ASJ: *International Journal of Health, Safety and Environment (IJHSE)*
Vol. 7 (04) 17 October, 2021, Pp. 838 – 845
www.academiascholarlyjournal.org/ijhse/index_ijhse.htm
ISSN: 2360-9311©Academia Scholarly Journals
Also Available@: Archive.org/Aruaye_et_al.
Indexed in: International Institute_of_Organized_Research_(I2OR)_database
Open access

Full Length Research

Complications among Pregnant Women during Child Labor in Kabo Local Government Area of Kano State, Nigeria

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Accepted October 13, 2021

Pregnancy and complications among women during child labor have become one of the greatest health challenges leading to mortality among women of reproductive age. In 2017, estimates show that 810 women die every day as a result of pregnancy or childbirth related complications around the world. Nigeria accounts for 10 percent of maternal mortality in the world. Sadly, these complications are also experienced in Kabo Local Government Area of Kano State in a very high magnitude. Hence, this study examined complications among pregnant women during child labor in Kabo Local Government Area of Kano State. The study used Interpretative Phenomenological Analysis (IPA). Purposive sampling method was used in selecting the 21 participants for Interpretative Phenomenological Analysis. The study found that complications among pregnant women during child birth in Kabo local government include postpartum haemorrhage, postpartum anaemia, intrapartum eclampsia, puerperal sepsis, breast engorgement, breast abcess and retained second twins. The study also discovered that most of the causes of these complications are lack of antenatal attendance, nutrition or diet, the presence of comorbidities and poor management of third stage of labor (delivery of the placenta). The study concludes that pregnancy complications have become one of the greatest health challenges and a leading cause of mortality among women of reproductive age. The study recommends that antenatal care and hospital delivery should be encouraged and there should be a provision for more professional health workers, especially those that will be able to handle the third stage of labor.

Keywords: Pregnancy complications, maternal complications, and labor complications.

INTRODUCTION

Pregnancy has become one of the greatest health challenges and a leading cause of mortality among women of reproductive age. That is, this normal process may sometimes be overcome by serious

complications which may affect the life of mothers and newborn babies, thereby contributing to maternal mortality and morbidity to the maximum level (Health WHOR, 2003). Maternal mortality is significantly becoming high. Estimates for 2017 show that 810 women die every day as a result of pregnancy or childbirth related complications around the world. In 2017, 295 000 women died during pregnancy and childbirth. The vast majority occurred in low-resource settings, and most could have been prevented (WHO et al., 2019).

The maternal mortality ratio in the least developed countries is as high as 415 per 100 000 births versus 12 per 100 000 in Europe and Northern America and 7 in Australia and New Zealand. There are large disparities between countries having extremely high maternal mortality ratios of 600 or more per 100 000 live births in 2017 (WHO et al., 2019). Furthermore, among adolescent girls aged 15-19 years, pregnancy and childbirth complications are the leading cause of death globally. Several countries, predominantly those in Latin America and the Caribbean, and in South-East Asia, have already begun reporting data for women and girls outside the standard 15–49-year age interval, documenting the disturbing fact that maternal deaths are occurring among girls even younger than 15 (WHO, 2016a).

Globally, 600,000 women between the ages of 15 and 49 years die every year as a result of complications arising from pregnancy and childbirth. The tragedy is that these women die not from disease but during the normal life enhancing process of procreation. Most of these deaths could be avoided if preventive measures were taken and adequate cares were available. For every woman who dies, many suffer from serious conditions that can affect them for the rest of their lives (WHO, 2004).

According to World Health Organization (2004) Nigeria suffers the losses of 52,900 women annually to childbirth related complications and 600,000 women die globally. This means that Nigeria accounts for 10 percent of maternal mortality in the World. Furthermore, it observed that one in every sixteen women die during childbirth and at least twenty to thirty women suffer reproductive disabilities such as anaemia, uterine prolapse, vesico vaginal fistula, pelvis inflammatory diseases or infertility as a result of complications during pregnancy and childbirth. Furthermore, report by Nigeria Demographic and Health Survey (NDHS, 2013) asked women about deaths of their sisters to determine maternal mortality. Maternal mortality includes deaths of women during pregnancy, delivery, and 42 days after delivery excluding deaths that were due to accidents of violence. The maternal mortality ratio (MMR) for Nigeria is 512 deaths per 100,000 live births for the seven-year period before the survey. The confidence interval for the 2018 MMR ranges from 447 to 578 deaths per 100,000 live births. A study by The Challenge Initiative (2019) revealed that Kano State has 1,508 Health Facilities (1,257 Public and 251 Private) with about 822 public health facilities providing pregnancy complications and labor services. Despite this growing numbers, the services are inadequate to meet the current and growing need of the population. As such, many pregnant women die from preventable complications during labor. Despite the available knowledge on pregnancy complications among women, there are no substantial studies that examined complications among pregnant women during child labor in Kabo Local Government in Kano State. To bridge this existing gap in the literature, this study therefore examined complications among pregnant women during child labor in the study area.

BASIC TOOLS OF SCIENTIFIC INQUIRY

The study was guided by the following research questions:

1. What are the complications among pregnant women during child labor in Kabo Local Government Area of Kano State?
2. What are the causes of the complications among pregnant women during child labor in Kabo Local Government Area of Kano State?
3. What strategies should be employed to prevent complications among pregnant women during child labor in Kabo Local Government Area of Kano State?

LITERATURE REVIEW

Scholars like Hall et al., (2007) and Podulka et al., (2008) found that pregnancy and childbirth complications are the most prevalent reasons for hospitalization in the United States. Out of the estimated 4.1 million hospitals in 2009, women agreed to have involved in childbirth, 91.3 percent of vaginal and 99.9 percent of cesarean section deliveries had at least one complicating condition (Stranges et al., 2009). These conditions range in severity and may include those that are preexisting,

such as mental health disorders; those that create risk factors, such as multiple gestations; and those that may lead to complications of care, such as an abnormality of fetal heart rate or rhythm.

Complications during pregnancy are among the problems that are associated with pregnancy worldwide, at least 585,000 women die each year from complications of pregnancy and childbirth and almost 90% of these deaths occur in sub-Saharan African. Women in Northern Europe have 1 in 4,000 chance of dying from pregnancy-related causes; for those in Sub-Saharan Africa, the chance is 1 in 16 (Pitterson, 2010). World Health Organization (2019) findings revealed that most of these complications develop during pregnancy. Other complications may exist before pregnancy but are worsened during pregnancy. The major complications that account for 80% of all maternal deaths are severe bleeding (mostly bleeding after childbirth), infections (usually after childbirth), high blood pressure during pregnancy (preeclampsia and eclampsia) and unsafe abortion (Say et al., 2014)

Maternal and Pregnancy Complications in Nigeria

A study by Nigeria Demographic and Health Survey, NDHS (2013) rated Nigeria second globally, after India, in the level of maternal mortality, as a result of pregnancy complications with the rate of 500-652 deaths per 100,000 live births. Similarly, report from The Challenge Initiative (2019) revealed that Kano State has 1,508 Health Facilities (1,257 Public and 251 Private) with about 822 public health facilities providing pregnancy complications and labor services. Despite this growing numbers, the services are inadequate to meet the current and growing need of the population. As such, many pregnant women die from preventable complications during labor. Similarly, 1 out of every 13 pregnant women is at risk of dying from complication that could occur during pregnancy or during labor. The maternal complication mortality rate in Nigeria has large geographical variation; the highest rates are seen in the North-Central and North-West zones of the country, the lowest toll noticed in the South-West and South- East. Based on the survey conducted in February 2010, the record stands at between 165 per 100,000 live births in the South-West and 1,549 per 100,000 live births in the North-East (Onumere, 2010).

Ibe (2017) noted that Nigeria is seriously lagging behind in achieving widespread coverage of key maternal and health intervention and will not likely meet the target of the Sustainable Development Goals (SDGs). Nigeria ranks one of the 13 countries in the world with the highest maternal mortality rate and is still not listed among the 10 countries seen to have made rapid progress to meet the goals and it is sad to note that most of the causes of these complications are preventable or treatable.

EMPIRICAL REVIEW

Worldwide, more than half a million women die of complications due to pregnancy, child birth and postpartum period annually. Kistiana (2009) noted that about 99 percent (533,000) of these deaths occur in developing regions, with Sub-Saharan Africa and Southern Asia accounting for 86 percent of maternal deaths. In Sub-Saharan Africa, it is estimated that 30 women die from complications of pregnancy and childbirth every hour of each day (Smith et al., 2009). In other words, about 270,000 maternal deaths occur every year. In addition, the lifetime risk of maternal mortality in Africa is 1 in 26 (Barate and Temmerman, 2009). About 125,000 women and 870,000 newborn babies on the continent of Africa die annually in the first week after delivery (Warren et al., 2009), and more than two thirds of maternal deaths occur after delivery. Warren, et al., (2009) found that 30 to 50 maternal morbidities occur for each maternal death.

The Challenge Initiative (2019) findings revealed that the regional (Northwest zone, which Kano State belong) has pregnancy complication and mortality ratio estimated at 1,025/100,000 live birth. Nigeria is one of the countries with high pregnancy complication and mortality Bergström, 2016; WHO, 2016b), contributing about 10% of the world total maternal deaths with ratio of maternal complications and mortality reduction inconsistently slow.

Pregnancy complication and mortality varies in Nigeria among and within the region with the figure showing high concentration in North-West and North-Eastern region and low concentration in Southern region (Adedini et al., 2015; Gayawan and Turra 2015; Jennings et al., 2015). Similarly, pregnancy complication and mortality in Jigawa State is far above national estimate of 576, with the figure of pregnancy complication and mortality ratio being 1,012 per given year per 100,000 live births (Jennings et al., 2015).

Metiboba (2009) noted that 1 in 80 women in

Nigeria die as a result of pregnancy-related complications. Some hospital-based studies in Nigeria revealed disparities in pregnancy related complications across the country. Among 2,728 deliveries in a teaching hospital, in Sagamu, South-West Nigeria 75 maternal deaths occurred between 2000 and 2005. 267 maternal deaths occurred among 38,768 deliveries in the Jos teaching hospital (North Central), between 1985 and 2001, 60 maternal deaths occurred between 2004 and 2008 in Enugu State Teaching Hospital, South- East Nigeria (Ezugwu et al., 2009).

THEORETICAL FRAMEWORK

The study espoused on Health Belief Model. The Health Belief Model was first developed in the 1950 by social psychologists Houcbaum, Rosenstock and Kegels working in the U.S Public Health Services. The exponents of this model believe that the response and utilization of disease prevention programs will be predicted on an individual's knowledge of the seriousness of the disease, severity of the disease, information benefit of services, and barriers to accessing such services (Namadi and Msughter, 2020). Also Glanz et al., (2002) argued that a wide variety of demographic, social, psychological, and structural might also impact people's perceptions and indirectly their health-related behaviors, these factors were later added to connect the various types of perceptions with the predicted health behavior, it is also a psychological model that attempts to explain and predict health behaviors' by focusing on the attitudes and beliefs of individuals like in the case of pregnant women. According to Namadi and Aondover (2020) this model was used due to the fact that is one of the models of behavior change typically used for studying and promoting the uptake of health services. Therefore, Health Belief Model guides and informs health communication and programs as regards to individual response and utilization of health information. Therefore, this model is relevant in this study especially when one looks at the issue of complication among pregnant women during child labor in Kabo Local Government in Kano State. Thus, there is a nexus between the study and the model because its assumption relates to the response and utilization of disease prevention programs, which can be predicted on an individual's knowledge of the seriousness of the disease, severity of the complication, information benefit of services, and barriers to accessing such services. Arguably, the theory provides a wide variety of demographic, social, psychological, and structural might which impact on pregnant women's perceptions and indirectly their health-related complications, these factors can be added to connect the various types of perceptions with the predicted health behavior, it also explains and predict health behaviors' by focusing on the attitudes and beliefs of pregnant women having complications during child labor.

METHODOLOGY

The study was conducted in Kabo Local Government Area of Kano State, Nigeria. It has an area of 341km^2 and a population of 153,828. However, the study comprises of women within the reproductive ages of 14-45, pregnant and married in Kabo Local Government Area of Kano State. 20 women were purposively selected for the study because they are the victims of pregnancy complications during child labor. The selection is based on those women that have pregnancy complication during child labor. One nurse was also selected from the Cottage Hospital in the local government based on her long working experience and competency in the facility. This makes a total sample of twenty-one (21) respondents.

The study used Interpretative Phenomenological Analysis (IPA). Purposive sampling method was used in selecting the respondents for Interpretative Phenomenological Analysis. Kabo Cottage Hospital was purposively selected, which is bigger out of the only two in the local government with an average of 52 anti-natal care attendance (ANC) and 36 live births in the facility monthly. The 21 respondents were interviewed by structural interview method, using tape recorder, note book and biro as data gathering instruments. The respondents were tag with codes like respondent 1, 2, 3, 4 and 5, etc. Based on the in-depth interview method, the data was presented using interpretative analysis.

FINDINGS AND DISCUSSION

In order to address the issue of complications among pregnant women during child birth, respondent 1 states that: "complications among women during child birth are enormous, however, she listed the following as part of the complications: postpartum

haemorrhage and postpartum anaemia".

Corroborating, respondent 2 put forward the followings as some of the complications: "breast engorgement and breast abcess," while respondents 5, 10 and 15 agreed that puerperal sepsis, retained second twins and intrapartum eclampsia are also among the complications.

Studies by Turan et al., (2007) also found that some of the problems of maternal deaths and stillbirth are due to direct pregnancy complications, primarily haemorrhage, sepsis, complications of abortion, preeclampsia and eclampsia, and prolonged or obstructed labor. Similarly, Say et al., (2014) stated that the major complications that account for 80% of all maternal deaths are severe bleeding (mostly bleeding after childbirth), infections (usually after childbirth), high blood pressure during pregnancy (preeclampsia and eclampsia) and unsafe abortion. In addition, Obianyo (2000) states that pregnancy related complications include pelvic disproportion and dislocation resulting from incompatibility of the foetus and the pre-mature pelvic bones, extensive laceration of the reproductive organs, the perineum and fistulas (urethral, vagina or recto-vaginal) which is a condition commonly caused by badly-managed labor, thereby leading to obstructed labor, which later becomes complicated with uncontainable leaking of urine through the vagina. Millions of women in developing countries experience life frightening and other severe health problems related to pregnancy or childbirth.

Complications of pregnancy and childbirth cause more deaths and debility than any other reproductive health problems (EC/UNFPA, 2000). WHO (2004) also found that Nigeria ranks second in the world, after India, in the measure of maternal complications or mortality with the rate of 500-652 deaths per 100,000 live birth. The research also shows that an estimated 52,900 Nigerian women die from pregnancy related complications out of a total of 529,000 global maternal deaths. Similarly, Lule (2005) discovered that pregnancy related complications are the main causes of deaths.

When asked about the causes of complications during labor among pregnant women, respondent 18 states that: "parts of the causes of complications among women during labor are numerous, not withstanding, she listed the followings as part of the causes: anaemia, poor dietary intake, malaria in pregnancy and hepatitis." Furthermore, respondent 20 stated "sickle cell diseases, poor management of the third stage of labor and poor antenatal care." Respondent 9 mentioned "intake of salt, kidney disease and multiple gestations," while respondent 21 stated "criminal abortions, missed abortion and lack of personal hygiene as part of the causes of complications during child labor." All the respondents agreed that wound breakdown during or after caesarean section and poor wound care are also causes of such complications.

The findings of the study are in concomitant with WHO (2004) that pregnancy complications and maternal death can be caused directly or indirectly. The direct causes include severe bleeding, sepsis, eclampsia, obstructed and unsafe abortion accounting for 50-75% of maternal deaths and the remaining 25-50% is due to indirect causes. Indirect causes have been identified as anaemia, malaria, tuberculosis, hepatitis and infections. The indirect causes are the result of a formerly existing disease or a disease that developed during pregnancy and was heightened by physiological effects or complications of childbirth. Similarly, Fridman et al., (2014) states that pregnancy complications can occur as direct result of problems that developed during pregnancy, childbirth, or postpartum factor. The incidence of pregnancy complications may be due to risk factors during pregnancy and the presence of comorbidities during pregnancy.

Benson and Pernol (2008) articulated that the causes that may affect the appearance of a problem pregnancy and childbirth complications are the socio-demographic factors, maternal obstetric history and access to health services. Maternal obstetric history consists of maternal age, gravida, parity, history of abortion, birth spacing, mode of delivery, and a history of complications. Age safe for a woman to experience pregnancy and childbirth is 20-35 years. Category too young age (<20 years) and too old (>35 years) have a high risk of pregnancy. Gravida is the total number of maternal pregnancies, including normal and abnormal intrauterine pregnancy, abortion, ectopic pregnancy and hydatidiform mole, parity is the number of births experienced by the mother. The safest parity is 2-3 children. Birth spacing is the spacing between the last deliveries with the previous ones. The birth spacing ideal is 2-4 years. How the previous labor affects the delivery of current and previous disease complications also determine the health condition of pregnant women and maternity (Purwaningrum and Fibriana, 2017). Regarding the strategies that should be employed to

prevent complications among pregnant women during child labor, respondent 13 states that “proper antenatal care and sensitization through mass media are vital.” Corroborating, all the respondents agreed that hospital delivery should be encouraged, infection prevention techniques should be encouraged, pregnant women should eat balanced diet, pregnant women should take iron supplements during pregnancy and after delivery and prompt treatment of malaria in pregnancy.

WHO et al., (2019) also found that all women need access to great quality care provided by proficient skilled health professionals during pregnancy (antenatal care), during childbirth (intrapartum care), and care and support in the weeks after childbirth (postnatal and postpartum care). It is very important that all births are attended by skilled health professionals, as timely management and treatment can make the difference between life and death. Antenatal Care (ANC) is a point of contact between health care service providers and pregnant women during which, interventions are offered to ensure the wellbeing of both the mother and the fetus (Bbaale, 2011; Pell et al., 2013; Wado et al., 2013; Lincetto et al., 2015). Averagely, 69% of the mothers in Africa attend antenatal care at least four times (Wado et al., 2013; Lincetto et al., 2015). A minimum of four visits is very essential for life-saving. It has the potential to reduce the congenital abnormalities that develop during pregnancy (Ainomugisha, 2014; Haftom, 2014; Kawungezi et al., 2015; Okinda et al., 2016) ANC is necessary for assessment and identification of probable risks of pregnancy and associated risk factors to both the mother and the fetus during the gestation period, child labor and the puerperal period. This enables appropriate referrals in case of complications. Mothers are educated on probable danger signs and their prevention, suitable nutrition like balanced diet and breastfeeding (Bbaale, 2011; Kawungezi et al., 2015).

Similarly, World Health Organization (2019) recommends Focused Antenatal Care (FANC) requiring all stakeholders to be more goals oriented, specific and targeting each mother’s needs. Ibe (2017) observed that majority of women who labored outside the health facilities in Bauchi State gave birth at home, where risks of morbidity are on the increase in the absence of an expert medical practitioner. According to her, 82.5% of the women in Bauchi State deliver at home. These deliveries are attended by neighbours, traditional birth attendants, auxiliary nurses, midwives and family members.

CONCLUSION

Pregnancy complications have become one of the greatest health challenges and a leading cause of mortality among women of reproductive age. Universally, 600,000 women between the ages of 15 and 49 years die every year as a result of complications arising from pregnancy and childbirth. This could be avoided if preventive measures were taken and adequate cares were available. Nigeria suffers the losses of 52,900 women annually to childbirth related complications and 600,000 women die globally. In view of these problems, the findings of this study attest that complications among pregnant women during child birth in Kabo local government include postpartum haemorrhage, postpartum anaemia, intrapartum eclampsia, puerperal sepsis, etc. Conclusively, the causes of these complications are lack of antenatal attendance, nutrition or diet and the presence of comorbidities and poor management of third stage of labor (delivery of the placenta).

RECOMMENDATIONS

Based on the findings, the study recommends the following:

1. The study recommends that antenatal care and hospital delivery should be encouraged; women in Kabo Local Government should be encouraged by both their communal rulers and people in authority to enhance delivery at the hospital.
2. Women in Kabo Local Government should be educated about the importance of diets during and even after pregnancy.
3. The study also recommends more professional health workers to handle the third stage of labor.

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