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Finger Relaxation Technique As A Non-Pharmacological Intervention In Nursing Care

Naomi Malaha^{1*}, Rezaqiah Aulia Rahmat², Rizki Andita Noviar³¹Nursing Study Program, Amanah Makassar College of Health Sciences, Indonesia²Faculty of Medicine, Bosowa University, Indonesia³Nursing Study Program, Husada Health College, Jombang, Indonesia*Correspondent Author: Naomi Malaha, Email: naomi685941@gmail.com

ABSTRACT

Relaxation is a non-pharmacological intervention that is effective in reducing anxiety and physiological tension. Finger relaxation techniques relaxation the finger relaxation technique is a simple method that utilizes controlled touch and breathing stimulation to reduce stress responses. This study aims to analyze the effectiveness of the finger relaxation technique as a non-pharmacological intervention in nursing care to reduce patient anxiety. The study used a quasi-experimental design with a pretest - posttest approach. without control group. The sample consisted of 35 patients with mild to moderate anxiety. Anxiety was measured using the Hamilton Anxiety Rating Scale (HARS). The results showed a significant decrease in anxiety scores from 21.4 ± 4.2 to 13.2 ± 3.8 ($p < 0.001$). It was concluded that finger relaxation techniques were effective as a nursing intervention in reducing patient anxiety.

Keywords: Finger Relaxation, Non-Pharmacological Intervention, Anxiety, Nursing Care





1. Introduction

Anxiety is an emotional response to a threat that can affect a patient's physical and psychological well-being. In nursing practice, anxiety is often found in patients with acute and chronic illnesses, as well as before medical procedures.

Anxiety management can be done pharmacologically and non-pharmacologically. Non-pharmacological interventions have the advantage of having minimal side effects and being able to be performed independently by the patient.

The finger relaxation technique is a method that combines deep breathing techniques with gentle touch on each finger in turn. This technique is believed to stimulate the parasympathetic nervous system, reduce sympathetic activity, and aid in emotional regulation.

This study aims to evaluate the effectiveness of finger relaxation techniques in reducing anxiety as part of holistic nursing care.

2. Research Methods

a. Research Design

Quasi-experimental with pretest - posttest approach without control group.

b. Population and Sample

The population consisted of inpatients with mild to moderate anxiety. A sample of 35 respondents was selected using purposive sampling.

c. Inclusion Criteria

- 1) Age 18–60 years
- 2) HARS score 14–28 (mild–moderate anxiety)
- 3) Willing to undergo intervention

d. Intervention Procedure

- 1) Measurement of anxiety scores (pretest).
- 2) Giving finger relaxation techniques for 15–20 minutes.
- 3) The intervention was carried out once a day for 3 days.
- 4) Re-measurement of anxiety (posttest).

e. Instrument

Hamilton Anxiety Rating Scale (HARS).

f. Data analysis

Paired t- test with a significance level of 0.05.

3. Research Result And Discussion

a. Research Result

The study involved 35 respondents with mild-moderate levels of anxiety based on Hamilton Anxiety Rating Scale (HARS).

- 1) Respondent Characteristics





Variables	n	%
Man	15	43
Woman	20	57
Age 18–35 years	18	51
Age 36–60 years	17	49
Mild anxiety	20	57
Moderate anxiety	15	43

The distribution shows that the majority of respondents are in the mild anxiety category.

2) Anxiety Scores Before and After Intervention

Measurement Mean \pm SD Minimum Maximum

Pretest	21.4 \pm 4.2	15	28
Posttest	13.2 \pm 3.8	8	20

Average decrease in anxiety score: 8.2 points (38%)

The paired t- test shows:

- $t = 10.74$
- $p < 0.001$

This means that there is a significant difference before and after the intervention.

3) Effect Size (Cohen's d)

Cohen's $d = 1.98$

→ Includes large category effect size

This shows that finger relaxation techniques have a strong impact in reducing anxiety.

4) Analysis of Changes Based on Anxiety Categories

a) Mild Anxiety (n=20)

- Pretest: 17.8 \pm 1.5
- Posttest: 11.9 \pm 2.1
- Decrease: 5.9 points

b) Moderate Anxiety (n=15)

- Pretest: 25.9 \pm 1.6
- Posttest: 15.0 \pm 2.4
- Decrease: 10.9 points

Greater incidence in the moderate anxiety group, indicating greater effectiveness in patients with more severe levels of anxiety.





5) HARS Symptom Component Changes

Significant decreases were found in the components:

- Tension (↓40%)
- Sleep disturbance (↓35%)
- Somatic symptoms (↓30%)
- Excessive worry (↓42%)

This suggests that the intervention not only reduced emotional anxiety but also physical symptoms.

b. Discussion

1) Statistical and Clinical Significance

A decrease of 8.2 points on the HARS scale is a clinically significant change. Clinically, a decrease of ≥ 7 points on the HARS indicates a significant therapeutic response. size almost 2, finger relaxation techniques provide a strong and relevant impact in nursing practice.

2) Physiological Mechanisms

Finger relaxation techniques work through:

a) Parasympathetic Nervous System Activation

Deep breathing and gentle touch decrease sympathetic activity, reducing heart rate and blood pressure.

b) Decreased Stress Hormones

Cortisol and adrenaline levels which increase during anxiety.

c) Limbic System Regulation

Touch stimulation and focused breathing help reduce amygdala activity which plays a role in anxiety responses.

3) Psychological Mechanisms

This technique provides:

- a) A sense of self-control over emotional states
- b) Distraction from negative thoughts
- c) Increased mindfulness

Touching the fingers also has a grounding effect, helping the patient refocus on the present moment.

4) Greater Effectiveness in Moderate Anxiety

The moderate anxiety group experienced a greater reduction because the physiological stress baseline was higher, so the relaxation response was more pronounced.

This shows that finger relaxation techniques are effective as complementary therapy in patients with more severe levels of anxiety.

5) Implications in Nursing Care





Finger relaxation technique:

- Easy to teach
- No tools needed
- Safe
- Can be done independently

This intervention supports the concept of holistic and patient-centered nursing care.

6) Critical Analysis and Limitations

- No control group
- The duration of the intervention was relatively short (3 days)
- No stress biomarker measurements were performed.

Further research with randomized design controlled trial (RCT) and measurement of cortisol levels will strengthen the scientific evidence.

➤ **Clinical Implications**

- a) Finger relaxation techniques can be part of standard interventions in anxiety management.
- b) Can be used on pre-operative patients, chronic patients, and pregnant women.
- c) Helps reduce dependence on mild anxiolytic drugs.

4. Conclusion And Suggestions

a. Conclusion

Finger relaxation techniques are effective in significantly reducing patient anxiety and can be used as a non-pharmacological intervention in nursing care.

b. Suggestion

- 1) Nurses can integrate this technique into routine nursing interventions.
- 2) Patients can be taught this technique to do independently.
- 3) Further research with a control group is recommended.

Bibliography

1. Berman A, Snyder SJ. *Fundamentals of nursing*. 2016.
2. Black JM. *Medical-surgical nursing*. 2019.
3. Ernawati, E., Ula, Z., Muthoharoh, BL, Saad, R., Devin, D., Wati, I., & Rahmat, RA (2025). Post-Delivery Recovery Until All Women's Reproductive Organs Recover After Delivery (Postpartum Period 6 - 8 Weeks) Regarding Knowledge Of Umbilical Cord Postpartum Care Mothers. *International Journal of Health Sciences*, 3 (2), 217–224. <https://doi.org/10.59585/ijhs.v3i2.645>
4. Hawari D. *Stress and anxiety management*. 2018.
5. Hinkle JL. *Brunner & Suddarth's nursing*. 2018.





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6. Hayati, SM, Purnama, DWN, Nurhaedah, N., Malaha, N., & Hardiyanti, S. (2024). The Relationship Of Knowledge Level With Hypertension Prevention Measures In Lumbi-Lumbia Health Center. *International Journal of Health Sciences*, 2(2), 596–612. <https://doi.org/10.59585/ijhs.v2i2.351>
7. Kaplan International Relations. *Synopsis of psychiatry*. 2015.
8. McEwen BS. Stress response. *N Engl J Med*. 2007.
9. Noviar, RA, Belangi, SP, Suminar, S., Sallo, AKM, Listina, O., & Fahamsya, A. (2024). The Influence of Fast Method Health Education on Nurses ' Knowledge in Early Detection of Stroke Disease at Labuang Baji Regional Hospital, Makassar City. *International Journal of Health Sciences*, 2(3), 980–990. <https://doi.org/10.59585/ijhs.v2i3.443>
10. Potter PA, Perry AG. *Fundamentals of nursing*. 2017.
11. Sadock B.J. *Kaplan & Sadock's psychiatry*. 2017.
12. Smeltzer SC. *Medical-surgical nursing*. 2018.
13. Stuart GW. *Principles and practice of psychiatric nursing*. 2016.
14. Taylor C. *Psychiatric mental health nursing*. 2019.
15. WHO. *Mental health guidelines*. 2022.
16. Yosep I. *Psychiatric Nursing*. 2020.
17. Varcarolis E. *Foundations of psychiatric nursing*. 2017.
18. Videbeck SL. *Psychiatric -mental health nursing*. 2020.

