



Research Article:

Awareness Regarding Birth Preparedness and Complication Readiness among Antenatal Mothers: An Hospital Based Study

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Abstract

Introduction: Birth preparedness and complication readiness (BP/CR) is a strategy to promote the timely use of skilled maternal and neonatal care and is based on the theory that preparing for childbirth and being ready for complications reduce delay in obtaining care. Birth. It includes, Preparation for normal delivery, readiness to deal with complications, post-natal and new born care. Preparing mother for the birth is an important part of antenatal counseling and one of the responsibilities of health care providers. Aim: To assess the awareness regarding birth preparedness and complication readiness (BPCR) among the antenatal mothers. Material and Methods: A quantitative research approach with Non-Experimental descriptive research design was used for this study. The sample consisted of 100 antenatal mothers who were attending antenatal OPD at PGIMS Rohtak. The samples were chosen by using convenient sampling technique. The data were collected by using structured demographic variables questionnaire and structured Birth preparedness and complication readiness questionnaire. The reliability of BPCR Questionnaire was checked by split half method and it was found $r=0.96$. The collected data were tabulated and analyzed by using descriptive and inferential statistics. Results: The mean age of antenatal women participated in the study was 27 ± 3.4 years. Almost Two third of antenatal mothers 66(66%) had good awareness regarding birth preparedness and complication readiness and one third of antenatal mothers 34(34%) had poor awareness regarding birth preparedness and complication readiness. The mean value of the awareness score of birth preparedness and



complication readiness was 7.26 with standard deviation of ± 2.2 . Education of mothers ($\chi^2=11.9$, $p=0.007$) was found to have significant association with BPCR. It shows that higher educated antenatal mothers were more aware about birth preparedness and complication readiness, whereas other variables were not significantly associated. Conclusion: Majority of antenatal mothers had good awareness about BPCR but still one third of mothers were having poor awareness regarding, emergency readiness and awareness of danger signs. Maternal education and early booking have an independent association with birth preparedness. Health Care Professionals must take necessary initiatives to enhance awareness and reduce maternal and neonatal deaths.

Keywords: Birth preparedness, Complication readiness, Awareness, Antenatal mothers

INTRODUCTION

Maternal mortality is a substantial burden in developing countries. Reduction of maternal mortality is one of the major goals of several recent international programme and has been included in the Millennium Development Goals (MDGs).¹ About one third of neonatal deaths occur on the first day of life, and the majority of maternal deaths occur during labour, delivery, and within 24 hours postpartum. Apart from medical causes, there are numerous interrelated socio-cultural factors which delay care-seeking and contribute to these deaths. Care-seeking is delayed because of the delay in identifying the complication, deciding to seek care, identifying and reaching a health facility, and receiving adequate and appropriate treatment at the health facility.²

High risk pregnancy is a critical problem for modern medical and nursing care. The leading cause of maternal attributable to pregnancy differs over the world the factors that are strongly related to maternal death include age, lack of prenatal care, low educational attainment.³ Information on how to stay healthy during pregnancy and the need to obtain the services of a skilled birth attendant, on recognizing signs of the onset of labour, and on recognizing danger signs for pregnancy-related complications and what to do if the risk would significantly increase the capacities of women, their partners and their families to remain healthy, to take appropriate steps to ensure a safe birth and to seek timely skilled care in emergencies.⁴

Birth Preparedness and Complication Readiness (BPCR) interventions are widely promoted



by governments and international agencies to reduce maternal and neonatal health risks in developing countries; however, their overall impact is uncertain, and little is known about how best to implement BPCR at a community level. Our primary aim was to evaluate the impact of BPCR interventions involving women, families and communities during the prenatal, postnatal and neonatal periods to reduce maternal and neonatal mortality in developing countries.⁵ Birth preparedness and complication readiness is an essential component of safe motherhood programs that promote appropriate utilization of skilled maternal and neonatal care. Preparing for childbirth and its probable complications can reduce delays in seeking care.⁶ A BPCR plan contains the following elements: the desired place of birth; the preferred birth attendant; the location of the closest facility for birth and in case of complications; funds for any expenses related to birth and in case of complications; supplies and materials necessary to bring to the facility; an identified labour and birth companion; an identified support to look after the home and other children while the woman is away; transport to a facility for birth or in the case of a complication; and identification of compatible blood donors in case of complications.⁷

Many research studies have been conducted on birth preparedness and complication readiness among the mothers and care providers at national and international level but few studies have been done in the Haryana state.⁸ The researcher has an experience of working in the obstetrics department and observed that the antenatal mothers who were coming to the hospital, were neither well prepared for birth of baby nor aware about danger signs and complications during pregnancy and labour, even not ready to decide if a complication arises. Hence, the researcher aimed to conduct a study to assess the awareness regarding birth preparedness and complication readiness (BPCR) among the antenatal mothers.

Objectives of the Study

1. To assess awareness regarding birth preparedness and complication readiness (BPCR) among antenatal mothers.
2. To find out the association between awareness regarding birth preparedness and complication readiness and selected demographic variables of antenatal mothers.

MATERIALS AND METHODS



A quantitative research approach and Non-Experimental descriptive survey research design was used for this study. The study was conducted in Gynae OPD of PGIMS, Rohtak. The samples were Antenatal mothers of second and third trimester attending antenatal OPD at PGIMS Rohtak. The sample size was calculated by power analysis and it was consisted of 100 antenatal mothers. The samples were chosen by using convenient sampling technique. The study excluded the antenatal mothers whose gestational age was below 4 month, those who were in the active labour phase, and those were mentally or physically incapable to give responses.

The data collection tool was consisted of two sections. Section I: Structured socio-demographic variable questionnaire- It consisted of Age, education, occupation, gravida, income, type of family, antenatal registration, source of information, gestation time, transportation, hospital visits. Section II: Structured Birth preparedness and complication readiness questionnaire- questions about the detail of antenatal visit, antenatal period, lab investigation during pregnancy, plan to arrangement of transport, place of delivery, preparation of bag during labour and arrangement of funds for delivery. The validity of data collection tool was obtained from the experts in the field of obstetrics and gynecology Medicine and Nursing. The content validity index value was 0.94. The reliability of Structured Birth preparedness and complication readiness questionnaire was checked by split half method and it was found $r=0.96$. According to the total score obtained by each subject awareness was classified into two categories: - Poor awareness (0-6) and Good awareness (7-14).

The pilot study was conducted from 09.12.2019 to 15.12.2019 in OPD PGIMS Rohtak Haryana. The written permission to conduct the pilot study was obtained from the HOD of obstetrical and Gynaecology OPD of PGIMS, Rohtak. The data was collected from 10 antenatal mothers which was 10% of total study subjects. The findings of the data revealed that study was feasible, practicable, acceptable and there get some modification as per discussion with the Guide and Co-guide. The main study was conducted from 01.01.2020 to 31.01.2020 at PGIMS Rohtak by using the designed questionnaire. The collected data were tabulated and analyzed by using. Descriptive and inferential statistics.

RESULTS



The results regarding socio-demographic distribution of antenatal mothers revealed that out of 100 antenatal mothers, almost half (52%) of the study subjects were in the age group of 18-25 years, 26% were in the age group of 26 -30 years and 22% were in the age group of 31-35 years, None of the study subject was of above 35 years. The mean age of antenatal women participated in the study was 27 ± 3.4 years. More than half (58%) of antenatal mothers were multigravida and least (42%) of antenatal mothers were primi gravida. Highest one third of antenatal mother (34%) were having secondary education, similarly one third of antenatal mothers (34%) husbands were also having secondary education, most of study subjects (88%) were homemaker, majority (68%) of them had family income below Rs. 5,000-10,000, 74% of study subjects belongs to the joint family, similarly 74% of study subjects were having antenatal registration, Most of antenatal mothers (91%) gain information on birth preparedness from family member, 64% antenatal mothers takes an hour to reach health facility, most of antenatal mothers (93%) were willing to give birth in government health facility and more than half (56%) of antenatal mothers were accompanied to health facility by their mother in law.

Table-1: Frequency and percentage distribution of antenatal mothers as per their level of awareness on birth preparedness and complication readiness.

N=100

Level of awareness	Frequency	Percentage
Poor awareness	34	34%
Good awareness	66	66%

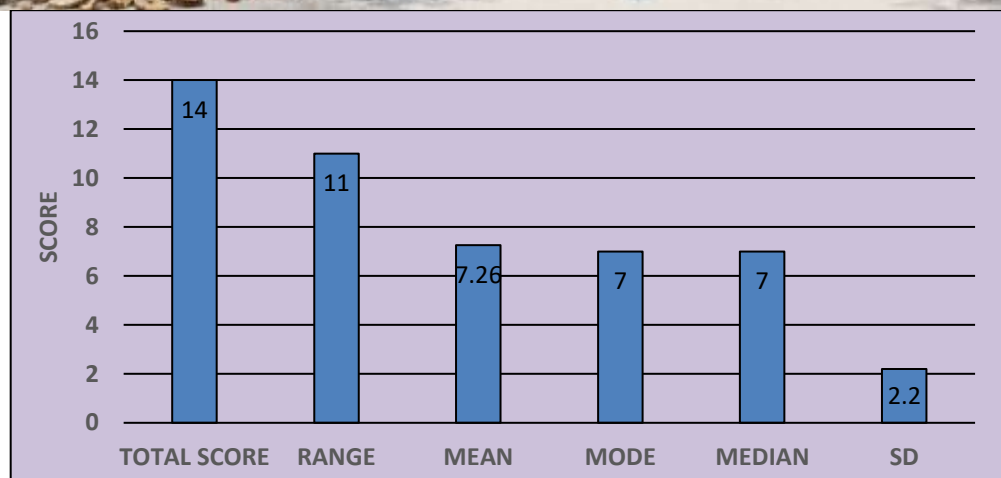


Figure 1: Showing mean, mode, median and S.D. according to the awareness level of antenatal mother on BPCR.

The data represented in Table 1 and figure 1 shows that majority 66 (66%) of antenatal mothers were having good awareness and least 34 (34%) were having poor awareness regarding birth preparedness and complication readiness (BPCR). The overall mean score of awareness regarding BPCR was 7.26 with standard deviation of ± 2.2 . Chi-square test was done to analyze the association between levels of birth preparedness and selected socio demographic variables of antenatal mothers. Education of mothers ($\chi^2=11.9$, $p=0.007$) was found to have significant association with BPCR. It shows that higher educated antenatal mothers were more aware about birth preparedness and complication readiness, while there was no association of age ($\chi^2=3.25$, $p=1.96$), gravida of mother ($\chi^2=2.76$, $p=0.096$), occupation of mother ($\chi^2=1.12$, $p=0.77$), type of family ($\chi^2=.82$, $p=0.50$), trimester of pregnancy ($\chi^2=.48$, $p=0.48$) with BPCR.

DISCUSSION

Birth preparedness for a woman is very essential to avoid or minimize pregnancy complications, give birth to a healthier baby, recover more quickly and easily after giving birth, have a more pleasant postpartum experience and minimize child's risk of future adult health problems. In the present study 100 antenatal mothers of 2nd and 3rd trimester were study participants. Among these 100 study participants, 52% were in the age group of 18-25 years,



26% were in the age group of 25-30 years and 22% were in the age group of 30-35 years. Majority 58% of antenatal mothers were multigravida and were in 3rd trimester (71%) of pregnancy. 39% and 37% were educated up to higher secondary and graduation respectively. In the population, 60% of them were in the favor of ambulance for transportation in emergency condition. 53% women were aware about the government benefit scheme. Mostly 93% antenatal mother's choice of birth place was govt. hospital in normal condition. Over all preparation for birth was assessed during antenatal period. The findings of the present study was supported with a study, which was conducted among 400 primigravida women attending ANC OPD at tertiary care hospital, from August-November 2015. Most of women (98.14%) identified skilled birth attendant for delivery. Though acceptable levels of registration of women in first trimester (79.75%) and identification of modes of transport in emergency (72.25%), TT2 coverage was very low (77.75%). About 63% women were aware about transportation provided by government & 70.25% women were aware about importance of 4 or more ANC visits during pregnancy. But only 68.50% women were aware about consumption of 100-FSFA tablets, whereas 31.50% of women had saved money to pay for expenses. Very few (29.75%) women identified compatible blood donors. 40.75% women knew about any one danger signs of pregnancy. Overall, no women knew about all 8 danger signs of pregnancy.⁹

Education of mothers ($\chi^2=11.9$, $P=0.007$), was found significant at $p<0.05$ level of significance. It shows that higher educated antenatal mothers were more aware about birth preparedness and complication readiness, while there was no association between age ($\chi^2=3.25$), gravida of mother ($\chi^2=2.76$), occupation of mother ($\chi^2=1.12$), type family ($\chi^2=.82$), trimester of pregnancy ($\chi^2=.48$) regarding birth preparedness and complication readiness. The findings of present study were supported with a study that was conducted to assess the BPCR among the 200 women in rural block of Haryana. 58.5% women were well prepared for BPCR. Education and occupation of participants were found to be significantly associated with socio-demographic variables.¹⁰ Planning before women get pregnant is very important. A woman should start planning for pregnancy as soon as she begins to have thoughts about having a baby. In this regard health personnel play a very important role as they have to educate the women about birth preparation and have a healthier pregnancy.¹¹



CONCLUSION

Nearly two third antenatal women attending a tertiary care hospital in an urban area are birth prepared. However, emergency readiness and awareness of danger signs during pregnancy, labor, or neonatal period are very poor. Maternal education has an independent association with birth preparedness. Educating women, encouraging pregnant women to utilize antenatal care, creating awareness on danger signs during pregnancy and childbirth might increase women's birth preparation and complication readiness plan. There is a need to create awareness among the antenatal mothers about the importance of proper planning and making arrangements in advance to avert the danger to the life of mother and child. Health care professional can play a significant role in enhancing awareness and promoting maternal and neonatal outcomes. Antenatal outreaches camps are good opportunities to discuss and address barriers that hinder adoption of appropriate practices relating to birth preparedness and complication readiness.

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