

Title:

Birth Preparedness and Complication Readiness Among Pregnant Women in a Resource Limited Setting

Adenike Ayobola Olaogun, PhD, MSc (Nsg), BSc (Nsg) (Hons)

Department of Nursing Science, Department of Nursing Science, Obafemi Awolowo University, Ile Ife, Nigeria, Ile Ife, Nigeria

Matthew Idowu Olatubi, MSc

Department of Nursing science, Bowen University Iwo Osun State, Iwo, Nigeria

Rashidat Omotola Akinsola, BNSc

Department of Nursing Science, University, Ile Ife, Nigeria

Session Title:

Global Strategies in Perinatal Health

Slot:

I 18: Monday, 30 October 2017: 3:45 PM-4:30 PM

Scheduled Time:

3:45 PM

Keywords:

Birth preparedness and complication readiness, Midwifery Practice and Nurse Clinicians and Researchers

References:

Alkema, L., Chou, D., Hogan, D., Zhang, S., Moller, A., Gemmill, A.,...Say, L. (2015). Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *Lancet*.6736: 828-837.

August, F., Pembe, A.B., Mpembeni, R., Axemo, P., & Darj, E. (2015). Men's knowledge of obstetric danger signs, birth preparedness and complication readiness in rural Tanzania *Plos one*, Doi:10.1371/journal.pone.0125978 May 7, 2015

Bintabara, D., Mohamed, M.A., Mghamba, J., Wasswa, P., & Mpembeni, R.N.M. (2015). Birth Preparedness and Complication Readiness among Recently delivered Women in Chamwino District , Central Tanzania: A Cross Sectional Study. *Reproductive Health* 12:44. DOI 10.1186/s12978-015-0041-8

JHPIEGO (2004). Monitoring birth preparedness and complication readiness: tools and indicators in maternal and newborn health. Baltimore: JHPIEGO.

Say, L., Chou, D., Gemmill, A., Tunçalp, Ö., Moller, A.B., Daniels, J.,...Alkema, L.(2014). Global causes of maternal death: a WHO systematic analysis. *Lancet Glob Health*. Jun;2(6):e323-33. doi: 10.1016/S2214-109X(14)70227-X. Epub 2014 May 5.

WHO (2010). Working with individuals, families and communities to improve maternal and newborn health. Geneva: WHO.

WHO (2016) .World Health Statistics.

Retrieved from http://www.who.int/gho/publications/world_health_statistics/2016/whs2016_AnnexA_Maternal_Mortality.pdf

Abstract Summary:

Birth Preparedness and Complication Readiness (BP/CR) is a strategy for reducing maternal mortality. Two hundred and twenty pregnant women were assessed for their practice of BP/CR. Exactly 67.3% prepared for birth but 31.4% were knowledgeable of signs of complications. Midwives should promote complication readiness among pregnant women in antenatal clinics.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to discuss the roles of birth preparedness and complication readiness (BP/CR) in the prevention of maternal deaths during pregnancy and childbirth.	Powerpoint slides will be used to discuss the definition and content of BP/CR. The roles of the women, families, health care providers, communities and policy makers will be highlighted.
The learner will be able to identify the level of BP/CR knowledge and practice among pregnant women living in a resource limited community.	The results of the study will be presented to the audience

Abstract Text:**Background:**

Maternal mortality (MM) is a major public health issue. Various attempts have been made at global level to reduce MM. At the year 2000 United Nations' Summit, 189 world leaders committed themselves to achieving a set of eight Millennium Development Goals (MDGs). MDG 5 was targeted at reducing MM by 75% from the level reported in 1990. By 2015, at the end of the fifteen-year execution period, there was a global decline of MM to 303,000 which is a reduction by 44% (Alkema et al, 2015 and World Health Organization (WHO), 2016). In recognition of the need to sustain this trend among others therefore, United Nations launched the Sustainable Development Goals (SDGs). SDG target 3.1 indicates that by 2030, the global Maternal Mortality Rate (MMR) should reduce to 70 per 100,000 live births (WHO, 2016).

Sub Sahara Africa has the highest MMR averaging about 500 maternal deaths per 100,000 live births (Bintabara, Mohamed, Mghamba, Wasswa & Mpembeni , 2015). Nigeria a sub Sahara African Country is characterised with a very high MM that is second only to India. Nigeria contributes 2% of the world population but accounts for 19% of the MM (Alkema, et al, 2015). The loss of a mother through MM affects the family negatively and threatens the well being of the surviving children. The main direct causes of maternal deaths are hemorrhage, hypertensive disorders, infections, prolonged labor and unsafe abortion (Say et al ,2014 and August, Pembe, Mpembeni, Axemo & Darj , 2015). Most of these conditions are preventable. A major strategy that can help reduce MM is making birth plan or birth preparedness (BP). Birth Preparedness and Complication Readiness (BP/CR) is a process of planning for birth and anticipating actions to take in case of obstetric complications. It is a comprehensive package that is aimed at promoting access to quality skilled maternal and neonatal services (JHPIEGO, 2004). It stems from the assumption that though, pregnancy and child birth are normal physiological events, every pregnant woman faces the risk of sudden and unpredictable life threatening complications. The concept of BP/CR emerged almost two decades ago and was later included by the World Health Organization (WHO) as an essential part of the antenatal care package (JHPIEGO, 2004 and WHO, 2010). According to WHO, BP/CR encourage women and families to make decisions before the onset of labour and in case of obstetric complications. The woman and her family should have the knowledge of danger signs, identify a labour and birth companion; a support person to look after other children at home and a mode of transport. They should also save money, identify a skilled attendant, a blood donor and where to go in case of complications. Nigeria adopted the BP/CR in 2005. Ten year post implementation of BP/CR in

Nigeria, its practice and determinants have not been well studied. Therefore we assessed the practice and factors affecting BP/CR among pregnant women using Primary Health Care (PHC) facility. PHC facilities are the first tier level of health care. It was anticipated that the findings of the study will provide important information regarding the level of awareness, practice and factors affecting BP/CR among pregnant women. It will thereby assist nurse midwives and public health nurses in developing community/culturally- friendly strategies in enhancing BP/CR knowledge and practice among pregnant women, families and communities.

Objectives:

- (i) Assess the pregnant women's level of preparedness of BP/CR;
- (ii) Evaluate the level of knowledge of pregnant women on CR; and
- (iii) Assess the influence of age, educational level, employment status, average monthly income, parity and level of awareness on birth preparedness on the pregnant women's level of birth preparedness.

Methods:

Design; A descriptive cross sectional research design was adopted for the study.

Study area; The study was conducted in Ile Ife, a sub urban town in Southwest Nigeria which is known for its rich culture and acclaimed as the origin of Yoruba race. The largest Primary Health Care centre (PHC) in the indigenous area of the town was used for the study site. The PHC as at the time of the study had five (5) nurse midwives who had also been trained as public health nurses, ten (10) community health officers, fifteen (15) community health extension workers and a medical doctor. It has an antenatal section, labor room, infant welfare clinic, and a general outpatient department.

Sample size and sampling technique; Sample size was calculated using a single population proportion formula with a level of confidence at 95%, 5% margin of error, 50% proportion of pregnant mothers. The population size that was used to calculate the sample size was the number of antenatal attendees in 2014 which was 484. The sample size was 215. Assuming a 2.5% non response rate – sample size estimated was 220. A systematic sampling method was used in selecting respondents.

Instrument; The questionnaire was adapted from a safe motherhood questionnaire developed by the Maternal Neonatal Program of JHPIEGO. Ile Ife is a Yoruba town and most of the people living in the indigenous area are Yorubas. Therefore, an expert translator translated the questionnaire from English to Yoruba and then another translator did a back translation to English to check for its original meaning.

Data Analysis; Data was analyzed using SPSS version 20. Bivariate analysis was used to test for relationship between the dependent variable BP/CR and other independent variables using Pearson's chi square and linear regression where appropriate.

Ethical Consideration; Permission to conduct the study was taken from the Ife Central Local Government and the Primary Health Centre. Informed consent was also taken from each respondent.

Results:

Respondents' ages ranged from 16-40 years with a mean of 26 ± 4.1 , 59.1% had secondary education (grade 12), and 85.5% were married. Seventy eight percent were employed and 47.3% earned below US \$65.40 per month. Exactly 67.3% prepared for birth. On their delivery plans, 96.8% had decided their place of delivery but 15.9% of these, planned to deliver in mission houses or at home. Over 92% had identified someone to accompany them to health facility for delivery, 88.6% had made arrangements for

transportation, 59.1% had saved money for delivery, and 26.4% had identified a potential blood donor. Regarding complication readiness, only 31.4% were knowledgeable of signs of obstetrical complications. Key danger signs identified were- severe vaginal bleeding during pregnancy (54.1%), Prolonged labor (47.7%), severe vaginal bleeding during post partum period (50.9%) and difficulty/ fast breathing in new born (64.1%). At $p=0.01$, the level of awareness on birth preparedness and the average monthly income of the respondents had very significant relationship with their level of birth preparedness. At $p \geq 0.05$, the age, educational level, marital status, parity and employment status did not have any significant relationship with the level of birth preparedness.

Conclusion:

The study revealed that the proportion of women who knew about obstetrical complications was low. It was recommended that Nurse Midwives should provide community based and culturally friendly education on importance of BP/CR with greater emphasis on complication readiness. The education should be given during antenatal sessions and at community outreaches to pregnant women, families and communities in low resource nations.