

# EFFECTIVENESS OF THE IMPLEMENTATION OF THE CHILDBIRTH ENVIRONMENT WITH COMPLEMENTARY THERAPY (RELAXATION THERAPY, WARM COMPRESSES AND ENDORPHIN MASSAGES) AGAINST INTENSITY PAIN IN THE FIRST STAGE OF LABOR

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SUBMISSION TRACK	A B S T R A C T
Received: August 28, 2024 Accepted: December 15, 2024	Childbirth is a process of spending the products of conception. Labour begins his existence, mucus blood and cervical dilation. There are two phases Latin (opening 1-3 cm) and the active phase (4-10 cm opening). These phases will usually be accompanied by
Keywords	pain. Labour pain will be more severe if accompanied by fear, anxiety, tension and lack of confidence, it is this which can aggravate the pain of labour. The application of the therapy delivery
The Childbirth Environment, Complementary Therapies, Pain Childbirth	environment is expected to help mothers reduce the first stage of labour pain intensity active phase. The purpose of this study is to determine the effectiveness of the application delivery environment
Correspondence	with complemented therapy to decrease pain intensity first stage of the labor active phase. The study design was a pre-experimental
E-mail: <u>nurhasanahzhuhri@gmail.com</u>	the tabor active phase. The shady design was a pre-experimental design with a comparison group static approach. The study population was all pregnant women who gave birth in PMB S Pasir Pengaraian, Rokan Hulu district in 2024, while the sample is multigravida mothers who gave birth from September 2023 to February 2024 some 16 maternal. The sampling technique used was purposive sampling. Data collection techniques using the Verbal Descriptor Scale. Data analysis using the Wilcoxon test. Research, the first stage of labour pain intensity in the active phase of the experimental group mostly feel the pain of labour at the level of moderate pain, (50%) in the control group while the majority (50%) of respondents feel the pain of labour at the level of severe pain. The difference in pain intensity between maternal childbirth given application delivery environment with complementary therapies to mothers who were not given the application delivery environment with complementary therapies, $P = 0.002$ ( $p < 0.05$ ).

# INTRODUCTION

Childbirth is a process of producing the results of conception that can live from the inside of the uterus to the outside world. Labor begins when he and the woman secrete mucus mixed with blood, this happens because the cervix begins to open. The opening of the cervix begins in the latent phase, where in this phase there is an opening of 1 - 3 cm and in the active phase there is an opening of 4 - 10 cm.

Cervical opening in labour is usually accompanied by pain. Labour pain is a physiological condition that begins to arise in labour phase I of the latent phase and the longer the pain felt will get stronger, the peak of pain occurs in the active phase. The intensity of pain during labour affects the effective distraction to create a childbirth environment with complementary therapy, that is, a therapy creates a comfortable and relaxed childbirth environment with relaxation therapy, warm compresses and endorphin massage to create a comfortable and relaxed childbirth environment, labour pain can hopefully be reduced.

One of the efforts to reduce stressors and pain in pregnant women to make his frequency effective so that he is adequate is with natural non-pharmacological methods, namely applying massage methods, relaxation therapy and warm compress techniques. Relaxation therapy shows the effect of reducing anxiety and depression, relieving pain, lowering blood pressure and lowering heart rate. Warm compresses can have direct effects on the body such as overcoming emotional problems, stress or depression (Koensoemardiyah, 2009).

Endorphin massage is a gentle massage by pressing on the sacrum area using the palm of your hand. Creating a comfortable atmosphere and environment in the delivery room, accompanying the mother and making physical contact with touch are sources of comfort during childbirth. Massage or touch can relax the mother, bring the mother's emotional connection with her husband and midwife closer and is beneficial in the first stage of labour to reduce pain, calm and calm the mother (Tournaire and Yonneau).

Based on this, researchers have conducted a study on "the effectiveness of the application of the labour environment with complementary therapies (relaxation therapy, warm compresses and endorphin massage) on reducing the intensity of labour pain during the first active phase".

## **METHODS**

This study employed a Pre-Experimental design with a One-Group Pretest-Posttest approach. Before the intervention, which included relaxation therapy, warm compress techniques, and endorphin massage, a pre-test was conducted to measure labour pain during the first active phase of labour using observation sheets. Following the pre-test, the intervention was administered, comprising relaxation therapy, warm compress techniques, and endorphin massage. After the intervention, a post-test was conducted to measure labour pain during the same phase.

The results were then compared to assess the decrease in labour pain intensity between the pretest and post-test among respondents who received the intervention. The study's population consisted of all maternity mothers who gave birth between September 2023 and February 2024, with a sample size of 16 participants. The data analysis was conducted using computerized programs, such as SPSS. For bivariate analysis, a Dependent T-Test was applied if the data met the assumption of normal distribution. However, if the data was not normally distributed, the Wilcoxon Test was used as an alternative.

## RESULT

This study used a sample of 16 respondents who were given relaxation therapy, warm compress techniques and endorphin massage during childbirth. Before being given treatment, respondents were measured the intensity of their pain, and then after being given treatment, the intensity of their pain was also measured.

The data used as the parameters of this study are pain intensity before treatment and after treatment.

## 1. Univariate Analysis

## Table 1

Frequency Distribution of Characteristics of Research Subjects					
Characteristics	F	%			
Age					
$\leq 20$ years	0	0			
21 – 34 years	6	37.5			
$\geq$ 35 years	10	62.5			
School education					
SD	0				
SMP	2	12.5			
SMA	10	62.5			
РТ	4	25			

## Table 2

Frequency Distribution of Labor Pain Levels in Phase 1 of Active Phase

Pain Levels of	<b>Before Giving Treatment</b>		After being given treatment	
Labor	F	%	F	%
No Pain	0	0	0	0
Mild Pain	2	12.5	8	50
<b>Moderate Pain</b>	4	25	8	50
Severe pain	9	56.3	0	0
Very severe pain	1	6.3	0	0
Total	16	100	16	100

2. Bivariate Analysis

			5		
Group	N	Median (Min-Max)	Mean ± s.d	Rank S	Р
Before Giving Treatment	16	3.07(2-4)	3.35±0.58	10(+)	0.002
After being given treatment	16	3(3-4)	3.15±0.36	3(-)	
			7 ties		

#### Table 3 Wilcoxon Test Analysis Results

# DISCUSSION

The majority of respondents in this study are of reproductive age. Based on Table 5.1, the majority of respondents are 21 to 34 years old as much as 37.5%, and over 35 years old as much as 62.5% so it can be said that respondents in adulthood can express feelings of pain or discomfort subjectively well, this greatly supports the smooth running of research that requires the expression

of pain feelings in real and as it is so that the pain scale can be measured accurately. This is by the opinion of Judha, et al. (2012) that an adult person can report pain well.

According to Khasanah (2005), Andarmoyo (2013) argues that young age tends to be associated with psychological conditions that are still unstable, which triggers anxiety, so that the pain felt becomes more severe, and tolerance will increase with age and understanding of pain.

In addition to age, a person's education level can also affect communication, opinions, and ways of thinking about the problems faced by a person (Hendra, 2008). This is supported by the results of the research in Table 5.1 about the characteristic description of the respondents. Based on Table 5.1, the majority of respondents have a high school education level of 62.5%. According to Ahmadi (2005), education is learning to improve or develop abilities, the level of education determines whether it is easy for a person to absorb and understand knowledge, in general, the higher the education, the better the knowledge. On the other hand, lack of education will hinder the development of attitudes towards new values that are introduced so that knowledge is also lacking.

Based on the education that the respondents had in this study (the majority of high school) made it easier for researchers to provide information about childbirth such as labour pain in the first period, what to do about labour pain, how the mechanism of pain occurs, what causes it, and whether this is reasonable and provides information about the research procedure and its benefits that can be taken for the respondents. This knowledge and information will have a positive impact on the pain management experienced by respondents, so that the assessment of labour pain and research procedures can be carried out smoothly, properly and correctly by the guidelines for the assessment of labour pain.

Pain measurement can be done with an objective approach and is most likely to be used to measure pain using the body's physiological response to pain itself. Pain measurement with an objective approach is in the form of a Descriptive Scale or Verbal Descriptor Scale (VDS). VDS is a more objective tool for measuring pain severity. (Tamsuri (2007) in Potter & Perry (2006). Based on Table 2 about the description of the respondents' pain level as a result of the VDS assessment, it was found that the results of 16 respondents in the experimental group (the group that was given treatment in the form of relaxation therapy, warm compress techniques and endorphin massage) the majority felt labour pain at a moderate pain level, which was 8 respondents (50%), and the respondents felt labour pain at a mild pain level of only 8 respondents (50 %).

The results of the statistical test with the Wilcoxon test in Table 3 obtained a significance value of 0.002 (p < 0.05) which means that there is a significant difference between maternity mothers who are given the application of the maternity environment with complementary therapy and maternity mothers who are not given the application of the maternity environment with complementary therapy.

#### CONCLUSION

1. Among the 16 respondents, 2 (12.5%) experienced mild pain, 4 (25%) experienced moderate pain, 9 (56.3%) experienced severe pain, and 1 (6.3%) experienced very severe pain.

2. There was a significant difference in the Application of the Childbirth Environment with Complementary Therapy (relaxation therapy, warm compress techniques and endorphin massage) to the Reduction of Intensity of Labor Pain During the I Active Phase of Labor with p Value < 0.002

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# BIOGRAPHY

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Born in Pasir Pengaraian, Indonesia March 27, 1987. Started career as a lecturer in the Midwifery Study Program at Prima Nusantara University Bukittinggi from 2010 to 2017, after which he became a teaching lecturer at the Al Insyirah Institute Pekanbaru 2017-2019, and also taught at the D-III Midwifery Study Program at the University of Muhammadiyah Riau from 2019-2021. Working at the Faculty of Health Sciences, Pasir Pengaraian University since 2002 until now.

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