

The Effect of Abdominal Lifting Technique on Postpartum Pain at St. Carolus Summarecon Hospital

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Abstract

Background: Postpartum pain is a common discomfort experienced by mothers after childbirth. Abdominal lifting, a non-pharmacological intervention, has been proposed to alleviate such pain. **Purpose:** To examine the effect of abdominal lifting technique on postpartum pain in postpartum mothers at St. Carolus Summarecon Hospital. **Methods:** This study used a quasi-experimental pretest-posttest design with one group. Fifteen postpartum mothers were selected using purposive sampling. The Numeric Rating Scale (NRS) was used to measure pain intensity. Data were analyzed using the Paired Sample T-Test. **Results:** The mean pain score before the intervention was 7.20, and after the intervention was 2.67, with a significant mean difference of 4.53 (p-value = 0.000). **Conclusion:** Abdominal lifting technique is effective in reducing postpartum pain.

Keywords: abdominal lifting, postpartum, pain, non-pharmacological, intervention

Introduction

Postpartum pain is a physiological response resulting from uterine involution, perineal trauma, or surgical interventions during childbirth. This pain can interfere with a mother's physical recovery, bonding with the newborn, and initiation of breastfeeding. Effective pain management during the postpartum period is therefore essential to support maternal well-being.

Globally, maternal health remains a critical concern. According to the World Health Organization (2020), approximately 295,000 women die each year due to complications during pregnancy and childbirth. Although mortality is the most severe outcome, morbidity—including unmanaged postpartum pain—also significantly impacts maternal health outcomes. In Indonesia, the maternal mortality ratio remains

high, and postpartum discomfort is widely reported but often under-addressed.

Non-pharmacological interventions are increasingly recommended for pain relief due to their accessibility, minimal side effects, and cultural acceptability. One such technique is abdominal lifting, a manual method involving gentle, rhythmic strokes along the abdominal area. Previous studies have indicated that this technique can stimulate endorphin release and reduce muscle tension, contributing to lower pain intensity.

Despite its potential benefits, empirical evidence on the use of abdominal lifting specifically for postpartum pain remains limited. This study aims to investigate the effectiveness of abdominal lifting technique in reducing postpartum pain among mothers who delivered at St. Carolus Summarecon Hospital.

Method

Method should be structured as follows:

1. Research Design

This research used a quasi-experimental design with a pretest-posttest one-group approach.

2. Setting and Samples

The study was conducted at a hospital in Tangerang, Indonesia, in January 2025. Fifteen postpartum mothers were selected using purposive sampling. Inclusion criteria included postpartum mothers willing to participate and complete both

pretest and posttest assessments. Exclusion criteria included medical emergencies or ERACS delivery.

3. **Intervention**

The intervention involved abdominal lifting performed daily for 7 days. Each session lasted approximately 20 minutes.

4. **Measurement and Data Collection**

Pain intensity was measured using the Numeric Rating Scale (NRS), a validated and reliable tool ranging from 0 (no pain) to 10 (worst pain). Data collection was done by the researcher using observation sheets.

5. **Data Analysis**

Data were analyzed using the Paired Sample T-Test with SPSS to determine the significance of the difference in pain scores before and after the intervention.

Results

Table 1. Mean Pain Scores Before and After Intervention

Group	Mean	SD	Min	Max
Pretest	7.20	1.01	6	8
Posttest	2.67	0.97	2	4

The Paired Sample T-Test showed a significant difference in pain scores before and after the intervention ($p = 0.000$).

Discussion

This study provides evidence supporting the effectiveness of abdominal lifting in reducing postpartum pain. The significant decrease in pain scores—from an average of 7.20 to 2.67—demonstrates the intervention's potential as a complementary therapy in postpartum care.

The results align with previous research by Malawat (2020) and Liana (2021), both of which reported significant pain reduction through abdominal lifting. The mechanism behind this effect is likely related to stimulation of the nervous system, leading to the release of endorphins and improved muscle relaxation.

These findings suggest that abdominal lifting is a simple, non-invasive technique that can be taught to healthcare providers or even family members for use in home care. The comfort and simplicity of the technique may increase patient compliance and satisfaction.

Despite its promise, the study is limited by the small sample size and short duration. Larger-scale studies are needed to confirm these findings and explore long-term outcomes and broader applicability.

Limitation

The main limitation of this study was the small sample size and the short intervention period. Additionally, the adherence of participants to the daily intervention schedule was not always optimal.

Conclusion

Abdominal lifting technique significantly reduces postpartum pain among postpartum mothers. It serves as an effective, low-cost, and non-pharmacological intervention that can enhance maternal comfort and recovery. The integration of this technique into routine postpartum care is recommended, particularly in settings where access to pharmacological pain relief is limited. Future research should consider larger sample sizes, longer observation periods, and comparisons with other pain management techniques to further validate the effectiveness of abdominal lifting.

Ethical Considerations

The study received ethical approval from the Health Research Ethics Committee of Universitas Nasional. All participants provided written informed consent.

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Conflict of Interest

The author declares no conflict of interest.

Author contribution

Alin Adelina was responsible for the conception, data collection, analysis, and manuscript preparation.

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