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Analysis Of Differences in Pregnant Women's Knowledge and Readiness Regarding Childbirth Preparation Before and After Counseling (At TPMB Desak Putu Lita. A) Surabaya

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ABSTRACT
Knowledge and preparedness for childbirth are two of the benchmarks for the success of the delivery process. As pregnancy progresses, the mother should be educated about childbirth and the necessary preparations. Counseling makes it easier for pregnant women and health workers to discuss health issues, namely, preparation and readiness for childbirth. Objective, analyzing differences in knowledge and readiness of pregnant women to face childbirth before and after being given counseling about childbirth preparation at Independent Practice Places for Midwives Desak Putu Lita Anggraeni in Surabaya. This research employed a pre-experimental design with a cross-sectional, one-group, pretest-posttest approach. The sample was taken using a total sampling technique of 30 participants. The dependent variable was the level of knowledge and readiness, which was measured using a questionnaire. Data were analyzed using the Wilcoxon Signed-Rank Test to differentiate between the two variables. Results of analysis of pregnant women's knowledge using the Wilcoxon Signed-rank test. The calculated z value = -3.357 with a significance of 0.001 is smaller than 0.05. The highest increase in knowledge about psychology is the need to feel loved by one's husband, specifically from 10 (33%) to 30 (100%). The results of the analysis of pregnant women's readiness to face childbirth yielded a calculated z-value of -3.00, with a significance level of 0.003, which is less than 0.05. The highest increase in participants' readiness regarding contraceptive methods after delivery is from 17 (57%) to 29 (97%). There are differences in the knowledge and readiness of pregnant women to face childbirth. Counseling increases the knowledge and readiness of pregnant women to face childbirth. Suggestions for Independent Practice Places for Midwives to improve educational methods regarding childbirth preparation that are effective and easily accessible.

Keywords: Counseling on Childbirth Preparation. Level of Knowledge, Readiness

INTRODUCTION

The current development program in Indonesia is prioritizing on improving the health of mothers and children, especially those who are most vulnerable to health issues, namely pregnant women and infants during the perinatal period. The goal of this health development program is to reduce the Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR)(Rahim et al., 2024; WHO, 2024). World Health Organization (WHO) reported in 2024 that every day, an estimated 800 women die from preventable causes related to pregnancy and childbirth. Nearly 95% of all maternal deaths occur in low- and lower-middle-income countries. Meanwhile, based on the results of the 2023 Indonesian Demographic Health Survey (IDHS), the Maternal Mortality Rate (MMR) in Indonesia reached 359 per 100,000 live births. Meanwhile, the targets for the 2020-2024 National Maternal Health Program (JMN) are: a reduction in the MMR to 183 per 100,000 live births, a reduction in the Neonatal Mortality Rate (NMR) to 10 per 1,000 live births, and a reduction in the Infant Mortality Rate (IMR) to

16 per 1,000 live births.(Kemenkes, n.d.; WHO, 2024).

This is a preliminary study based on direct interviews conducted by the researcher with six pregnant women attending ANC classes at TPMB on November 21, 2024, which found that four pregnant women (66.7%) still lacked knowledge about childbirth preparation. The only aspects of childbirth preparation they knew about were the costs and equipment for mothers and newborns. while 2 pregnant women (33.33%) were well informed about supplies for mothers and babies, the cost of the delivery location, delivery assistants, delivery companions, transportation to the delivery location, and potential blood donors.

Pregnancy is the process of union between a sperm and an ovum (Arisanti et al., 2023). During pregnancy, expectant mothers prepare themselves physically and mentally for childbirth through prenatal classes (Sri Yuni et al., 2021). The purpose of prenatal classes is to enhance mothers' knowledge, attitudes, and behaviors, enabling them to understand pregnancy, childbirth, and postpartum care. Maternity classes are a means of learning together about maternal health through face-to-face group sessions designed to enhance mothers' knowledge and skills in areas such as pregnancy, pregnancy care, childbirth, postpartum care, and newborn care (Annisa Salsabila Ayuningtia Migunani & Tina Mawardika, 2024). Previous research shows that 54.3% of mothers who attended prenatal classes were prepared for childbirth (Arlym & Herawati, 2021).

During the prenatal classes, mothers will be guided to think optimistically about childbirth, which will increase their confidence in the process. Confidence in facing childbirth is very important, especially for primigravida mothers who have never given birth before. Additionally, multigravida mothers will be better prepared for childbirth.(Alizadeh-Dibazari et al., 2023; AlKhunaizi et al., 2025; Arlym & Herawati, 2021).

A study conducted in November 2022 at the Mijen II Demak health center interviewed 10 primigravida pregnant women, inquiring about their gestational age and various preparations required prior to childbirth (Arisanti et al., 2023). The results of the interviews showed that 8 pregnant women had not prepared for childbirth because they were unsure about what to prepare, such as savings for childbirth costs, clothes for their babies, who would make decisions in case of an emergency, and potential blood donors. This is related to the increased perception of coping abilities possessed by primigravida pregnant women in facing childbirth situations that are considered threatening to the safety of their babies and themselves (Khoirunnisa & Rosiana, 2023).

Other studies have shown that holistic childbirth preparation education for pregnant women in their third trimester has an effect on mothers' confidence in facing childbirth. The material covered in holistic education makes mothers more confident about the smoothness of the childbirth process (Alizadeh-Dibazari et al., 2023; Azza et al., 2025).

The impact of good knowledge on pregnant women can help them understand and improve their physical, psychological, and financial well-being. By planning for childbirth, pregnant women can take appropriate actions to prevent unwanted events (Alzboon & Vural, 2021; Bayisa et al., 2022). Therefore, knowledge and readiness for childbirth are crucial in reducing problems during childbirth. The knowledge possessed by pregnant women regarding childbirth preparation will shape their confidence, enabling them to plan for childbirth and make more informed decisions (Azza et al., 2025; Bayisa et al., 2022).

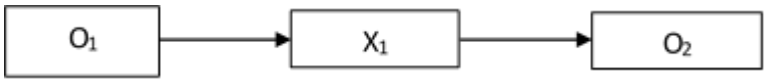
The need for skills-based antenatal education classes will prepare pregnant women for childbirth. Skills-based antenatal education materials cover topics such as signs of labor, what mothers can do during labor to optimize fetal position through yoga, practicing ways to cope with labor pain, relaxation exercises, and managing emotions during labor. With more thorough preparation, it is hoped that mothers' confidence in facing childbirth will increase. Therefore, observation of pregnant women before and after antenatal education is necessary (Ahmed et al., 2024; Zaman et al., 2025).

Based on the background described above, the researcher is interested in conducting research on the level of knowledge of pregnant women about childbirth preparation at TPMB Dsk. P. Lita A, Surabaya. The research question is: Is there a difference in knowledge about childbirth preparation and the readiness of pregnant women to face childbirth before and after receiving counseling on childbirth preparation?

METHODS

Research design is a strategy for identifying problems before the final design of data collection (Kadang, 2025). This study employed a pre-experimental research design with a cross-sectional, one-group, pretest-posttest approach. This approach was chosen because the study aimed to determine the differences between two dependent variables, namely the knowledge of pregnant women before and after receiving counseling on childbirth preparation, and the readiness of pregnant women to face childbirth before and after receiving counseling on childbirth preparation. The cross-sectional design allows data collection at a single point in time (Puspa Zuleika & Legiran, 2022; Wang & Cheng, 2020).

The cross-sectional approach employed in this study entails collecting data on dependent variables simultaneously, utilizing a one-group pretest-posttest design (Puspa Zuleika & Legiran, 2022). In this study, the experimental group was given counseling on childbirth preparation.



Picture 3.1 Research Design

Description :

O1 = Observation/pretest; X1 = Intervention/provision of childbirth preparation counseling; O2 = Observation/posttest.

RESULTS

A. Knowledge About Childbirth Preparation

Table Description Participants' knowledge about childbirth

No	Knowledge	Pretest		PostTest	
		Total	Percentage	Total	Percentage
1	Good(76% - 100%)	15	50	29	97
2	Sufficient(56% - 75%)	14	47	1	3
3	Insufficient(<56%)	1	3	0	0
	Total	30	100	30	100

Based on the table above, it shows that before receiving counseling, 15 respondents (50%) had a good level of knowledge, 14 participants (4.7%) had a sufficient level of knowledge, and 1 respondent (3%) had an insufficient level of knowledge. There was an increase in the respondents' knowledge after receiving counseling, namely the level of knowledge of respondents who were sufficient became good, 29 people (97%), and there was 1 (3%) respondent whose knowledge level increased from insufficient to sufficient.

B. Preparation for Childbirth

Table Describing Respondents' Preparation for Childbirth

No	Preparation	Pretest		Posttest	
		Total	Percentage	Total	Percentage
1	Prepared	5	17	14	47
2	Unprepared	25	83	16	53
	Total	30	100	30	100

Based on the table above, it is evident that before receiving counseling, 5 respondents (17%) were prepared to face childbirth, while 25 respondents (83%) were unprepared. After receiving counseling on childbirth preparation, the number of respondents who were prepared to face childbirth increased to 14 people (47%).

C. Results of The Analysis of The Difference Between The Pretest and Posttest of Childbirth Preparation Knowledge

Test Statistics[a]	
Posttest Knowledge Preparedness for Childbirth - Pretest Knowledge Preparedness for Childbirth	
Z	-3,357b
Asymp. Sig. (2-tailed)	,001
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

Based on the table above, the results of the pre-test and post-test analysis of pregnant women's knowledge about childbirth preparation, using the Wilcoxon Signed Ranks Test, obtained a calculated z value of -3.357 with a significance of 0.001, which is less than 0.05, meaning that there is a significant difference between the pre-test score for knowledge about childbirth preparation and the post-test score for knowledge about childbirth preparation.

D. Results of The Analysis of The Difference Between The Pretest And Posttest of Childbirth Preparedness

Test Statistics[a]	
Posttest on Preparedness for Childbirth - Pretest on Preparedness for Childbirth	
Z	-3,000[b]
Asymp. Sig. (2-tailed)	,003
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

Based on the table above, the results of the pre-test and post-test analysis of pregnant women's preparedness for childbirth using the Wilcoxon signed-rank test showed a calculated z value of -3.000 with a significance of 0.003, which is less than 0.05, meaning that there is a significant difference between the pre-test and post-test scores for preparedness for childbirth.

DISCUSSION

The difference in the knowledge of pregnant women before and after receiving counseling on childbirth preparation is evident in Table 4.7. The analysis results show that there is a difference in the pre-test and post-test scores of pregnant women before and after

receiving counseling on childbirth preparation. The results of this study were statistically significant using the Wilcoxon Signed Ranks Test, which yielded a calculated z-value of -3.357 with a p-value of 0.001, which is less than 0.05. Therefore, Hypothesis 1 (H1) was accepted, indicating a significant difference between the pre-test and post-test scores on knowledge about childbirth preparation before and after receiving counseling on childbirth preparation.

Knowledge about childbirth preparation is crucial for the community, particularly for pregnant women. Knowledge about childbirth preparation, including physical, psychological, financial, cultural, and blood donation needs, should be prepared early in pregnancy. Pregnant women who have more knowledge about childbirth preparation are more likely to think about determining their attitude and behavior to prepare everything necessary for childbirth, so that when the time comes, they will be more focused and calm in facing childbirth.(Alizadeh-Dibazari et al., 2024; Azza et al., 2025).

Health education activities are crucial and should be initiated early for pregnant women to enhance their knowledge. One way of providing health education to pregnant women today is by maximizing antenatal classes, where pregnant women can gather to obtain information about health during pregnancy and prepare for childbirth. In this activity, counseling uses a method of explaining childbirth preparation and showing videos about childbirth to pregnant women in the TPMB Desak Putu Lita A area. The activity begins with a pre-test, followed by a direct explanation and a question-and-answer session. Health education is essentially an activity or effort to convey messages to the community, groups, or individuals. It is hoped that with these messages, the community, groups, or individuals can obtain knowledge and information and discuss childbirth preparation with health workers (Mei, 2024; Rizvi, 2022).

The results of the activity showed an increase in the knowledge of pregnant women about childbirth preparation, indicating that the provision of health education was effective in increasing knowledge. The implementation of health education must fulfill several key aspects, including an easily accessible location, effective media, suitable delivery methods, and optimal timing, to ensure the best possible results(Aswita et al., 2019; Fauziah et al., 2023).

The difference in the readiness of pregnant women to face childbirth before and after receiving counseling on childbirth preparation can be seen in Table 4.8, which shows the results of the pre-test and post-test analysis of the readiness of pregnant women to face childbirth using the Wilcoxon signed-rank test. with a calculated z value of -3.000 and a significance of 0.003, which is less than 0.05, meaning that there is a significant difference between the pre-test and post-test scores for preparedness for childbirth. Therefore, Hypothesis 2 (H 2) is accepted, meaning that there is a difference in the preparedness for childbirth of pregnant women before and after receiving counseling on childbirth preparation.

Pregnant women and their families need to prepare for childbirth early on, or from the beginning of pregnancy, so that the delivery process can run smoothly. There are seven things that need to be prepared for childbirth: a health facility as the place of delivery, a companion during delivery (husband, parents, or close family), costs for the baby and mother during childbirth, health workers who assist with childbirth (doctors, midwives), transportation to the place of delivery in good condition, potential blood donors, and the method of contraception chosen for use after childbirth(Alizadeh-Dibazari et al., 2024; Munkhondya et al., 2020).

The results of the activity show an increase in the preparedness of pregnant women for childbirth, although some have not yet prepared blood donors, and some have not yet prepared their choice of contraceptive method to be used after childbirth, as this requires time to prepare by discussing it with their husbands and families. These results demonstrate that counseling has been proven effective in enhancing the preparedness of pregnant women for childbirth.

CONCLUSION

Based on the results of research conducted on the analysis of differences in the knowledge of pregnant women before and after receiving counseling on childbirth preparation and childbirth readiness at the Desak Putu Lita Anggraeni Maternity Clinic in Surabaya, the following conclusions can be drawn:

1. Most pregnant women had insufficient knowledge about childbirth preparation, with 1 person (3%) before receiving counseling on childbirth preparation.
2. Most pregnant women's knowledge about childbirth preparation increased after receiving counseling, with 29 people (97%).
3. Most pregnant women were not prepared for childbirth before receiving counseling on childbirth preparation, with 25 women (83%) not prepared before receiving counseling on childbirth preparation.
5. There was a difference in the knowledge of pregnant women about childbirth preparation before and after receiving counseling on childbirth preparation, with a calculated z value of -3.357 and a significance of 0.001, which is less than 0.05.
6. There was a difference in the preparedness for childbirth of pregnant women before and after receiving counseling on childbirth preparation, with a calculated z-value of -3.000 and a significance of 0.003, which is less than 0.05.

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