

ORIGINAL RESEARCH

Thariqah-Based Neck Exercise Program Reduces Headache Intensity among Indonesian College Students



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Abstract

Background: Headaches are common among students due to academic stress and poor sleep habits. One way to reduce headaches is through neck exercises using *Thariqah* movements. Previous studies have focused only on physical neck exercises, yet a more holistic approach by combining *dzikr* (*Laa ilaha illallah*) recited *Thariqah* movements with the exercises has never been studied.

Purpose: This study aimed to determine the impact of *Thariqah*-based neck exercises on headache intensity experienced by college students.

Methods: The study used a two-arm parallel randomized controlled trial design. College nursing students were recruited through purposive sampling and then sequentially randomized, with 64 respondents in each group. Participants in the intervention group performed *Thariqah*-based neck exercises during *dzikr* three times per week for three weeks, while those in the control group received educational leaflets on headache management. Headache intensity was measured using the Numeric Pain Scale (0-10 scale). Data were analyzed using the Wilcoxon and Mann-Whitney tests.

Results: The results showed that *Thariqah*-based neck exercises performed during *dzikr* had a significant effect on reducing headache intensity among students ($p=0.000$). The differences in headache intensity before and after the intervention were also significant between the intervention and control groups ($p=0.000$).

Conclusion: Neck exercises based on *Thariqah* movements accompanied by *dzikr* recitation may serve as a practical option for self-therapy or complementary therapy in managing mild to moderate headache complaints. The integration of physical and spiritual elements offers potential benefits for both physical relief and emotional well-being.

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1. Introduction

Primary headaches are the most common complaints experienced by college students. They are divided into four types: trigeminal autonomic cephalalgias, migraines, tension-type headaches, and other primary headaches (Hernandez et al., 2024). These headaches occur on their own, without any underlying illness, and affect people of all ages. More than 60% of people worldwide experience headaches, making them a common health issue. According to the Global Burden of Disease (GBD) study, headaches are the most widespread disorder, with 52% of people having active headaches, 14% experiencing migraines, and 26% suffering from tension-type headaches (Stovner et al., 2022). A previous study involving 755 individuals from the general population reported that 80% experienced secondary headaches of varying severity levels (Hueso et al., 2019).

Given the high global prevalence of headaches, it is crucial to explore their potential triggers, including psychological factors such as stress. While some studies have identified a positive correlation between stress and tension-type headaches, others have reported inconsistent findings, highlighting the need for further investigation. The literature does not consistently report the relationship between stress and tension-type headaches; some studies found a positive

correlation, while others did not (Shah et al., 2024). One study found that headaches were linked to psychological or academic stress, and the sufferers preferred natural stress management over medication (Amiri et al., 2022; Bierhals et al., 2023; Qutub et al., 2020).

Beyond tension-type headaches, another primary headache disorder with significant consequences is cluster headaches. Although less frequently studied, patient-reported outcomes suggest that cluster headaches severely impact individuals' daily lives, social interactions, and work capacity. Patient-reported outcomes in cluster headaches are rarely documented. However, existing data from standard assessment tools indicate a significant negative impact on patients' well-being, social interactions, and work capacity (Kamm et al., 2022). These findings underscore the need for deeper research to develop effective treatments and minimize the condition's adverse effects (D'Amico et al., 2020; Kandel & Mandiga, 2023; San-Juan et al., 2024).

Headaches are common among university students due to multiple psychological and hereditary factors. A study involving 371 students at the University of Wollo reported a 34% prevalence of headaches (95% CI: 29.2), with significant associations identified between headache occurrence and a family history of headaches, recent suicidal thoughts, and perceived stress levels (Birkie et al., 2021). Similarly, a study conducted in Bangladesh also found that out of 2,352 college student respondents, 21.4% suffered from headaches, with risk factors including gender, family income, marital status, physical exercise, family history of heartache, lifestyle choices, symptoms of depression, and excessive anxiety (Rafi et al., 2022).

Headaches negatively affect students' academic performance, daily activities, social life, sleep, and overall well-being (Basdav et al., 2016). One study found that college students with primary headaches missed an average of two college days and struggled with normal activities for nearly three days. Their parents also lost workdays due to their children's headaches, with 5.7% of students restricted from activities. Additionally, many students experienced concentration problems (24.8%), frequent disturbances (26%), and sadness (51.5%) (Al-Hashel et al., 2020).

Headaches, including migraines and tension-type headaches, are commonly managed using pharmacological agents such as analgesics, particularly paracetamol. While these drugs are effective in relieving pain, their excessive or prolonged use can lead to adverse effects such as medication overuse headaches, gastrointestinal disturbances, and renal complications (San-Juan et al., 2024). A study reported that 72.45% of students experiencing migraine or tension-type headaches relied on analgesics, with paracetamol being the most frequently used drug. These findings highlight a strong dependency on medication, often without proper medical guidance, which increases the risk of side effects and reduces long-term treatment efficacy. In response to these limitations, clinical guidelines published between 2009 and 2020 have recommended the integration of complementary therapies to reduce dependence on pharmacological treatments. These include dietary supplements, oxygen therapy, herbal medicine, electrotherapy, acupuncture, and spirituality (Birru et al., 2016; Ng & Hanna, 2021).

Among non-pharmacological approaches, neck exercise therapy is widely recognized as beneficial in managing cervicogenic and tension-type headaches. This therapy improves neck flexibility, reduces muscular tension, and enhances blood flow in the cervical region, all of which contribute to headache relief (Licina et al., 2023). However, most exercise-based interventions focus solely on biomechanical aspects, often overlooking psychosocial and spiritual dimensions that may also influence headache intensity (Mamud-Meroni et al., 2025). On the other hand, *Thariqah*—a spiritual practice involving *dhikr* (remembrance of God)—has been shown to promote emotional stability, reduce stress, and foster a sense of inner peace (Fitriyani et al., 2024). In the context of Islamic spiritual practices, *Thariqah* includes repetitive neck movements synchronized with the recitation of *dzikr* "*La ilaha illallah*," usually performed under the guidance of a *murshid* (spiritual mentor) (Gitosaroso et al., 2023a). A qualitative study by Maulana (2022) found that students engaging in this practice reported improvements in spiritual well-being, emotional regulation, and social connectedness, suggesting that *Thariqah* may have therapeutic potential beyond its religious function.

Despite the documented benefits of both interventions, no previous studies have combined spiritual-based *dzikr* movements with structured physical neck exercises as a complementary therapy for headaches. This study proposes an integrated approach that merges the physiological benefits of neck exercises with the emotional and spiritual grounding of *Thariqah*. By aligning body movements with devotional recitation, this method aims to enhance circulation, reduce muscular tension, and support emotional resilience—factors that may collectively contribute to

reduced headache intensity. The novelty of this combination lies in its holistic nature, addressing both physical and non-physical dimensions of headache triggers, and fills a gap in existing research where spiritual elements are rarely included in exercise-based interventions for headache management. This study aimed to evaluate the effectiveness of *Thariqah*-based neck exercises in alleviating primary headache intensity among college students.

2. Methods

2.1. Research design

The study employed a parallel randomized controlled trial design involving two groups with 1:1 sequential randomizations of the study participant to the intervention and the control group. This design was chosen to measure the effect of a new intervention to allow outcomes' differences to be explored through random allocation (Hariton & Locascio, 2018). The research flow is depicted in Figure 1.

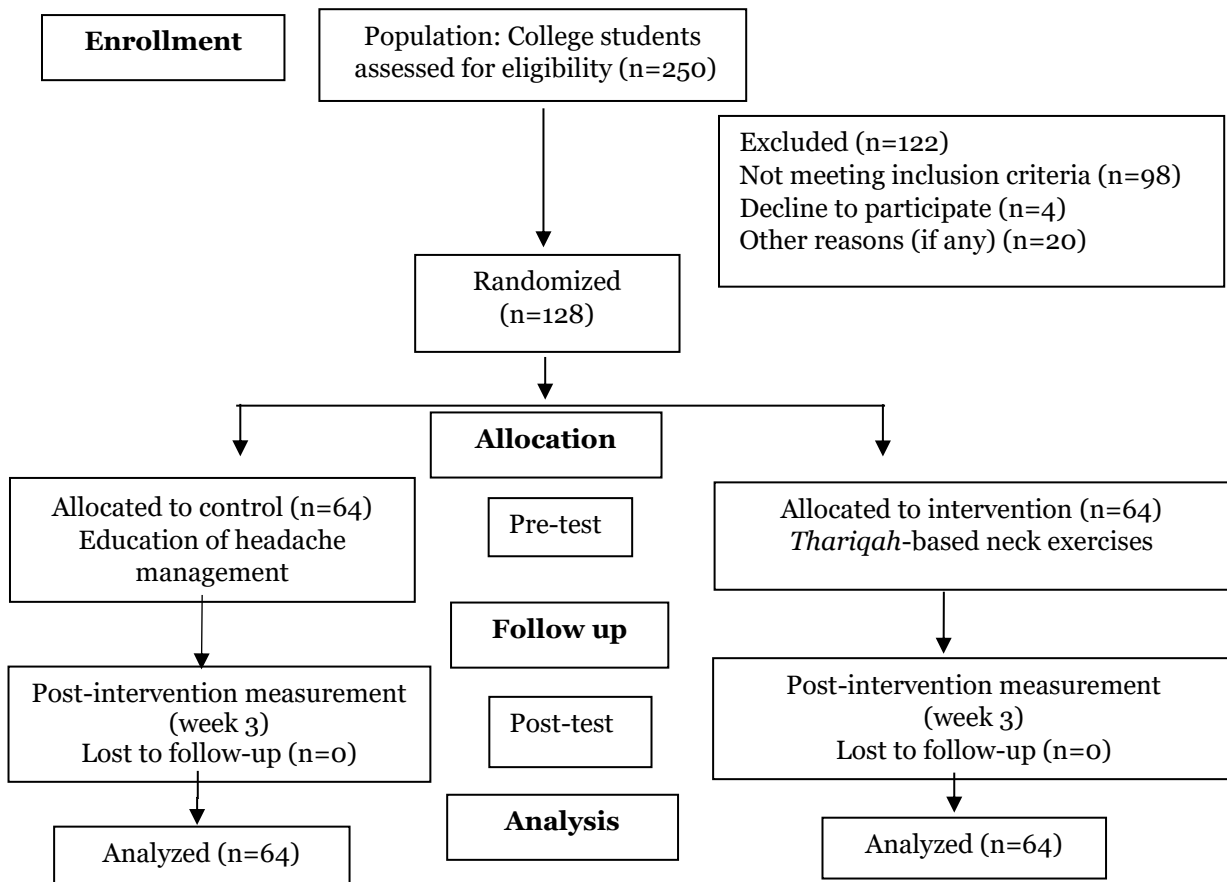


Figure 1. Flowchart of the study

2.2. Setting and samples

This study was conducted at a university in Kudus Regency, Central Java, Indonesia. The sample size was determined using the formula for comparing paired means, with a significance level (α) of 0.05 and a power ($1-\beta$) of 0.80. Based on this calculation and prior studies reporting medium effect sizes in similar interventions (Rau et al., 2020), the minimum required sample was 128 participants, consisting of 64 in the intervention group and 64 in the control group.

Participants were recruited using purposive sampling based on predetermined criteria: students currently working on their final college assignments and experiencing headaches within the past week. They were then screened based on the inclusion and exclusion criteria. Participants were eligible for this study if they met the following criteria: (1) experiencing mild to moderate headaches, defined as a pain intensity of 1–6 on the Numeric Rating Scale (NRS); (2) having no prior experience with neck exercises; and (3) willing to perform the neck exercise routine under the supervision of the researcher. On the other hand, participants were excluded if they were

taking analgesics or receiving other non-pharmacological treatments. The focus on mild-to-moderate headache intensity was chosen to ensure participant safety and the appropriateness of non-pharmacological interventions. Individuals with severe headaches (pain scale ≥ 7) might require pharmacological treatments or further medical evaluations, making them unsuitable for physical exercise-based interventions alone.

After screening, eligible participants were randomly assigned sequential identification numbers. Those with odd numbers were placed in the intervention group, while even-numbered participants were allocated to the control group. A total of 64 participants each group received allocated intervention and none was lost to follow up. Given the nature of the intervention, only single-participant blinding was conducted in this study, as it was not feasible to blind the providers administering the interventions.

2.3. Intervention

The intervention group received neck exercise treatments integrated with *Thariqah*-based movements, performed while reciting *dzikr* “*La ilaha illallah*.” This exercise involved slow, repetitive, and rhythmic neck movements synchronized with spiritual recitation, aiming to promote physical relaxation and emotional calmness. In the *Thariqah* movement, the neck moves up and down, and the jaw moves closer to the right and left shoulders in sequence. These exercises were repeated rhythmically while maintaining focus on breathing and spiritual awareness. The movement steps are shown in Figure 2 and Table 1 (Gitosaroso et al., 2023). The *Thariqah*-based neck exercises during *dzikr* recitation were conducted three times per week for three weeks, led by the researcher. The exercises were performed during the day in a quiet room prepared in advance. Each session lasted approximately 20 minutes and was conducted under the supervision of the researchers to ensure correct technique and consistency.

To monitor adherence, participants in the intervention group were asked to perform the exercises at home and submit video recordings through a designated social media group. In contrast, the control group received educational materials in the form of a leaflet containing information about headaches, including possible causes, prevention strategies, and non-pharmacological techniques to reduce headache intensity, such as stress management and lifestyle adjustments. The control group also joined a separate social media group but only received the educational materials. This setup allowed the researchers to track participation and ensure compliance throughout the study.

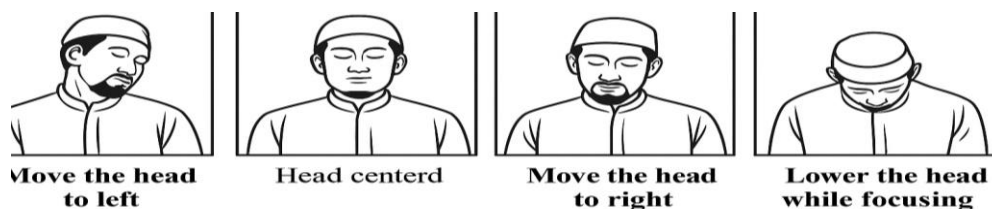


Figure 2. *Thariqah*-based neck exercises

Table 1 below provides a detailed breakdown of each movement along with its corresponding *dzikr* recitation.

Table 1. *Thariqah*-based neck exercises with *dzikr* recitation

Movement	Description	Dhikr Pronunciation
Head Moves Up	Lift the head while focusing upward	<i>La</i>
Head Moves Down	Lower the head, chin approaching the chest	<i>Ilaha</i>
Head Turns Right	Turn the head to the right, jaw moving closer to the right shoulder	<i>Illallah</i>
Head Turns Left	Turn the head to the left, jaw moving closer to the left shoulder	<i>Illallah</i>

2.4. Measurement and data collection

Data in this study were collected using three instruments: a *Thariqah*-based neck exercise observation sheet, the Numeric Rating Scale (NRS) for headache intensity, and a demographic questionnaire. The NRS is a standardized subjective pain scale ranging from 0 (no pain) to 10 (worst possible pain). It is widely used for headache assessment and has demonstrated good validity and reliability across clinical settings, including the Indonesian version. For example, a study assessed the validity and reliability of the NRS in patients with non-myogenic low back pain. The results indicated robust validity and excellent intra- and inter-rater reliability, with Cronbach's alpha and Intraclass Correlation Coefficient (ICC) values surpassing 0.9 (Adha & Komalasari, 2024). The interpretation of the pain scale measurement results is based on the guidelines shown in Table 2 (Gago-Veiga et al., 2022).

Table 2. Interpretation of headache scale measurement results

Pain Scale	Pain Level	Interpretation
0	No pain	The person feels no discomfort or pain.
1–3	Mild pain	Minimal pain that does not interfere with daily activities.
4–6	Moderate pain	Noticeable pain that may affect concentration and some daily tasks.
7–9	Severe pain	Intense pain that significantly limits movement and daily functions.
10	Worst possible pain	Unbearable pain, often requiring immediate medical intervention.

2.5. Data analysis

Data analysis began with a normality test using the Kolmogorov-Smirnov test, which indicated that the headache intensities were not normally distributed ($p < 0.001$). A homogeneity test was also conducted using Levene's test to assess the equivalence of data between the intervention and control groups. While gender, age, and disease history were found to be homogeneous ($p > 0.05$), the pre-intervention headache intensity data were not homogeneous ($p = 0.007$). Therefore, the Wilcoxon signed-rank test for within-group comparisons and the Mann-Whitney U test for between-group comparisons were used.

2.6. Ethical considerations

This research adhered to ethical standards by offering comprehensive research justifications, ensuring equity among respondents and groups, safeguarding respondent confidentiality, and promoting fundamental human values. The Ethics Committee of Universitas Muhammadiyah Kudus granted approval for this research, with the reference number 23/Z-K/KEPK/UMKU/VIII/2023. The ethics guidelines outlined how participants were treated in accordance with safety and confidentiality standards. All participants were fully informed about the study objectives, procedures, and their rights to decline or withdraw from the study. Finally, written informed consent was obtained from all participants prior to their participation.

3. Results

3.1. Characteristic of respondents

As shown in Table 3, the results indicated that the majority of respondents were female (more than 85% in both groups) and had gastric pains as the primary trigger disease (28.1% in the intervention group and 31.3% in the control group). The mean age was 21.63 (SD=0.793) for the intervention and 21.88 (SD=0.826) for the control group.

3.2. The headache intensity with *Thariqah*-based neck exercises

Table 4 shows a statistically significant reduction in headache intensity from 3.22 to 1.44 among students in the intervention group following the *Thariqah*-based neck exercise with *dzikir* ($p = 0.001$). In contrast, the control group did not demonstrate a significant change in headache intensity ($p = 0.527$). The result also indicated that the mean rank in the intervention group (48.50) was significantly different from that in the control group (80.50), with a p -value of 0.001.

It can be concluded that *Thariqah*-based neck exercises during *dzikr* recitation were effective in reducing headache intensity.

Table 3. Respondent's characteristics

Variable	Category	Intervention (n=64)	Control (n=64)	p-value
		f (%)	f (%)	
Gender	Men	8 (6.25)	10 (12.5)	0.313
	Women	56 (93.75)	54 (87.5)	
Trigger disease	Gastric Pain	18 (28.1)	20 (31.3)	0.103
	Typhoid	8 (12.5)	14 (21.9)	
	Headache	4 (6.3)	4 (6.3)	
	Influenza	8 (12.5)	8 (12.5)	
	Asthma	4 (6.3)	4 (6.3)	
	Tonsillitis	6 (9.4)	8 (12.5)	
	None	16 (25)	6 (9.4)	
Age	Mean (SD)	21.63 (0.793)	21.88 (0.826)	0.791

The following table (Table 4) compares headache intensity before and after the intervention within each group and between the intervention and control groups.

Table 4. Differences in headache intensities before and after the intervention

Group	Within Group Comparison					Between Group Comparison		
	Mean(SD)	Positive Rank	Negative Rank	Z-Value	p	Mean Rank	Z-Value	p
Intervention (n=64)						48.50	-5.113	0.001**
Before	3.22(1.035)	29.60	10.67	-5.907	0.001*	80.50		
After	1.44(1.207)							
Control (n=64)								
Before	2.58(0.753)	5.50	5.50	-0.632	0.527*			
After	2.53(0.755)							

Notes. *(Wilcoxon test), **(Mann-Whitney test)

4. Discussion

The study aimed to analyze the effect of *Thariqah*-based neck exercises during *dzikr* on headache intensity experienced by college students. The results found that neck exercises based on *Thariqah* movements during *dzikr* were effective in reducing headache intensity. Participants who performed the intervention experienced a noticeable improvement, while those in the control group showed no meaningful change. This finding aligns with prior research demonstrating the benefits of combining physical movement with mindfulness or meditative practices in reducing tension-type headaches and promoting emotional regulation (Remskar et al., 2024).

Previous studies have shown that spiritual-based interventions, particularly those incorporating rhythmic movement and focused attention, contribute to physiological relaxation and reduced muscle tension, both of which are key contributors to headache episodes (Shchaslyvyi et al., 2024; Wells et al., 2020; Wells et al., 2021). The uniqueness of the present study lies in the integration of structured neck movements with *dzikr*, which may create a dual calming effect: one physiological effect through muscle stretching and improved circulation and another psychological effect through spiritual focus and inner calm.

One possible mechanism by which exercise reduces headaches is by relieving post-exercise muscle soreness. Tensed muscles may contribute to headache pain. It has been demonstrated that engaging in muscular exercise helps the body relax and reduce pain perception. Progressive muscle training has been shown, in a study involving 60 schoolchildren, to improve muscle relaxation and lessen psychological stress, both of which can be potential headache triggers (Toussaint et al., 2021). Neck exercises and stretches are advantageous for enhancing mobility, especially for supporting the head. Necks that are both strong and flexible exhibit enhanced performance, a reduced likelihood of pain complaints, and a decreased risk of headaches (Chakravarty, 2019).

Recent studies have demonstrated the effectiveness of neck-focused exercise interventions in reducing headache intensity and frequency. Altmis Kacar et al. (2024) found that an eight-week cervical stabilization training program significantly reduced headache frequency, duration, and intensity among patients with migraine, tension-type, and cervicogenic headaches. Similarly, Koné-Paut et al. (2023) reported that a six-month neck and shoulder strengthening exercise program led to a 47% reduction in weekly headache frequency in the intervention group, compared to a 32% reduction in the control group. These findings highlight the therapeutic potential of structured neck exercises as a non-pharmacological approach to headache management.

A previous study by Piromchai et al. (2023) demonstrated that independent neck exercises significantly reduced Dizziness Handicap Inventory (DHI) scores compared to the control group, with a mean difference of 25.92 points (95% CI: 4.21–47.63; $p=0.021$). The study involved 32 participants who experienced headaches. Furthermore, eight weeks of craniocervical muscle training improved frontal muscle sensitivity ($p=0.040$) and increased trapezius muscle strength, both of which play a key role in supporting the neck and head—ultimately contributing to the reduction of headache symptoms (Benatto et al., 2022). Exercises involving flexion of joint and cervical muscle extensions for four weeks in 16 intervention participants also reduced headache complaints and increased sleep frequency (Choi, 2021). The findings suggest that performing flexion exercises targeting the deep cervical muscles in individuals with tension headaches and forward head posture can enhance their quality of life and daily activities by reducing the frequency and intensity of headaches and improving sleep patterns. These exercises mean a positive reduction in the stiffness of the neck muscles and help to relax the muscles so that the headache decreases (Choi, 2021). A study involving 88 respondents who underwent neck exercises for four weeks also showed a significant change in headache frequency after the intervention (Ernst et al., 2025).

However, unlike earlier studies that focused solely on biomechanical or physical components of neck movement, this study incorporated a spiritual element, which may have contributed additional emotional and cognitive benefits. Spiritual practices such as *dzikr* have been associated with stress reduction, emotional stability, and increased pain tolerance (Anggun et al., 2021), suggesting that the combined approach used in this study could offer synergistic effects not observed in purely physical interventions. Therefore, integrating spiritual and physical modalities presents a novel and culturally appropriate strategy for managing headaches, particularly in populations with strong religious or spiritual affiliations. Neck exercises have been widely practiced to reduce headaches; however, purely physical exercises are highly susceptible to recurrence, especially when triggered by stress experienced by college students. Incorporating a spiritual element through *dzikr* can further optimize headache reduction while also enhancing the ability to cope with stress. *Dzikr* also enhances physiological functions through a relaxation phase that increases oxygen supply to the body's tissues (Insyira et al., 2023).

In this study, the intervention group received *Thariqah*-based neck exercises combined with the recitation of *dzikir* “*Laa Ilaha Illallah*,” which led to a greater reduction in headache intensity compared to the control group. This finding suggests that integrating physical movement with spiritual practices may enhance relaxation, improve blood circulation, and aid in pain reduction. These results are consistent with previous studies showing that neck exercises alone can significantly reduce tension-type and cervicogenic headaches by relieving muscular tension and improving cervical posture (Bodes-Pardo et al., 2018; Gross et al., 2016).

Spirituality is an essential element in both health disorder therapy and health improvement. It is one of the fundamental human needs when addressing various problems, including health issues. The spiritual aspect provides strength, optimism, and relaxation, which can have a positive impact on health problems, including headaches (Koburtay et al., 2023). In Islamic teachings, both physical and spiritual aspects receive equal attention to achieve balance. Many physical activities, such as exercises and maintaining proper postures, are complemented by spiritual practices such as prayer and remembrance (*dzikir*) to maintain overall health. This approach is also applied in pain management practices, including rest and prayer, to help reduce pain (Ghounem, 2024). One of the sects in Islam is the *Thariqah*, which often practices *dhikr* with various body movements to enhance the intimate relationship with God through the contemplation of *dhikr* phrases expressed with bodily movements. The combination of neck and head movements with the recitation of *dhikr* has the potential to serve as a therapy based on the

wisdom of community habits. *Thariqah*-paradigm neck exercises during *dhikr* are movements derived from the philosophy of saying the sentence “*Laa*” from the navel and lifted all the way to brain; “*Illaha*” from the head descending slowly to the right shoulder; and “*Illallah*” from the right shoulder lowering to the left chest base and ending in the heartstrings under the ribs. Such exercises allow for decreased muscle tension and peace of mind through the phrase “*Laa illaha illallah*” (Mufid & Mohad, 2022).

“*Laa Ilaha Illallah*” means “There is no God but Allah”, a fundamental declaration of faith in Islam. This phrase affirms the oneness of God, rejecting all forms of polytheism and emphasizing absolute devotion to Allah alone. It serves as the foundation of Islamic belief, guiding a person’s faith, actions, and way of life (Gitosaroso et al., 2023). Spiritually, the recitation of “*Laa Ilaha Illallah*” brings a sense of peace, inner purification, and closeness to Allah. It helps individuals detach from worldly distractions and strengthens their reliance on divine wisdom. Repeating this phrase during meditation or *dhikr* fosters mindfulness, enhances self-awareness, and instills a deep sense of humility and gratitude. Furthermore, it provides emotional and psychological relief, helping believers cope with stress, anxiety, and life’s challenges by reinforcing trust in Allah’s plan. By continuously affirming “*Laa Ilaha Illallah*”, one nurtures a stronger spiritual connection, leading to a more disciplined and meaningful life. It encourages sincerity in worship, cultivates patience, and promotes a heart free from arrogance and negativity. The transformative impact of this phrase extends beyond the individual, fostering a sense of unity and brotherhood among believers as they share a common devotion to the one true God (Latif et al., 2024).

Dzikir, as one of the activities carried out by Muslims, has a positive influence on life. It also increases inner strength, which affects physical strength. The combination of *dzikir* and physical movement gives rise to a mixture of mental and physical resilience when facing various challenges. Those who believe find joy in the remembrance of Allah (God), for it is only through the remembrance of God that the heart becomes calm. With a calm mind, it becomes easier to make a rational decision (Anwar et al., 2024). Phrases such as *Asmaul Husna* have been shown to improve mental health (Agustina et al., 2020). A previous study conducted in Iran involving 92 respondents suffering from headaches and receiving 40 mg of propranolol therapy found a significant reduction in headache severity after three months of prayer therapy (Tajadini et al., 2017). Moreover, a study involving 32 hypertensive patients with headaches showed that those who received deep breathing therapy combined with *dzikir* experienced a more significant reduction in symptoms (Pusporini et al., 2024).

The results of the present study emphasize that incorporating spiritual elements into physical therapy can enhance its effectiveness, especially in populations familiar with or receptive to such practices. In addition, the findings highlight the importance of culturally grounded, low-cost interventions that are accessible and can be practiced independently, offering promising alternatives to pharmacological treatment, particularly for mild to moderate headache conditions. Physical exercises and spiritual elements in Islam, such as prayer, *dzikir*, and listening to Quran recitations, have been applied in the therapy of health disorders in both outpatient and inpatient settings. However, their implementation remains limited and lacks a comprehensive approach. More in-depth research should not only incorporate spiritual and physical aspects but also consider social and psychological elements to achieve a more significant and holistic impact.

5. Implication and limitation

The combination of neck exercises and *dzikir* can be implemented as an independent nursing intervention for individuals with mild to moderate headaches. As a non-pharmacological approach, it supports holistic nursing care by addressing both physical and spiritual dimensions of patient well-being. This intervention holds potential for integration into outpatient education programs and community nursing practices, offering a practical strategy to reduce headache frequency and decrease patients’ reliance on medication. However, this study has limitations, including a small sample size, lack of concealment method, and the use of only single blinding. Despite these limitations, the findings offer valuable implications for nursing practice.

6. Conclusion

This study concludes that neck exercises based on *Thariqah* movements accompanied by *dzikir* significantly reduce headache intensity among college students. The intervention not only enhances neck muscle flexibility but also provides psychological benefits through spiritual

engagement, helping to alleviate emotional tension commonly associated with headaches. For nursing practice, this combined physical-spiritual approach can serve as a complementary and culturally appropriate self-care intervention, especially for patients with mild to moderate headaches who prefer non-pharmacological alternatives. It also empowers nurses to implement holistic care strategies that address both physical and emotional dimensions of health. Future research is recommended to validate these findings in larger, more diverse populations using randomized controlled trial designs. Studies exploring long-term adherence, physiological mechanisms, and the integration of this method into structured nursing protocols would also provide valuable insights.

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Author contribution

SS contributed to data collection and processing. EN and SY were responsible for data presentation, while DG and NR contributed to the preparation of the manuscript.

Conflict of interest

The authors affirm that there are no conflicts of interest pertaining to the publication of this paper.

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