Birth preparedness and Complications Readiness among Women of Reproductive Age in Rural Benue State, Nigeria

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Abstract
In many sub-Saharan African countries, including Nigeria, pregnancy and childbirth complications are among the leading causes of mortality and morbidities among women of reproductive age especially in rural communities. This paper examined how women in rural Benue State prepare for births especially as it relates to utilization of maternal healthcare services to avoid potential pregnancy and childbirth related complications. It specifically investigated the factors that hinder rural women from birth preparedness and complication readiness (BPCR). The study which was anchored on Rational Choice Theory utilized intra method triangulation to elicit qualitative data from women of reproductive age (15-49), Woman leaders and community health personnel from 6 rural communities drawn from 3 local government areas in Benue State. Focus Group Discussions (FGDs) and In-depth Interviews (IDIs) were the main instruments used for data collection in order to capture the nuances involved. Findings indicate that utilization of maternal health services in preparation for births among rural women is poor. Cost of transportation, poor knowledge and concerns over cost of service were key barriers to BPCR. The study recommends that policy makers and all stake holders should intensify awareness on the needs and importance of BPCR, and that government should consider complete removal of user-fees on maternal healthcare services in order to improve BPCR.

Keywords: Maternal health services utilization, birth preparedness, complication readiness, rural women in Benue State
Background
Maternal mortality remains one of the most critical health outcomes globally. Several maternal related deaths are associated with complications during pregnancy and childbirth particularly in sub-Saharan Africa with the worst record (Azuñ, Azuñ, Iweala et al., 2017; WHO, 2019). According to a report by the World Health Organization (2015) a lot of mothers go through life threatening complications during pregnancy and childbirth. About 810 women die from pregnancy or childbirth related complications around the world everyday (WHO, UNICEF, UNFPA et al., 2019). For every woman that dies from pregnancy and childbirth related causes, 20 to 30 more develop short and long term damage to their reproductive organs leading to disabilities such as pelvic inflammatory disease, obstetric fistula, ruptured uterus, among other forms of disabilities (WHO, 2015; UN Human Rights, 2020). The world Health Organization (WHO, 2014) systematic analysis report observes that the major complications that account for nearly 75% of all maternal deaths include severe bleeding, infections, usually, after birth, high blood pressure (pre-eclampsia and eclampsia), complications from delivery and unsafe abortions. Others are associated with diseases such as malaria and HIV/AIDS during pregnancy. In high income countries, delivery is often positive and a fulfilling experience, but for women in low resource countries delivery is associated with suffering, morbidity and in several cases maternal deaths (Goldenberg, McClure & Saleem, 2018). Recent report of 2019 by the World Health Organization estimated the life time risk of maternal mortality in high income countries to be 1 in 5,400 while in low income countries it was estimated to be 1 in 45 live births (WHO, UNICEF, UNFPA et al., 2019).

Pregnancy and childbirth complications are leading causes of death and disability among women of reproductive age especially in developing countries (Olonade, Olawande, Alabi & Imhonopi, 2019). Less developed regions account for approximately 94% of global maternal deaths and Sub-Saharan Africa alone accounts for roughly 77% while Nigeria accounts for 20% of such deaths (WHO, 2019; United Nations, 2019). Most recent estimate of maternal mortality ratio in Nigeria is 814 deaths per 100,000 live births and this is the fourth highest maternal mortality ratio in the world (Ope, 2020). The lifetime risk of a Nigerian woman dying during pregnancy, childbirth, postpartum or post abortion is 1 in 22, in contrast to the lifetime risk in developed countries estimated at 1 in 4900 (Ope, 2020). This is worrisome when compared to 13 deaths per 100,000 in the United Kingdom and 17 per 100,000 in the United States (Ai-ris & Molina, 2019).

As a response to the high level of maternal mortality in Nigeria since 2000, the Nigerian government introduced variety of national health and development policies that aim to reduce maternal mortality. For instance, the development of an Integrated Maternal, Newborn and Child Health (IMNCH) strategy in 2007, designed to ensure continuum of care from pregnancy through postnatal and newborn periods for mothers and children and the
implementation of the task shifting and sharing policy which has empowered many community health workers, through training and capacity building, to acquire skills which are crucial for promoting maternal, newborn and child health in Nigeria (Adebajo, Okereke & Joseph, 2017). However, the rate of mortality and morbidities due to pregnancy and childbirth still remains unacceptably high in Nigeria and in Benue State. Many women continue to die and many others suffer injuries and disabilities especially in rural communities. Many of these deaths and disabilities could be averted if pregnant women prepare for births and consider utilization of maternal healthcare services to avoid complications that may arise during pregnancy and deliveries. However, Azuh, Ogundipe and Ogundipe (2019) observed that the utilization of maternal services in sub-Saharan Africa and in Nigerian remains low.

People of low socio-economic standing judge from residence pattern conceive of disease distinctively and also have different access to health care facilities. Low socio-economic status individuals live where life situations are usually poor. The utilization pattern of health care services is largely determined by the category of persons that constitute majority of the population. If the greater population is the illiterate group, traditional health care would be the main source of health care and if the literate group constitute the majority, western health care would be mainly patronized. Proximity, costs of service, quality of service are the main obstacle to health care utilization most especially among rural dwellers whose only source of health care is sometimes located kilometres away (Idris, Sambo and Ibrahim, 2016; Abdulraheem, 2018). The situation in Benue state is not an exception. It is based on these shortfalls that this study assessed birth preparedness and complication readiness among women of reproductive age in rural communities of Benue State. And the study focused on examining, how rural women prepare for birth and consider utilizing maternal healthcare services and factors that hinder rural women from preparing for births and being ready for potential birth complications in Benue State.

Theoretical Framework

Rational Choice Theory

This study was anchored on Rational Choice Theory (RCT). The theory is a framework used for understanding social and economic behaviour (Blume & Easley, 2008). The basic premise of the perspective is that the behaviour of individuals is based on some rational calculation to achieve outcomes that will be profitable to them. People often weigh the likely cost and benefits of any action before deciding on the course of action (Crossman, 2011). Rational choice theorists opine that individuals must anticipate the outcome of alternative courses of actions and calculate that which will be best for them. Rational individuals choose the alternative that is likely to give them the greatest satisfaction (Heath, 1976; Carling 1992 and Coleman, 1973).

Relating the rational choice theory to this study, individual’s rational choice can influence their actions and decisions on birth preparedness and
complication readiness. For instance, if a pregnant woman is concerned about cost of transportation to health facilities for maternal healthcare services, and also concerned about the cost of maternal health services among other pressing needs and then calculates that it will be more beneficial for her to use the money she has for other pressing needs like food, or other household items rather than spending it on transportation to utilize maternal health services and also pay for health services especially in a situation where she does not have any complications during the gestation period nor anticipate any form of complication at the time of childbirth she may decide not to save money in anticipation of complications that may arise at any stage during which she remains pregnant or at the point of delivery nor visit a health facility for maternal services and delivery. The option she chooses may be more beneficial and will give her the greatest satisfaction or positive birth outcome based on her choice among alternatives.

Methods
The study adopted survey design and utilized qualitative method of data collection, which included In-depth interviews and FGDs. Benue State where the research was conducted is rich agriculture and is designated as the food basket of Nigeria. The state has a projected population of 5 million and comprises 23 Local Government Areas. The study population were rural women of reproductive age (15–49 years) who were currently married, widowed, divorced or separated and have experienced at least one birth in their life time. It also included woman leaders and community health personnel resident in the study areas.

Qualitative data were obtained from interviews conducted with thirty-three (36) purposively selected key informants, who were selected based on their knowledge and experience working with women. The participants included eighteen (18) women leaders, eighteen (18) community health personnel who have knowledge of obstetrics and gynaecology while 12 FGD sessions were conducted with women of reproductive age (15-49) years. Groups were constituted along the focus of age.

Data collection was done through the use of interview guide and FGD guild. These guilds were designed to cover the objectives of the study and were anonymous to ensure confidentiality of the respondents. The names of the interviewees were also not mentioned during the course of the interview to ensure their anonymity. Data were transcribed and analyzed through thematic and content analysis using ATLAS.ti software and it generated patterns of relevant information that threw light on important issues.

Results
The results reflect views of the majority of respondents that participated in the study. Findings were discussed based on specific objectives of the research. Some relevant quotations from the FGDs and IDIs were used as illustrative quotes.
Women’s Preparedness for Births and Complication Readiness

In assessing women’s preparedness for births and complication readiness, themes for discussions were identified for analysis. Rural women were asked whether they were aware that complications could occur during pregnancy and during delivery. Findings revealed that most women were aware that complications could occur during pregnancy and deliveries and were also able to mention some common complications that could emerge. An FGD participant whose position was popular among others stated:

I know that during the period of pregnancy or childbirth a woman could suffer complications such as unusual vaginal bleeding, retained placenta after delivery, foetus coming out with hands or legs during labour among other forms of complications; but it is not every woman that suffers such. (FGD/Pregnant Women/Mbiesev)

This is in line with the findings of WHO, (2015) and UN Human Rights, (2020), which states that for every woman that dies from pregnancy and child birth related causes, 20 to 30 more develop short and long term damage to their reproductive organs leading to disabilities such as pelvic inflammatory disease, obstetric fistula, ruptured uterus, among other forms of disabilities.

Another line of conversation was structured on women’s utilization of prenatal and maternal services, deliver at healthcare facilities and save money towards maternal healthcare services in case complications arise during pregnancy or delivery and findings revealed that, even though women knew of prenatal and maternal services however only a few utilized the services. Some utilized but admit to not being consistent and also not delivering in healthcare facilities and are usually rushed to the clinics whenever complications arise during pregnancy or labour. It was also found that a lot of rural women do not save money towards the maternal cases of emergencies during pregnancy or delivery. This was confirmed by an FGD participant whose view represented the position of other discussants, thus:

Utilizing prenatal or maternal services when you don’t experience any unusual pain or challenge means inviting problems for yourself. When you don’t experience any unusual thing but patronize clinics just because you are pregnant you end up with series of problems. It is normal for a woman to be pregnant and deliver babies, but when you start going to the hospital when nothing is wrong with you, today they tell you this and tomorrow another, you end up using money you could have used for other things for drugs and series of test. Some of us don’t utilize maternal health services yet we had our babies’ normal, safe and sound. (FGD/Women/Agbaaye)
Another participant observed that:

Look, I have five (5) children but I never utilized prenatal services while carrying any of them, I always deliver at home, we have women who are birth attendants, they are well known in the community and when labour starts family members or anybody around rush and call them to come and attend to the woman in labour and in many cases it has always been successful, we usually give little token for them to use and buy soap. This is just our little way of appreciating them, sometimes even 200 naira is given and they usually appreciate this gesture. (FGD/Women/Olugwu)

The above assertions reveal that, women in the rural areas do not consider modern maternal health services superior to their indigenous health care. This is in line with a study conducted among women in Ogun state by Azuh et al., (2017) who posited that, several women believe that delivering in a non-institutional setting is better than in a modern facility because traditional birth attendants show more concern and compassion than skilled birth attendants. People’s beliefs and culture also impede the utilization of modern maternal health facilities (Idris, Sambo & Ibrahim, 2016)

As another FGD participant whose view reflected the opinion of other discussants stated:

Saving money in anticipation of complications means you are thinking of complications and want the pregnancy to develop complications. Nobody prays for complications, when a woman becomes pregnant she keeps praying to God to help her carry the pregnancy to full term and also deliver safely, why should one start saving money when there is no problem in sight? There are a lot of things to do with money like buying of food to eat and sometimes baby items among other things, so with the little money we have we prioritize things to do and spend the money accordingly instead of setting money aside for complications’ that may not even arise if God helps. (FGD/Women/Shamior)

A community health extension worker interviewed corroborated some of the assertions of the women in FGD. As the interviewee noted:

Although some women utilize maternal health services available in the health centre, a lot of them don’t turn up for services and some are usually not consistent. Some women are usually rushed to us when they have prolonged labour or develop other forms of
complications; sometimes they are brought in when it is too late. We usually send messages to those that don’t care to utilize maternal services by telling those that come for services such as the antenatal care to go and tell those that don’t utilize such services the dangers of not utilizing maternal services when pregnant. (*IDI/Health Extension Worker/Mbiesive*)

**Factors that hinder Women in Rural Communities from preparing for Births and been ready for Complications that could arise**

From the FGD sessions held, poor knowledge is one of the major factors hindering rural women from birth preparedness and complication readiness. Majority of the women were of the view that if a woman does not experience any form of complication she need not take extra precautions towards prevention. A participant stated and in line with the opinion of others in the group:

> Family members provide close intimate contact usually characterized by deeply held commitment, trust, respect.

I see no reason for any woman to be preparing specially for birth and potential complications. Our parents and grandparents did not prepare specially, and if preparations for births means to save money and utilize prenatal services our parents did not do any of those yet had us so what makes the difference now? Is it the type of food we eat now that is bringing problems of going to the hospital to be checked and be monitored? She asked (*FGD/Women/Agena*).

Another FGD participant noted that:

> I am pregnant as you can see, I discussed with my husband so I can visit a health centre to register for antenatal care because during my first child birth, I was rushed to the hospital because of complications at the last minute and I was delivered through caesarean section, it was God that saved my life and that of the baby. But he doesn’t have money to give me yet, I am in my 2nd trimester. I just pray and hope he gets money soon to give me because I don’t want what happened to me before to repeat itself. What can one do without money? Maternal health services are not free, even at the primary health care centres services are paid for. (*FGD/Women/Ikobi*)

The response to cost of treatment indicates the financial capabilities or otherwise that may limit or support the health seeking behaviour of relevant women that may need medical services. The ability or inability of individuals to pay for healthcare increases or reduces their chances of accessing health
services when in need. The ability to pay significantly determines when and where a person seeks care. Preference of healthcare is influenced by medical care costs and income. People of low socio-economic income are more likely to seek healthcare services if the cost of treatment is low and very affordable than when it is high and out-of-pocket fees. Direct costs which include payments for doctor’s consultations, drugs, diagnoses and supplies and indirect costs which include transportation, accommodation and feeding play a significant role at when, where and how a client seeks for healthcare.

Some of the responses from the in-depth interviews also buttressed this finding:

Some women don’t utilize maternal health services or visit health centres during delivery because at any point money is involved whether we go to register for prenatal services or during deliveries, we don’t want embarrassments. For instance, when you go and deliver at a health facility and don’t have money to offset your bill they will detain you there until you bring the money. There was a time a woman in a neighbouring community was held hostage at the health centre where she was delivered of her baby because her husband could not afford the amount they charged them after delivery. That is how he went looking and begging for money while his wife and the new born remained at the hospital. It became gossip that went round. Nobody will want to experience such a thing, so if we don’t have money it’s better we don’t invite trouble. (IDI/Woman/ Mbiesev)

Reasons for the non-use of maternal health services for antenatal and delivery care were given by women were related to perceptions about long distance and high costs of services. Okonofua et al. (2018) posited that cultural perception, proximity to healthcare, costs of services and poor quality of service delivery were the reasons for non-utilization of maternal healthcare services.

Most women stressed on cost of transportations to health facilities as another factor affecting their preparations for birth and utilization of maternal healthcare services. As observed by a participant whose views were popular among other discussants:

Cost of transportation to health facilities sometimes discourages most of us from utilizing maternal health services. We don’t have any health facility in this community and most of the community health centres (CHCs) in neighbouring communities are almost non-functional and to locate a functional primary health facility or a hospital one have to travel more than 8 kilometres and pay for transportation which is usually not easy for us. (FGD/Women/Agbaaye)
Birth Preparedness and Complication Readiness

Proximity of health care is a significant independent predictor of health seeking behaviour which describes the level of accessibility that patients have to health care facilities. Distance to a healthcare facility may constitute a problem to use and access of healthcare facilities. Distance travelled to shop for healthcare may make the difference between life and death and result in low health outcomes. Close proximity to a healthcare facility is an influential factor in the choice and use of a health facility. An individual’s capacity to pay for healthcare, or level of poverty, significantly influences when and where a person seeks healthcare. In rural areas, the effect of distance on service use becomes stronger when combined with the lack of transportation and with poor roads, which contribute towards indirect costs of visits to health facilities.

Discussion of Findings

This study is a qualitative study conducted among rural women of reproductive age in communities of Benue State. The study assessed birth preparedness and complication readiness among women in some selected communities. The sampled communities were Mbiesev and Shamior in Guma LGA, Agbaaye and Agena in Ukum LGA and Ikobi and Olugwu in Apa LGA.

The study revealed that birth preparedness and complication readiness among the women is poor. Poor preparations for births and non-utilization of maternal health care services could have direct bearing on maternal mortality and morbidities with significant effect on communities (Ope, 2020). Many women do not utilize prenatal services and a lot of them deliver at home with the help of birth attendants. This finding is contrary to a study conducted by Ajaegbu (2017) where it found that, 71% of women in Isiekenesi a rural community in Imo State, Nigeria utilize prenatal healthcare services. Findings of this study are however in line with the report of the Nigerian National Demographic Health Survey Report (NDHS, 2013) and also consistent with findings from studies carried out by Idris, Sambo and Ibrahim, 2016; Abdulraheem (2018) which revealed that, many women in Nigeria even among those that utilize skilled antenatal services do not deliver in healthcare facilities. Although the reasons for this may vary, in the study area poor knowledge, cost of transportation to health facilities and concerns of women over cost of maternal services were major reasons for women not utilizing maternal healthcare services and also preferring home deliveries.

Although antenatal care enables effective management of pre-natal morbidities and facilitate deliveries in healthcare facilities thus improving maternal health outcomes (NDHS, 2013; World bank, 2016 and Adebajo, Okereke and Joseph, 2017) most maternal morbidities and mortalities in Nigeria are still occur due to delay or not utilizing prenatal healthcare during the course of pregnancy Azuh et al. (2017). A lot of women in rural communities of Benue State still do not utilize maternal healthcare services and many more still deliver at home thus exposing themselves to a lot of risk that could lead to death and disabilities due to cost of transportation to health facilities.
facilities and cost of maternal services. Studies have shown that fee-for-service is an impediment to women’s use of maternal health services and keep millions of women from having hospital deliveries and seeking health care even when complications arise (Idris, Sambo and Ibrahim, 2016). Okonofua et al. (2018) noted that, proximity to healthcare facilities and cost of service as factors that also hinder women from accessing adequate maternal care services during pregnancies and deliveries which is in line with the findings of this study.

For many other women in the study area birth preparedness and utilization of maternal services is not a priority due to poor knowledge. The implication of this is that, many women in rural communities will continue to suffer morbidities and loss of lives due to complications that may arise during pregnancy and childbirth with significant effect on families, communities and society at large.

**Conclusion**

Many women of reproductive age could have at least one pregnancy and birth in their life time and many of these women could risk injuries, disabilities or may even die due to pregnancy and childbirth related complications. Birth preparedness and complication readiness is therefore important for all women of reproductive age who may desire to have children. Preparing for births and utilizing maternal healthcare services during pregnancy and childbirth could reduce complications arising during such periods and lead to healthier pregnancies and safe deliveries thus reducing the high rate of maternal mortality in Nigeria among several other injuries and disabilities.

**Recommendations**

Pregnancy and childbirth is usually a dangerous period for many women in Nigeria especially in rural communities. A lot of these women are exposed to risk of morbidities and mortalities due to complications that sometimes arise. Based on findings, the study recommends that:

i. Government, NGOs and religious bodies should intensify awareness and also develop programmes that can effectively carry out campaigns to educate rural women on the need for preparing for births and being ready for complications that may arise during pregnancy or childbirth psychologically and financially since a lot of rural women are exposed to risks as a result of poor knowledge and lack.

ii. The Nigerian Government should develop and implement health policies that would completely remove user-fees or at least reduce service fees paid for maternal healthcare services to the barest minimum at the primary health centres in rural communities and also make provision for means of transportation to health facilities for pregnant women in rural communities to enable the women access and utilize maternal healthcare services so they can be properly monitored to avoid complications that may occur or
properly tackle any existing complications. In this way a lot of women could be saved from death and disabilities.

References
