

Effectiveness Of Pregnancy Class Implementation On Increasing Knowledge Of Delivery Preparation

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Abstract. Pregnant Women Class is a place to learn for pregnant women about pregnancy health, childbirth, postpartum care, newborn care as well as myths and culture. Introduction All pregnancies are basically considered risky, During the course of pregnancy and childbirth, low-risk pregnant women can turn into high-risk, therefore continuous monitoring is needed during the pregnancy period and the birth process. The aim of this study was to determine the effectiveness of implementing classes for pregnant women in increasing knowledge in preparing for childbirth. Research method Quantitative research type True Experimental Design one group pretestposttest design. The research population is all pregnant women in Pukdale village Trimester two and Trimester three. Sampling with Proposive sampling using Simple Random Sampling. The research sample of 15 respondents was determined based on the inclusion criteria. The results of the study found that before being given education in the pregnant women's class, respondents had sufficient knowledge and after attending the pregnant women's class, respondents had good knowledge. Conclusion The results of the study prove that the Mother's Class is effective in increasing knowledge in preparation for childbirth, showing that the majority of respondents answered that it was effective, as many as 15 people (100%).

Keywords: Class, Mother, Pregnancy, Childbirth, Effectiveness.

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1. Introduction

Maternal mortality is very high. Around 260,000 women will die during and after pregnancy and childbirth in 2023. Around 92% of all maternal deaths will occur in low- and lower-middle-income countries in 2023, and most of them could actually be prevented (WHO, 2025). The maternal mortality rate in 2023 in Kupang district reached 14 cases and the infant mortality rate reached 114 cases, this figure increased compared to 2022 where the maternal mortality rate was 9 cases (BPS NTT Province, 2024). Lack of maternal awareness of the importance of pregnancy health will result in the prevention of poor pregnancy problems. This condition will affect the baby and its growth during the first 1000 days of life. (Lestari,

2022). Pregnant women's classes are a way that can be used to disseminate messages or information related to pregnancy health. (Apriliani, 2022).

The information conveyed in the pregnant women's class program, such as pregnancy care, is mainly about preparation and the birth process, in addition, the pregnant women's class also discusses nutrition during pregnancy. By increasing the mother's ability to carry out early detection of high risk or danger signs during pregnancy, maternal mortality rates can be reduced (Yusnidar, 2021). Pregnant Women Class is a study group for pregnant women with a maximum of 10 participants. In this class, pregnant women will learn together, discuss and exchange experiences about maternal and child health comprehensively and systematically and can be implemented in a scheduled and continuous manner (Ministry of Health of the Republic of Indonesia, 2019). Pregnant women's class learning is important in the implementation of the Maternal Child Health book in the community as a learning effort for pregnant women, husbands and families related to preparing pregnant women to undergo a healthy and normal pregnancy, facing a safe and comfortable delivery (Idanuraida, 2022).

Sudarmi, et al. 2023 showed that the results of implementing classes for pregnant women were more effective in increasing the knowledge of pregnant women and maternal compliance in planning childbirth and preventing complications. Another study by Adriani, 2024 showed that prenatal classes were effective in increasing pregnant women's knowledge about risk factors in pregnancy, which would certainly be a determining factor in preparing for a safe delivery. Based on the preliminary study conducted by the researcher, data on health problems in Pukdale Village were obtained, namely that there were still pregnant women who had not routinely undergone pregnancy check-ups, pregnant women had never undergone pregnancy check-ups, gave birth at a midwife, stunting and belief in myths about food taboos for pregnant women.

This is due to the lack of awareness of mothers about the importance of safe and healthy pregnancy and childbirth, for that it is necessary to make an effort that can increase the willingness of mothers to visit health care facilities, one of which is the implementation of pregnancy classes, with the existence of pregnancy classes it is hoped that it will increase the knowledge of mothers so that they are more aware of the importance of a healthy pregnancy. (Sulkifli, 2028). This study aims to improve the knowledge of pregnant women in preparing for childbirth through the implementation of mother classes. Based on the description above, the author is interested in conducting research on "The Effectiveness of Implementing Pregnant Women's Classes on Increasing Knowledge in Preparation for Childbirth.

2. Methods

The research was conducted in December 2024. The research location was in Pukdale Village, East Kupang District, Kupang Regency, East Nusa Tenggara Province. The type of research used in this study is quantitative True Experimental Design research with a one group pretest - posttest design. The data in this study uses primary data obtained from filling out questionnaires directly by respondents. The population in this study were all pregnant women in the second and third trimesters in Pukdale village, with a sample size of 15 respondents. Sampling was done by Proposive sampling using Simple Random Sampling. The selection of respondents was in accordance with the inclusion criteria determined by the researcher, namely respondents who were willing to be studied. The data collection tool used a pretest and posttest questionnaire. Filling out the questionnaire before being given the mother class to find out the respondents' initial knowledge will then be evaluated using the questionnaire after being given the mother class. The data analysis method uses the Wilcoxon Signed Rank Test with the help of the SPSS program.

3. Results and Discussion

This study was conducted in Pukdale Village, the implementation of the Pregnant Women's Class at Posyandu Mawar which was carried out in December 2024 on 15 respondents. The following is an explanation related to the distribution of the characteristics of the research respondents:

Characteristics	Presentation (%)	
1. Information on the implementation of Pregnant Women's Classes		
a. Health Workers (Midwives)	10	67
b. Social media	0	0
c. Integrated Health Post Cadres	5	33
d. Friend	0	0
Amount	15	100.0
1. Work		
a. Self-employed	6	40
b. PNS	3	20
c. Farmers	6	40
Amount	15	100.0

2. Education		
a. No school	2	13
	0	0
b. Completed SE	5	33
	5	33
c. Completed JHS	3	20
	15	100.0
d. Completed SHS		
e. D-3/SI		
Amount		
4. Mother's Age		
a. < 20 year	2	14
	10	67
b. 20 year – 35 year	3	20
	15	100.0
c. > 35 year		
Amount		
5.Are Prenatal Classes Effective in Increasing Your Knowledge about Childbirth Preparation?		
a. Effective	15	100
	0	0
b. Not Effective	15	100.0
Amount		

In the Frequency Distribution Table of Respondents regarding Information on the Implementation of Pregnant Women's Classes, most of it was obtained from Health Workers (Midwives), namely 10 people (67%). Distribution of Respondents' Jobs were mostly self-employed and farmers with the same value, namely, 6 people for self-employed (40%) and 6 people for farmer jobs (40%). Distribution of Respondents' Education Most of them graduated from junior high school, 5 people (33%) and graduated from high school as many as 5 people (33%). The distribution of respondents based on age is mostly in the age range of 20 years - 35 years, namely 10 people (67%). Distribution based on the question Is the Pregnant Women's Class Effective in Increasing Your Knowledge about Childbirth Preparation? All respondents answered effectively, namely 15 people (100%).

Before the implementation of the pregnant women's class, a pre-test was conducted on 15 respondents with the following results:

Table 3.2 Frequency Distribution of Pregnant Women's Initial Knowledge

Characteristics	N	Percentage (%)
Less (< 56 %)	10	67
Enough (56 – 75 %)	5	33
Good (76 – 100 %)	0	0
Total	15	100,0

Based on the table above, of the 15 respondents, it was found that the majority of pregnant women, namely 10 people (67%) had insufficient knowledge about Childbirth Preparation.

Table 3.3 Frequency Distribution of Final Knowledge of Pregnant Women

Characteristics	N	Percentage (%)
Less ($\leq 56\%$)	0	0
Enough ($56 - 75\%$)	0	0
Good ($76 - 100\%$)	15	100
Total	15	100

Based on the table above, from 15 respondents, it was found that after attending the mother's class, all respondents, namely 15 people (100%) had good knowledge about Childbirth Preparation.

Table 3.4 Test Results Wilcoxon Signed Ranks Test

	Pre-Pos Test
Z	-3.260 ^b
Asymp. Sig. (2-tailed)	.001

From the table above, it can be seen that the results of the Wilcoxon Signed Ranks Test obtained the Asymp. Sig. (2-tailed) result with a value of 0.001. Because 0.001 is smaller ($<$) than 0.05, it can be concluded that H_a is accepted. This means that there is an Effectiveness of the implementation of Pregnant Women's classes on increasing maternal knowledge in preparing for childbirth.

4. Discussion

1) Respondent Characteristics

The implementation of this research was carried out in Pukdale Village, Oesao Health Center working area with 15 respondents. The results of the study were obtained by filling out pre- and post-test questionnaires to see the characteristics of pregnant women and increased knowledge before and after attending the mother class. The explanation of the characteristics of respondents based on information sources, namely in this study, shows that most respondents know about the implementation of pregnancy classes from Health Workers (Midwives) as many as 10 people (67%). These results indicate that midwives are the spearhead of health services in the region or community and a source of health information for the community. Distribution of Respondents' Jobs Most of them are self-employed and farmers with the same score, namely, 6 people for self-employed (40%) and 6 people for farmer jobs (40%). This shows that the work environment does not limit someone to develop and increase knowledge, even though they are busy with work, respondents still take the time to study in the mother's class. Distribution of Respondents' Education Most of them graduated from junior high school, 5 people (33%) and graduated from high school as many as 5 people (33%). This shows that the level of education does not affect respondents to learn even though the limitations of education, respondents can still understand the explanation given well. The distribution of respondents based on age is mostly in the age range of 20 years

-35 years, which is 10 people (67%). This is related to the condition of being fit to get pregnant for women, which is at the age of 20 - 35 years. At this age, it is necessary to pay attention to planning a pregnancy because it is related to physical and mental health in a condition fit to get pregnant for women. Women who are physically, mentally and psychologically ready will be more mature with a good age. Distribution based on the question Is the Pregnant Women's Class Effective to Increase Your Knowledge about Childbirth Preparation? All respondents answered effectively, namely 15 people (100%).

2. Distribusi Pre test and Pos test

1). Respondents' Knowledge Before and After Attending Pregnant Women's Classe

In this study, before attending the mother class, the pre-test results showed that the majority of respondents' knowledge in preparing for childbirth was lacking knowledge, as many as 10 people (67%). After the respondents attended the mother class, all respondents, namely 15 people (100.0%) had good knowledge about Childbirth Preparation. The increase in knowledge in this study proves the success of the implementation of the mother class for 15 respondents which will later be useful for maternal health during pregnancy until childbirth. where in the process of implementing the mother class there are teaching and learning activities from a cognitive perspective, through sequential information transformation in the respondents.

2). Effectiveness of Implementing Mothers' Classes on Increasing Knowledge in Childbirth Preparation.

The results of the Wilcoxon Signed Ranks Test obtained the Asymp. Sig. (2-tailed) results with a value of 0.001. because 0.001 is smaller ($<$) then it can be concluded that H_a is accepted which means that there is an Effectiveness of the implementation of mother classes on increasing knowledge in preparing for childbirth in Pukdale Village, East Kupang District, Kupang Regency, East Nusa Tenggara, Indonesia.

5. Conclusions

The data on the number of respondents in this study were 15 respondents. From the overall results of the study, it was proven that the Mother Class was Effective in increasing Knowledge in Childbirth Preparation, namely showing that most respondents answered effectively as many as 15 people (100%). The results of respondents' knowledge before attending the mother's class mostly showed the poor category, namely 10 respondents (55.6%) and the results of respondents' knowledge after attending the mother's class showed that all respondents were in the good category, namely 15 respondents (100.0%). The results of the Wilcoxon Signed Ranks Test obtained the Asymp. Sig. (2-tailed) result with a value of 0.001. Because 0.001 is smaller ($<$) then it can be concluded that H_a is accepted which means

that there is an Effectiveness of the implementation of the mother's class on increasing knowledge in preparing for childbirth.

References

- 1 Abadi, M. Y., Marzuki, D. S., Rahmadani, S., Al Fajrin, M., & Juliarti, R. E. (2021). Effectiveness of compliance with COVID-19 health protocols among informal sector workers in Makassar City. East Java: Uwais Inspirasi Indonesia.
- 2 Andriyani, V. (2024). Effectiveness of pregnant women's classes on increasing knowledge of pregnancy risk factors at Andong Health Center (Doctoral dissertation, Kusuma Husada University, Surakarta).
- 3 Apriliani, N. L. P. E. (2022). The relationship between regularity of attending pregnant women's classes and mother's knowledge of pregnant women's classes at Buleleng II Health Center (Diploma thesis, Poltekkes Kemenkes Denpasar, Department of Midwifery).
- 4 Badan Pusat Statistik Provinsi NTT. (2024, April 1). Jumlah kematian ibu menurut kabupaten/kota (orang). <https://ntt.bps.go.id/id/statistics-table/2/MTUzMCMY/jumlah-kematian-ibu-menurut-%20kabupaten-kota-.html>
- 5 Emiyanti, E., Rahfiludin, M. Z., & Winarni, S. (2017). Analysis of factors related to pregnant women's class participation in January–July 2017 (Study in Muara Tembesi District, Batang Hari Regency, Jambi Province). *Jurnal Kesehatan Masyarakat*, 5(4), 801–811.
- 6 Idanuraida. (2022). Impact of pregnancy class participation on pregnancy danger signs knowledge in Cikeas Village. *Scientific Journal of Obstetrics and Gynecology*, 14(1).
- 7 Kementerian Kesehatan Republik Indonesia. (2022). Increasing the capacity of health workers through socialization and reorientation of pregnant women's classes. <https://kesmas.kemkes.go.id/content/133/0/increasing-the-capacity-of-health-workers-through-socialization-and-reorientation-of-pregnancy-women's-classes>
- 8 Laporan dari Lembaga/Instansi/Organisasi
- 9 Lestari, D. (2022). The effectiveness of the implementation of pregnant women's classes on increasing mothers' knowledge about maternal and child health during the COVID-19 pandemic in the work area of the Buleleng I Health Center. *Journal of Health Service Iteskes Cendekia Utama Kudus*, 5(2). <https://jpk.jurnal.stikescendekiautamakudus.ac.id>
- 10 Mariam, M., Pratiwi, B. R., & Natalia, O. (2018). The relationship between pregnant women's employment status and participation in mothers' classes at Mangkung Health Center, Praya Barat District, Central Lombok Regency in 2018. *Jurnal Kesehatan Qamarul Huda*, 6(1), 31–35.
- 11 Maulida, I., Umriaty, U., Dina, I. S., & Zulfiana, E. (2018). The influence of participation in pregnant women's classes on improving postpartum mothers' skills in providing exclusive breastfeeding in Marganada District, Tegal City in 2017. *Jurnal Midwifery*, 7(1), 47. <https://core.ac.uk/download/pdf/234036734.pdf>
- 12 Nurdin, S. (2018). Relationship of pregnant women's class activities with pregnant women's readiness in facing childbirth at Pangkaj Health Center. *Lentera Acitya Health Journal*, 5(2), 1–6.
- 13 Risneni, R., & Yenie, H. (2018). Factors related to pregnant women's attendance at mothers' classes in one sub-district of South Lampung Regency. *Jurnal Ilmiah Keperawatan Sai Betik*, 13(1), 19–30.
- 14 Sudarmi, S., & Pranajaya, R. (2023). Effectiveness of pregnant women's class application on mother's knowledge and compliance in childbirth planning and complication prevention. *Health Journal*, 14(3), 481–488.
- 15 World Health Organization. (2025, April 7). Maternal mortality. <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>
- 16 Yusnidar, Y., & Andsuriati, I. (2021). The effect of pregnant women's classes on primigravida mothers on knowledge of pregnancy care. *Jurnal JKFT*, 6(1), 1–6.