

# The Effectiveness of Nurses' Independent Interventions: Benson Relaxation and Five-Finger Hypnosis in Reducing Anxiety among Elderly Individuals in the Service Area of UPT. Puskesmas Lawawoi, Sidenreng Rappang Regency

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## ABSTRACT

**Background:** The growing elderly population has increased concerns regarding geriatric mental health, particularly anxiety disorders. Anxiety in older adults is often associated with declining physical function, chronic illness, social isolation, and reduced social support, which can negatively affect psychological well-being and quality of life (Beard et al., 2016; World Health Organization, 2022). If untreated, anxiety may worsen physical health conditions and reduce functional independence. Non-pharmacological nursing interventions are therefore needed due to their safety and accessibility. The novelty of this study lies in integrating Benson relaxation and five-finger hypnosis as nurse-led complementary interventions to reduce anxiety among community-dwelling elderly individuals.

**Purpose:** This study aimed to analyze the effectiveness of Benson relaxation and five-finger hypnosis in reducing anxiety levels among elderly individuals in the service area of UPT Puskesmas Lawawoi, Sidenreng Rappang Regency, Indonesia.

**Methods:** A quasi-experimental study with a pretest–posttest design was conducted among 54 elderly participants selected through simple random sampling. Participants were assigned to Benson relaxation (n = 27) and five-finger hypnosis (n = 27) groups. Anxiety levels were measured using a standardized instrument and analyzed using paired t-tests.

**Results:** The findings showed a significant reduction in anxiety levels after the interventions ( $p < .001$ ). This study provides evidence that combining relaxation response therapy with hypnosis-based techniques can effectively reduce anxiety among older adults.

**Conclusion:** Benson relaxation and five-finger hypnosis are effective nurse-led complementary interventions that can be applied in community nursing programs to improve mental health among the elderly.

**Keywords:** Anxiety, Benson Relaxation, Elderly, Five-Finger Hypnosis

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**BACKGROUND**

Population aging has become a global demographic phenomenon driven by improvements in healthcare, declining fertility rates, and increased life expectancy. While increased longevity reflects progress in public health, it also contributes to epidemiological transitions characterized by a growing burden of non-communicable diseases and age-related health conditions among older adults (World Health Organization, 2022). As the elderly population continues to increase, various health challenges arise, including physical, social, and psychological problems.

Mental health issues are increasingly recognized as significant concerns among older adults. Many elderly individuals experience psychosocial stressors such as declining physical function, chronic illness, loss of social roles, bereavement, and social isolation. These conditions may increase vulnerability to psychological disorders, particularly anxiety and depression (Santini et al., 2020; Kim et al., 2021). Anxiety is one of the most common mental health problems among the elderly and can negatively affect sleep quality, physical health, social functioning, and overall quality of life (Gonçalves et al., 2021).

In Indonesia, the demographic transition toward an aging population presents challenges for the healthcare system, particularly in providing comprehensive and accessible mental health services for older adults. Community-based health facilities such as primary healthcare centers (Puskesmas) play an essential role in promoting elderly health and preventing mental health problems. However, interventions addressing anxiety among older adults in community settings remain limited.

Non-pharmacological nursing interventions are widely recommended because they are safe, cost-effective, and can be implemented independently by nurses. Relaxation-based therapies are among the most commonly used approaches to reduce anxiety. Benson relaxation is a technique that activates the body's relaxation response through controlled breathing and mental focus, thereby reducing physiological stress (Dossey & Keegan, 2021). Another technique, five-finger hypnosis, is a brief psychological intervention that uses guided imagery and focused attention to help individuals regulate emotions and reduce anxiety (Kaur et al., 2022).

Previous studies have shown that relaxation therapy and hypnosis-based interventions can effectively reduce anxiety in various patient populations (Chen et al., 2020; Milling et al., 2021). However, most studies have examined these interventions separately and were conducted in hospital settings among patients with specific medical conditions. Evidence regarding the implementation of these techniques as independent nurse-led interventions for anxiety management among community-dwelling elderly populations remains limited.

Therefore, this study aims to analyze the effectiveness of nurses' independent interventions, namely Benson relaxation and five-finger hypnosis, in reducing anxiety levels among elderly individuals in the service area of UPT Puskesmas Lawawoi, Sidenreng Rappang Regency. The novelty of this study lies in evaluating two complementary relaxation-based nursing interventions within a community healthcare setting to address anxiety among elderly populations.

**OBJECTIVE**

This study aims to analyze the effectiveness of nurses' independent interventions, specifically Benson relaxation and five-finger hypnosis, in reducing anxiety levels among elderly individuals in the service area of UPT. Puskesmas Lawawoi, Sidenreng Rappang Regency.

**METHODS**

This study employed a quasi-experimental design using a pretest–posttest control group approach. The research was conducted in the service area of UPT Puskesmas Lawawoi, Sidenreng Rappang Regency, Indonesia, from November to December 2024.

The study population consisted of elderly individuals experiencing anxiety symptoms in the working area of Puskesmas Lawawoi. A simple random sampling technique was used to select 54 respondents who met the inclusion criteria. Participants were divided into two intervention groups: 27 elderly individuals received the Benson relaxation intervention, and 27 participants received the five-finger hypnosis intervention.

Anxiety levels were measured using the *Geriatric Anxiety Scale (GAS)*, a standardized instrument designed to assess anxiety symptoms specifically in older adults. The GAS consists of several items that evaluate somatic, cognitive, and affective symptoms of anxiety. Responses are measured using a Likert scale, with higher scores indicating higher levels of anxiety.

Data collection was conducted in two stages. First, a pretest was administered to measure baseline anxiety levels before the intervention. Participants then received their respective interventions according to the assigned group. After the intervention sessions were completed, a posttest was conducted using the same instrument to assess changes in anxiety levels.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were used to summarize participant characteristics, and paired t-tests were conducted to compare anxiety scores before and after the interventions within each group. Statistical significance was determined at  $p < 0.05$ .

Ethical considerations were strictly maintained throughout the study. Ethical approval was obtained from the Health Research Ethics Committee of STRADA Indonesia University No. 001859/EC/KEPK/I/11/2024 prior to data collection. All participants provided written informed consent after receiving an explanation of the study procedures. Participant confidentiality and the right to withdraw from the study at any time were fully guaranteed.

**RESULTS**

The study findings from 27 respondents who received Benson relaxation therapy at the working area of Lawawoi Public Health Center, Sidenreng Rappang Regency, showed that the majority were aged between 60-74 years (85.2%,  $n = 23$ ). Similarly, among the 27 respondents who received the Five-Finger Hypnosis intervention, 74.1% ( $n = 20$ ) were aged between 60-74 years. In terms of gender distribution, the majority of respondents were female, with 16 participants (59.3%) in the Benson relaxation group and 19 participants (70.4%) in the Five-Finger Hypnosis group.

**Table 1.** Anxiety Levels Before and After Benson Relaxation Intervention

<b>Variables</b>	<b>n</b>	<b>Percentage</b>
<b>Anxiety before Benson relaxation intervention</b>		
No anxiety	0	0 %
Mild anxiety	0	0 %
Moderate anxiety	0	0 %
Severe anxiety	17	63.0 %
Extreme anxiety or panic	10	37.0 %
Total	27	100 %

<b>Anxiety after Benson relaxation intervention</b>		
No anxiety	1	3.7 %
Mild anxiety	19	70.4 %
Moderate anxiety	6	22.2 %
Severe anxiety	1	3.7 %
Extreme anxiety or panic	0	0 %
Total	27	100 %

Source: Primary Data, 2024

Table 1 illustrates that before the intervention, most respondents experienced severe anxiety (63.0%, n = 17), while 37.0% (n = 10) experienced extreme anxiety or panic. After the intervention, a significant improvement was observed. One respondent (3.7%) reported no anxiety, the majority (70.4%, n = 19) experienced mild anxiety, and 22.2% (n = 6) had moderate anxiety. Only one respondent (3.7%) remained in the severe anxiety category. These results indicate that Benson relaxation therapy was effective in reducing anxiety levels.

**Table 2.** Anxiety Levels Before and After Five-Finger Hypnosis Intervention

<b>Variables</b>	<b>n</b>	<b>Percentage</b>
<b>Anxiety before Five-Finger Hypnosis intervention</b>		
No anxiety	0	0 %
Mild anxiety	0	0 %
Moderate anxiety	0	0 %
Severe anxiety	17	63.0 %
Extreme anxiety or panic	10	37.0 %
Total	27	100 %
<b>Anxiety after Five-Finger Hypnosis intervention</b>		
No anxiety	0	0 %
Mild anxiety	20	74.1 %
Moderate anxiety	7	25.9 %
Severe anxiety	0	0 %
Extreme anxiety or panic	0	0 %
Total	27	100 %

Source: Primary Data, 2024

Table 2 shows that prior to the intervention, the majority of respondents experienced severe anxiety (63.0%, n = 17), while 37.0% (n = 10) had extreme anxiety or panic. After the intervention, a significant improvement was observed, with 74.1% (n = 20) experiencing mild anxiety and 25.9% (n = 7) experiencing moderate anxiety. This demonstrates that the Five-Finger Hypnosis intervention effectively reduced anxiety levels.

**Table 3.** Paired T-Test Comparison of Anxiety Levels Before and After Benson Therapy Intervention

Paired Differences	t	df	Sig. (2-tailed)
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	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				lower	Upper			
Pair 1 Anxiety score before Benson therapy - Anxiety score after Benson therapy	9.963	3.684	.709	8.505	11.421	14.051	26	.000

Note: Paired T-Test Analysis

**Table 4.** Results of Anxiety Comparison Before and After the Five-Finger Hypnosis Intervention

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				lower	Upper			
Pair 1 Anxiety Score Before Five-Finger Hypnosis - Anxiety Score After Five-Finger Hypnosis	10.444	2.679	.516	9.384	11.504	20.254	26	.000

Note: Paired T-Test

The paired T-Test results indicate a significant difference between anxiety scores before and after the therapy. The average anxiety score before Benson relaxation therapy was 14.30, which decreased to 4.33 after the intervention. Similarly, for five-finger hypnosis, the average anxiety score was 14.89 before the intervention, dropping to 4.44 afterward. The obtained p-value (Sig. 2-tailed) of 0.000 for both interventions indicates that this difference is highly statistically significant. These findings suggest that the provided interventions have a significant effect on reducing anxiety among respondents.

**Table 5.** Effect Size Analysis of Benson Relaxation and Five-Finger Hypnosis Interventions

	Standardizer <sup>a</sup>	Point Estimate	95% Confidence Interval	
			Lower	upper
Before Intervention	Cohen's d	2.246	-.264	.798
	Hedges' correction	2.279	-.260	.787
	Glass's delta	2.207	-.268	.804
After Intervention	Cohen's d	2.491	-.045	.578
	Hedges' correction	2.528	-.044	.570
	Glass's delta	2.172	-.051	.584

Note: Paired T-Test

The effect size analysis using Cohen's *d* shows a considerable effect, with a value of 2.246 before the intervention and 2.491 after the intervention. This indicates that both interventions are not only statistically significant but also have a substantial impact on reducing anxiety.

The comparison test results between the two interventions reveal no significant difference in effectiveness between Benson relaxation and five-finger hypnosis, both before and after the intervention. This suggests that both methods are equally effective in reducing anxiety, although five-finger hypnosis appears to be slightly more effective in lowering anxiety post-intervention.

## **DISCUSSION**

The findings of this study directly address the research objective, which was to analyze the effectiveness of nurse-led interventions Benson relaxation and Five-Finger Hypnosis in reducing anxiety levels among elderly individuals in the working area of UPT Puskesmas Lawawoi, Sidenreng Rappang Regency. The results indicate a significant difference in the mean anxiety scores of the 54 respondents before and after receiving the interventions.

Statistical analysis using a paired t-test showed a p-value of 0.000 ( $p < 0.05$ ), indicating a statistically significant reduction in anxiety levels after the interventions. These findings lead to the rejection of the null hypothesis ( $H_0$ ) and the acceptance of the alternative hypothesis ( $H_1$ ), confirming that both Benson relaxation and Five-Finger Hypnosis significantly influence anxiety levels among older adults.

Effect size analysis using Cohen's *d* revealed a strong intervention effect, with values of 2.246 before the intervention and 2.491 after the intervention. These results indicate that the interventions not only demonstrate statistical significance but also provide a substantial practical impact on reducing anxiety among elderly participants.

The effectiveness of Benson relaxation in reducing anxiety can be explained through the activation of the relaxation response, which helps regulate physiological stress mechanisms, decrease muscle tension, and promote psychological calmness (Dossey & Keegan, 2021). When practiced consistently, this technique helps elderly individuals manage emotional stress and improve their overall psychological well-being.

Similarly, Five-Finger Hypnosis has been shown to reduce anxiety by promoting mental focus, guided imagery, and positive suggestion, which help individuals regulate emotional responses and enhance self-control (Kaur et al., 2022). Hypnosis-based interventions are increasingly recognized as effective non-pharmacological approaches for managing anxiety, particularly among individuals experiencing psychosocial stressors.

Older adults are particularly vulnerable to anxiety due to biological, psychological, and social changes associated with aging. Factors such as declining physical health, loss of social roles, social isolation, and uncertainty about the future contribute significantly to psychological distress among elderly populations (Kim et al., 2021; Santini et al., 2020). If left untreated, anxiety can negatively affect sleep quality, physical health, and overall quality of life.

The findings of this study demonstrate that both Benson relaxation and Five-Finger Hypnosis are effective nurse-led interventions for reducing anxiety among elderly individuals. Although both techniques show significant effectiveness, Five-Finger Hypnosis appears to produce slightly greater improvements. This may be attributed to its simplicity and practicality, making it easier for elderly individuals to practice compared to Benson relaxation, which requires greater concentration during the relaxation process.

This study contributes to the development of non-pharmacological nursing interventions for mental health management among elderly populations, particularly within community healthcare settings. The results support the integration of relaxation-based and

hypnosis-based techniques into community nursing programs to improve mental well-being and quality of life among older adults. Furthermore, these findings provide valuable evidence for healthcare professionals and policymakers in developing accessible and effective mental health programs for elderly populations at both community and primary healthcare levels.

## **CONCLUSION**

This study aimed to analyze the effectiveness of nurse-led independent interventions, specifically Benson relaxation therapy and Five-Finger Hypnosis, in reducing anxiety levels among elderly individuals in the working area of UPT Puskesmas Lawawoi, Sidenreng Rappang Regency. The findings demonstrate that both interventions significantly reduce anxiety levels among older adults, confirming the effectiveness of non-pharmacological nursing approaches in managing psychological problems in the elderly population. The results also indicate that Five-Finger Hypnosis produces slightly greater improvements compared to Benson relaxation therapy, likely due to its simplicity and practicality, which allow elderly individuals to perform the technique more easily without requiring prolonged concentration.

The findings provide important scientific evidence supporting the use of relaxation-based and hypnosis-based interventions as accessible and effective strategies for anxiety management in community-dwelling elderly populations. From a geriatric nursing perspective, these interventions activate psychological and physiological relaxation responses that help reduce stress, improve emotional regulation, and enhance overall psychological well-being among older adults.

This study contributes to the growing body of evidence on non-pharmacological interventions in geriatric mental health and highlights the important role of nurses in implementing independent therapeutic interventions within primary healthcare settings. The integration of Benson relaxation therapy and Five-Finger Hypnosis into routine nursing care at community health centers may serve as a practical and cost-effective strategy for improving mental health outcomes among elderly populations.

In terms of practical implications, healthcare providers, particularly community nurses, are encouraged to incorporate these interventions into elderly care programs as part of comprehensive mental health promotion and anxiety management strategies. Additionally, policymakers and healthcare administrators may consider integrating relaxation-based therapies into community health services to support the psychological well-being of the growing elderly population.

Future research is recommended to involve larger and more diverse samples, explore the long-term effects of these interventions, and examine the potential benefits of combining multiple relaxation techniques. Further studies should also consider additional psychosocial factors that may influence anxiety levels among older adults, thereby providing a more comprehensive understanding of effective strategies for improving geriatric mental health in community settings.

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## **CONFLICTS OF INTEREST**

No conflicts of interest were reported in this study, and the research was conducted smoothly without any disruptions.

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