

ARTICLE INFORMATION

Received: March 07, 2025

Revised: March 15, 2025

Available online: March 16, 2025

at: <https://e-jurnal.iphorr.com/index.php/mchc>

Effectiveness of slow dancing movement (hug with husband) on labour pain in active phase I

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Abstract

Background: Labour pain during the first stage is one of the main complaints experienced by women in labour, especially in the active phase when there is an increase in the intensity and frequency of contractions. Various nonpharmacological methods have been recommended for pain management, one of which is the slow dancing technique (hug with husband).

Purpose: This study aims to determine the effectiveness of slow dancing movement (hug with husband) on reducing labour pain in active phase I.

Method: The research design used a quasi-experiment with a one-group pretest-posttest design. The sample in this study were 45 mothers in labour during the active phase I who met the inclusion criteria. The sampling technique used purposive sampling. Pain measurement was carried out using the Numeric Rating Scale (NRS) scale before and after the slow dancing intervention for 20 minutes with husband assistance. Data were analysed using paired t-test statistical test

Results: The difference in the level of labour pain in the first stage before and after the slow dancing movement intervention (hug with husband) in the results of bivariate analysis (Paired t-test) showed that there was a significant difference between the level of pain before and after the intervention ($p < 0.05$).

Conclusion: Slow dancing movement (hug with husband) proved to be effective in reducing labour pain in the first stage.

Suggestion: Midwives are expected to integrate slow dancing techniques as part of non-pharmacological pain management in childbirth care and provide education to couples since the antenatal period regarding the importance of husband support during childbirth.

Keywords: Labour Pain; Slow Dancing.

INTRODUCTION

Labour is a natural physiological process that is often accompanied by intense pain, especially during the active phase I (Nirnasari, Astuti, Evi, Marianthi, & Azza, 2025). This pain arises from uterine contractions, cervical dilatation, and pressure on pelvic structures. Without proper pain management, the mother may experience anxiety, muscle tension, fatigue, and obstacles to the progress of labour such as slow cervical opening. Therefore, modern midwifery practice emphasises the importance of

non-pharmacological interventions that are safe and able to increase maternal comfort during labour (Yulizawati, Sinta, & Insani, 2019).

In Indonesia, the quality of the delivery experience still needs to be improved in line with efforts to reduce the maternal mortality rate (MMR). WHO has recorded the global MMR to reach 346 per 100,000 live births by 2023. Indonesia's MMR in 2023 is still at 305 per 100,000 live births, far from the national target of 183 per 100,000 KH. Central Java had 427

cases of MMR in 2024, while Jepara District reported 13 cases, and RSUD RA Kartini recorded 6 cases out of 1388 deliveries (Central Java Provincial Health Office, 2024; Central Statistics Agency. (2024). The Indonesian Health Profile (2023) shows that the quality of midwifery services including pain management and emotional support is still a challenge and needs to be strengthened (Ministry of Health of the Republic of Indonesia, 2024).

Mobility and position changes during labor have been shown to significantly impact labor comfort and progress. Maternal comfort increases when she is free to move, is receptive to touch, and receives emotional support. This approach can reduce pain because the mother has more control over her body and feels secure in dealing with contractions (Hall, Foster, Yount, & Jennings, 2020). The importance of walking, moving, and changing positions is crucial to harnessing gravity to accelerate fetal head descent and reduce pain (Ondek, 2019).

One form of mobilization that is now widely used is dance-accompanied labor, which involves rhythmic movements such as pelvic and body swaying that can be done with a companion. Labor with dance accompaniment can accelerate cervical dilation in the first stage and make the mother more relaxed (Simanullang, Wahyuni, Azizah, Simamora, Simbolon, & Sinaga, 2023). Labor with dance accompaniment can help lower the fetal head through rhythmic movements that support optimal fetal positioning. This technique is considered effective because it combines relaxation, rhythm, and companion support, so that the mother can adapt better to the pain of contractions (Asiyah, Indianingrum, Nabila, & Nisak, 2023).

In addition to helping labor progress, rhythmic mobilization is also beneficial in reducing pain perception. Non-pharmacological techniques such as mobilization, position changes, touch, and emotional support can reduce pain without side effects. Meanwhile, husband's support has been shown to

have a natural analgesic effect (Rejeki, 2020). The presence of a husband through touch, hugs, and verbal support can reduce anxiety and improve the mother's pain perception (Sari, 2022).

Movements such as pelvic tilts, standing, and walking help accelerate cervical dilation and increase the mother's sense of control. They also confirmed that emotional support from the husband through touch and hugs can stimulate the release of oxytocin and reduce pain through the gate control mechanism. This approach is in line with slow dancing techniques, namely gentle hugs and rhythmic movements with the husband that create a sense of security and relaxation for the mother (Ristiowati, 2025).

Dancing during labor provides a positive distraction, increases oxytocin, and reduces anxiety (Kram, 2020). Dancing during labor is not just a social media trend but has potential as an evidence-based midwifery practice because it improves the labor experience and reduces medical interventions (Toberna, Horter, Heslin, Forgie, Malloy, & Kram, 2020). The combination of pelvic tilt and belly dancing can significantly reduce pain intensity through pelvic muscle relaxation and endorphin stimulation (Berlita, Wijayanti & Sudirman, 2021).

RESEARCH METHOD

This type of research uses a quantitative design with an experimental design. The research design used was One Group Pretest Posttest Design. The population in this study were all first-time labouring mothers who gave birth at RA Kartini Jepara Hospital during the study period, with a total population of 72 people. The sampling technique used purposive sampling and the sample size was calculated using the Slovin formula to obtain a sample of 45 people. Subjective perception of pain felt by mothers due to contractions in the active phase of the first stage, measured before (pretest) and after (posttest) intervention using the Numeric Rating Scale (NRS) 0-10. Analysis used Paired t-test test

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DOI: 10.56922/mchc.v4i12.2667

RESEARCH RESULTS**Table 1. Characteristics of Respondents (n=45)**

Variable	Results
Age (Mean $\pm$ SD) Years	(28.3 $\pm$ 5.5) (18-45)
<20	3/6.7
20-35	36/80.0
>35	6/13.3
Parity	
Primipara	20/44.4
Multipara	25/55.6
Grandemultipara	0/0
Gestational age	
37-38 weeks	17/37.5
39-40 weeks	20/44.4
>41 weeks	8/17.8
Cervical Opening (n/%)	
4	21/46.7
5	16/35.6
6	5/11.1
7	3/6.7
8	0/0
Contractions in 10 minutes	
2 times	20/44.4
3 times	25/55.6
4 times	0/0
Contractions in 1 minute	
< 20 seconds	14/31.1
20-40 seconds	31/68.9
>40 seconds	0/0

Based on Table 1, Characteristics of maternal age respondents, most of the birth mothers were at the age of 20-35 years, as many as 36 respondents (80.0%). the majority of respondents were multiparous, namely 25 respondents (55.6%), while primiparous were 20 respondents (44.4%). Most respondents were at 39-40 weeks of gestation, namely 20 respondents (44.4%), and the least at > 41 weeks of gestation, namely as many as 8 respondents (17.8%). Most respondents were at the opening of the cervix 4 cm, namely 21 respondents (46.7%), and the least at the opening of 7 cm as many as 3 respondents (6.7%). The frequency of contractions in 10 minutes was mostly 3 times, as many as 25 respondents (55.6%), while 20 respondents (44.4%) experienced contractions 2 times in 10 minutes. The duration of contractions was mostly in the range of 20-40 seconds, as many as 31 respondents (68.9%), while 14 respondents (31.1%) experienced contractions of less than 20 seconds.

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Table 2. Effectiveness of Slow Dancing Movement (Hug with Husband) on Reducing Labour Pain in Active Phase I (N=45)

Labour pain	Pre-test	Post-test	Pvalue
No pain (0)	0/0	0/0	
Mild Pain (1-3)	5/11.0	19/42.2	
Moderate Pain (4-6)	22/49.0	20/44.5	
Severe Pain (7-10)	18/40.0	6/13.3	
Mean	6.82	4.31	0.000
SD	1.21	1.37	
Min-Max	4-9	2-7	

Table 2. shows that before the slow dancing intervention, most respondents experienced moderate pain as many as 22 respondents (48.9%) and the least experienced mild pain as many as 5 respondents (11.1%). This data shows that before the intervention, the majority of mothers experienced a fairly high level of pain. After the slow dancing intervention. Most respondents were in the moderate pain category as many as 20 people (44.5%) and the least respondents experienced severe pain decreased to 6 respondents (13.3%). These results indicate a shift in pain levels from the severe category to the moderate and mild categories after the provision of slow dancing interventions.

The average pain score before the intervention was 6.82 (SD = 1.21), while after the intervention it decreased to 4.31 (SD = 1.37). Descriptively, there was a decrease in average pain by 2.51 points. The p-value (Sig. 2-tailed) result is 0.000 (<0.05). This shows that there is a significant difference between pain scores before and after the slow dancing intervention (hug with husband).

DISCUSSION

Paired t-test results show a p-value of 0.000 (<0.05), which means there is a significant difference between pain scores before and after slow dancing intervention (hug with husband). The average pain scale before the intervention was in the severe category, while after the intervention it decreased to the moderate to mild category. The average pain reduction of 2.51 points showed a significant clinical effect. This decrease indicates a positive effect of slow dancing movements on reducing pain intensity.

In the active phase of labour there is an increase in the frequency and strength of contractions so that the perception of pain increases (Kurniawati & Lestari, 2022). In addition to physiological factors, psychological factors such as anxiety and fear can also aggravate pain perception (Yulianingsih, Violentina, Nancy, & Puili, 2024). In theory, labour pain in the first stage is mainly caused by uterine contractions, cervical dilatation, and stretching of the lower segment of the uterus.

Relaxation and distraction techniques during labour have been proven effective in reducing pain intensity because they help mothers control

physiological and psychological responses to contractions. Physiologically, the mechanism of pain reduction can be explained through the Gate Control theory, where tactile stimuli and movement can inhibit the transmission of pain impulses to the brain. In addition, light physical activity and emotional support increase the secretion of endorphins which act as natural analgesics (Rejeki, 2020). The concept of active mobilization during labor, moving and changing positions can increase comfort and facilitate the progress of labor (Ondeck, 2019),

In the researcher's opinion, the difference in pain levels before and after the intervention shows that slow dancing works through a biopsychosocial approach. From the biological aspect, the upright position and pelvic movement help the fetal head to descend and improve uteroplacental circulation, so that contractions become more effective and less stressful. From the psychological aspect, the husband's embrace creates a sense of security and emotional support that reduces anxiety. Meanwhile, from the social aspect, the husband's involvement increases the mother's confidence in facing the

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labour process. The combination of these three aspects led to a break in the fear-stress-pain cycle so that pain intensity decreased significantly after the intervention was given.

The results of this study are in line with various previous studies that show a significant difference in pain levels before and after movement-based interventions or partner support. Other research proved the effectiveness of rebozo gymnastics for stage I is more effective than dance labor. The mean value of rebozo gymnastics 2.31 is greater than dance labor of 1.25. Rebozo gymnastics and dance labor are therapies without the use of drugs to accelerate the first stage of labour where the birth canal becomes more flexible and the pelvic floor muscles are more relaxed (Asiyah et al., 2023). Combination of pelvic rocking and belly dance was effective in reducing labour pain significantly (Berlita et al., 2021).

Other research showed that dancing during labour has the potential to increase maternal comfort and positive experiences (Kram, Horter, Heslin, Forgie, & Malloy, 2020; Toberna et al., 2020). Husband's assistance was associated with a decrease in labour pain levels. Thus, the findings of this study strengthen the scientific evidence that slow dancing intervention is effective in significantly reducing first stage labour pain (Sari, 2022). In theory, rhythmic movement in an upright position helps to increase the descent of the fetal head and improve the mechanism of labour (Ondek, 2019).

In addition, the husband's touch and hug provide emotional support that increases a sense of security and stimulates the release of endorphins, which act as the body's natural analgesic (Hall et al., 2020). These results are in line with other research which state that dancing or rhythmic movements during labour can increase maternal comfort and help reduce pain perception (Kram et al., 2020; Toberna et al., 2020). Dance labour is effective in accelerating the progress of labour while increasing maternal comfort (Munafiah, 2023; Simanullang et al., 2023).

Thus, slow dancing intervention not only works through physical aspects (upright position and rhythmic movements), but also through psychological aspects (husband's support and sense of security), thus providing a comprehensive effect on reducing labour pain.

SUGGESTION

Midwives are expected to integrate slow dancing techniques as part of non-pharmacological pain management in childbirth care and provide education to couples since the antenatal period regarding the importance of husband support during childbirth.

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