



Birth preparedness and complication readiness among antenatal women at selected areas, Bangalore

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Abstract

Background: It is true that pregnancy precedes celebration but it equally poses source of concern as sometimes it is an uncertain journey especially in the developing nations like India. Birth Preparedness and Complication Readiness is one of an approach towards care of mother and the new born which includes preparation for any emergencies and building a favourable environment for both maternal and new born survival.

Objectives: To assess the Birth Preparedness and Complication Readiness among antenatal women and find out the associated factors with selected socio-demographic variables.

Materials and methods: A descriptive survey design was used to assess the Birth Preparedness and Complication Readiness among antenatal women, at selected areas, Bangalore. Self-structured Questionnaire developed from John Hopkins Program for International Education in Gynaecology and Obstetrics was used to assess the Birth Preparedness and Complication Readiness.

Result: The study result shows that (50.67%) were moderately prepared for the birth and (60.67%) of the subjects were moderately ready for the prevention of complication. Birth Preparedness showed an association with age, place of residence, educational status of pregnant women, occupation of pregnant women, and type of family whereas, Complication Readiness showed an association with only educational status of husband.

Conclusion: The findings of the study revealed that the antenatal women were moderately birth prepared and ready to handle any complication that may arise during pregnancy, delivery and postnatal period. By conducting BPCR campaigns in the community, the antenatal women and their families will gain awareness about the importance of BPCR in improving maternal and neonatal outcomes.

Keywords: Birth preparedness, Complication Readiness, antenatal women, maternal health

Introduction

The most delightful moment in every women’s life is when she gets pregnant. she spends her every single day in pleasant anticipation, to carry a bunch of happiness in

her arms. ⁽¹⁾ The pregnancy, delivery or postpartum period which will experience complications is unpredictable.

According to World Health Organization in 2009, maternal deaths are believed to happen in developing countries due to delay in seeking care, and receiving sufficient emergency services. ⁽²⁾ The WHO

approximates those 300 million women of developing countries suffer from short term and long-term morbidities and WHO in 2015 estimated that 830 pregnant women die in a single day because of preventable causes linked to pregnancy and childbirth. ⁽³⁾

Study reports show that 62.4% urban women and only 27.7% rural women reported attending four antenatal visits ⁽⁴⁾; and 60% of those who sought care had to borrow money for treatment ⁽²⁾; 91.4% cases reported the lack of understanding related to the role of skilled birth attendant. ⁽⁵⁾; 79.4% made no arrangement for a blood donor prior to delivery ⁽⁶⁾; only 6.0% had sufficient knowledge of obstetric danger signs; 58% of death occurred due to delay in reaching the health facility. ⁽⁷⁾

So prior preparation of mother and family can be helpful in identifying the complications at the earliest and get timely treatment.

Birth Preparedness and Complication Readiness is the planned action which has long been considered instrumental in improving the health of women and new born. ⁽⁸⁾ Safe motherhood program accepts BPCR as one of its most vital components. ⁽⁹⁾

Even in developing countries with poor health systems, increased preparedness for birth allows women to eliminate possible delays, and proper use of available health facility for complications. ⁽¹⁰⁾ In addition to working with antenatal women, BPCR programmes often

address help to her family and community to increase awareness on BPCR. ⁽¹¹⁾

Every pregnant woman is suspected to face certain complications during pregnancy. If pregnant women and their families are prepared for birth and its complications, the delays may be reduced, regular antenatal visits, choose skilled practitioner, Identify the health centre, aware of the complications that can be aroused at any moment.

Materials & method

Study Design

The study used descriptive research design.

Variables

Study variables for the study includes age, religion, place of residence, educational status of pregnant women, occupation of pregnant women, educational status of husband, occupation of husband, type of family, income, health insurance, LMP, EDD, period of gestation.

Setting of the study

The study was conducted on antenatal women at selected areas (Mathikere, Malleshwaram, Nethaji circle, Armanenagar, Srirampura), Bangalore.

Sample size: 150 antenatal women.

Sampling technique: Non probability convenient sampling technique was used to select the samples.

Inclusion and exclusion criteria

Inclusion criteria

Antenatal women who are

- willing to participate in the study
- able to read and understand English or Kannada

Exclusion criteria:

- Antenatal women with medical and obstetric condition complicating pregnancy
- Antenatal women who have previous knowledge of Birth Preparedness and Complication Readiness

Development of tool

After an extensive review of literature, discussion with the experts and with the investigator's personal and professional experience, a self-structured questionnaire was developed by including some of the components of JHPIEGO. The tool included three sections; Section-A (Socio-demographic variables), Section-B (Personal experience with current pregnancy) based on ANC registration, folic acid supplementation, tetanus toxoid vaccination, iron supplements, calcium supplements, exercise, blood test and urine test during pregnancy and Section-C (Birth Preparedness and Complication Readiness).

Validity

Content validity of the tool was established by inviting suggestions from experts that included two Specialist (MD, Obstetrics and Gynaecology), seven HOD of Obstetrics and Gynaecological Nursing and three Associate Professor of Obstetrics and Gynaecological Nursing Department. There was 100% agreement between the experts on relevance of items included on the tool.

Reliability

The tool was tested for reliability using split half test method ($r= 0.71$ and 0.72) respectively.

Ethical clearance

The ethical clearance for this study was obtained from the ethics committee of Ramaiah Institute of Nursing Education and Research, Bangalore.

Pilot study: Pilot study was conducted at Bettahalsur, Bangalore. A total of 15 antenatal women were selected for the study. On completion of pilot study, it was found that it was feasible to undertake main study.

Data collection procedure

The data were collected at selected areas (Mathikere, Malleshwaram, Nethaji circle, Armanenagar, Srirampura), Bangalore, after obtaining formal permission from the concerned authorities. A total of 150 antenatal women who met the selection criteria were selected using non probability convenient sampling technique during the data collection period. Subjects were given detailed information about the study and informed consent was obtained from all the subjects. Data were obtained by using semi-structured questionnaire. 20-30 samples were selected per day. Time taken to complete all three sets of tools by the subjects was around 15-20 minutes. The tool (questionnaire) was distributed to each subject and informed to read and follow the instructions carefully. Subjects were requested to respond to all three tools completely; Section-A (Socio-demographic variables), Section-B (Personal experience with current pregnancy) and Section -C (Birth Preparedness and Complication Readiness). The collected data were coded and entered in the master sheet.

Statistical method

The data analysis was done by using descriptive and inferential statistics. SPSS (version 20) was used to analyse the data.

1. Frequency and percentage distribution were computed for selected socio-demographic variables.
2. Frequency and percentage distribution were computed for Personal experience with current pregnancy.
3. Frequency and percentage distribution were computed for Birth Preparedness and Complication Readiness.

4. Association between Birth Preparedness and selected socio-demographic variables using chi square test.

5. Association between Complication Readiness and selected socio-demographic variables using chi square test.

Results

The collected data were analysed according to the objectives of study. The findings are presented below.

Socio-demographic variables of the subjects.

Frequency and percentage distribution were computed for socio-demographic variables of the subjects. It is observed that more than half of the subjects, 57.3% belonged to the age group of 21-25 years. Majority of the subjects 100 % were married. More than half, 56.2% of the subjects were Hindus. Majority, 78.1% of the subjects were from urban. 34.67% of the subject's husband had completed primary education, and 61.33% of the subject's husband were self-employed. 41.6% of the subjects had completed secondary education and 78% of the subjects were unemployed. More than half of the subjects, 52.67% belonged to nuclear family and 52.67% of the subjects had income of Rs. 10,001-20,000. Majority of the subjects, 86.8% has health insurance. 36.67% of the subjects were between 26-32 weeks of gestation.

Frequency and percentage distribution of Personal experience with current pregnancy.

Majority of the subject 88.67% subjects have good personal experience, 6.0 % subjects had fair personal experience, 5.3 % subjects had poor personal experience with current pregnancy.

Frequency and percentage distribution of Birth Preparedness and Complication Readiness.

The study result shows that half of the subjects 50.67% were moderately prepared for the birth and 60.67% of the subjects were moderately ready for complication.

Association between Birth Preparedness and selected socio-demographic variables.

Chi square was used to find the association between Birth Preparedness and selected socio-demographic variables. The study finding showed that there is a statistical association between Birth Preparedness and selected socio demographic variables with regards to age ($p=0.000$), place of residence ($p=0.026$), educational status of pregnant women ($p=0.000$), occupation of pregnant women ($p=0.000$), and type of family ($p=0.000$) and rejected for educational status of husband, income and period of gestation.

Association between Complication Readiness and selected socio-demographic variables

Chi square was used to find the association between Complication Readiness and selected socio-demographic variables. The study finding showed that there is a statistical association between Complication Readiness and socio demographic variables with regards to educational status of husband ($p=0.024$) and rejected for age, place of residence, educational status of pregnant women, occupation of pregnant women, family, income and period of gestation.

Discussion

Birth Preparedness and Complication Readiness is a key component of globally accepted safe motherhood programs, which helps ensure women to reach professional care when labour begins and bring awareness among the antenatal mothers to take appropriate steps in managing pregnancy. ⁽¹¹⁾ This study

aims to determine the Birth Preparedness and Complication Readiness among antenatal women. Findings of the study have been discussed in term of objectives, theoretical bases and hypothesis.

The study result shows that half of the subjects (50.67%) were moderately prepared for the birth and (60.67%) of the subjects were moderately ready for complication. The findings of the present study were close to the findings reported in various published studies. A similar study conducted in 2017 in Hyderabad, India results shows that (71.5%) of pregnant women were birth prepared. ⁽¹²⁾ A study conducted in 2016 in Birgunj, Nepal found that (50%) of the antenatal mothers had moderate knowledge and (83.33%) had poor practice of preparation for birth and its complication. ⁽¹³⁾ A study conducted in 2016 in Kenya, Africa shows that (70.5%) of women were prepared for birth while (90.6%) reported readiness for complications. ⁽¹⁴⁾

Health workers of the selected community, Bangalore were involved in conducting door to door visit of every antenatal woman in order to encourage them to go for regular ANC. Therefore, In the present study, Antenatal women were moderately prepared and ready for the complication.

The study finding showed that Birth preparedness is statistical associated with selected socio-demographic variables. Hence, the hypothesis (H1) stated as “There is a significant association between Birth Preparedness and selected socio-demographic variables” is accepted for age, place of residence, educational status of pregnant women, occupation of pregnant, and type of family and rejected for educational status of husband, income and period of gestation. The findings of this study were discussed below in light of past research studies. Various studies were conducted on Birth preparedness and

complication readiness among antenatal women. A similar study conducted in 2017 in Thailand shows that there was an association between baseline characteristics of the pregnant women like age, marital status, education, employment, income, type of family with good BPCR. ⁽¹⁵⁾ A study conducted in 2016 in Ethiopia shows that maternal education was significantly associated with place of delivery. ⁽¹⁶⁾

The present study finding also showed that there is a statistical association between Complication Readiness and socio demographic variables. Hence, the hypothesis (H1) stated as “There is a significant association between Complication Readiness and selected socio- demographic variables” is accepted for educational status of husband and rejected for age, place of residence, educational status of antenatal women, occupation of antenatal women family, income and period of gestation. Findings of the present study were close to findings reported in a similar published study conducted in 2011 in Uganda, Africa which shows that educational status were associated with complication readiness. ⁽¹⁷⁾ The study findings were contradicted by a research study conducted in 2013, Ethiopia shows that family income was the only factor that associated with knowledge of women about obstetric danger signs. ⁽¹⁸⁾

Limitations

- Authenticity of the information regarding socio-demographic variables is based on the response of the subjects.
- Limited sample

Conclusion

The study concluded that the antenatal women were moderately prepared for birth and moderately ready for the prevention of complication. Hence, BPCR should be

included in ANC so that the antenatal women can be prepared for the birth and ready for the complication.

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