

THE IMPACT OF MATERNAL BEHAVIOR ON PRENATAL CLASS PARTICIPATION

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Abstract

Pregnancy classes are crucial for helping pregnant women address the physical and mental challenges they face, which can affect the birthing process. However, many women do not attend these classes. This research analyzes the factors influencing maternal behavior regarding participation in pregnancy classes. This quantitative study employs a cross-sectional approach, involving 403 pregnant women as subjects. A simple random sampling method was used to select 80 participants, with data collected through interviews. The Chi-Square test was utilized for data analysis. Findings indicate that 87.5% of pregnant women had low education levels, while 66.3% displayed good knowledge about pregnancy. Most participants (71.3%) reported inadequate facilities and infrastructure, though 66.3% received support from their husbands. Additionally, 66.3% of women were not actively involved in the classes. A significant relationship was found between education ($p=0.010$), knowledge ($p=0.010$), facilities ($p=0.000$), and husband's support ($p=0.000$) with participation in pregnancy classes. It is recommended that pregnant women actively engage in these classes voluntarily. Community health centers should enhance awareness to encourage participation, enabling early detection of pregnancy and childbirth complications.

Keywords: behavioral determinants, class of pregnant women

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1. Introduction

The Maternal Mortality Rate (MMR) is a critical health indicator, with complications during pregnancy and childbirth causing over 350,000 deaths globally each year [1]. Insufficient timely care for obstetric complications contributes significantly to maternal fatalities, which occur in 15% of pregnancies. In 2020, West Java Province reported 745 maternal deaths, including eight in Majalengka Regency

[3]. At Balida Health Center, one maternal death due to pregnancy-related hypertension was recorded in 2021. To mitigate the physical and mental uncertainties faced by pregnant women, the government should implement maternal education classes that will positively influence the childbirth process [4].

These classes provide a collaborative learning environment, aiming for a 100% success rate. Each

class accommodates up to ten pregnant women with varying knowledge and experiences, focusing on health during pregnancy, childbirth, and postpartum.^[5] However, only 7% of mothers complete the prenatal program [6].

A preliminary study in February 2022 involving ten pregnant women revealed varying educational backgrounds: four had elementary education, five had junior high, and one had high school. Knowledge levels were low, with only 30% of those with elementary education answering correctly, compared to 40% for junior high and 50% for high school. Eight participants found facilities inadequate, while two felt supported. Six women reported a lack of support regarding spousal support, while four received it. Maternal education class attendance at Balida Health Center was as follows: 411 pregnant women (64.5% of the target) in August 2021, 414 (65.2%) in September, and only 49.6% of 403 in October. Monthly reports indicated persistent high referral cases for labor: four cases from 54 births in August, five from 62 in September, and four from 60 in October 2021.

Three factors influence behavioral determinants: predisposing factors include knowledge, attitudes, beliefs, and trust; enabling factors involve the availability of facilities and a supportive environment; and reinforcing factors encourage health-promoting actions [7].

According to Nurhayati et al. 2020, pregnant women's participation in prenatal classes correlates with their education, knowledge, spousal support, and health practitioner support [8]. Increased knowledge regarding antenatal care was noted [9] with Puspitasari L. (2017) finding that maternal classes

could double awareness of danger signs in pregnancy [10]. Factors like maternal knowledge, motivation, attitudes, and external support significantly affect participation in class activities [11].

To improve maternal health, providing high-quality, evidence-based services is vital. Enhancing obstetric care will empower mothers with knowledge and skills related to pregnancy, childbirth, postpartum care, and newborn care, ultimately reducing maternal and infant mortality rates. This study analyzes the relationship between mothers' behavioral determinants and participation in maternal education classes.

2. Methods

This study employed a cross-sectional design, focusing on independent variables such as education, knowledge, facilities and infrastructure, and family support. The dependent variable was the class participation of pregnant women. The research included 403 pregnant women from the Balida Health Center area, with a sample size 80, selected through random sampling. Inclusion criteria required respondents to have effective communication skills and prior attendance in maternity classes, while exclusion criteria eliminated those who gave birth during the study or were illiterate. Data were collected via interviews. Univariate analysis using frequency distribution and bivariate analysis was conducted using the Chi-square test. This research received ethical approval under permit number 082/B/STIKes Crb/IV/2023 from the Institute for Research Development and Community Service of Cirebon Health Sciences College.

3. Results and Discussion

Table 1. Frequency Distribution of Education, Knowledge, Facilities, Spousal Support, and Participation in Prenatal Classes

Variable	Frequency	%
Education		
Low	70	87.5
High	10	12.5
Knowledge		
Poor	27	33.8
Good	53	66.3
Facilities		
Unsupportive	57	71.3
Supportive	23	28.8
Spousal Support		
Unsupportive	29	36.3
Supportive	51	63.8
Participation in Prenatal Classes		
Inactive	53	66.3
Active	27	33.8
Total	80	100

Table 1 reveals that a significant majority of pregnant women, 70 individuals (87.5%), had low education levels. There were 53 individuals (66.3%) with good knowledge, whereas 57 participants (71.3%) felt that the

available facilities were unsupportive of their participation in prenatal classes. Spousal support was present for 51 individuals (63.8%), but 53 pregnant women (66.3%) did not participate in these classes

Tabel 2. Hubungan antara Pendidikan Pengetahuan, Sarana Prasarana, Dukungan Suami, dengan Keikutsertaan Kelas Ibu Hamil

Variable	Participation in Prenatal Classes						p-value
	Inactive		Active		Total		
	n	%	n	%	n	%	
Education							
Low	50	71,8	20	28,6	70	100	0,010
High	3	30	7	70	10	100	
Knowledge							
Poor	26	92,6	2	7,4	27	100	< 0,001
Good	28	62,8	25	47,2	63	100	
Facilities							
Unsupportive	45	78,9	12	21,1	57	100	< 0,001

Supportive	8	34,8	15	65,2	23	100	
Spousal Support							
Unsupportive	30	90,9	3	9,1	33	100	
Supportive	23	48,9	24	51,1	47	100	< 0,001
Total	63	66,3	27	33,8	80	100	

Table 2 demonstrates that a notable percentage of pregnant women with low education levels, 50 individuals (71.8%), were inactive in prenatal classes, presenting a significant relationship with a p-value of 0.010. Additionally, 26 individuals (92.6%) did not participate among those with low knowledge, with a p-value of <0.001 indicating a significant association. Women lacking supportive facilities showed a higher inactivity rate of 45 individuals (78.9%), with this relationship also deemed significant ($p < 0.001$). Lastly, among those without spousal support, 30 individuals (90.9%) were inactive, further supporting a significant correlation ($p < 0.001$).

Education and Participation in Prenatal Classes

The findings of this study indicate that a greater number of women with low education levels were inactive in prenatal classes compared to those with higher education, as evidenced by a p-value of 0.010. This suggests a correlation between educational attainment and engagement in prenatal classes, consistent with other studies that highlight the relationship between motivation and education with pregnant women's participation in such classes.^[6] Furthermore, research has shown a connection between maternal education levels and preparedness to face challenges, such as the COVID-19 pandemic [13]. Education plays a crucial role in influencing an individual's behavior and motivation to actively participate in prenatal classes [14]. Women with higher educational attainment are more adept at obtaining

information, leading to a better understanding of the benefits and importance of attending such classes during pregnancy.

On-site observations suggest that to enhance participation rates in prenatal classes, it is essential to raise awareness among pregnant women and their families regarding the benefits of attending these sessions. Low educational levels contribute to fewer women utilizing prenatal classes to mitigate pregnancy complications. Collaborative efforts with community and religious leaders are recommended to encourage pregnant women to take advantage of the benefits offered by prenatal education classes.

Knowledge and Participation in Prenatal Classes

The proportion of pregnant women with poor knowledge and low participation in prenatal classes is significantly higher compared to those with good knowledge, evidenced by a p-value of 0.000. This indicates a relationship between maternal knowledge and participation in prenatal classes, consistent with the findings of Ida Baroroh et al. 2017, which also confirmed a link between maternal knowledge and engagement in prenatal classes [15]. The most dominant factors influencing participation are knowledge, attitude, and spousal support [16].

Knowledge, fundamentally composed of various facts and theories, enables individuals to solve problems they encounter and informs their actions.[17]

It is essential to enhance pregnant women's understanding of prenatal education through outreach efforts at

integrated health posts (posyandu), prenatal classes, or home visits by healthcare personnel. The more knowledge pregnant women acquire about prenatal classes, the higher the likelihood of their regular participation. Knowledge serves as a foundation for informed behaviors, aiding in the prevention and management of health issues [18].

Poor knowledge in this study was attributed to a lack of information regarding pregnancy-related challenges and the benefits of prenatal classes. This deficiency can lead to delays in decision-making. Participation in these classes and receiving education can significantly improve their understanding of pregnancy, childbirth, and newborn care.

Facilities and Participation in Prenatal Classes

The proportion of pregnant women lacking adequate supportive facilities shows lower participation in prenatal classes compared to those with sufficient facilities, with a p-value of 0.000. This implies a significant relationship between infrastructure provision and participation in prenatal classes. Infrastructure is a crucial factor for the success of any program; the more comprehensive the supporting facilities, the more effective the activity will be.^[14] This aligns with the theory indicating that public health behavior is influenced by the availability of healthcare infrastructure [18].

Adequate facilities is vital for the successful implementation of programs. The effectiveness of activities increases in direct relation to the completeness of the supporting facilities [20].

Based on the above discussion, pregnant women are less likely to engage in prenatal classes due to poor infrastructure. This limitation renders activities ineffective, contributing to a lack of motivation among pregnant women to attend classes.

Spousal Support and Participation in Prenatal Classes

The proportion of pregnant women actively participating in prenatal

classes without spousal support is substantially higher than those with support, with a p-value of 0.000, indicating a significant association between spousal support and participation. This finding aligns with Arie's 2022 research demonstrating that spousal support is related to attendance in prenatal classes.^[21] Moreover, Yenni et al. 2018 reported that spousal support influences a mother's participation in these educational sessions [22].

This study revealed that most pregnant women attending maternity classes were not accompanied by their husbands, contrary to findings in Turkey that advocate for spousal involvement in antenatal education.

Support from husbands can take various forms: informational support includes sharing advice and information about the classes; emotional support entails encouraging participation; evaluative support involves expressing appreciation for attendance; and instrumental support may involve helping with transportation or logistics related to the classes.

4. Conclusion

A significant portion (87.5%) of respondents had a low educational level, while 66.3% demonstrated good knowledge about pregnancy. Additionally, 71.3% reported that the available facilities were inadequate, and 66.3% received support from their husbands; however, a majority (66.3%) of pregnant women were not actively engaged in antenatal class activities. There is a relationship between educational level ($p=0.010$), knowledge ($p=0.000$), available facilities ($p=0.000$), and husband support ($p=0.000$) with participation in antenatal classes.

It is hoped that pregnant women can participate in antenatal classes to enhance their knowledge, change their attitudes, and improve their behavior regarding their experiences as pregnant individuals. To help detect pregnancy and childbirth complications early, community health centers (Puskesmas)

should continue to raise awareness among pregnant women about the importance of attending antenatal classes. The Health Department should also enhance the tools and resources available to support these classes.

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6. References

- [1] P. Kusuma, W. A., M. Bakti, and N. Pringsewu, "Faktor-faktor yang mempengaruhi terjadinya perdarahan pasca persalinan," *Aisyah: Jurnal Ilmu Kesehatan*, vol. 2, no. 1, p. 2017, 2017, [Online]. Available: <http://ejournal.stikesaisyah.ac.id/index.php/eja>
- [2] H. N. Siti Komariah, "Hubungan pengetahuan, usia, dan paritas dengan kejadian komplikasi kehamilan pada ibu hamil trimester III di RS Ibu dan Anak Aisyiyah Samarinda," *Jurnal Kesehatan Masyarakat*, vol. 5, no. 2, pp. 84–93, 2019.
- [3] N. Nur, R. Amalia, and A. Alhidayati, "Determinan perilaku ibu hamil dalam mengikuti kelas ibu hamil di Wilayah Kerja Puskesmas Langsung Pekanbaru Tahun 2020," *Media Kesmas (Public Health Media)*, vol. 1, no. 2, pp. 192–214, Dec. 2021, doi: 10.25311/kesmas.vol1.iss2.45.
- [4] I. Puji Septeria and R. Adlia Syakurah, "Efektivitas Hipnosis dalam menurunkan kecemasan pada Ibu Primigravida Trimester III," *Jurnal Keperawatan*, vol. 16, no. 4, pp. 1295–1310, 2024, [Online]. Available: <http://journal.stikeskendal.ac.id/index.php/Keperawatan>
- [5] Andi Syintha Ida; Afriani, "Pengaruh edukasi kelas ibu hamil terhadap kemampuan dalam deteksi dini komplikasi kehamilan," *Jurnal Inovasi Penelitian*, vol. 2, no. 2, pp. 345–350, 2021.
- [6] K. Azhar, I. Dharmayanti, D. H. Tjandrarini, and P. S. Hidayangsih, "The influence of pregnancy classes on the use of maternal health services in Indonesia," *BMC Public Health*, vol. 20, no. 1, Mar. 2020, doi: 10.1186/s12889-020-08492-0.
- [7] A. P. Nur Rahman, P. Nugraha Prabamurti, E. Riyanti, and M. Fakultas Kesehatan, "Faktor-Faktor yang Berhubungan dengan Perilaku Pencarian Pelayanan Kesehatan (Health Seeking Behavior) pada Santri di Pondok Pesantren Al Bisyrî Tinjomoyo Semarang," *Jurnal Kesehatan Masyarakat*, vol. 4, no. 5, pp. 2356–3346, 2016, [Online]. Available: <http://ejournal-s1.undip.ac.id/index.php/jkm>
- [8] Nurhayati; and D. Mulyanti, "The Role of Community Health Centers in Reducing the Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) in West Java Province," *Jurnal Ilmiah Kedokteran dan Kesehatan*, vol. 2, no. 2, pp. 108–116, 2023, [Online]. Available: <http://ejournal.stie-trianandra.ac.id/index.php/klinikHalamanUTAMA><http://ejournal.stie-trianandra.ac.id/index.php>
- [9] S. Agung Aryastuti, D. Ayu Putu Ratna Juwita, P. Nita Cahyawati, N. Putu Diah Witari, and L. Gede Pradnyawati, "Empowerment of Health Cadre in Managing Antenatal Class in Tulikup Village, Gianyar-Bali," *International Journal of Community Service Learning*, vol. 4, no. 4, pp. 393–400, 2020, doi: 10.23887/ijcsl.v4i4.
- [10] Lia Puspitasari, "Gambaran pelaksanaan kelas ibu hamil di

- Puskesmas Bangetayu Kota Semarang,” *Jurnal Kesehatan Masyarakat*, vol. 1, no. 2, pp. 1054–1060, 2012.
- [11] W. Daril Tassi, M. Sinaga, and R. Riwu, “Analisis faktor-faktor yang berhubungan dengan perilaku ibu hamil dalam pemanfaatan pelayanan antenatal care (K4) di Wilayah Kerja Puskesmas Tarus,” *Media Kesehatan Masyarakat*, vol. 3, no. 2, pp. 175–185, 2021, doi: 10.35508/mkm.
- [12] C. Gamberini, F. Angeli, and E. Ambrosino, “Exploring solutions to improve antenatal care in resource-limited settings: an expert consultation,” *BMC Pregnancy Childbirth*, vol. 22, no. 1, Dec. 2022, doi: 10.1186/s12884-022-04778-w.
- [13] M. Kiftia, M. Rizkia, D. Ardhia, and Darmawati, “The correlation among pregnant woman’s education level with knowledge and behaviour on readiness toward COVID-19 pandemic,” *Enferm Clin*, vol. 32, pp. S35–S38, Aug. 2022, doi: 10.1016/j.enfcli.2022.03.014.
- [14] Tri Ayu lestari; Ari susanti; Fathunikmah, “Faktor-faktor yang berhubungan dengan keikutsertaan ibu hamil dalam mengikuti kelas ibu hamil di Wilayah Kerja Puskesmas Kampar Kiri Tengah Kabupaten Kampar,” *Jurnal Ibu dan Anak*, vol. 6, no. 2, pp. 112–119, 2018.
- [15] Ida Baroroh; Miftacuhul Jannah; Pedvin Ratna Meikawati, “Hubungan pengetahuan ibu hamil dengan keikutsertaan kelas ibu hamil di Wilayah Kerja Puskesmas Jenggot Kota Pekalongan,” *Jurnal Siklus*, vol. 6, no. 2, pp. 212–217, 2017.
- [16] L. Rina Efrina Sinurat, R. Rita Sipayung, and Y. Turisma Oktavia Simanjuntak, “Hubungan dukungan keluarga dengan keikutsertaan kelas ibu hamil di Klinik Bidan Wanti,” *JINTAN: Jurnal Ilmu Keperawatan*, vol. 1, no. 2, pp. 141–150, 2021.
- [17] Y. Cahyati and E. I. Yusuf, “Knowledge analysis of hospital nurse on the importance of radiation protection during radiological examination,” *Borneo Journal of Medical Laboratory Technology*, vol. 6, no. 2, pp. 341–347, 2022, [Online]. Available: <http://journal.umpalangkaraya.ac.id/index.php/bjmlt>
- [18] E. Retnaningtyas et al., “Upaya peningkatan pengetahuan ibu hamil melalui edukasi mengenai tanda bahaya kehamilan lanjut di Posyandu Sampar,” *ADI Pengabdian Kepada Masyarakat*, vol. 2, no. 2, pp. 19–24, Jan. 2022, doi: 10.34306/adimas.v2i2.552.
- [19] C. Triarman and J. Sekarsari, “Analisis faktor penyebab keterlambatan waktu pada pekerjaan struktur atas proyek konstruksi,” *Jurnal Penelitian dan Karya Ilmiah Lembaga Penelitian Universitas Trisakti*, vol. 3, no. 2, pp. 2541–4275, 2018.
- [20] I. Bararah, “Pengelolaan sarana dan prasarana pendidikan dalam meningkatkan kualitas pembelajaran,” *Jurnal Mudarrisuna*, vol. 10, no. 2, pp. 351–370, 2020, doi: 10.22373/jm.v10i2.7842.
- [21] A. M. Neny and N. Endang, “Karakteristik Ibu dan Dukungan Suami dengan Partisipasi Ibu Mengikuti Kelas Ibu Hamil,” *Poltekita: Jurnal Ilmu Kesehatan*, vol. 15, no. 4, pp. 380–385, Feb. 2022, doi: 10.33860/jik.v15i4.480.
- [22] A. T. Yenni, O. Angka, and H. Datuan, “Hubungan Antara Dukungan Suami dengan Partisipasi Ibu Mengikuti Kelas Ibu Hamil di Wilayah Kerja Puskesmas Andowia Kecamatan Andowia Kabupaten Konawe Utara,” 2021.