



ARTICLE RESEARCH

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Gentle Birth Delivery Method With Level Of Labor Pain at PMB Griya Bunda Sehat Balikpapan

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ABSTRACT

Gentle birth is a birthing approach characterized by a calm, gentle, respectful, and courteous process that optimally utilizes the natural integration between body, mind, and spirit. Globally, the prevalence of gentle birth practices has increased in line with the growing demand for humanistic and minimally medical interventions in childbirth. Studies report that 20–40% of pregnancy care facilities in developed countries have adopted elements of gentle birth, such as relaxation techniques, emotional support, controlled breathing, minimal medical intervention, and a supportive birthing environment. In a gentle birth, the mother is directed to perceive pain as something that will help her to meet the baby. The aim of this study is to find out the relationship between the gentle birth delivery method and the level of labor pain in women giving birth at PMB Griya Sehat Balikpapan in 2024. Quantitative research with an analytical observational research type. The sampling method in this research was non-probability sampling using an accidental sampling technique with a sample size of 45 people plus 10% to account for sample dropout. This research uses cross-sectional analysis. The statistical test results of this study indicate a significant relationship between gentle birth methods (independent variable) and the level of labor pain (dependent variable) in women who gave birth at PMB Griya Sehat Balikpapan in 2024 ($p < 0.05$). These findings indicate that the application of gentle birth methods is associated with a decrease in pain levels during childbirth. It can be concluded that mothers who used the gentle delivery method during labor at PMB Griya Bunda experienced mild labor pain. Based on these findings, the gentle delivery method can be recommended as an alternative non-pharmacological strategy for managing labor pain in obstetric services.

Keywords: Labor Pain; Gentle Birth; Maternity Mother

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INTRODUCTION

Childbirth is a series of processes that end with the mother expelling the products of conception. This process begins with true labor contractions, which are marked by progressive changes in the cervix, and ends with the birth of the placenta, which begins with uterine contractions causing progressive dilatation of the cervix, birth of the baby, and birth of the placenta, and this process is a natural process¹.

The types of childbirth are divided into: spontaneous labor, namely the process of giving birth to a baby using the mother's own power without help or tools, and without injuring the baby's mother, which lasts less than 24 hours². Assisted delivery, namely vaginal delivery with the help of tools or through the abdominal wall with a caesarean section operation. Caesarean section is one of the methods used in the health sector to assist childbirth when unexpected problems occur during labor. from the outside by means of stimulation, such as several methods in gentle birth. Pain is a feeling of discomfort that is very subjective, and only the person who experiences it can explain and evaluate this feeling³.

Labor pain is a physiological process experienced by Maryuni (2021) almost all women during childbirth, yet its intensity varies widely and can significantly affect maternal comfort, emotional well-being, and overall birth experience. High levels of labor pain are often associated with fear, anxiety, prolonged labor, and increased medical interventions. Consequently, pain management during labor remains a crucial aspect of maternal care⁴⁻⁶.

During the first stage of labor, pain is caused by dilatation of the cervix and lower uterine segment and distension of the uterine corpus. The intensity of labor pain in primiparas is often more severe than labor pain in multiparas. This is because multiparas experience cervical thinning at the same time as cervical dilatation, whereas in primiparas the process of cervical thinning occurs before cervical dilatation. This process causes the intensity of contractions felt by primiparas to be heavier than multiparas, especially during the first stage of labor^{7,8}.

Gentle Birth is a delivery method that emphasizes minimal intervention, maternal comfort, emotional support, controlled breathing, relaxation techniques, and a calm birthing environment. This approach aims not only to support the physiological process of childbirth but also to empower women to experience labor in a more positive and less traumatic manner. While Gentle Birth has gained popularity as a holistic childbirth approach, empirical evidence regarding its specific impact on labor pain levels is still limited and inconsistent^{1,9}.

Gentle Birth, according to one maternity expert, Midwife Yesie Aprilia, is a calm and polite birth concept that utilizes all natural elements. So with Gentlebirth, the mother and baby are treated as individuals or main actors in childbirth, not medical personnel or supporting equipment¹⁰.

According to Hung 2009, published in the Tzu Chi Nursing Journal, Gentle Birth is a concept of a birthing method that has been used since ancient times, before various modern medical procedures in the birthing process became as common as they are today. Where every woman who is pregnant in a healthy condition has the ability to give birth naturally without involving much modern medical treatment^{11,12}.

When a pregnant mother receives support and informational guidance, she can develop self-esteem and self-confidence. Preparation replaces anxiety and fear with greater focus and calm. Then, a reassuring and calming environment. In the parasympathetic brain, a dim, dark, and calm environment will help a woman to feel safe and access her instinctive nature easily, which will affect the duration or length of labor. In a gentle birth, the midwife must also be able to facilitate the mother in choosing each desired position and make it comfortable during labor. With freedom of movement and a free birth position, apart from allowing optimal space for the baby to move down and through the pelvis, the work of the pelvic muscles will be more efficient^{3,13}.

This study is novel in its specific focus on quantifying labor pain intensity as an outcome of the Gentle Birth delivery method, rather than emphasizing maternal satisfaction or general birth experiences as in previous research. It provides a holistic evaluation by integrating both physiological and psychological components of Gentle Birth within a clinical midwifery context, contributing new evidence for non-pharmacological labor pain management³.

Therefore, this research is very important for analyzing the relationship between the Gentle Birth method and the level of labor pain, so that it can provide scientific evidence to support its implementation in midwifery practice.

The purpose of this study is to analyze the impact of the Gentle Birth Method on the level of labor pain experienced by women during childbirth and to provide scientific evidence regarding the effectiveness of Gentle Birth as a non-pharmacological approach to labor pain management and support its application in maternal and midwifery care practices.

METHODS

This study used a quantitative observational design with a comparative approach. The study population consisted of women who were in active labor and met the inclusion criteria, while the study sample was selected using non-probability sampling with the accidental sampling technique, which is the selection of cases or respondents who happened to be present or available^{14,15}. The intensity of labor pain was measured using a standard pain scale (such as the Visual Analog Scale or Numeric Rating Scale) during the active phase of labor^{16,17}.

The research population was mothers who gave birth at PMB Griya Bunda Sehat Balikpapan. The population in this study was 240. The samples in this study were part of the mothers who gave birth at PMB Griya Bunda Sehat Balikpapan, a total of 45 respondents were included in the study and analyzed. The sample size in this research can be determined using the minimum sample size formula¹⁵

The subjects selected in this study met the inclusion criteria and were not excluded from the exclusion criteria. The inclusion criteria in this study were mothers who gave birth using the gentle birth method at PMB Griya Bunda Sehat Balikpapan who were willing to be respondents, mothers who gave birth in the first active phase, while the exclusion criteria were respondents who gave birth with complications.

This research is an analytical observational study using a cross-sectional design, in which the dependent and independent variables are examined simultaneously ¹⁵. The ethical clearance for this research is: DP.04.03/F.XLII.25/0151/2024

RESULT

This research was conducted at the Independent Midwife Practice, Griya Bunda Sehat, an individually established health service institution located in the Balikpapan City area, located on Jalan PJHI Batakan Rt. 14 No. 16 A, Manggar sub-district, sub-district. East Balikpapan, East Kalimantan, Postal Code 76111.

Characteristics Of Respondent

Table 1. Characteristics of Respondents at PMB Griya Bunda Sehat Balikpapan in 2024

Charateristics	N=45	%
Age		
< 20 Years	2	4.4
21-35 Years	34	75.6
>35 Years	9	20
Total Of Deliveries		
1 time	11	24.4
2-4 times	34	75.6
> 4 times	0	0
Education		
Elementary School	0	0
Junior High School	4	8.9
Senior High School	15	33.3
Diploma/Bachelor	24	53.3
Master	2	4.4
Job		
Private sector employee	4	8.9
Self-employed	2	4.4
Government employees	3	6.7
Housewife	36	80

Table 1 shows that the majority of respondents' ages are known: 34 people (75.6%) aged 21-35 years, 2 people (4.4%) aged < 20 years, and 9 people (20%) aged 35 years. The number of births was 34 people (75.6%) with 2-4 births, while 11 people (24.4%) had 1 birth. The patient's education was 24 people (53.3%) had a Diploma/Bachelor's degree, while 16 people (33.3%) had a high school education, 4 people (8.9%) had a junior high school education, and 3 people (4.4%) had a secondary school education. Masters. As many as 34 people (80%) work as housewives, 4 people (8.9%) work as private employees, 3 people (6.7%) work as civil servants, and 2 people (4.4%) work as entrepreneurs.

Labor Pain

Based on Table 2, it is known that the majority of respondents, namely 28 people (62.2%), experienced mild pain during the labor process, while 17 people (37.8%) experienced moderate pain during the labor process.

Table 2. Labor Pain Levels

Painful	n	%
Mild Pain	24	53.3
Severe Pain	21	46.7
Total	45	100

Gentle Birth Method

Table 3 Selection Gentle Birth Delivery Method

Choosing a Gentle Birth Delivery Method	n	(%)
Didn't choose	5	11.1
Choose	40	88.9
Total	45	100

Based on Table 3, it is known that the majority of respondents, namely 40 people (88.9%), mothers chose the gentle birth method, while 5 people (11.1%) mothers did not choose the gentle birth method. The relationship between labor pain and the choice of a gentle birth delivery method among mothers giving birth at PMB Griya Bunda Sehat Balikpapan in 2024.

The relationship between labor pain and the choice of a gentle birth delivery method among mothers giving birth at PMB Griya Bunda Sehat Balikpapan in 2024

Table 4. The relationship between labor pain and the choice of a gentle birth delivery method among mothers giving birth at PMB Griya Bunda Sehat Balikpapan in 2024

No	Labor Pains	Choosing a Gentle Birth Delivery Method				Total	%	p value			
		Didn't Choose		Choose							
		n	%	n	%						
1	Mild Pain	2	40	21	52.5	23	51.1				
2	Severe Pain	3	60	19	47.5	22	48.9	$\alpha = 0.02$			
	Total	5	5	40	100	79	100				

* Chi-Square Test Analysis $p < \alpha$

Table 6 shows that among the 5 respondents who did not choose the gentle birth method, 60% experienced severe pain and 40% mild pain; for the 23 respondents who chose the gentle birth method, the percentages were reversed. The percentages of respondents who experienced severe pain and mild pain were 47.5% and 51.1%, respectively.

Based on the results of statistical tests, the p-value was <0.05 ; $\alpha = 0.05$ indicates a relationship between the pain experienced by the mother and the choice of a gentle birth delivery method among

women giving birth at PMB Griya Bunda Sehat Balikpapan in 2024.

DISCUSSION

Based on the results of this research analysis, it was found that the highest average maternal age in the first stage of labor who chose a gentle birth was 20-35 years. The research results show that respondents aged 21-35 years are the best age range for giving birth and the most productive, safe, and healthy age, and their thinking patterns are mature, so it is possible that at this age they can control labor pain and the length of labor well. According to Nursalam, the older you are, the more mature a person's level of maturity and strength will be in thinking and working, whereas according to Hurlock, the age of 21-35 years is said to be the period of adulthood and reproduction, where at this time they are expected to be emotionally able to face problems during childbirth. This research is not in line with research by⁶ which shows that there is no relationship between age and labor pain, this is because labor pain is subjective and influenced by many other factors.

The largest average educational requirement for birthing mothers who choose the gentle delivery method is a Diploma/Bachelor's level. The results of the study showed that there was no influence of education on the choice of a gentle birth delivery method. This is in line with research conducted by¹⁸ which stated that there was no significant relationship between income, education level, knowledge of Gentle Birth, maternal class, and delivery method.

The Gentle Birth method affects labor pain by supporting the natural physiological process of childbirth while minimizing unnecessary medical interventions. Labor pain is not only^{19,20} caused by uterine contractions, but is also influenced by muscle tension, oxygen supply, and hormonal balance. Gentle Birth techniques, which include slow and rhythmic breathing, relaxation, and freedom of movement, help reduce muscle resistance and increase uterine efficiency, thereby reducing the intensity of pain felt during contractions^{3,21}.

In the hormonal system, Gentle Birth promotes the optimal release of oxytocin and endorphins. Oxytocin triggers effective uterine contractions, while endorphins act as natural analgesics that reduce pain perception. A calm birthing environment, dim lighting, and minimal disturbances—key components of Gentle Birth—help suppress the excessive release of catecholamines (stress hormones), which can inhibit oxytocin and intensify pain. As a result, labor proceeds more smoothly with lower levels of pain^{19,20,22}.

Psychologically, the Gentle Birth method is expected to reduce fear and anxiety, which are known to exacerbate labor pain through the fear–tension–pain cycle. Emotional support, clear communication, and empowerment of the mother increase a woman's sense of control during labor. As fear decreases, muscle tension decreases, breathing becomes more effective, and pain feels more manageable. This psychological comfort plays an important role in reducing pain intensity^{23,24}.

Many factors influence the physiological and psychological processes of birth and the extent to which women experience pain, including the extent to which birth is managed and how it is managed. Pain patterns, for example, appear to be different in nulliparous women compared with multiparous

women. Typically, nulliparous women experience greater sensory pain than multiparous women in early labor (before 5 cm dilatation)²⁵.

In addition, Gentle Birth emphasizes non-pharmacological pain management strategies such as positioning, movement, and ongoing support from medical staff or birth companions. This approach allows women to actively adapt to contractions rather than resist them, leading to better adjustment mechanisms and reduced pain perception. Overall, the Gentle Birth method contributes to a more positive childbirth experience by addressing both the physical and emotional dimensions of labor pain. The labor pain experienced by each woman is different and personal. Each person perceives pain differently from the same stimulus, depending on their pain threshold. Pain during labor is a manifestation of contractions (shortening) of the uterine muscles. Most mothers consider and imagine labor pain as a scary thing or experience^{26,27}.

The Gentle Birth method during childbirth is widely used by mothers who give birth at PMB Griya Bunda Sehat Balikpapan. They choose the gentle birth method with the aim of minimizing the pain that will be felt during childbirth.

This is in line with research conducted by Jones (2012), the research states that various pain management methods are used by women during childbirth. The method used is usually a gentle birth. Gentle Birth is a non-pharmacological intervention (hypnosis, biofeedback, intracutaneous or subcutaneous injection of sterile water, immersion in sterile water), aromatherapy, relaxation techniques (yoga, music, audio), acupuncture or acupressure, manual methods (massage, reflexology), nerve stimulation, transcutaneous electrical nerve stimulation (TENS)^{4,25,28}.

Gentle birth methods used at the start of labor are hypnosis, biofeedback, aromatherapy, relaxation techniques (yoga, music, audio), acupuncture or acupressure, manual methods (massage, reflexology), while other methods are only given during labor, for example, injections, intracutaneous or subcutaneous sterile water, water birth^{25,29}.

According to the researchers' assumptions, based on the results of this study, mothers who gave birth using the gentle birth method during delivery at PMB Griya Bunda were healthy; their pain was mild.

CONCLUSIONS AND RECOMMENDATIONS

The results of the study showed no significant relationship between gentle delivery methods and maternal characteristics; however, a significant relationship was observed between gentle delivery methods and reduced labor pain ($p < 0.05$). Gentle delivery can be considered a non-pharmacological approach to improve maternal comfort during labor. These results support integrating gentle birth principles into routine midwifery care during labor. Capacity building through structured training and continuing professional education is necessary to ensure effective implementation. Further studies with larger sample sizes and rigorous research designs are recommended to confirm these findings and improve their generalizability.

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