

The Effect of Mindfulness Training to Reduce Anxiety in Nurses of General Hospital X Ciamis

Fajrin Siti Fauziah, Rahma Widyana

Universitas Mercu Buana, Indonesia

Email: fajrinsitifauziah12@gmail.com, rahma@mercubuana-yogya.ac.id

KEYWORDS	ABSTRACT
Mindfulness Training, Anxiety, Female Nurses in Public Hospitals	The objective of this study was to determine the effect of mindfulness training on female nurses in reducing anxiety. This study had 10 research subjects who were divided into 2 groups, namely 5 subjects for the experimental group (<i>KE</i>) and 5 subjects for the control group (<i>KK</i>). The selection of subjects was carried out randomly. This study used a pre-test post-test control group design. This study used an anxiety scale, FFMQ scale, observation, and interview. The results of the analysis showed a difference in anxiety levels between <i>KE</i> and <i>KK</i> with a Z value of -2.312 and a significance of 0.021 ($p < 0.05$). The post-test anxiety score in <i>KE</i> was lower, with an average value of 89.8, while <i>KK</i> had an average value of 113. Further test results at follow-up in <i>KE</i> and <i>KK</i> showed a significant difference in anxiety levels with a Z value of -2.619 and a significance of 0.009 ($p < 0.05$). The anxiety score at follow-up showed a lower level of anxiety in <i>KE</i> with a mean score of 68.8, whereas <i>KK</i> had a mean score of 114.4. The T-test showed that there was a difference in anxiety levels at the post-test and follow-up in <i>KE</i> after being given mindfulness training, compared to <i>KK</i> , who were not given the treatment. This finding shows that mindfulness training can reduce the anxiety level of female nurses in public hospitals.

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INTRODUCTION

Based on population data in February 2022, the number of Indonesia's population is known to be 273,000,000 people. A total of 138,303,472 people, or 50.5% of the total population of Indonesia, are men, while 135,576,278 people, or 49.5% of the total population of Indonesia, are women (*dukcapil.kemendagri.go.id*, February 24, 2022). Furthermore, based on data quoted from *komnasperempuan.go.id*, the number of workers in Indonesia as nurses occupies the largest proportion, reaching 71% of 511,191 (Cahya et al., 2023).

Nurses often interact with patients or other healthcare recipients in the hospital (Abdel-Khalek et al., 2023; Huang et al., 2022). They are part of the healthcare team that deals with the patients' health issues around the clock. Gilles (in the Indonesian National Nurses Association, 2012) argues that 40% to 75% in hospitals are epidemic nursing services. In addition to caring for patients, nurses make contact with the patients' family members and sometimes receive complaints related to dissatisfaction with hospital services, not ruling out the possibility that this can lead to anxiety. As explained by Nevid (2018), this ranges from fear that is generally related to feelings of discomfort to panic attacks. In addition, there will be more effects if

anxiety is not controlled immediately, including physical and mental problems, such as heart disease, high blood pressure, and digestive problems, as well as depression (Kang et al., 2017).

Anxiety is a normal reaction to the threat of danger, but anxiety can become abnormal when the anxiety is not proportional to the actual threat or when the anxiety occurs without a cause, i.e., when something is unstable with changes in the environment (Nevid, Rathus, and Greene, 2018). Symptoms experienced by anxiety sufferers include behavioral, cognitive, and physical disorders. During physical symptoms, the individual feels restless, experiences irregular breathing, tremors, and stomach or chest tightness (Hwang et al., 2020; Karo et al., 2024). In behavioral symptoms, individuals avoid addictive behaviors and exhibit anxiety behaviors. Regarding cognitive symptoms, they will feel anxious, afraid, and overthink, as stated by Nevid et al. (2018). According to Hamilton (Coallier, 2017), there are two categories: psychological anxiety and physical anxiety. Psychological anxiety includes aspects such as anxiety, stress, fear, intelligence, and depressed mood, while somatic anxiety comprises somatic aspects, insomnia (*insomnia*), cardiovascular symptoms, respiratory symptoms, gastrointestinal symptoms, genitourinary symptoms, autonomic and behavioral symptoms (Hamilton, in Coallier, 2017).

Some alternative anxiety interventions include psychotherapy with CBT or cognitive behavioral therapy, relaxation, laughter therapy, supportive group therapy, and mindfulness. Brown and Ryan define mindfulness as a person's conscious state that is related to experience. Snyder and Lopez argue that mindfulness is a positive mind that is open to new things and a way of realizing something new when one realizes that they have had enough (Rodrigues et al., 2017; Simonsson et al., 2021).

Although prior studies have substantiated the value of mindfulness in mitigating anxiety, significant gaps remain. For instance, Cahyono et al. (2024) conducted a systematic review comparing mindfulness therapy and cognitive behavioral therapy (CBT) in treating anxiety disorders; they found that both were effective, though CBT delivered faster relief while mindfulness offered more sustained outcomes. Yet their study did not focus specifically on nurses or professional healthcare environments (Cahyono et al., 2024). In another line of research, Saragih et al. (2023) performed a meta-analysis of randomized controlled trials and concluded that mindfulness-based interventions significantly reduced stress and depression among nurses—but the evidence for anxiety reduction remained inconclusive due to conflicting results and heterogeneity in intervention protocols (Saragih et al., 2023). These works contribute valuable insights but leave unaddressed the specific impact of tailored mindfulness training on anxiety among practicing nurses in hospital settings, particularly within Indonesia.

Based on the above explanation, the researcher conducted research at the X Ciamis General Hospital because this place is the first private general hospital in Ciamis Regency. In addition, this research site has a total of 226 employees with 66% female employees and 34% male employees. Furthermore, based on AWA's research, it was shown that 26.6% of the 45 female employees in the study had anxiety. The study aims to see whether there is an impact of mindfulness practice on reducing anxiety in nurses at General Hospital X Ciamis. With the training method, research subjects will gain knowledge, abilities, and skills regarding mindfulness.

METHOD

The dependent variable in this study is anxiety. Anxiety can be defined as an emotional response in the form of feelings of worry or excessive fear of stimuli that can be interpreted as threats, both real and imaginary. Mindfulness training is part of the independent variable in this study. Mindfulness training is a learning process aiming to gain knowledge, skills, and abilities to increase the state of awareness, alertness, and attention to the internal state of the person and the current surrounding environment, which is openly accepted as it is.

The research uses the pre-test, post-test control group design method by randomly selecting subjects for each group, both control groups (*KK*) and experimental groups (*KE*). According to Creswell (2016), each group was given a pre-test and a post-test, with treatment applied only to *KE*. A mother who works as a nurse, with a minimum age of 25 years, working at RSU X Ciamis, is the subject of this study. The number of subjects in the study was 10 people with moderate to severe anxiety based on the results of the pre-test, who were then divided into 2 groups, with a total of 5 subjects each in the control group and the experimental group. The next step was to take a random draw of paper containing the names of the subjects for the control group and the experimental group in equal numbers. Data collection was conducted using interviews, observations during training, anxiety scales, and FFMQ scales. The anxiety scale is based on the theory put forward by Greenberger and Padesky (in Fenn & Byrne, 2013), stating that the anxiety aspect includes the physical symptom aspect, the thought aspect, the behavioral aspect, and the feeling aspect. Meanwhile, the FFMQ scale uses the scale developed.

The intervention used is mindfulness training, with stages arranged based on the development of modules that have been compiled by Khadijah Amaliah (2020), focusing on the theory from Kabat-Zinn and then developed by Santorelli (2014), which is adapted based on research and references from the book *The Power of Mindfulness* by Sony Adams (2022). The training was organized into 6 sessions held over 3 offline meetings. The first meeting began with an opening and icebreaking, then session I: breathing in and out, and session II: body scan meditation. The second meeting began with a review of the activities and exercises from the previous meeting, followed by session III, namely body detection with an attitude of appreciation, then interspersed with icebreaking, which continued with session IV, namely open awareness and accepting thoughts and feelings. The third meeting began with a review of previous activities and exercises, then continued to session V: Mindful Wanting (letting go of desire), interspersed with icebreaking, and then continued with session VI: mindfulness in daily life. After that, an evaluation and closing were carried out.

Mann Whitney U quantitative data analysis was used to see whether there was a difference in anxiety levels between *KK* and *KE* after treatment with mindfulness training. Furthermore, the Wilcoxon T-Test was used to see whether there is a difference in anxiety levels in the experimental group before and after mindfulness practice.

RESULTS AND DISCUSSIONS

Table 1. Golden Scale Data

Measurement	WED			MONTHS		
	<i>Pre Test</i>	<i>Post Test</i>	<i>Follow-Up</i>	<i>Pre Test</i>	<i>Post Test</i>	<i>Follow-Up</i>
Minimal	105	72	52	106	108	110
Maximum:	125	109	104	116	118	119
Mean	110,8	89,8	68,8	110	113	114,4
Standard Deviation	8,074	13,7	21,253	4,415	4,795	4,335

Table 1 shows the mean values in both the control and experimental groups when the pre-test had almost equal scores. Meanwhile, in the post-test and follow-up columns, there is a difference in the mean in KE and KK. Where the mean in the KK is higher than the KE in the mean during post-test and follow-up.

Table 2. Mann Whitney-U Test Results Anxiety Scale

	<i>Pre Test</i>	<i>Post Test</i>	<i>Follow-Up</i>
With	-,210	-2,312	-2,619
Asymp. Sig. (2-tailed)	0,834	0,021	0,009

Based on table 2 above, in the pre-test column, it shows that there is no difference in the level of anxiety between KK and KE where the Z value is -.210 and the significance level is 0.834 ($p > 0.05$), then in the post test column there is a difference in the level of anxiety in KE and KK by having a Z value of -2.312 with a significance level of 0.021 ($p > 0.05$). Then in the follow-up columns in KE and KK, there was a significant difference in anxiety levels with a Z value of -2.619 and a significance value of 0.009 ($p < 0.05$). So, it can be found that there is a difference in the level of anxiety at the post-test and follow-up in KE after mindfulness training with KK who did not receive any treatment. Then, the anxiety score on the KK post-test was higher than KE. Likewise, in the follow-up results, it was seen that KK had a higher anxiety score than KE.

Table 3. Wilcoxon rank test results

	<i>Pre Test – Post Test</i>	<i>Post Test – Follow Up</i>
With	-2.032	-2.032
Asymp. Sig. (2-tailed)	.042	.043

Based on Table 3, it is known that the experimental group in the post test and pretest showed a Z coefficient of -2.023 with a significance level of 0.043 ($p < 0.05$). Furthermore, the KE in the post-test and follow-up showed a Z coefficient of -2.032 with a significance level of 0.043 ($p < 0.05$). The results of this research are in line with previous research conducted by Hapsari, et al (2021) and research that has been conducted by Samakul, et al. (2021) the results state that mindfulness training is effective in reducing anxiety. In addition, research by Santoso (2022) shows that mindfulness can reduce anxiety in ASN women. The ability of working mothers to practice mindfulness, which is to be fully aware of themselves and manage emotions appropriately. This mindfulness training helps individuals become more aware and aware of

thoughts, feelings and behaviors that can affect their physical and psychological health. So that they can control their emotions and thoughts to stay healthy and carry out their role well.

The breathing in and out exercise aims to train participants to be able to breathe and focus on the present moment. Santorelli (2014), mindfulness training with this technique is a basic practice of mindfulness techniques. These mothers who work as nurse professionals will then be trained to focus on breathing. In addition, the function of respiratory relaxation is that it can make people calmer, reduce anxiety, and exercise is beneficial for a person's body (Ekawaldi, 2014).

In the technique exercise, it opens awareness and accepts thoughts and feelings that have the purpose of helping the research subject to be more open to every situation or event, whether positive, negative or neutral, as well as helping to accept without making judgments (Smith, 2020; Zhang et al., 2023). In stressful situations, anxiety, nervousness, body sensations will also emit sensations. Mindfulness is defined as the awareness that arises from paying attention to goals, presenting experiences without judgment, and the ability to appreciate each experience (Kabat-Zinn, 2013).

The weaknesses of this research, according to the researcher, include the condition of the subject in the field which clashes with his responsibilities as a hospital employee. So that there are two subjects who are obstructed at the second meeting, and the third meeting. However, these obstacles can be overcome with the results of coordination and consultation with trainers. So that research subjects who are unable to attend these sessions still receive mindfulness training at the agreed time. Then the obstacle of the researcher's preparation in documenting, there was one session at the second meeting that was not visually documented (video recording) because the storage space was full.

CONCLUSION

There was a difference in the level of anxiety during the post-test between *KK* and *KE*. The results of the anxiety scale score at the time of the post-test showed that *KK* was higher than *KE*. At follow-up, it was also found that there was a difference in anxiety levels between *KK* and *KE*, where *KE*'s anxiety score was lower than *KK*'s. In the second hypothesis test, it was found that in *KE* there was a difference in the level of anxiety in nurses before and after the provision of mindfulness training. In addition, there was a significant difference in the level of anxiety during the post-test and follow-up. The suggestion from this study, especially considering the limited duration of the study, is for future researchers to plan a longer interval between the post-test and follow-up so that they can better see the effect of mindfulness training on the research subjects. In addition, researchers may also conduct research with subjects who have flexible schedules to minimize obstacles in the field.

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