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The Effect of Hypnobirthing on Labor Pain in Primiparous Women During the Active Phase at the Midwife Independent Practice Center Bdn L in the City of Depok

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Abstract---Almost all women feel fear when facing the process of giving birth or childbirth. Women's fear of childbirth puts stress on their entire body and prevents their bodies from carrying out their physiological functions to give birth comfortably. As a result, they experience a long and very painful labor process that requires medical intervention which is not really needed if their body can relax. Based on the initial survey at Independent midwife practice Bdn Lucyana Kohan in October 2021 to December 2021 in childbirth as many as 5 mothers, of which 66.7% did not use hypnobirthing relaxation techniques, while those using hypnobirthing relaxation techniques were 33.3%. This study aims to find out the Effect of Hypnobirthing on Labor Pain of Active Phase Primiparous Mothers in Independent midwife practice Bdn L 2021. The research design used is analytic research, non-parametric approach methods. Total sample with a sample number of 32 respondents, using data that is primary data (observation) secondary data (medical records), analysis using the Wilcoxon test signed rank test. Non parametric test statistical test results with sig value results of 0.001, where P value ≤ 0.005 (H_0 rejected, H_a accepted), alternative hypothesis accepted. There is of this research is to prove that there is an effect of hypnobirthing on the pain of active phase primiparous mothers

Keywords---active labor, childbirth, hypnobirthing, pain, relaxation.

Introduction

Almost all women experience fear when facing the process of childbirth. The fear that women feel during childbirth causes their entire bodies to tense up, hindering their physiological functions and making it difficult for them to give birth comfortably. As a result, they may undergo a prolonged and very painful labor process, often requiring unnecessary medical interventions if their bodies could relax.

World Health Organization (WHO) data from 2019 indicates a Maternal Mortality Ratio (MMR) of 216 per 100,000 live births, and the Infant Mortality Rate is estimated at 19 per 1,000 live births. According to the Association of Southeast Asian Nations (ASEAN) data, maternal mortality rates remain high, with Myanmar ranking first at 250 per 100,000 live births, followed by Laos at 185, Indonesia at 177, Cambodia at 160, Timor-Leste at 142, and the Philippines at 121 per 100,000 live births in 2017 ⁽²⁾.

According to the results of Riskesdas 2018, the Maternal Mortality Ratio (MMR) in Indonesia reached 305 per 100,000 live births, with Antenatal Care (ANC) coverage at 96.1 %, deliveries at health facilities at 79 %, postpartum visit at 37 %, and contraceptive use at 42.4 %. The Infant Mortality Rate (IMR) in Indonesia reached 24 per 100,000 live births, with coverage for the first Neonatal Care Visit (NCV1) at 84.1%, second Neonatal Care Visit (NCV2) at 71.1%, and third Neonatal Care Visit (NCV3) at 50.6%. The total number of maternal deaths in 2018-2019 showed a slight decrease from 4,226 to 4,221. It is estimated that by the year 2024, the MMR in Indonesia will decrease to 183 per 100,000 live births⁽³⁾ (Uldal et al., 2023; Sari et al., 2022).

In the year 2017, the MMR for the West Java Province was 76.03 per 100,000 live births, and the IMR was 3.4 per 1,000 live births (West Java Health Profile, 2017). In the Bogor Regency, the MMR was 28 per 117,350 live births, and the IMR was 109 per 117,350 live births⁽⁴⁾ (Aprilia, 2010).

The Data Center of the Indonesian Hospital Association explains that 15% of mothers in Indonesia experience childbirth complications, and 21% state that the childbirth they undergo is painful due to experiencing intense pain, while 63% do not alleviate pain during childbirth⁽⁵⁾.

Based on my observations of 32 laboring mothers who gave birth with hypnobirthing, there is an influence of hypnobirthing on the perceived pain of childbirth, where mothers can control themselves when pain occurs due to uterine contractions, allowing them to give birth calmly, comfortably, smoothly, and without intense pain. This is supported by the influence of hypnobirthing on the level of pain and the progress of childbirth in laboring mothers, where the p-value for the level of pain is 0.001, indicating a significant influence of hypnobirthing on the reduction of pain intensity (Astuti & Noviyanti, 2015).

"Based on the preliminary survey conducted at Independent Midwife Practice Lucyana Kohan from October 2021 to December 2021, a total of 5 mothers went through childbirth. Out of these, 66.7% did not utilize hypnobirthing relaxation techniques, while 33.3% employed the hypnobirthing relaxation technique. Interviews with clinic staff revealed that mothers who used hypnobirthing techniques during the childbirth process experienced smooth deliveries and found it to be a joyful moment. They were even able to smile while awaiting the birth of their baby, devoid of fear or anxiety. On the contrary, mothers who gave birth without hypnobirthing often experienced intense pain, anxiety, and even developed a sense of fear during the childbirth process (Beck & Gable, 2012; Atis & Rathfisch, 2018).

Given the issues mentioned above, the author is interested in conducting research on the "The Influence of Hypnobirthing on Labor Pain in Primiparous Women during the Active Phase of Labor at the Independent Practice of Midwife Bdn L in the year 2021" (Catsaros & Wendland, 2023; Güler & Mete, 2023).

Research Method

"This research is a quasi-experimental study, which involves conducting experimental activities with the aim of understanding the resulting effects. The consequence of this experimental research is the implementation of trials or interventions. The experiment involves treating or intervening with one control group compared to another. The goal is to observe the impact of the intervention on the control group.

The research design employed is a One-Group Pre-test-Post-test Design. This approach involves conducting a pretest (initial observation) before administering the intervention, followed by the intervention itself, and concluding with a post-test (final observation). The study took place at Independent Midwife Practice Bdn L, located at Bukit Waringin Housing, Block C17 No.1, Kedungwaringin Village, Bojonggede Sub-District, Bogor District. The study population comprises pregnant women in the third trimester with TP between June to December 2021, who are registered as participants in Hypnobirthing training and meet the criteria to be part of the research case group, resulting in a total of 32 respondents. The control group consists of pregnant women in the third trimester with expected delivery dates between June and December 2021, who are receiving prenatal care at Independent Midwife Practice Bdn L in the year 2021.

Result and Discussion

Table 1

Frequency Distribution of Active Phase Primiparous Respondents at the Independent Practice of Midwife Bdn L in the year 2021 Based on Age

Age	Quantity (individual)	Percentage (%)
<20 years	8	25,0
20-35 years	20	62,5
>35 years	4	12,5
Total	32	100

Based on the table above, we can observe that out of 32 primiparous women in active labor, the majority are in the age range of 20 – 35 years, comprising 20 individuals (62.5%). The second group, under 20 years old, consists of 8 individuals (25%), and the third group, above 35 years old, comprises 4 individuals (12.5%).

Table 2

Frequency Distribution of Active Phase Primiparous Respondents at Independent Practice of Midwife Bdn L in the year 2021 Based on Education

Education	Quantity (individual)	Percentage (%)
Higher education	12	37,5
Lower education	20	62,5
Total	32	100

Based on the table above, it can be observed that out of 32 active-phase primiparous mothers, 20 individuals (62.5%) have a lower level of education, while 12 individuals (37.2%) have a higher level of education.

Table 3

Frequency Distribution of Active Phase Primiparous Respondents at Independent Practice of Midwife Bdn L in the year 2021 Based on Parity

Parity	Quantity (individual)	Percentage (%)
Primipara	12	37,5
Multipara	16	50
Grandemultipara	4	12,5
Total	32	100

Based on the table above, it can be seen that out of 32 active-phase primiparous mothers, there are 16 multiparous mothers (50%), 12 primiparous mothers (37.5%), and 4 grandmultiparous mothers (12.5%).

Table 4

Frequency Distribution of Active Phase Primiparous Respondents at Independent Practice of Midwife Bdn L in the year 2021 Based on Psychological Factors.

Psychological	Quantity (individual)	Percentage (%)
Easily anxious	12	37,5
Not easily anxious	20	62,5
Total	32	100

Based on the table above, out of 32 active-phase primiparous mothers, there are 12 individuals (37.5%) who easily experience anxiety and 20 individuals (62.5%) who do not easily experience anxiety.

Table 5

Normality Test of Active Phase Primiparous Women at the Independent Practice of Midwife Bdn L in the year 2021

	Statistic	Saphiro-wilk	
		Df	Sig
Before hypnobirthing	0,879	Before Hypnobirthing	0,879
After hypnobirthing	0,660	After Hypnobirthing	0,660

Based on the table above, out of 32 respondents, it is indicated that for all data of primiparous women in the active phase before and after Hypnobirthing, the p-value is 0.00 (p-value < 0.05), indicating that the data is not normally distributed.

Table 6

Frequency distribution of labor pain levels in primiparous women during the active phase at the Independent Practice of Midwife Bdn L before Hypnobirthing intervention

Pain Level	Frequency	Percentage (%)
No pain	0	0
Mild pain	0	0
Moderate pain	1	3,1
Severe pain	18	56,3
Unbearable pain	13	40,6
Total	32	100

Based on the table above, out of 32 primiparous women, the results are as follows that 1 individual (3.1%) experienced moderate pain, 18 individuals (56.3%) experienced severe pain, and 13 individuals (40.6%) experienced unbearable pain during the active phase of labor at the Independent Practice of Midwife Bdn L before Hypnobirthing intervention.

According to [Simatupang & Mangkuji \(2020\)](#), labor pain is characterized by uterine contractions that can increase sympathetic nervous system activity. Intense pain during childbirth can lead to physiological changes in the body, such as increased blood pressure, elevated heart rate, and increased respiratory rate. If not addressed promptly, this pain can escalate feelings of worry, tension, fear, and stress ([Santoro et al., 2018](#); [Friedman & Cohen, 2023](#)).[References](#)

[Astuti & Noviyanti \(2015\)](#), adds that fear causes the arteries leading to the uterus to contract and tighten, resulting in pain. However, in the absence of fear, muscles relax, and the cervix can naturally thin and open during rhythmic pulsations of the body, facilitating easier pushing of the baby. This leads to a relatively smoother and faster childbirth process with minimal pain complaints. According to the researcher, the childbirth process is a natural occurrence that pregnant women will go through when the time comes to give birth. Before the actual delivery, women may experience symptoms such as labor pain, and the intensity of this pain can vary among expectant mothers. Therefore, the use of hypnobirthing is deemed necessary to reduce labor pain in laboring women, facilitating a smoother and safer childbirth process.

Table 7

Frequency distribution of labor pain levels in primiparous women during the active phase at the Independent Practice of Midwife Bdn L after Hypnobirthing intervention

Pain Level	Frequency	Percentage (%)
No pain	0	0
Mild pain	20	62,5
Moderate pain	0	0
Severe pain	4	12,5
Unbearable pain	8	25
Total	32	100

Based on the table above, out of 32 primiparous women, the results are as follows: 18 individuals (56.25%) experienced mild pain, 4 individuals (12.5%) experienced severe pain, and 8 individuals (25%) experienced unbearable pain during the active phase of labor at the Independent Practice of Midwife Bdn L after Hypnobirthing intervention. This study aligns with the research by [Astuti & Noviyanti \(2015\)](#), where out of 30 research samples, the group that did not undergo hypnobirthing mostly experienced severe pain (66.7%), followed by moderate pain (26.7%), and very severe pain (6.7%). In contrast, the group that underwent hypnobirthing mostly experienced moderate pain (60%), followed by severe pain (26.7%), and mild pain (13.3%).

According to the researcher, hypnobirthing has a significant impact on the emotional state of mothers during childbirth, especially in reducing pain during the active phase of labor. The hypnobirthing technique has proven to be effective in reducing labor pain from before the intervention to after hypnobirthing is performed ([Aprillia, 2010](#)).

Table 8
Non-Parametric Wilcoxon signed rank test

Z	Posttest -Pretest
Asymp. Sig. (2-tailed)	-3.932 ^b
	.001

From the above data, the obtained Asymp. Sig (2-tailed) value is $0.001 < 0.05$, indicating a significant difference. Therefore, it can be concluded that "Hypothesis is accepted, Null hypothesis is rejected". That means There is an effect of hypnobirthing on primiparous women during the active phase of labor at the Independent Practice of Midwife Bdn L in 2021.

Hypnobirthing is aimed at preparing and training the muscles involved in the birthing process optimally, increasing the levels of endorphins and epinephrine hormones in the body to reduce or even eliminate pain during contractions and childbirth ([Kuswandi, 2014](#)). Similarly, hypnobirthing can reduce anxiety, tension, and pain during the childbirth process, enhancing the speed and ease of the birthing process ([Hermina & Wirajaya, 2015](#)).

According to the researcher, the application of Hypnobirthing techniques during the childbirth process has an impact on the level of labor pain. Mothers who underwent Hypnobirthing during childbirth experienced lower levels of labor pain compared to those who did not receive Hypnobirthing intervention during childbirth. This is evident from the research results using the non-parametric Wilcoxon signed-rank test, where the significance value is 0.001 (< 0.005), indicating the influence of Hypnobirthing on labor pain. This is further supported by the reduction in pain experienced by primiparous women before and after receiving Hypnobirthing intervention. Before Hypnobirthing, labor pain was more intense, ranging from severe to unbearable, while after Hypnobirthing, the percentage of labor pain was more dominant in the mild category ([Horsch & Ayers, 2016](#); [Bradfield et al., 2023](#)).

Conclusion

Based on the research findings regarding the Influence of Hypnobirthing on Labor Pain in Primiparous Women during the Active Phase at the Independent Practice of Midwife Bdn L in 2021, the conclusions can be summarized as follows:

From the research results, the frequency distribution of pain levels before undergoing hypnobirthing among 32 active-phase primiparous mothers showed the following: one individual (3.1%) experienced moderate pain, 18 individuals (56.3%) experienced severe pain, and 13 individuals (40.6%) experienced unbearable pain. Following the hypnobirthing intervention, the frequency distribution of pain levels among the same 32 active-phase primiparous mothers showed the following: 18 individuals (56.25%) experienced mild pain, 4 individuals (12.5%) experienced severe pain, and 8 individuals (25%) experienced unbearable pain.

The non-parametric test results with a significance value of 0.001, where $P \text{ value} \leq 0.005$ (Null hypothesis rejected, Hypothesis accepted), prove that there is an influence of hypnobirthing on labor pain in primiparous women during the active phase at the Independent Practice of Midwife Bdn L in 2021.

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