022).

A study of women aged 40 and over found that their (limited) knowledge was mostly from relatives (26.8%) and friends (25.5%), rather than from formal educational sources (Bakouei et al., 2013). A relationship between women's knowledge about menopause and their education, socioeconomic and occupational status, and ethnicity has been shown (Hamid et al., 2014). There is limited research on younger women's education and knowledge about menopause. One study conducted in Egypt on women of reproductive age showed that they had minimal knowledge about menopause, and another study conducted in Jordan found that although women knew the concept of menopause, there was little

awareness of the consequences of menopause. (Alshogran et al., 2021; Elkazeh & El-Zeftawy, 2015).

Several studies in Indonesia have also demonstrated the low level of knowledge among women regarding menopause. Susanti and Indrajati (2021) in Magelang found that nearly half of premenopausal women had poor knowledge about menopause and were not adequately prepared for the transition. Similarly, Zubaidah et al. (2022) in East Martapura reported that more than one-third of menopausal women had low knowledge levels, and this group tended to experience more severe physical and psychological symptoms. In addition, a study by Hutagaol (2023) in Sarolangun revealed that 60% of premenopausal women had insufficient knowledge, which was significantly associated with negative attitudes toward physical changes during menopause.

'Aisyiyah Member in Wonosari, Bondowoso, is a women's organisation that focuses on social and religious activities in the community. This partner has 38 members, most of whom (76%) are aged 40-60 years, and the majority are housewives who are less economically productive but active in social and religious activities. Most of the partner members are in the premenopause to menopause phase. Based on the initial survey and discussions with members of Aisyiyah Member in Wonosari, the majority of members complained of premenopausal symptoms, such as hot flashes, fatigue, emotional instability, sleep disturbances, and anxiety. However, their understanding of this condition remains very limited. Only a small number of them actively consult medical personnel. This causes many 'Aisyiyah members in Wonosari, Bondowoso to be unprepared to face this change mentally and physically. In addition, anxiety and stress due to hormonal changes are some of the most significant problems experienced by partner members.

In managing this anxiety, many members of the partner community tend to rely on general social interactions and routine religious activities for emotional support. While these practices offer comfort, they are often informal and not specifically designed to address the psychological challenges associated with the menopausal transition. Notably, most women have not been introduced to or have not intentionally implemented structured spiritual coping techniques (such as *dhikr*) that have been shown to promote physiological relaxation, reduce stress, and enhance emotional regulation.

Based on this, the main problems faced by the partner community include a limited understanding of menopause, its symptoms, and appropriate self-management strategies. In addition, they lack specific skills for managing anxiety or stress related to hormonal changes, despite showing interest in incorporating spiritual-based approaches. These gaps indicate the need for structured education and practical techniques to support their well-being. This Community Service aims to empower women in the menopausal phase by increasing their physical and psychological preparedness through structured health education and the introduction of spiritual-based anxiety management techniques. This program not only emphasizes physical health but also mental well-being through a spiritual approach.

This community service activity consists of providing health education and practicing *dhikr* techniques to deal with anxiety during menopause. The purpose of this community service activity is to increase partner understanding of menopause, its symptoms, and health strategies that can be applied to manage this condition, such as through diet, exercise, and health checks, and equip partner members with *dhikr* techniques as a spiritual method to calm the mind and reduce anxiety due to hormonal changes. This is expected to improve the quality of life of 'Aisyiyah Member in Wonosari, Bondowoso, during menopause.

This community service is by Merdeka Belajar Kampus Merdeka (MBKM)/ Freedom to Learn Independent Campus Program because it involves students in community service relevant to the local community's needs. Students will play an active role in providing education, facilitating discussions, and practicing dhikr techniques with partners, thus providing real experience in community empowerment. In addition, this activity contributes to IKU because it facilitates collaboration between academics (students and lecturers) and the community, especially in the health sector. This program is expected to improve the quality of life of the partner community, which will be tangible evidence of the impact of service on the 'Aisyiyah Member in Wonosari, Bondowoso.

METHOD

The steps taken to address the partners' problems consisted of three stages: (1) preparation and needs analysis, (2) implementation, and (3) monitoring and evaluation.

Preparation and Analysis of Partner Needs

During this stage, the team conducted initial surveys and collected baseline data regarding participants' health conditions and anxiety levels. These data served as the foundation for later evaluation. The team also identified specific issues experienced by partners related to menopause, both physical and psychological. The implementation team was formed, and tasks were clearly distributed among lecturers, students, and partners. Coordination meetings were held, schedules were finalized, and all materials, including questionnaires, educational media, and training modules, were prepared to support smooth program execution. Partners were responsible for confirming participant lists and preparing the venue and logistical needs.

Implementation

The implementation phase consisted of two main components: health education and spirituality-based anxiety management. A total of 43 participants were involved, all of whom were women in the perimenopausal and menopausal phases. Participants were recruited through coordination with the leadership of the 'Aisyiyah Member in Wonosari, who distributed invitations and participant registration forms to eligible members. The health education session addressed menopausal symptoms, hormonal changes, and preventive strategies for risks such as osteoporosis and cardiovascular disease. The team also guided the adoption of a healthy lifestyle, including balanced nutrition and simple physical exercises appropriate for menopausal women. Participants received a take-home guide. A pre-test was administered to assess their initial knowledge, followed by a post-test to measure improvement. Discussions and Q&A sessions enabled participants to raise personal concerns directly with the health educators.

The spiritual-based component focused on training participants to apply dhikr techniques as a method for managing stress and anxiety. The dhikr instructors provided step-by-step demonstrations, followed by guided individual practice sessions. Participants were encouraged to share feedback regarding their comfort and experiences with the techniques. Partners actively engaged in all practice sessions and committed to regularly applying dhikr techniques in their daily routines.

The team's and partners' responsibilities were distributed according to their roles. The Team Leader oversaw overall coordination, ensured implementation quality, delivered health education, led Q&A sessions, and monitored participants' health progress. Team members, consisting of lecturers and health workers, supported the delivery of educational content, supervised practice sessions, and assisted with consultations. The dhikr instructor was responsible for leading dhikr training sessions, guiding participants during practice, and

evaluating their mastery of the technique. Students acted as facilitators, assisted with surveys and data collection, managed logistics, supported practice activities, and documented the program; their participation was recognized with academic credit based on involvement hours, contribution quality, and task performance. Meanwhile, partners coordinated participants, prepared logistical support, actively engaged in all sessions, and supported the continuation of healthy lifestyle and dhikr practices after the program.



Figure 1. Program team and participants of the Menopause Health Education and Dhikr Training at PCA Wonosari.

Monitoring and Evaluation

The team monitored participants' engagement during training sessions and documented lifestyle changes reported by partners. Evaluation methods included quantitative assessments such as pre- and post-test scores and anxiety measurements conducted before and after the program, and qualitative interviews designed to capture participants' experiences, perceived benefits, and behavioral changes. The implementation team compiled an evaluation report and presented the results to partners, and feedback from both participants and partner representatives was used to assess the program's effectiveness and identify areas for improvement in future community service initiatives. Overall, the evaluation process combined knowledge assessments, surveys measuring the application of healthy lifestyle practices and dhikr-based anxiety management techniques, and qualitative interviews exploring changes in daily habits, emotional well-being, and preparedness for menopause.

RESULT AND DISCUSSION

The Impact of Menopause Health Education on Increasing Knowledge

Data showing changes in Knowledge Level categories are as follows:

Table 1. Comparison of Pretest and Posttest Results on Knowledge about Menopause

Knowledge Level	Pre-test	Posttest
Low	9	0
Moderate	18	8
Good	16	35
Total	43	43

The number of participants with low knowledge decreased from 9 to 0. This can be interpreted as an increase in the number of participants with low knowledge. Participants with good knowledge increased from 16 to 35, indicating a very significant increase. Overall, there was a shift from low to moderate, and moderate to good, for the majority of participants. The statistical analysis used was the Wilcoxon Signed Rank Test. The results showed that the number of participants who increased their scores was very high. The increased scores far outweighed the decreased scores (no decrease). The statistical value is $Z = -5.42$ ($p < 0.001$). A p -value < 0.001 indicates that menopause health education significantly increased knowledge.

Participants understood menopause not only as "stopping menstruation," but also as hormonal, physical, and emotional changes, as well as health risks, such as osteoporosis, hot flashes, mood swings, and anxiety due to estrogen changes. The education, delivered in simple language and through discussion sessions, enabled participants to relate the information to their own experiences. The study found a significant increase in knowledge following the educational intervention. At the pre-intervention stage, most participants had an incomplete understanding of menopause. Many only associate menopause with the cessation of menstruation, without understanding physiological changes such as decreased estrogen, metabolic changes, the risk of osteoporosis, emotional fluctuations, and the long-term impact on reproductive and cardiovascular health. This limited understanding is related to low reproductive health literacy among pre- and perimenopausal women; misperceptions about menopause contribute to anxiety, fear, and suboptimal health behaviors (De Hertogh & Molloy, n.d.; Kandasamy et al., 2024; O'Reilly et al., 2024; Rodrigues et al., 2025).

After the structured educational session, there was a statistically significant increase in knowledge, indicated by a shift in the distribution of categories from "low" to "good." Participants not only understood the biological aspects of menopause but also learned about preventive strategies such as calcium intake, weight-bearing exercise, stress management, and early detection of health risks during menopause. This improvement was supported by statistical test results showing a significant difference between pretest and post-test scores ($p < 0.001$). Factors influencing the effectiveness of this education included the use of accessible language, delivery of material related to everyday experiences, and interactive discussion sessions that allowed participants to ask questions about their concerns. These findings are consistent with the literature, which suggests that participatory educational approaches can improve women's understanding of reproductive health, reduce misconceptions, and increase their self-efficacy in managing hormonal changes (Herlianty et al., 2025; Musavi et al., 2024; Yogesh et al., 2024).

The Effect of Dhikr Techniques on Reducing Menopause Anxiety

The data showing changes in anxiety levels after the intervention are as follows:

Table 2. Comparison of Pretest and Posttest Results on Anxiety about Menopause

	Pretest	Post-test
None	10	22
Mild	15	18
Moderate	15	3
Severe	3	0
Total	43	43

Based on these results, it can be interpreted that participants with severe anxiety decreased from 3 to 0. Participants with moderate anxiety decreased from 15 to 3. Participants with "no anxiety" increased from 10 to 22. This interpretation indicates that the dhikr technique has a calming effect on participants' emotional changes.

The statistical analysis used was the Wilcoxon test. The calculation results: $Z = -5.88$, $p < 0.001$. This result indicates $p < 0.001$, indicating a highly significant difference, indicating that the dhikr technique is effective in reducing menopausal anxiety levels. Dhikr works by reducing sympathetic activity, increasing relaxation, stabilizing breathing, fostering a sense of surrender, gratitude, and spiritual calm. Furthermore, dhikr provides a sense of control and serenity in dealing with hormonal changes during menopause.

Before the intervention, many participants experienced high levels of anxiety related to menopause. The anxiety varied, ranging from concerns about physical changes such as osteoporosis, dry skin, and weight gain to emotional instability such as irritability, unexplained anxiety, and feelings of loss of control. Furthermore, several participants also expressed social anxiety, such as concerns about their diminished role in the family, reduced self-confidence, and negative societal perceptions of women entering menopause. These anxieties are related to research by Barghandan et al. (2021) and Hickey et al. (2021), which showed that perceptions of bodily changes can exacerbate women's emotional and psychological reactions during the perimenopausal phase (Barghandan et al., 2021; Hickey et al., 2021).

After participating in the education program and practicing dhikr for one month, anxiety levels decreased significantly. Data showed that the moderate and severe anxiety categories decreased dramatically, while the "not anxious" category increased from 10 to 22 participants. This significant anxiety reduction was supported by statistical testing ($p < 0.001$), confirming that this intervention not only affected knowledge levels but also directly improved participants' psychological well-being. Spiritual interventions such as dhikr can reduce physiological activity associated with anxiety, increase calmness, and improve an individual's ability to control emotional responses (Al Hidaya et al., 2024; Irhas et al., 2023; Mawaddah et al., 2024; Sufya, 2025; Zulaikha et al., 2025).

Effectiveness of Dhikr Practice in Anxiety Management

The findings of this study also indicate that dhikr practice not only functions as a spiritual activity but also has tangible psychological benefits. Participants reported that dhikr helped them slow their breathing rhythm, create a sense of peace, increase focus on positive thoughts, and reduce repetitive negative thoughts. Physiologically, dhikr is believed to inhibit sympathetic nervous system activation and increase parasympathetic nervous system activity, thereby reducing the stress response. These benefits are consistent with previous studies showing that spiritual practices can lower stress hormone levels, improve sleep quality, and enhance emotional regulation (de Oliveira Santana et al., 2025; Koch, 2025; Moroni et al., 2024).

In addition to individual benefits, group dhikr sessions also have powerful social and emotional impacts. Many participants reported feeling more connected, valued, and supported by fellow women at similar life stages. This social support acts as an essential protective factor in reducing anxiety and increasing emotional resilience. Thus, dhikr practices serve not only as a spiritual intervention but also as a form of group therapy, enhancing participants' sense of belonging and strengthening their coping mechanisms.

Integrating Education and Dhikr as a Holistic Approach

After understanding that menopause is a natural process and not a disease, cognitive anxiety decreased. Knowledge helped participants feel more prepared and less afraid of bodily changes. When participants experienced anxiety, the dhikr technique helped them calm their minds. Dhikr complemented education with psychological and spiritual approaches. Analysis of these two components revealed a synergistic relationship. Education provided understanding, thereby reducing cognitive anxiety. Dhikr provided inner peace, thereby reducing emotional anxiety. The combination of the two resulted in a significant increase in knowledge and a significant decrease in anxiety. The effect size for knowledge was $r = 0.82$, indicating a significant effect. For anxiety,

it was 0.90, indicating a huge impact. The educational program and dhikr technique had a significant impact on increasing knowledge and reducing anxiety. This intervention was not only statistically effective but also psychologically, spiritually, and socially relevant for the women of 'Aisyiyah Wonosari Bondowoso. Dhikr serves as a spiritual strategy that strengthens acceptance, while education reinforces understanding.

Overall, the results of this study indicate that an intervention combining reproductive health education with spiritual practices such as dhikr has a significant impact on increasing knowledge and reducing anxiety in women entering menopause. This approach is practical because it not only provides evidence-based scientific information but also addresses participants' emotional and spiritual needs. This integration promotes holistic women's health by viewing women's well-being through biological, psychological, social, and spiritual perspectives.

Furthermore, this approach aligns with the community's cultural and religious values , thereby increasing acceptance and the sustainability of the practice. The results of this study confirm that cultural-spiritual interventions can improve participants' internal motivation to understand and accept the natural processes occurring in their bodies. Community-based interventions like this also have the potential to be implemented in other regions to strengthen women's empowerment, improve quality of life, and reduce the negative stigma often associated with menopause.

Participant Responses, Evaluation, and Satisfaction

In addition to changes in knowledge and anxiety, this study also evaluated participants' responses and satisfaction with the menopause education program and dhikr practice. Overall, participants demonstrated high satisfaction with the entire series of activities. They stated that the material presented was relevant to their needs as women entering or experiencing perimenopause and menopause. Many participants found the explanations regarding hormonal changes, health risks, and coping strategies helpful in understanding processes that had previously caused fear.

Participants also expressed positive appreciation for the delivery method. They noted that the use of simple language, visual explanations, and interactive discussions made the educational sessions easier to understand and less intimidating. Several participants pointed out that the opportunity to ask questions directly, share experiences, and hear from others created a comfortable and supportive learning environment. A dialogue-based educational approach can improve the acceptance and retention of information among adult participants (Lin et al., 2023; Liu, 2020; Yan et al., 2018).

Participants' responses to the dhikr practice were also very positive. They reported that dhikr provided a sense of calm and comfort and helped reduce mental stress. Many reported that after a month of regular dhikr practice, they felt more emotionally stable, slept better, and were better able to manage daily worries. Some participants expressed that dhikr made them feel closer to God, fostering a sense of acceptance of the menopausal transition. Several participants also noted that the group dhikr sessions fostered social closeness, created a sense of community, and reduced the isolation they had previously experienced.

This integration actively advances holistic women's health by incorporating biological, psychological, social, and spiritual dimensions into the care approach. Some suggested supplementing the educational sessions with topics such as nutrition, exercise, or the prevention of degenerative diseases. Participants also recommended expanding the program to other women's communities, especially those with limited access to health information. This high level of satisfaction demonstrates that programs that integrate health education with spiritual approaches, such as dhikr, are not only practical but also well-received by participants.

CONCLUSION

From the results of this activity, it can be concluded that menopause education can significantly increase participants' understanding, as seen from the increase in participants with good knowledge from 16 to 35 people; dhikr techniques are effective in helping participants overcome menopause anxiety, as seen from the decrease in the number of participants with severe anxiety from 3 people to 0 people. Social support and spiritual approaches play an important role, helping participants feel calmer and more prepared to face menopause.

Some suggestions for this Community Service activity are: long-term monitoring needs to be carried out, for example, by holding a follow-up posttest several months after the program to measure the impact of education and dhikr techniques in the long term; this program can be expanded to other communities, especially in rural areas or communities that have limited access to menopause health information, and integration with different methods, such as breathing exercises, light exercise, or psychological counseling, to complement the approaches that have been taken.

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