To Assess the Effectiveness of Self-Instructional Module on Knowledge Regarding Obstetric Danger Signs, Birth Preparedness and Complications Readiness among the Primigravida Mothers

A. Lalawmpuii1* and Vaishali Taksande1

1Department of Obstetrics & Gynaecological Nursing, Smt. Radhikabai Meghe Memorial College of Nursing, Datta Meghe Institute of Medical Sciences, Sawangi (M), Wardha, India.

Authors’ contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Background: Every pregnant woman faces the possibility of unforeseeable pregnancy problems, which can result in morbidity or fatality for herself or her infant. As a result, the concept of birth preparedness and complication readiness was developed, in which the family and community should plan ahead of time to protect the safety and well-being of the women and their new-borns throughout pregnancy, delivery, and after delivery. In the event of pregnancy and delivery problems, delivery intrapartum, and after postpartum, good plans and preparations will enhance usage of professional care and reduce delays in receiving care. Good plans and preparations will increase the usage of expert care and reduce the time it takes to seek care in the case of pregnancy and delivery complications [1].

Objectives: 1. To assess the existing knowledge on obstetric danger signs, birth preparedness and complications readiness among primigravida mothers. 2. To evaluate the effectiveness of self-instructional module on knowledge regarding obstetric dangers signs, birth preparedness and complications readiness among the primigravida mothers. 3. To find out the association between
the knowledge regarding obstetric danger signs, birth preparedness and complications readiness with selected demographic variables.  

**Materials and Methods:** It is a quantitative research approach, in which one group pre-test post-test design will be used. Purposive sampling technique will be used to collect the data. Self-instructional module and structured questionnaire will be used to assess the effectiveness of self-instructional module on knowledge regarding obstetric danger signs, birth preparedness and complication readiness among the primigravida mothers.

**Keywords:** Self-instructional module; obstetric danger signs; birth preparedness; complication readiness; primigravida mothers.

1. **INTRODUCTION**

In developing countries, the risk of pregnancy problems is increased. In 2015, 303,000 women died as a result of readily preventable pregnancy and delivery problems, with low-income nations accounting for 99 percent of the deaths. It is critical to be aware of risk indicators during pregnancy, labour, and delivery in order to be a safe mother. Pregnancy danger signals are symptoms that indicate that a pregnant woman or her foetus is in risk and requires emergency medical intervention. Severe vaginal bleeding, swelling face/hand, and hazy vision are the most prevalent pregnancy hazard signs: Severe vaginal bleeding, prolong labour, and convulsions are all warning indications during labour and delivery [2].

The practice of planning for a normal birth and anticipating the actions needed in the event of an emergency is known as birth preparedness and complication readiness (BP/CR). It's also a technique to encourage rapid access to professional maternal and neonatal care, based on the idea that planning for childbirth and anticipating difficulties minimises the time it takes to get this treatment [2].

Strategies aimed at increasing the use of competent care in low-income nations include knowledge of obstetric danger signs, birth preparedness, and complication readiness. The presence of trained birth attendants and the provision of emergency obstetric treatment has been found to significantly minimise maternal death due to obstetric complications [3].

1.1 **Background of the Study**

Every pregnant woman confronts the risk of unanticipated pregnancy complications, which can lead to morbidity or death for herself or her baby. As a result, the concept of birth preparedness and complication readiness was developed, in which the family and community should organise ahead of time to protect the women and their new-born’s safety and well-being during pregnancy, delivery, and after delivery. Good plans and preparations will increase the use of professional care and reduce delays in accessing care in the event of pregnancy and delivery issues, delivery, and after delivery. In the event of pregnancy and delivery issues, good plans and preparations will maximise the use of expert care and shorten the time it takes to seek care[1].

This method encourages women to be aware of the warning signs of obstetric complications and emergencies, to select a desired birth location and birth attendant, and to be aware of the signs of obstetric difficulties and emergencies, to make preparations with the birth attendant in advance, in the event of an emergency, to organise transportation to a skilled care facility, to put money aside or make other arrangements for professional and emergency care, and to be aware of the warning indications of obstetric difficulties and crises, locating a partner to accompany the woman to emergency treatment or to be with her at the time of birth. Other preparations include locating a compatible blood donor in the event of a haemorrhage, obtaining permission from the head of household to seek competent treatment if a birth emergency occurs while he is abroad, and arranging for temporary family care while she is away[4].

Consistent vomiting, severe abdominal discomfort, and vaginal bleeding throughout pregnancy and delivery, significant vaginal spotting, swelling of the face, fingers, or feet, vision blurring, Fits, severe headaches, high-grade fever, and a dramatic change in foetal movements and blood pressure that is too high are all obstetric warning indicators. In addition, abrupt fluid leakage from the vaginal canal, dysuria, protracted labour, oliguria or anuria, Placental retention and loss of consciousness, are all part of the warning signs[5].
Death and unwell condition of the mother may be decreased greatly if women and their families notice these maternity warning signs and look out for medical help as soon as possible. Furthermore, there is evidence that better understanding of obstetric risk signs will aid in early diagnosis of abnormalities and better decision-making for obtaining necessary health treatment. Furthermore, non-specialist health workers, who are the backbone of primary health care, may be able to recognise these danger indications, which could help to compensate for the dearth of professional birth attendants and emergency obstetric services. As a result, enabling women to recognise warning indicators will go a long way toward improving primary health care[6].

1.2 Need of the Study

Pregnancy and childbirth are significant milestones in the lives of women and their families. This can be a time of immense expectation and delight, but it can also be a period of fear, suffering, and even death. In underdeveloped nations, pregnancy and delivery complications are frequently the primary causes of morbidity and mortality among women of reproductive age. At least 40% of all pregnant women will face problems at some point throughout their pregnancy. These problems will be potentially life-threatening for roughly 15% of them, necessitating rapid obstetric care. According to the World Health Organization, approximately about five hundred thousand women die each year from maternity diseases, among which 99 percent of the incident occurs mostly in underdeveloped areas[7].

Many women suffer from maternity complication and more than five hundred thousand women still die due to this complication like: vaginal bleeding, hyperemesis, high blood pressure, anaemia, urinary tract infection, etc. So pregnant women need to have knowledge regarding the complications that could occur during pregnancy, during child birth and after delivery of the baby.

2. METHODOLOGY

The study will be based on quantitative research approach with one group pre-test post-test design. Purposive sampling technique will be used. The selected samples are the primigravida mothers in a selected area in Wardha with a total of 60 samples.

2.1 Inclusion Criteria

- Primigravida mothers who are willing to participate in the study.
- Primigravida mothers who can read and write English, Hindi, and Marathi.

2.2 Exclusion Criteria

- Primigravida mothers who are health professional.

2.3 Randomization

Non-randomized purposive sampling technique will be used for data collection.

2.4 Interventions

The purpose and nature will be explained to all the participants and will take consent from the samples before the study. The pre-test knowledge will be assessed by using structured questionnaire. The intervention self-instructional module will be given, and the post-test knowledge will be assessed again by using structured questionnaire after the 7th days of intervention.

2.5 Data Management and Monitoring

Questionnaire will be conducted to assess the pre-knowledge regarding the obstetric danger signs, birth preparedness and complication readiness. The intervention self-instructional module will be given, and post knowledge will be assessed by using questionnaire after the 7th days of intervention.

2.6 Statistical Analysis

Statistical analysis will be performed by using SPSS Software.

3. EXPECTED RESULTS AND DISCUSSION

The main purpose of the study is to assess the effectiveness of self-instructional module on knowledge regarding obstetric danger signs, birth preparedness and complication readiness among the primigravida mothers. The assessment will be done by using self-instructional module and structured questionnaire.
After the 7th days of intervention, the knowledge of the primigravida mothers are expected to be increased regarding their knowledge on obstetric danger signs, birth preparedness and complication readiness.

Fig. 1. Schematic diagram of study methodology
4. CONCLUSION

Conclusion will be drawn from the statistical analysis.

CONSENT AND ETHICAL APPROVAL

The study is approved by the Institutional Ethics Committee of DMIMS (DU)/IEC/2021/298. The demographic will be collected and taking consent from the participants before the study.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Birth preparedness and complication readiness among women of child bearing age group in Goba woreda, Oromia region, Ethiopia. BMC Pregnancy and Childbirth. Full Text [Internet]. [cited 2021 Mar 15].
2. Mukhopadhyay DK, Bhattacherjee S, Mukhopadhyay S, Malik S, Nayak S, Biswas AB. Birth preparedness and complication readiness among women of Bankura District, West Bengal. J Family Med Prim Care. 2016;5(2):404–10.
3. Urassa DP, Pembe AB, Mganga F. Birth preparedness and complication readiness among women in Mpwapwa district, Tanzania. Tanzania J Hlth Res [Internet]. 2012 Jan 25 [cited 2021;14(1).
4. Information NC for B, Pike USNL of M 8600 R, MD B, Usa 20894. Danger signs in pregnancy [Internet]. Counselling for Maternal and New-born Health Care: A Handbook for Building Skills. World Health Organization; 2013 [cited 2021 Mar 15].
5. Haleema M, Raghuveer P, Kiran R, Mohammed IM, Mohammed ISA, Mohammed M. Assessment of knowledge of obstetric danger signs among pregnant women attending a teaching hospital. J Family Med Prim Care. 2019;8(4):1422–6.
6. El-Nagar A, Ahmed M, Belal G. Knowledge and Practices of Pregnant Women Regarding Danger Signs of Obstetric Complications. IOSR Journal of Nursing and Health Science. 2017; 06:30–41.
7. Birth preparedness and complication readiness among women in Mpwapwa district, Tanzania | Tanzania Journal of Health Research [Internet]. [cited 2021 Mar 15].

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