



A study to assess the level of knowledge regarding warning signs of pregnant women at Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni

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Abstract

Background: Knowledge of obstetric warning signs is essential for timely intervention and improved maternal health. This study evaluates the awareness of these signs among pregnant women attending Vitthalrao Vikhe Patil Rural Hospital, Loni BK. Understanding this knowledge gap is critical, especially in rural settings where healthcare access may be limited.

Objectives: The primary objective of this study is to assess the knowledge of obstetric warning signs among pregnant women at the hospital. Additionally, the study aims to explore the association between this knowledge and various demographic factors.

Material and methods: A descriptive research design was employed with a sample of 100 pregnant women selected through simple random sampling. Data were collected using structured questionnaires designed to gauge participants' awareness of obstetric warning signs. The data were analyzed using both descriptive and inferential statistics to assess knowledge levels and identify any significant associations.

Results: The study found varying levels of knowledge about obstetric warning signs among the participants. Results indicated that a significant portion of the sample had limited understanding of these critical signs. Analysis revealed notable associations between knowledge levels and certain demographic factors.

Conclusion: The findings highlight a need for enhanced educational programs targeting pregnant women to improve their awareness of obstetric warning signs. Such interventions could lead to better maternal and fetal outcomes by ensuring timely medical attention.

Keywords: Knowledge, warning signs, pregnant women

Introduction

Pregnancy is a critical period characterized by numerous physiological changes and potential health risks. Effective prenatal care and timely medical intervention are essential to safeguard the health of both the mother and the fetus. Recognizing and responding to obstetric warning signs is crucial for preventing serious complications and ensuring positive outcomes.

In rural areas like those served by Vitthalrao Vikhe Patil Pravara Rural Hospital in Loni Bk, the awareness of these critical warning signs may be limited due to insufficient healthcare education and resources.

This study aims to assess the level of knowledge among pregnant women attending this hospital regarding these obstetric warning signs. By identifying gaps in their understanding, the research seeks to inform targeted educational interventions and improve maternal care practices.

Maternal mortality remains a significant public health challenge globally, with approximately 810 women dying every day from preventable causes related to pregnancy and childbirth (World Health Organization, 2020). Obstetric complications are a leading cause of maternal mortality, often exacerbated by delays in recognizing and responding to warning signs during pregnancy. Obstetric warning signs encompass a range of symptoms that indicate potential complications, such as vaginal bleeding, severe headaches, blurred vision, and swelling of hands or face. Timely recognition and appropriate management of these signs are

crucial for ensuring maternal health and reducing mortality rates.

In low- and middle-income countries (LMICs), where access to healthcare services may be limited and maternal mortality rates are disproportionately high, improving awareness and knowledge of obstetric warning signs among pregnant women is essential. Adequate knowledge empowers women to seek timely medical care, thereby potentially averting adverse maternal and neonatal outcomes.

Material and Method

Descriptive, Cross-sectional design with Non Probability Purposive sampling technique the sample size comprised of 100 Pregnant women attending the outpatient department of the Vitthalrao Vikhe Patil Pravara Rural Hospital Loni bk, ethical approval was obtained from the Institutional Ethical Committee and official permission was received from authority which carried the formal permission was taken from Prior to collection of data, Permissions were obtained from medical superintendent, Head of the Department of OBGY, then the written informed consent was obtained from the participants who were willing to participate in the study and who fulfilled the eligibility criteria. The plan for statistical analysis was made on the basis of objectives. The data analysis was planned to include descriptive and inferential statistics. In tool consist

The data collected was analysed based on objectives of the study in the following way:

Section I: Description of the study participants according to their demographic characteristics

Section II: Description of level of knowledge of the study participants

Section III: Association between Level of knowledge and selected demographic variables

Results

Section-I

Description of the study participant according to their demographic characteristics: -

This section deals with description of participants according to their demographic characteristics. Frequency and percentage are used to describe the demographic characteristics of study participants

Table 1: Description of study participants according to their demographic characteristics

N=100

Sr. No.	Variables	F	%
1	Age in years	18-22 yrs	32 32%
		23-27 yrs	48 48%
		28-32 yrs	16 16%
		Above 33 yrs	4 4%
2	Gravida	Primi	43 43%
		multipara	57 57%
2	Education	Primary	3 3%
		Secondary	62 62%
		Graduate	34 34%
		Illiterate	1 1%
3	Occupation	House Wife	59 59%
		Private job	28 28%
		Govt job	4 4%
		Other	9 9%
4	Type of family	Joint	56 56%
		Nuclear	44 44%
5	Monthly income of the family	5000-15000	39 39%
		16000-25000	34 34%
		26000-35000	12 12%
		Above 36000	15 15%
6	Religion	Hindu	85 85%
		Muslim	15 15%
		Other	1 1%
7	Residence	Urban	56 56%
		Rural	44 44%

Table no. 1 shows the description of the study participants according to their demographic variables, the detailed description of the study participant according to each demographic characteristic is discussed further in the chapter.

Section II

Description of level of knowledge of the study participants

This section deals with description of existing level of knowledge of the Pregnant Women regarding Warning Signs. The description of level of knowledge is described in three categories with frequency and percentage below.

Table 2: Description of level of knowledge of the study participants

N=100

Sr.No.	Level of knowledge	F	%
1	Good	52	52%
2	Poor	48	48%

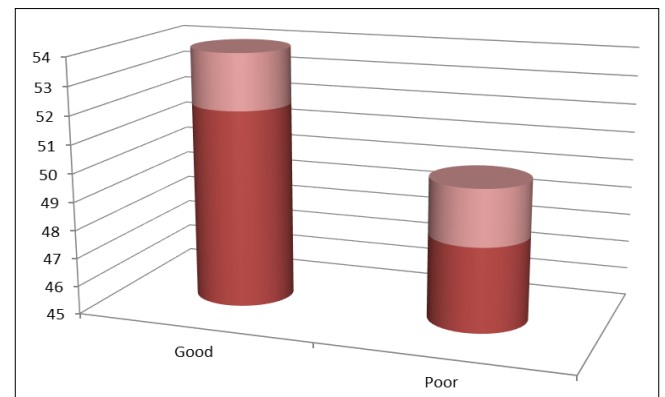


Fig 1: Description of level of knowledge of the study participants

shows the description of level of knowledge of the study participants, it reveals that majority 52% of the study participants were having average level of knowledge, followed by 48% of the study participants were having poor level of knowledge Overall, the Pregnant Women at Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital Loni.

Discussion

This chapter discusses the major findings of the study and reviews that in relation to findings from the result of the previous study.

The present study was conducted assess the level of knowledge Regarding Warning Signs of Pregnant Women at Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni. In order to achieve the objectives of the study, the researcher adopted descriptive, cross-sectional research design. The non-probability method, purposive sampling technique was used. Total 100 Pregnant Women were selected for the present study. The study participants were assessed using demographic variables and knowledge questionnaires.

The Findings of the Study Are Discussed Under the Following Sections

Objective I: Findings related to demographic characteristics

Highest number of pregnant women were in age group of 23-27 yrs (48%) years.

Multi gravida (women with multiple pregnancies) Number of Multipara Women 57(57%)

Majority 62% of the study participants were in the category of primary A substantial majority 59(59%), are housewives, which reflects a traditional role prevalent within the community.

The majority of participants 39(39%) fall within the income range of ₹5,000 to ₹15,000 A significant proportion 34(34%), earn between ₹16,000 and ₹25,000. This income range indicates a somewhat higher financial capability compared to the lower bracket, Additionally, 12% of participants have an income between ₹26,000 and ₹35,000. This higher income range suggests that this segment of the sample might have access to a broader range of health resources and educational opportunities

This higher percentage suggests that urban participants may have more frequent access to healthcare facilities, educational resources, and health information. The concentration of medical services and prenatal care in urban settings likely provides these individuals with better opportunities for understanding and recognizing obstetric warning signs.

Hindu Pregnant Women (84): This group makes up 84% of the total, so they are the majority.

Highest number of pregnant women in the nuclear family is 56(56%)

Objective II: Description of existing level of knowledge regarding Warning Signs of Pregnant Women

The present study assesses the level of knowledge regarding Warning Signs of Pregnant Women. Findings regarding level of knowledge reveals that, majority % of the study participants were having average level of knowledge, followed by % of the study participants were having poor level of knowledge, whereas % of the study participants had good level of knowledge. Overall, the Pregnant Women at the Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni had average level of knowledge with mean score of.

A similar study was conducted to assess the knowledge regarding in a study conducted by Sangal *et al.* in Gorakhpur where 90.5% and 80% of study participants were aware of bleeding/leaking per vagina, decreased fetal movements respectively, as obstetric danger signs^[5]. In few other studies, vaginal bleeding was found to be the most commonly cited danger sign^[12, 13, 14]. In this study, a mere 20.0% of the study participants reported that convulsions was a danger sign. Contrary to this, it was found that in a study conducted by Sangal *et al.* that 78.4% of study participants reported seizures/fits during pregnancy as a danger sign^[5], while in a study conducted by Sahithi *et al.* in Hyderabad, India, 39% of study participants reported convulsion as danger sign in pregnancy^[10]. This low knowledge of convulsions as a danger sign in the present study, could be due to the reason that only 2% of study participants were suffering from pregnancy induced hypertension, which if uncontrolled could lead to eclampsia, characterized by convulsions as a clinical feature.

Objective III: Association of level of knowledge with selected demographic variables

The present study assesses association of existing level of knowledge with selected demographic variables. Findings regarding association reveals that, there was no significant association found between the level of knowledge with selected demographic variables except Education and occupation (shows significant association). Calculated chi-value for age 8.97 is less than table value 12.59 shows non-significant association. Calculated chi-value for education 19.46 is greater than table value 12.59 shows significant association. Calculated chi-value for occupation 25.62 is greater than table value 12.59 shows significant association. Calculated chi-value for type of family 0.55 is less than table value 5.99 shows non-significant association. Calculated chi-value for Monthly income 5.92 is less than table value 12.59 shows non-significant association. Calculated chi-value for religion 7.08 is less than table value 12.59 shows non-significant association. Calculated chi-value for residence 0.85 is less than table value 5.99 shows non-significant association.

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Summary

This chapter dealt with the findings, limitations, suggestions for the study and implications in the field of nursing education, practice, administration and nursing research.

The present study was conducted assess the level of knowledge Regarding Warning Signs of Pregnant Women at Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni. In order to achieve the objectives of the study, the researcher adopted descriptive, cross-sectional research design. The non-probability method, purposive sampling technique was used. Total 100 Pregnant Women were selected for the present study. The study participants were assessed using demographic variables and knowledge questionnaires.

Major Findings of the Study

Age of the primi mothers reveals that, majority highest number of pregnant women were in age group of 23-27 yrs (48%) years. of the study participants were belonged to the more than 36 years of age.

The data based on the education of the participants states that, majority 62% of the study participants were in the category of primary education, whereas 6.66% of the study participants belonged to the category graduation and above.

The data based on occupation of the study participants states that, majority A substantial majority 59(59%), are housewives, which reflects a traditional role prevalent within the community. of the study participants were housewife whereas of the study participants belonged to the occupation category of self-owned business.

The data based on their type of family reveals that, majority The majority of participants 39(39%) fall within the income range of ₹5,000 to ₹15,000 A significant proportion 34(34%), earn between ₹16,000 and ₹25,000. This income range indicates a somewhat higher financial capability compared to the lower bracket, Additionally, 12% of participants have an income between ₹26,000 and ₹35,000. This higher income range suggests that this segment of the sample might have access to a broader range of health resources and educational opportunities Highest number of pregnant women in the nuclear family is 56(56%) of the study participants were belonged to nuclear family.

The religion of the study participants reveals that, majority Hindu Pregnant Women (84): This group makes up 84% of the total, so they are the majority.

The data of the area of residence of the study participants reveals that, majority This higher percentage suggests that urban participants may have more frequent access to healthcare facilities, educational resources, and health information. The concentration of medical services and prenatal care in urban settings likely provides these individuals with better opportunities for understanding and recognizing obstetric warning signs.

Majority 52% of the study participants were having Good level of knowledge, followed by 48% of the study participants were having poor level of knowledge.

There was no significant association found between the level of knowledge with selected demographic variables except Education and occupation (shown significant association).

Conclusion

The Pregnant Women had average level of knowledge regarding the Warning Signs of Pregnant Women The patient teaching should be conducted to improve knowledge and awareness regarding Warning Signs of Pregnant Women

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Conflict of Interest-None to declare

Informed Consent-The informed consents have been obtained Pregnant Women admitted in Dr. VVPPRH, Loni.

References

1. Too-Kong T. The Millennium Development Goals Report 2014 United Nations Development Programme. 1st ed. New York: United Nations, 2015, 56. Reference Source [Google Scholar].
2. United Nations. A/RES/71/313: Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development, 2017, 25.
3. Vogel JP, Pileggi-Castro C, Chandra-Mouli V, *et al.* Millennium Development Goal 5 and adolescents: looking back, moving forward. *Arch Dis Child*,2015;100(Suppl 1):S43–S47. 10.1136/archdischild-2013-305514 [PMC free article] [PubMed] [CrossRef] [Google Scholar].
4. Shora T, Verma A, Jan R, *et al.* Knowledge regarding antenatal care services, its utilization, and delivery practices in mothers (aged 15–49 years) in a rural area of North India. *Trop J Med Res*,2015;18:89.
5. Teng SP, Zuo TC, Jummaat FB, *et al.* Knowledge of pregnancy danger signs and associated factors among Malaysian mothers. *Br J Midwifery*,2015;23:800–6.
6. Jhpiego. Monitoring birth preparedness and complication readiness. Tools and indicators for maternal and newborn health, 2004. Available from: <http://www.jhpiego.org/files/BPCRtoolkit.pdf-birth>
7. Abas AA, Fakhredeen E. Knowledge about danger signs and symptoms of pregnant women attending antenatal care centers in Baghdad City. *J Nurs Health Sci*,2017;6(4):37–40.

8. Sumankuuro J, Crockett J, Wang S. Factors influencing knowledge and practice of birth preparedness and complication readiness in sub-saharan Africa: a narrative review of cross-sectional studies. *Int J Community Med Public Health*,2016;3(12):3297–307.
9. Jhpiego/Maternal and neonatal health (MNH) Program. Birth preparedness and complication readiness: a Matrix of shared responsibilities. Baltimore, MD: Jhpiego, 2008.
10. August F, Pembe AB, Mpembeni R, *et al.* Men's knowledge of obstetric danger signs, birth preparedness and complication readiness in rural Tanzania. *PLoS ONE*,2015;10(5):e0125978.