Proceeding of The International Conference of Inovation, Science, Technology, Education, Children, and Health

E-ISSN: 2776-9062

Research Article

Effectiveness of Finger Hold Relaxation Technique on Pain in Mothers Who Have Sex 640-645

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Abstract: Post-cesarean section (CS) pain is a common issue faced by postpartum mothers, significantly affecting their recovery process and overall well-being. Effective pain management is crucial to enhance recovery and improve quality of life. One promising non-pharmacological approach gaining attention is the finger hold relaxation technique, which has been shown to alleviate various forms of pain. This study aimed to assess the effectiveness of the finger hold relaxation technique in reducing post-CS pain. A quasi-experimental design was used with two groups: an intervention group that received the finger hold relaxation technique and a control group that did not receive the intervention. The study involved 60 post-CS mothers, randomly divided into the two groups. Pain levels were measured before and after the intervention using the Numeric Rating Scale (NRS). Data analysis was performed using the Mann-Whitney U test. Results indicated a significant decrease in pain levels in the intervention group compared to the control group ($p < 0.05$). The average pain score in the intervention group before the intervention was 7.5, which decreased to 4.2 after the intervention. In contrast, the control group exhibited relatively stable pain scores, with an average of 7.3 before the intervention and 6.9 after. The Mann-Whitney U test confirmed a significant difference, with a p-value of 0.01, indicating that the finger hold relaxation technique had a significant effect on reducing post-CS pain. In conclusion, the finger hold relaxation technique is effective in reducing pain in post-CS mothers. It is recommended that this technique be incorporated into post-operative care programs to enhance maternal comfort and facilitate faster recovery.

Keywords: Pain; Post-CS; Postpartum Period; Relaxation

1. Introduction

Back pain is one of the common complaints experienced by pregnant women, especially in the third trimester. According to research conducted by BÃ¸ et al. (2015), around 50-70% of pregnant women experience back pain during their pregnancy. This pain can be caused by various factors, including changes in body posture, weight gain, and hormonal changes that occur during pregnancy. In this context, it is important to find an effective method to reduce the intensity of back pain, one of which is acupressure therapy.

Back pain is one of the common complaints experienced by pregnant women, especially in the third trimester. Based on research conducted by ACOG (American College of Obstetricians and Gynecologists), around 50-70% of pregnant women experience back pain during their pregnancy (ACOG, 2020). This figure shows a fairly high prevalence and is an important concern in prenatal care. In addition, a study in Indonesia found that 63% of pregnant women experience back pain, with pain intensity varying from mild to severe (Sari, 2021).

Increased relaxin hormone during pregnancy contributes to ligament laxity, which can lead to spinal instability and back pain (Choi et al., 2021). In addition, significant weight gain

Received: 17, May 2025
Revised: 31, May 2025
Accepted: 16, June 2025
Published: 30, June 2025
Curr. Ver.: 30, June 2025

during pregnancy also puts additional stress on the spine, which can worsen the condition. Data from WHO shows that back pain is one of the leading causes of disability in pregnant women, which can affect their quality of life (WHO, 2021).

Another factor that affects the incidence of back pain is the lifestyle and physical activity of pregnant women. Research shows that pregnant women who are not physically active are more susceptible to back pain compared to those who exercise regularly (Kumar & Kumar, 2020). Therefore, it is important for health workers to provide education on the importance of safe physical activity during pregnancy.

In this context, it is important to screen and evaluate pregnant women who experience back pain. With a good understanding of the incidence and risk factors, health workers can design appropriate interventions to reduce back pain in pregnant women. This will also help reduce the incidence of complications that may arise due to untreated back pain.

Overall, the high incidence of back pain among pregnant women indicates the need for greater attention and intervention in prenatal care. With the right approach, it is hoped that the quality of life of pregnant women can be improved, as well as reducing the negative impact of back pain on their health and fetal development.

Acupressure is a technique originating from traditional Chinese medicine that involves pressing certain points on the body to relieve pain and improve overall health. The Blader 23 (BL23) point, located in the waist area, is known as a point associated with kidney and back health. Research by Lee et al. (2017) showed that stimulation at this point can help relieve lower back pain. Thus, this study aims to explore the effect of acupressure therapy at the Blader 23 point on the intensity of back pain in pregnant women in the third trimester.

In this study, researchers will involve a number of pregnant women who experience back pain and compare the level of pain before and after acupressure intervention. The data obtained are expected to provide deeper insight into the effectiveness of this method as a non-pharmacological alternative in treating back pain in pregnant women. This is important, considering that many pregnant women avoid using drugs during pregnancy because of the potential side effects that can harm the fetus (Chung et al., 2018). Through this study, it is hoped that it can provide scientific evidence regarding the benefits of acupressure therapy, as well as provide recommendations for medical personnel and pregnant women regarding safe and effective pain management methods. This study will also contribute to the development of knowledge in the field of maternal and child health, as well as improve the quality of life of pregnant women who experience back pain. With this background, this study is expected to contribute to the development of better pain management methods for post-CS mothers, as well as provide a deeper understanding of the effectiveness of relaxation techniques in the context of reproductive health.

2. Proposed Method

This study used a quasi-experimental study design with a pre-test and post-test approach. The subjects of the study consisted of 30 mothers who underwent cesarean section at the Buntalo Health Center, who were divided into two groups: an intervention group that received finger-holding relaxation techniques and a control group that did not receive intervention. Subject selection was done randomly to avoid bias.

The finger-holding relaxation technique is carried out by teaching mothers to use their fingers to apply pressure to certain points on the body, such as the wrists and fingers. Each intervention session lasted for 30 minutes, carried out for three consecutive days after surgery. Before and after the intervention, the level of pain was measured using a numeric pain scale (NRS) from 0 to 10, where 0 means no pain and 10 means very severe pain.

The data obtained will be analyzed using descriptive and inferential statistics. The paired t-test will be used to compare the differences in pain levels before and after the intervention in the group that received the relaxation technique, while the Mann-Whitney test will be used to compare the differences between the intervention and control groups. The level of significance is set at $p < 0.05$.

The study will also consider demographic factors such as age, parity, and socio-economic status that may affect pain levels. These data will be collected through questionnaires given to subjects before the intervention is carried out. In this way, the study can provide a more comprehensive picture of the effectiveness of the finger grip relaxation technique.

3. Results and Discussion

Table 1. Frequency distribution table of pain scale in the control group

Control group	n	Min	Max	Mean±SD	p value
Pretest	15	4	9	7.30±0.74	0.13
Posttest		4	8	6.90±0.69	

Table 1. Shows that there is a decrease in the pain scale in the control group, namely from a scale of 7 to a scale of 6. The results of the paired t-test obtained a p-value of 0.13> 0.05, meaning that there is no significant effect on the pain scale in the control group.

Table 2. Frequency distribution table of pain scale in the intervention group

Kelompok intervensi	n	Min	Max	Mean±SD	p value
Pretest	15	4	9	7.5±0.85	0.01
Posttest		3	6	4.2±0.93	

Table 2. Shows that there is a decrease in the pain scale in the control group, namely from a scale of 7 to a scale of 6. The results of the paired t-test obtained a p-value of 0.13> 0.05, meaning that there is no significant effect on the pain scale in the control group. Table

Table 3. Differences in Breast Milk Production in Postpartum Mothers who are not given and who are given warm compresses

Kelompok	n	Perubahan Mean	p value
Kontrol	30	0.40	0.01
Intervensi		3.3	

Table 3 shows that postpartum mothers in the control group had a mean rank value (average rank) of pain scale 0.4, and postpartum mothers in the intervention group had a mean rank value (average rank) of pain scale 3.3. After the Mann Whytney U test was conducted in the halsil plane, the effect of the finger hold relaxation technique on the post-SC pain scale was p (Sig) 0.001 (<0.05)

5. Result and discussion

The initial results of this study showed that there was a significant decrease in pain levels in the group receiving the finger-holding relaxation technique intervention compared to the control group. The average pain score before the intervention in the intervention group was 7.5, while after the intervention it dropped to 4.2. Meanwhile, the control group showed a relatively stable pain score, with an average score of 7.3 before the intervention and 6.9 after.

This decrease indicates that the finger-holding relaxation technique can provide a significant analgesic effect. This is in line with previous studies showing that relaxation techniques can reduce pain perception in patients (Nansikombi, 2015). This decrease in pain not only provides physical comfort for mothers, but can also contribute to improving their quality of life during the recovery period.

In addition, statistical analysis showed that the difference between the intervention and control groups was significant with p <0.05. This indicates that the finger-holding relaxation technique has a real effect in reducing post-CS pain. This study also found that demographic factors such as age and parity did not show a significant effect on the results, indicating that this technique can be widely applied regardless of demographic background.

In terms of mechanism, the reduction in pain experienced by mothers can be explained through stimulation of the autonomic nervous system that occurs when performing relaxation techniques. This stimulation can increase the release of endorphins and reduce muscle tension, which in turn can reduce the perception of pain. Research by Pramesti (2023) supports this finding by showing that relaxation techniques can improve the psychological and physical well-being of patients.

Thus, the results of this study indicate that the finger hold relaxation technique can be an effective alternative in pain management in post-CS mothers. Further research is needed to explore the potential of this technique in a broader context and to develop clinical practice guidelines that can be adopted by health workers

The finger hold relaxation technique is one method that can be used to reduce pain in post-CS mothers (Vambheim, 2021). This technique involves using the fingers to press certain

points on the body, which is believed to stimulate the nervous system and help reduce the perception of pain. According to research by Rante (2023), this relaxation technique can reduce pain levels by up to 30% in mothers undergoing cesarean sections.

One of the mechanisms of this technique is through diversion. When mothers focus on the pressure applied to the finger, their attention from the pain can be reduced. A study by Setyoningsih (2023) showed that distraction techniques can be an effective strategy in managing postoperative pain. This suggests that the finger hold relaxation technique can be a useful non-pharmacological alternative.

In addition, this relaxation technique can also increase overall comfort and relaxation. Research by Small (2020) showed that mothers who used relaxation techniques reported feeling calmer and more comfortable, which can contribute to pain reduction. This shows the importance of a holistic approach to post-CS pain management.

The use of relaxation techniques can also increase maternal involvement in the recovery process. By giving mothers the tools to manage their pain, they can feel more empowered and involved in their care. A study by Smith (2018) showed that mothers who are involved in their own pain management tend to have better recovery outcomes. Thus, the finger hold relaxation technique can be an effective method in managing pain in mothers after CS, providing a safe and beneficial alternative in postoperative care.

6. Conclusions

In conclusion, this study shows that the finger-holding relaxation technique is an effective method in reducing pain in post-CS mothers. The results obtained showed a significant decrease in pain levels after the application of this technique, which supports the use of a non-pharmacological approach in pain management. This study also emphasizes the importance of a holistic approach in post-operative maternal care, which not only focuses on physical but also psychological aspects.

With the increasing number of births through cesarean section, health workers need to have a variety of strategies in pain management. The finger-holding relaxation technique can be one of the feasible options to help mothers cope with post-operative pain. In addition, this study opens up opportunities for further studies on other relaxation techniques and their impact on maternal and child health.

Finally, it is hoped that the results of this study can be applied in clinical practice and provide benefits for mothers undergoing cesarean section. Improving the quality of life of post-CS mothers can be achieved through a more comprehensive and inclusive approach to pain management, which includes relaxation techniques such as finger-holding.

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