

## **The Effect of Supportive Education About Gentle Birth with Audiovisual Media on Readiness to Childbirth in Third Trimester Primigravida**

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### **KEYWORDS      ABSTRACT**

Supportive Education,  
Audiovisual,  
Readiness, Childbirth,  
Gentlebirth

A third trimester primigravida mother's excessive anxiety indicates a lack of preparation that will negatively impact the mother's, the fetus's, and the delivery process's health. Making birth plans might help a mother feel more prepared for giving birth. The purpose of this study is to ascertain how preparedness for labor is affected by supportive education about gentle birth through the use of audiovisual media. Pre-experimental methodology with a single group pre-test–post-test design was employed in this study. Maternal preparation for labor and supportive education about gentle birth through audiovisual media were the research variables. In June 2023, the Pratama Anugrah Clinic in Surabaya recruited 30 participants for the study, of whom 30 were sampled using total sampling. The study group consisted of primigravida mothers in their third trimester. The questionnaire was the instrument, and the Wilcoxon test with  $\alpha = 0.05$  was utilized for analysis. The findings demonstrated that whereas most respondents (60%) felt well-prepared before receiving supportive education, nearly all respondents (93.3%) felt well-prepared for childbirth after receiving such information. The Pratama Anugrah Clinic Surabaya's mothers' preparedness for childbirth is impacted by supportive education, as indicated by the findings of the Wilcoxon test analysis, which yielded a  $P=0.003$  result. The study concludes that maternal preparedness for childbirth can be positively impacted by supportive education about gentle birth through audiovisual media, leading to an increase in knowledge, information, and maternal readiness.

### **1. Introduction**

Childbirth is a natural processes that are expected to run smoothly so that the mother and baby can go through labor in a healthy condition, but in reality this delivery process often makes mothers feel anxious and worried, especially for mothers who are giving birth for the first time. Excessive levels of anxiety during the third trimester, particularly in primigravida moms, can have detrimental effects on the health of the mother and fetus as well as the progress of labor. According to World Health Organization (WHO) data from 2020, 8–10% of pregnant women experience anxiety, and this number rises to 12% as delivery approaches (World Health Organization, 2020) (Neelima et al., 2024). Anxiety can have an impact on a mother's readiness to face childbirth. Research conducted by Wulandari (2021) on 190 pregnant women in the third trimester showed that the majority of respondents were less prepared for childbirth, of the 190 respondents found to be less prepared, namely 155 people (81.6%) and respondents with good readiness, namely 35 people (18.4%). Anxiety and worry are experienced because mothers feel they are not strong enough to push and endure pain, thus making some mothers choose to have a caesarean section (SC) labor because they think SC can minimize more pain. The fact is that SC deliveries are even more risky because they can cause short-term and long-term problems (Mogren et al., 2018). This shows that one of the indicators that influence feelings of anxiety and worry when childbirth is due to the mother's unpreparedness in childbirth caused by a lack of birth planning. Abidah et al. (2021) demonstrates how worry can have an impact on a woman's psychological state, how feelings can impact the health of the fetus while it's inside the mother, and how anxiety can interfere with a child's ability to grow and develop in the future (Kodric et al., 2021).

Mothers experiencing anxiety in the third trimester of pregnancy may cause their bodies to release stress hormones such cortisol, ACTH, norepinephrine, and epinephrine. An excessive amount of stress hormone will result in placental hypoperfusion, which will affect the embryonic growth (Anggraini and Handayani, 2021). The World Health Organization (WHO) estimates that 5–15% of all babies worldwide will require SC surgery on average. One nation where SC has dramatically expanded is China, where it went from 3.4% in 2010 to 39.3% in 2018. According to Basic Health Research, 17.6% of deliveries in Indonesia in 2021 used the Sectio Caesarea (SC) technique, and 4 % of those SCs were performed at the mother's wish.

Pregnancy counseling that has been running so far focuses more on education about physical changes,

discomfort during pregnancy and how to handle it, while what is related to childbirth is limited to planning the place of birth, helpers and companions during childbirth as well as equipment that needs to be brought by the mother when there are signs of labor. Efforts to overcome readiness and overcome anxiety such as fear of tearing, unexpected complications, inability to endure pain, pain management and images of the birth process have not been accommodated (Malathi et al., 2024). Supportive education is one of the efforts that can be made to increase the readiness of mothers. Supportive education is an educational method that involves various methods such as teaching, guiding, supporting, and developing the environment (Bobir et al., 2024). Gentle birth is one of the methods used to prepare mothers for childbirth. A gentle birth is a birth that prioritizes calm, tenderness and utilization of all the natural elements of the human body. The provision of supportive education for childbirth doesn't only increase comprehension of the gentle birth but also includes matters related to delivery planning, besides that supportive counseling also provides to support mothers had childbirth with gentle birth. To apply gentle birth, mothers must have a birth plan and be prepared both physically and psychologically for the mother since her pregnancy. The aim of this study was to ascertain the impact of using audiovisual media to provide supportive education about gentle birthing practices on primigravida mothers' preparedness for childbirth in the third trimester.

## **2. Methodology**

### **Dataset**

#### ***Materials***

This study is pre-experimental in nature and employs a pre-test-post-test design with a single group. The mother's preparedness for giving birth was the dependent variable in this study, whereas supporting education regarding gentle birthing was the independent variable (Padmanabhan et al., 2015). Thirty respondents who meet the criterion of primigravida third trimester pregnant women make up the sample size. sampling in the context of complete sampling.

#### ***Data collection procedures***

A readiness questionnaire from research was the instrument employed in this investigation by Purtanti (2014) It has undergone reliability and validity testing. The Pratama Anugrah Clinic in Surabaya was the site of this investigation. Analysis using a significance value of  $\alpha = 0.05$  for the Wilcoxon sign rank test. The research was carried out in June 2023 and included the following stages: describing the goals and advantages of the study, protecting participant privacy, obtaining consent to participate, administering a pre-test questionnaire, offering supportive education about gentle birth through the use of audio-visual media (video) for one week, conducting the control (post-test) questionnaire one week later, processing and analyzing data, presenting findings and recommendations, and publishing.

#### ***Data analysis***

IBM SPSS Statistics was used for all data analysis. A total sampling technique was used during the sampling process. The Wilcoxon sign rank test was used for analysis. For the test, the significance threshold was set at 0.05.

## **3. Results and discussion**

Table 1 reveals that all of the respondents are between the ages of 18 and 40, or early adulthood, that the majority of them have advanced degrees, and that the majority of them do not have jobs.

Table 1. Respondent characteristics according to age, education, and employment

Characteristics	Category	Amount	%
Age Phase	Early Adulthood	30	100,0
Education	Elementary	2	6,7
	Middle	11	36,6
	High	17	56,7

Job	Not Working	17	56,7
	Working	13	43,3

Source: Primary data, June 2023

Table 2 shows that most respondents had a good level of readiness before being given supportive education about gentle birth, while after giving supportive education about gentle birth almost all respondents had a good level of readiness.

Table 2. Variable distribution both before and after the intervention

Variables	Criteria	Amount	%
Before Intervention	Good	18	60,0
	Enough	9	30,0
	Less	3	10,0
After Intervention	Good	28	93,3
	Enough	2	6,7
	Less	0	0,0
Total		30	100,0

Source: Primary data, June 2023

Table 3 demonstrates that the average mother's preparation for childbirth was 58.76 for the pre-test and 62.56 for the post-test. The mean pre-test and post-test scores on moms' preparedness for childbirth differ statistically significantly, increasing by 3.8 points.

Table 3. Wilcoxon Test Analysis Results Before and After Intervention

Variables	Supportive Education With Audiovisual Media			
	Pre-Test Mean (SD)	Post-Test Mean (SD)	Average Mean	P-value
Readiness	58,76 (5,14)	62,56 (4,13)	3,8	0,003
Wilcoxon Sign Rank Test Analysis				0,003

Source: Primary data, June 2023

The hypothesis (H0) is rejected based on the results of the Wilcoxon Sign Rank Test with SPSS 25 for windows with a meaning level of  $\alpha = 0.05$ , which yielded a value of  $P = 0.003$  ( $0.003 \leq 0.05$ ). This indicates that supportive education about gentle birth through audiovisual media has an impact on mothers' readiness for childbirth. The purpose of this study was to determine how supportive education about gentle birthing affected primigravida moms' readiness for childbirth in the third trimester. Mother readiness in childbirth before being given supportive education about gentle birthal video intervention The results of the pre-test showed that the readiness of mothers in childbirth before being given supportive education about gentle birth, most of the third trimester pregnant women had a good level of readiness in childbirth. Of the 30 respondents, most (60.0%) mothers had good readiness.

While the remaining 30.0% had a enough level and 10 % had less of readiness in childbirth. This can be seen from the pre-test results where there are 4 points that have a low score with an average score of 1 and 2, including 1 statement on the physical aspect where the mother does not prepare a second decision maker because she thinks the first decision maker (husband) is enough and is always beside the mother. In fact, childbirth often comes suddenly and may experience complications and other emergencies. when the incident takes, the husband is often at work or even out of town. This situation making the mother's condition deteriorate because she does not immediately get treatment due to the length of time the family takes to make decisions. Maternal and neonatal mortality is currently a global issue in developing countries, with Indonesia having the highest MMR in ASEAN. Approximately 75% of maternal deaths are caused by complications such as postpartum hemorrhage, postpartum infection, preeclampsia/ eclampsia and prolonged / obstructed childbirth (Achadi, 2019). These complications are difficult to predict, so they are included in cases of maternal neonatal emergencies that require rapid treatment to minimize the consequences.

There are 2 statements on psychological aspects that have low scores, mothers who tend to be anxious and afraid in the face of childbirth because they hear mythical stories about childbirth. This is because the mother still has no experience in childbirth and believes the myths too much. Whereas feelings of anxiety and fear before labor will actually affect the mother's labor process in the future. Excessive levels of anxiety during the third trimester, particularly in primigravida moms, can have detrimental effects on the health of the mother and fetus as well as the progress of labor. Stress hormones such cortisol, ACTH, norepinephrine, and epinephrine can be released by the body in response to these emotions. An excessive amount of stress hormone can result in placental hypoperfusion, which will affect the growth of the fetus (Anggraini and Handayani, 2021). In this psychological aspect, most mothers also tend to be ordinary or less excited about childbirth, which means letting every process they go through just flow. This sober readiness will have an impact on the mother's childbirth process in the future because of the lack of encouragement from within to immediately perform labor which can cause complications before delivery, so that support from husband, family, and health workers is needed. Emotional support is positively related to the mental and physical health of laboring women, which can minimize the occurrence of labor complications and postpartum depression (Argaheni et al., 2022). The last statement that has a low score is on the financial aspect, where mothers tend to prepare their baby's needs when they know the sex of the baby.

This is directly related to the mother's economic level because the mother considers that preparing the baby's needs before knowing the sex of the baby will be a waste of money and tends not to match the sex, even though preparing baby equipment in advance does not make expenses swell because the equipment is prepared little by little, besides that preparation in advance makes the mother more calm when approaching the delivery process because the delivery process can come at any time. Economic preparation is related to financial preparation which absolutely must be prepared before childbirth, if the financial preparation before childbirth is maximally fulfilled, the mother will feel calmer, more stable and confident in undergoing labor (Nurmala Dewi, 2020). Based on these results, the way that can be done to improve readiness in the face of childbirth is to provide supportive education about gentle birth which includes planning and preparation for childbirth, gentle birth tips and how to reduce labor pain, as well as illustrations of gentle birth labor. Mother Readiness After supportive education about gentle birthal Video Intervention The post-test results in table 2 show that the mother's readiness to childbirth after being given supportive education about gentle birth, almost all respondents (93,3 0%) have a good level of readiness in facing labor.

This can be proven by the results of the questionnaire scores that have been filled in by respondents regarding readiness to face labor which tends to increase in each statement and has a score > 55 which indicates that the mother's readiness to face labor is in the good category. The 4 statements with the lowest score in the pre-test also experienced an increase in score. This shows that there is an increase in the mother's readiness to face labor compared to before being given supportive education with audiovisual media. Supportive education here is not just providing education, but also providing support and images for mothers in facing labor. Research conducted by Wananda (2022) that health education or education to mothers about the preparation and process of labor is effective in increasing the level of readiness for labor in primigravida mothers.

Analysis of The Effect Before and After supportive education about gentle birthal Video Intervention on Maternal Readiness in Facing Labor The results of data analysis in table 3 show that 30 respondents have changes in readiness in childbirth from pre-test to post-test, almost all pregnant women (93,3%) have a good level of readiness. Additional analysis using SPSS software version 25 and the Wilcoxon sign rank test with a significance level of  $\alpha = 0.05$ . With a value of  $P = 0.003$  ( $0.003 \leq 0.05$ ) derived from the analysis,  $H_0$  is rejected, indicating that mothers' preparedness for labor at Pratama Anugrah Surabaya Clinic is impacted by supportive teaching about gentle delivery through audiovisual media. This is demonstrated by the fact that, of the thirty respondents who completed a questionnaire before to receiving the intervention, the majority (60.0%) had strong readiness, accounting for 21 respondents, while nine other respondents had sufficient readiness, or 30.0%. Meanwhile, nearly all responders

(93,3%) reported feeling more prepared to face labor after receiving supportive instruction about gentle birth. The study's findings are consistent with previous research by Yuniwati et al. (2018) and Kuswanti & Rochmawati (2021) It demonstrated that maternal knowledge increased both before and after receiving education and health promotion using audiovisual medium. Another study conducted by Agustin (2023) stated that audiovisual/ video media has a significant advantage in increasing maternal motivation in providing child nutrition before and after being given supportive education compared to posters and other media.

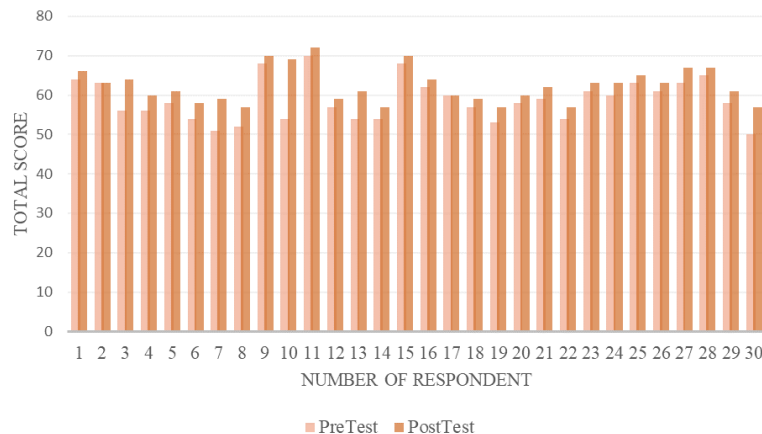


Figure 1. Distribution of Total Score Before and After Intervention

#### 4. Conclusion and future scope

Supportive education about gentle delivery using audiovisual media has an impact on primigravida mothers' readiness for childbirth throughout the third trimester of pregnancy. The results of the analysis P value = 0.003 which means less than  $\alpha = 0.05$ , as well as an increase in the readiness of respondents. Initially most of them have a good level of readiness to increase to almost all respondents have a good level of readiness in childbirth. This research has a positive impact on increasing knowledge, information and maternal readiness.

#### Acknowledgment

We would like to express our gratitude to all of the Klinik Pratama Anugrah Surabaya respondents who helped with the data collection and research process. We appreciate the cooperation of Nahdlatul Ulama University Surabaya for this study.

#### Conflict of interest

Regarding the research, writing, and/or publication of this article, the author(s) have stated that they have no potential conflicts of interest

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