

Birth preparedness (BP) and complication readiness (CR) among women of childbearing age in the rural communities of cross river state

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Abstract

Maternal mortality and morbidity remain a huge health problem in Nigeria, and this problem is more in the rural communities. Getting more pregnant women to deliver with the assistance of skilled attendants could help to reduce maternal morbidity and mortality. Women need to understand that complications may occur without warning anytime during pregnancy, labour, and even after completely normal pregnancies. This study explores the Birth Preparedness (BP) and Complication Readiness (CR) among women of child-bearing age in rural communities of Cross River State, Nigeria. The study which was directed by the concept of three phase delay, was conducted using a qualitative descriptive approach that applied semi-structured one-on-one interviews. Two rural communities of Akpabuyo Local Government Area of Cross River State, Nigeria were purposively selected for the study from where 20 women were selected. The aim was to choose participants who will most benefit the study in terms of data gathering. Thematic qualitative data analysis was done from which themes emerged. The study revealed poor understanding of Birth Preparedness (BP) and Complication Readiness (CR) among the rural women which reflected in the high patronage of TBAs, irrespective of their poor knowledge of maternal and child care. Based on these findings, recommendations made included the need for collaboration between the rural communities and the healthcare professionals in the communities, for the purpose of engaging the community to achieve the sensitisation and maternal health education of the rural women, their families and the entire community, on Birth Preparedness (BP), Complication Readiness (CR), and the importance of utilising skilled care during pregnancy, delivery and after delivery to prevent maternal health complications.

Introduction

Around the world the birth of a baby is a major reason for celebration and societies expect women to bear children and honour them for their role as mothers. Yet, pregnancy and childbirth are a very dangerous journey in most of the developing countries including Nigeria [1]. The majority of Nigerian people (women) live in rural areas where the burden of reproductive ill health is higher while the issue of health-seeking behaviour of these women is one of the most neglected maternal mortality research activities in the country [2].

Every pregnancy faces risk, and prenatal screening cannot detect which pregnancy will develop complications [3]. The high levels of maternal morbidity and mortality that are prevalent throughout the developing world, and indeed Nigeria, are as a result of many factors, including complexities of problem recognition and decision-making during emergencies leading to delayed actions and the acute impact is borne more by the rural communities [4]. It is essential for women to have access to skilled attendants during pregnancy, delivery, and after delivery, and prompt adequate care for obstetric complications if the goal of reducing maternal morbidity and mortality must be achieved [5].

Each year over half a million women die as a result of complications related to pregnancy and childbirth and the vast majority of these deaths are preventable [6]. While women in developed countries have only a 1:2,800 chance of dying in childbirth, women in Africa have a 1:20 chance with the lifetime risk greater than 1:10 [7]. Nigeria contributes approximately 10% of the global burden of maternal and child deaths and thus has one of the worst maternal health outcomes [8]. The World

Health Organisation ranked Nigeria as having the second highest number of maternal deaths in the world, with an estimated 37,000 maternal deaths [9]. Nigeria is one of few countries where the maternal mortality ratio (MMR) has almost doubled in the 1990-2008 figures [10]. In the rural areas, the MMR is very high as the majority of births takes place at home unassisted and or assisted by unskilled persons, thus women who develop complications rarely receive emergency services [2].

Receiving care from a skilled provider (doctor/nurse/midwife) during childbirth has been identified as one of the most important strategies towards early detection of maternal complications and prompt interventions [11]. However, the use of skilled provider in developing countries remain low according to the Demography and Health Survey [11]. In response to this many African countries, including Nigeria have developed measures towards reducing maternal mortality [12].

Birth Preparedness (BP) and Complication Readiness (CR) are two key maternal health literacy strategies to promote the timely use of skilled maternal care during childbirth and are based on the theory

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that preparing for childbirth and being ready for complications reduces delays in obtaining care (John Hopkins Program for International Education in Gynaecology and Obstetrics [13,14]. The awareness of pregnant women and their family members regarding the danger signs enhances Birth Preparedness and Complication Readiness, improves early detection of problems, and reduces the delays in deciding to seek obstetric care [13].

There are three delays that influence the provision and use of maternal health care services to prevent maternal deaths: a) deciding to seek care if complication occurs; b) reaching care; and c) receiving care [15]. A three-delay model was presented to explain the chain of factors responsible for the high maternal morbidities and mortalities in low-income countries [16]. The first delay is by the individual, the family, or both, in making a decision to seek care (delay I), and is due to socio-economic or cultural factors, which include women's status, decision-making, poor understanding of complications and risk factors in pregnancy, previous poor experience of healthcare, acceptance of maternal death, and financial implications [16]. The second delay is occasioned by women failing to reach the healthcare faculties due to physical accessibility, cost of transportation, adverse road conditions, mountainous terrains, and rivers (delay II), and the third delay is when women take time to receive appropriate and adequate care once they reach the health faculty due to poor facilities, lack of medical supplies, inadequately trained staff, poorly motivated supplies, and inadequate referral systems (delay III) [16].

Gabrysch and Campbell have used the three phase delays model in their review report to group the determinants of delivery service use into sociocultural, perceived need, and economic and physical accessibility [17]. Accordingly, it has been noted that studies on women's autonomy (which is a socio-cultural factor), and health knowledge (which is the perceived need group) have produced mixed results across populations both within and across countries regarding the use of maternal healthcare in relation to funding and the organisation of health services [18,19]. Therefore, the authors recommended that, there is a dire need for context-specific studies to help design interventions to reduce the three delays and consequently reduce maternal morbidity and mortality [19].

The Maternal and Neonatal Health (MNH) programme of JHPIEGO developed the Birth Preparedness (BP) and Complication Readiness (CR) matrix to address these three delays at various levels including the pregnant woman, her family, her community, health providers, health facilities, and policymakers during pregnancy, childbirth and the post-partum periods [15]. The concept of Birth Preparedness and Complication Readiness includes: recognising danger signs, planning for a skilled birth attendant (SBA) and birth location, arranging transportation, and saving money in case of an obstetric complication [13]. Birth Preparedness has been recommended as the best practice that has been adopted by several projects in many parts of the world including Nepal, India, Ethiopia, and Bangladesh [20]. Birth preparedness should reduce the three delays, commencing at community level and should link to improved access to skilled care [20].

Over the last few years, the Federal Government of Nigeria has launched various health programmes in all the states to cover the different tiers of government (including Cross River State), to curb the burden of maternal morbidity and mortality and to include Focused Antenatal Care (FANC) and skilled attendants at births [21]. In line with this, National Midwife Service Scheme (NMSS) is one of the strategies, and most primary healthcare facilities have been upgraded to meet this challenge [21]. A study in Calabar, Nigeria, revealed less progress in the

rural areas in comparison to progress in the urban areas [21]. This was traced to gross under-utilisation of healthcare facilities and delays in seeking skilled attendant by pregnant women in the rural communities, as a result of unawareness of the danger signs of obstetric complications and lack of birth preparedness and complication readiness. [22].

In other words, the more adequately prepared for child birth an expecting mother is, the more complication-ready she is likely to be. In a study on Birth Preparedness and Complication Readiness among slim women in Indore city, India, findings highlighted that maternal literacy and the access to antenatal services were important predictors of Birth Preparedness and Complication Readiness and was positively associated with Skilled Birth Attendance [23]. These findings reinforced the widely-held notion that Birth Preparedness and Complication Readiness should be promoted during pregnancy especially in settings where home deliveries are common, if the problems of maternal morbidity and mortality must be averted [13,14].

Statement of the problem

Pregnancy-related poor maternal health and maternal death are still a major problem in sub-Saharan Africa, and it is assumed that most of these cases can be prevented when births are assisted by Skilled Birth Attendants (SBAs). Reviews highlight that Safe Motherhood programme packages of interventions to reduce maternal mortality include placing Skilled Birth Attendants within functioning health systems with the availability of referral to emergency obstetric care services [24]. However, the availability of these services does not mean that they are utilised.

In Cross River State, Nigeria, only 34,890 of women attend labour by skilled attendants while the majority deliver at home, the situation as revealed in a study, is worse in the rural communities [22]. This contributes to the high ratio of maternal mortality, currently being 1,513.4:100,000 live births in the state [22]. Despite some interventions by the federal and state governments, such as free maternal and child healthcare services and the National Midwives Service Scheme (NMSS), the majority of the women do not use these services [21]. Findings from the same study showed that most women are aware of the existing healthcare facilities and the free services within their locations, yet they show no interest in utilising them. The study identified lack of information on obstetric warning signs, birth Preparedness, complication readiness, as some of the factors that cause delays in seeking appropriate care, thereby hampering the abilities of rural women to participate fully in safe motherhood initiatives [25,14].

Good knowledge of danger signs means that the predictable elements of the three phases of delay can be anticipated and prepared for with a birth plan for each pregnancy [23]. It was hypothesised that the implementation of Birth Preparedness/Complication Readiness concepts that focus on individual, families, and communities could reduce at least the first two phases of delay [25]. As observed, targeting of interventions to the most vulnerable rural populations and poor people is essential if substantial progress is to be achieved in the reduction of maternal morbidity and mortality by 2015 [26]. In support of this, emphasised that strengthening community mobilization efforts designed to reduce delays in transport to Emergency Obstetric Care referrals and to increase use of skilled services through community education on recognition of danger signs and early intervention has been identified as a key link towards improving maternal health through addressing the delays in seeking care and reaching health facilities [27].

Against this background, the researcher sought to explore birth preparedness (BP) and complication readiness (CR) of women of

childbearing age (pregnant and new mothers) in the rural communities of Cross River State, Nigeria.

Research questions

The following research questions were adopted from the Maternal and Neonatal Health (MNH) programme of JHPIEGO who developed the Birth Preparedness (BP) and Complication Readiness (CR) matrix to address the three delays at various stages, to direct the data collection for the study [15]:

- Tell me those signs that are considered to be dangerous in a woman during pregnancy, delivery and after delivery?
- What do you understand by Birth Preparedness and Complication Readiness?
- Tell me about how you make plans for transportation in case of emergency during pregnancy or delivery?
- How do you make plans for saving money in case of emergency during pregnancy or delivery?
- Have you arranged for any blood donor in case it is needed?
- Where have you been having your babies?
- Where do you intend to have your present baby?
- Tell me the reasons for your choice of place of birth?
- Where do women in this community prefer to have their babies?

Materials and methods

Study approach

The study was conducted using a qualitative descriptive approach that utilised semi-structured one-on-one interviews. Using a qualitative approach results in the investigation of phenomena typically in an in-depth and holistic fashion, and the investigations are conducted without the manipulation of the researcher [28]. Qualitative research is concerned with a subjective exploration of reality from the perspective of the person experiencing the phenomenon [29]. It is based on a naturalistic inquiry, which implies that the experiences of the participants and their interpretation thereof will be studied in their natural state [30]. In this study the researcher using the qualitative approach method was able to explain the relationships between the social, cultural, political, physical environments, and the individual by analysing the responses they gave [31]. The research delves in-depth into the complexities and the process of the participants' real-life experiences and is designed to provide a complete and accurate description of a particular situation, social setting, or relationship [32,33].

Study area

The Akpabuyo Local Government Area (LGA) is one of the eighteen LGAs that make up Cross River State, Nigeria. It is situated in the South-South geopolitical zone of the State [18]. The ethnic groups are the Efiks, Quas, and Efuts, and over the years the Akpabuyo LGA has witnessed migrant settlers from the Anang- and Ibibio-speaking people of the present Akwa Ibom State. Some of these immigrants have influenced the thought patterns of Akpabuyo people, and the dominant culture and beliefs of the traditional Akpabuyo people are significantly upheld. It has 271 villages comprised of 22 clans (Source-Secretary Traditional Rulers Council). The estimated population is 31,134 people. It is sub-divided into 10 political wards and five health districts (PHC Dept). The Local Government is linked directly to the Primary

Healthcare Department of the State Ministry of Health. The Hospital Management Board posts doctors to the Local Government Councils as primary healthcare coordinators, while primary healthcare directors in each LGA are directly in charge. There is only one general hospital/secondary health facility (St. Joseph Hospital, Ikot Ene) in Akpabuyo LGA, and it is located in the Ikot Ene community. It serves as a referral point for the entire LGA and its environs. The hospital has an equipped maternity unit for ANC and deliveries. It has a functional theatre for the management of obstetric complications.

The administration of the Idundu and Anyanganse clans' rests with the clan heads that sit in council with all heads of the villages in the clans. The clan heads delegate responsibilities to the village heads and equally mentor the exercise of such delegated authorities and powers. The clan heads run a secretariat for easy administration of the communities and information dissemination on all issues (including health matters). New and innovative health issues and ideas to be implemented in the clan have to be precisely explained to the clan head-in-council. The clan head-in-council will explain such new ideas to the entire community and will solicit their co-operation. The clan authority is often (in most cases of health campaigns) saddled with the responsibility of mobilising the community for participation.

There are a variety of alternative treatment sources available in the local communities in Akpabuyo LGA, including the communities under study (Idundu and Anyanganse). These sources include traditional healers, herbalists, spiritual healers, diviners, and Traditional Birth Attendants (TBAs). Among the sources listed above, there is a high preference for TBAs and spiritualists to attend to antenatal care and deliveries in the communities. A recent community survey revealed that most women in these rural communities consult the TBAs before seeking orthodox care during antenatal care and deliveries, even though they have access to orthodox medical facilities. The strategic role of TBAs should be explained further that since the TBAs are contacted first, and they decide when and where orthodox medical services should be sought by women with childbirth complication(s) [34]. The communities of Idundu and Anyanganse were selected for this research study, based on their records of low utilisation of PHC services for delivery (Akpabuyo LGA PHC Records).

Participants

The study included twenty women of reproductive age who met the inclusion criteria of being pregnant at any given gestational stage and women who have recently given birth (babies within 12 months of age). The participants comprised an equal number of participants ten, purposively selected from each of the two communities under study (Idundu and Anyanganse). Entry was gained into the community through the community women leaders who identified the participants in their communities based on the inclusion criteria for the study (Table 1).

Sampling

Non-probability purposive sampling was used based on the judgment of the researcher [35]. The aim was to choose individuals who will most benefit the study. It was assumed that the selected participants (pregnant women and nursing mothers) having had pregnancy and/or delivery experiences will form a rich source of information to meet the focus of the study. The first step in the sampling was to purposively select two specific communities characterised by low use/patronage of orthodox maternal services. The Akpabuyo Local Government Chairman was visited through the Primary Health Care (PHC) coordinator, for the purpose of obtaining permission for the study and

Table 1. Participants demographics

Demographics	Idundu (Community A) (n=10)	Anyanghanse (Community B) (n=10)
State: Pregnant	6	2
New mothers	4	8
Age: 15-24 years	5	3
25-34 years	3	7
35-45 years	2	0
Marital Status: Single	2	2
Married	8	7
Widow	0	1
Occupation: House Wives	3	2
Farmers	2	3
Traders/Business	3	5
Workers	2	0
Total	10	10

to intimate him of the study aims and objectives. Through the PHC Coordinator, the researcher was able to access the PHC facilities register to identify those communities that least utilise the Primary healthcare facilities for delivery. From there, the choice of the two communities under study (Idundu and Anyanghanse) was made. The second step of the sampling process was to purposively select the participants. Visits to the clan heads of the two communities were made for their approval of the study. The clan heads introduced the community women leaders to the researchers, to assist in identifying the pregnant women and the new mothers in their communities for the study.

Research instrument

The semi-structured one-on-one interview was used to elicit information using an interview schedule. The interview schedule (consisting of the research questions mentioned above) was developed using the guiding principles from Birth Preparedness/Complication Readiness matrix adapted into community Maternal and Newborn Health programmes [13].

Data collection and analysis

The data collection process for this study was done as semi-structured one-on-one interviews with the participants. Two research assistants, both with BSc. in Social Works were trained for two weeks and used for voice recording and note taking throughout the interviews. Interviews were done in the homes of the interviewees. This venue is both private and allowed for the out of sight voice recording of the face-to-face interview. The interview was approximately 45 minutes to an hour long. Field note taking was done alongside voice recording, therefore allowing for the highest possible reliability of data [28]. Data were collected until data saturation was achieved; this means that both emergent themes developed and continued until no additional information was provided [35]. The data were analysed using standard qualitative data analysis techniques.

Qualitative data analysis

The researcher used Tesch's proposed eight steps in data analysis:

1. The researcher carefully read through all the transcriptions, making notes of ideas that came to mind.
2. The researcher selected one interview and read it to try to get meaning in the information, writing down thoughts coming to mind.
3. After going through the transcripts, the researcher arranged the similar topics in groups by forming columns labelled major topics; unique topics; and leftovers.

4. The researcher then abbreviated the topics as codes and wrote the codes next to the appropriate segment of the text. The researcher then observed the organisation of data to check if new categories or codes emerged.
5. The researcher found the most descriptive wording for the topics and converted them into categories. The aim was to reduce the total list of categories by grouping topics together that relate to each other. Lines drawn between the categories indicated interrelationship of categories.
6. A final decision was then made on the abbreviation of each category and the codes were arranged logically.
7. The data material belonging to each category was put together in one place and preliminary analysis performed.
8. Recoding of the data was done [36].

Validity and reliability of qualitative research

The model for trustworthiness in qualitative data to ensure credibility, dependability, confirmability, transferability, and authenticity, as identified, were maintained throughout the study [37].

Ethical considerations

The following permissions, consents, and approvals were obtained before the commencement of the study: ethical approval from the Cross-River State Ministry of Health; approval from the Chairman, Akpabuyo LGA of Cross River State, Nigeria; permission from the community gate-keepers, community heads, and the women leaders; and informed consent from the participants.

Results and Discussions

The following themes emerged based on the analysis of the data generated and transcribed from the interviews: (Table 2)

Theme 1: Poor understanding of Birth Preparedness and Complication Readiness

Five sub-themes supported this theme. These sub-themes are: Inability to mention at least two components of Birth Preparedness and Complication Readiness, Poor preparation for emergencies (transport, money, and blood); Preparation for baby things (not emergency related); Reliance on TBAs regarding delivery dates; Reliance on husbands for financial arrangements and Reliance on God for provision.

Inability to mention at least 3 components of Birth Preparedness and Complication Readiness

The concept of Birth Preparedness and Complication Readiness includes: recognising danger signs, planning for a skilled birth attendant (SBA) and birth location, arranging transportation, and saving money in case of an obstetric complication [13]. Only six participants out of the twenty of them were able to mention about 2 of these components, and they happened to be those who had accessed ante natal care at health care facilities at one point or the other.

"when I went to the health centre to register during my last pregnancy, nurse tell us that problems can happen to a pregnant woman anytime, even in the night, so.....all of us should start planning to save small money, arrange for motor that can carry us to the hospital anytime we call them, we should also start buying things from the list they gave us one by one....hmmmmmm! that is all I can remember". (Participant 20)

"I can remember that, that....., nurse in the clinic told us to keep money little by little, now that we are pregnant, tell our neighbours or relatives who get motor cycle to be ready to carry us to the hospital in case labour starts at night..."(Participant 16)

"I don't need to prepare for anything, when time reach God will raise people to help..." (Participant 5)

Contributions from the participants indicated that women in rural communities are ignorant danger signs and symptoms during pregnancy, delivery, or after delivery. Some of the women interviewed affirmed not knowing and being unable to mention any of the key danger signs.

"I don't know!"(Participant 10).

"I have no idea"(Participant 3)

About 7 out of the 20 respondents could mention only one or two correct signs and symptoms related to obstetric dangers, and they happened to be those who had at one time or the other accessed ante natal care in a health facility. Among the key signs mentioned was bleeding, swollen legs (oedema), high fever, severe vomiting, paleness (anaemia), weakness, severe lower abdominal pain, liquid drainage, prolonged labour, and retained placenta though the words used to describe these dangers were often tacit and simplistic.

"If she is not well sometimes water starts entering her, also she has to go to hospital or sometimes since she started pregnancy she has been sickly."(Participant 4)

"The problem was that since when that pregnancy started, I was really sick, I was sick, real sick. Whatever I put in my mouth, I will vomit, it did me somehow, somehow in my body, I was really sick". (Participant 13)

"When it is time for me to born the baby, water used to come out first before, but in this particular child, it was blood that came out first, blood came out plenty that I said God what could cause this? I went and told somebody who advised me to come to the hospital". (Participant 9)

"I think those kinds of signs that someone can see that can be bad signs during pregnancy... sometimes, one can notice bleeding ... I think that is a bad sign or water coming out of a pregnant woman's body when labour has not started, she has to rush to see a doctor".(Participant 7)

"Those signs that can occur that can take a woman's life are..... excessive...hmmm... profuse bleeding can occur, labour could start without the baby moving in the belly, labour can last up to one week, the legs will be very fat and heavy with water. Those kinds of things can take one's life. The nurse told us in the clinic".(Participant 11)

"One of the dangerous signs during pregnancy that can cause danger is bleeding, high fever ...fever comes up very strongly or she has lower abdominal pain or waist pain, they are bad signs. Then swelling of the face and legs also....." (Participant 1).

"What I know myself is that if a woman is pregnant and she looks pale and her lips looks white, it shows that there is no blood and is something that she should go to the hospital"(Participant 19).

Poor preparation for emergencies

Preparation of emergencies include arranging transport, financial arrangements and ensuring that blood for blood transfusion would be available. Contributions from the participants affirm that most of the women did not make any preparations or arrangements regarding transportation in the event of any emergency or ease of mobility in terms of the expected date of delivery (EDD). These denotes poor understanding of what Birth Preparedness and Complication Readiness entail by these community women.

"I don't use to prepare myself, but I know that when the day reaches, God will do his will". (Participant 3)

"I don't know?".(Participant 12)

Regarding arrangements for a blood donor in case it is needed, contributions from the participants showed that there were usually no preparations for a blood donor put in place by the women or their family members as part of preparations towards a successful delivery. Most of the participants maintained that they never made such arrangements prior to their deliveries. Some of their responses include:

"No". (Participant7)

"I did not do". (Participant 3)

"Yes, I know that it is possible for a woman putting to bed to require blood. No, I have not made any arrangement for blood". (Participant 9)

A few participants maintained that their husbands are usually prepared as donors, while others stated that money is usually provided

Table 2. Themes and sub-themes emerging from the study

Themes	Sub-themes
1. Poor understanding of Birth Preparedness and Complication Readiness	<ul style="list-style-type: none"> • Inability to mention at least 3 components of Birth Preparedness and Complication Readiness • Poor preparation for emergencies • Reliance on TBAs for delivery dates • Provision for non-emergency baby provisions • Reliance on husbands for financial arrangements • Reliance on God for provision during emergencies
2. High preference for TBAs	<ul style="list-style-type: none"> • High patronage of TBAs by the community women • Communal living in TBA homes • Spirituality in TBA homes • Physical proximity to service point • Confidence in TBAs as a first choice • Past experience ad belief that first place of birth is safe • Poverty and low cost of TBA services
3. Understanding of skilled care and prompt interventions in health facilities	<ul style="list-style-type: none"> • Good care of mother and baby • Safety of their babies through cleanliness and immunisation • Positive experiences of hospitals • Education on birth preparedness • Provision of prompt emergency care
4. Poor skills on maternal and child care	<ul style="list-style-type: none"> • TBA's lack of skills on proper delivery procedures and care • Lack of education on Birth Preparedness and Complication Readiness

by their husbands for blood to be procured at the hospital, thus implying that the few respondents whose husbands made money available for blood are those few who access care at the Primary Health Centres or hospitals.

"I think they can take blood from my husband. It can be bought from the hospital". (Participant 5)

"I have never made preparation concerning blood but I have made preparation Firstly, I used to buy pampas and keep, buy pad that I will use and baby's things and keep for the day baby will come". (Participant 2)

"no,..... if so, we can get blood from my husband, or buy in the hospital".(Participant 4)

Most of the participants reported that no specific planning were routinely done regarding place of delivery and that they continued about their daily domestic and business routines, even if they had information on their delivery dates.

"Aunty;.....I have not really decided on a particular place to deliver yet, that is why I am saying whenever it happens and wherever, I will deliver there".(Participant 18)

Preparations for non-emergency baby provisions:

The participants reported that the primary issue of concern in preparation is for the baby whereby the baby provisions need to be bought before the delivery of the baby. According to them:

"I have to keep money knowing that labour can start anytime unexpectedly, buy things and keep those things to be used in taking care of the baby, I have to prepare, buy them and keep in place so that when that day comes, I can bring them to hospital".(Participant 2)

"Yes...I used to do because when you go to TBA's house, TBA will not tell you to buy baby's things and keep, TBA will not tell you that, but when you go to the hospital, they will always tell you to be prepared in case labour starts unexpectedly in the midnight".(Participant 20)

"Preparations that I used to make when am pregnant concerning my baby...saying my time has gone far...from there I stand and consider that my time has gone far...., it is for me to enter and start buying baby's things like clothes or powder, I buy baby's things and keep, so that if baby is delivered now, they can bath and use those things on him, use soap on the baby and powder the baby"(Participant 6).

Reliance on TBAs for delivery dates: There is a strong reliance on the TBAs to provide delivery dates. This information is known to usually be speculative and unempirical information (based on palpation examination of a pregnant woman). Hence the pregnant participants reported having to prepare and leave their homes and family members in their eighth month to live in the TBA homes until she delivers her baby.

"Yes....., because the TBA use to give me something to meet up the month, when my month is complete, I will go there and stay until it is the day I deliver. Nothing used to happen". (Participant 10)

Reliance on husbands for financial arrangements: A strong sub-theme that emerged were the reliance on the husbands for financial arrangements such as money in the event of any emergency during pregnancy or delivery. Contributions from all the participants interviewed revealed that the women strongly rely on their husbands to provide the financial requirements for their pre- natal, delivery and post- natal care and that they do not concern themselves with the burden of saving money for their delivery.

"I prepared, the preparations I made was....it used to be that when the father of this baby gives money, I will buy baby's things and keep them. I will also follow and buy small small things, like food thing ... when the time to deliver draw near, I bought foodstuffs, so that when I deliver, so I will have what to eat". (Participant 4)

"No, when the time comes my husband will have the money; God will provide the money for us. When that time comes, because my husband is working".(Participant 14)

"Preparation is that as I am pregnant, I have started buying my things and keep, my husband has not yet given me money to buy things and keep but when it is time he will buy what he wants to buy, he will give me money to start buying baby's things and keep small small".(Participant 8)

Reliance on God for provision during pregnancy: Most of the respondents maintained that they relied on God to provide at delivery, hence leaving everything related to the birth to faith.

"God will do his will" (Participant 8).

"Nothing will happen" (Participant 3).

"I don't use to prepare myself, but I know that when the day reaches, God will do his will" (Participant 4).

Discussion

Similar to our study, studies conducted in sub-Saharan countries report low rates of Birth Preparedness [38-41]. Birth Preparedness and Complication Readiness are interventions that address the three phase delays by encouraging pregnant women, their families, and communities to effectively plan for births and deal with emergencies if they occur. The concepts of Birth Preparedness and Complication Readiness include; recognising obstetric danger signs, identifying a trained birth attendant for delivery, identifying a health facility for an emergency, arranging for transport for delivery and/or an obstetric emergency, and saving money for delivery [13]. The Prevention of Maternal Mortality Programme (1987-1997) found that inadequate funds and transport were key causes of delay in deciding to seek care and in reaching facilities [13].

The Maternal and Neonatal Health posits that the cause of the delays in taking decisions in emergency situations are common and predictable, and in order to address them, women, families, communities, providers, and the facilities that surround them must be prepared in advance and ready for rapid emergency action [13]. High levels of Birth Preparedness have been shown to be strongly associated with increased levels of use of skilled birth attendants [39-41]. There is evidence from rural Nepal, Burkina Faso, and Ethiopia and India that promoting Birth Preparedness and Complication Readiness improves preventive behaviour, improves a mother's knowledge regarding dangers signs, and leads to improvement in care-seeking during obstetric emergency [20,27,39,42]. In support of this, in their study concluded that the awareness of pregnant women and their family members regarding the danger signs enhances Birth Preparedness and Complication Readiness, improves early detection of problems, and reduces the delays in deciding to seek obstetric care [13,14].

In corroboration with these findings, suggested that social influence is important in encouraging women to seek both antenatal and delivery care and that existing informal social networks within the community can help in relaying to the pregnant women and the community members the extent to which health facilities have been improved [43]. Recommendations has it that messages regarding Birth

Preparations and recognising and knowing how to respond to danger signs could be integrated into the local social networks and groups, such as village women committees [43]. Birth Preparation needs to be a consistent element of antenatal care and should be incorporated into community-based information networks to promote birth planning and preparation, even among women who don't attend antenatal care [44]. In a similar study on Birth Preparedness and Complication Readiness among women in India, findings highlighted that maternal literacy and availing of antenatal services were important predictors of Birth Preparedness and Birth Preparedness was positively associated with skilled birth attendance [23].

Part of Birth Preparedness is having a birth plan and involving partners in the pregnancy care process. Evidence from studies has shown that the women who had a birth plan were more likely to be accompanied by their spouses to health facilities and were more likely to report more support from spouses in looking after children or in assistance with household chores during pregnancy [45]. The findings are similar to those from a study in northern Uganda, which found that several men were actively involved in Birth Preparedness and Complication Readiness when their spouses were pregnant or in labour [46]. In this study, men who were knowledgeable of antenatal services obtained health information from a health worker, and whose spouses utilised skilled delivery during their most recent pregnancy were more likely to accompany their spouses to antenatal care. This finding suggests that providing information to male partners of pregnant women attending antenatal might increase their involvement and participation [46].

Lastly, a major factor affecting Birth Preparedness is finances. Financial barriers often prevent local people from being able to arrange transportation. In Nigerian rural areas, vehicles are scarce and in poor condition and the cost of arranging emergency transportation can be daunting [47].

These findings reinforced the widely held notion that Birth Preparedness and Complication Readiness should be promoted during pregnancy in settings where deliveries in the home are common [13]. While improving knowledge and helping mothers to prepare for birth and emergencies, efforts are also required to address the barriers that hinder skilled birth attendance and the use of health facilities for delivery [45].

Theme 2: High preference for Traditional birth attendants (TBAs)

Findings from the interview revealed a high preference for TBAs, which further confirms the women's lack of Birth Preparedness and Complication Readiness. The reasons for this were supported through six sub-themes. Specifically, they are high patronage of TBAs by the community women, communal living in TBA homes, physical proximity to the service point, prayers and fasting in TBA homes, confidence in the TBAs, past experiences, and beliefs that the first place of birth is safe and financial reasons.

Sub-theme 1: High patronage of TBAs by the community women

Through the women narratives and stories during the interview, high patronage of TBAs was confirmed. The participants commented on the large number of women in the TBA houses. It was interesting to note that no reference was made to the size of the room or their comfort.

"Ma,...the number of pregnant women and women that deliver with our TBA is usually very plenty ... pregnant women, women in labour pain, those who had delivered, and their relatives are all kept in one room. In a corner of the room is an altar where we (the pregnant women) use to pray for ourselves and family". (Participant 19)

"Women seat down in the room waiting for their turn to be attended to ... relatives also stay around their women in labour to provide help. Relatives and other children are allowed to visit at any time to render support. Some do sleep there as provisions are made for a place to cook" (Participant7).

From the responses by participants, it is evident that TBA homes continue to receive good patronage by community women. The women are at ease with the conditions inherent in TBA homes. Their family members are allowed to support their pregnant relations by rendering one form of assistance or another. Children from home are occasionally brought in to see their mothers. There is also a food preparation area and spiritual support.

Sub-theme 2: Communal living in TBA homes

Participants' responses also denote the importance and the joy derived from communal and free living in the TBA homes.

"Mothers, pregnant women, relations are all in one room in a TBA home. Staying all of them very happy even as the room may be very tight and hot. Some do sit on the floor not minding". (Participant 9)

"Our women are always happy being together. The TBA is friendly and welcomes everybody" (Participant 13).

The fact that family members of the pregnant woman can prepare food for the pregnant woman in the TBA's home and that communal sharing of things like food, prayers, toiletries, family life discussions take place in the TBA home, provides pregnant woman with a home-from-home feeling and attribute to the high patronage of TBAs. When asked how this relates to their lives, the participants' responses were again confirming the joy they from being together in the TBA homes:

"Every one of them is happy to be together. This cannot be allowed in the hospital". (Participant 12)

"The women feel free here than hospitals. Because in the hospital they don't allow relations. Even the visiting time is very short. If it is hospital nurses will be shouting at them as they are sitting on the mat on the floor". (Participant 17)

"Your people like your sister or your sister-in-law can come to the place, prepare food for you ... in the hospital this is not accepted; you cannot even try it ... I like it ... TBA will massage your body; tell you when you will born ... we use to pay together! ... give her foodstuff like yams, cassava ... ". (Participant18)

Sub-theme 3: Spirituality in TBA homes

The regular prayers and fasting organised for pregnant women in the TBA homes also encourage women to patronise TBAs. From the responses, a prayer altar is always an aspect of the TBAs delivery rooms. It was confirmed that every TBA clinic or delivery room has an altar at one corner. This is used for regular prayers and fasting with pregnant women and mothers and these are the strong forces that endears women to the services of the TBAs, since they strongly believe in God's protection throughout the course of pregnancy. According to participants' contributions, most women tend to feel spiritual and religious during pregnancy, hence their preference to access

birth delivery services from TBAs since most of them apply spiritual programmes such as prayers, prophecies, visions, and food fasting to psychologically prepare each pregnant woman for delivery.

"The TBA will pray with you and give you fasting to do ... all the women come together to pray at the altar ... yes now! She has an altar in the house everybody comes together we pray". (Participant 9)

This service is usually not provided at the health centres, hence the higher preference of pregnant women in TBA homes. The women expressed their unwillingness to desist from utilising the TBA services;

"Mma Nurse, it will not be easy ... to stop women going to TBAs at all at all. Because these women are very good ... many are prophetess, they pray for women, fast for women ... in fact they have a way of locking your pregnancy so that it does not come out till it is time". (Participant 3)

"Hospital people don't know all these; prayers and fasting are very important. We believe in God and it is God that helps us. Nurses do not have much time for fasting and prayer with women unless ... they will start doing something about this. If not so, I know that our women will still go to TBAs and churches even after registering in health centres". (Participant 5)

"Nurse, we trust in God here! Without God, it will not work for us. Prayers and fasting make us believe God will help the woman deliver safely. So please we want fasting and prayers in our hospital if we must attend. In fact, they should be calling prophets and prophetess to pray for the women, so that any bad thing coming can stop" (Participant 14).

The participants' responses revealed the strong religious inclination of the community's women.

Other participants offered the following:

"Mma, see ... I don't play with my God ... o! Anything done without putting God will never work out. Here ... em, in the villages here, there are many evil eyes after you, ...especially when pregnant. If you don't cover yourself with prayer and fasting, hm, hm! they will kill you and your baby. TBAs take us through prayers and fasting every week, some even see spiritual things and prophesy...and tell you what to do. I can't stop going to them ... o!"(Participant 12).

"Some of the TBAs see spiritually. During fasting and prayer, they prophesy and do some assignments to ward off evil manipulation on the pregnant women that would have caused them to die or their babies to die"(Participant 18).

"Pregnant women need prayers ... o! They really need prayers and fasting because this is a trying period, that is why they ask people to be praying for them too when they will be fasting and praying for God to see them through"(Participant 2).

"This means that women like a place of prayer so that God will protect them to go through pregnancy and delivery without dying".(Participant 8).

"Most TBAs are prophetess. They combine fasting and prayers with their work that is why God is helping them to help women in this community". (Participant 19)

On the reason why the choice of TBA services, most participants emphasised beliefs on some supernatural forces and attack from enemies.

"Prayers and fasting are one of the things that move women to go to TBA to deliver. God is everything. And during pregnancy, you have to

surrender yourself to God. The world is bad, and enemies attack more during pregnancy and delivery". (Participant 18)

"Fasting and prayer are what help us. We all rely on God who can do everything and protect us from harm during pregnancy and delivery". (Participant 7).

"Not only the prayer aspect alone.....our TBAs are very kind, friendly and they still help us even when we have no money to pay. They are our mothers in this community". (Participant 17)

"It will not be easy ... to stop women going to TBAs at all at all. Because these women are very good...o! Many are prophetess, they pray for women, fast for women ... in fact, they have a way of locking your pregnancy so that it does not come out till it is time. Hospital people don't know all these, prayers and fasting is very important". (Participant 6)

Discussion: Spirituality is an important part of the culture of the women. Most religious people emphasise the healing power of faith, and thus most pregnant women patronise mission homes in order to be protected from evil during delivery [48]. The spiritual belief of people of Cross River State has a serious impact on their health-seeking behaviour [49]. Faith healers have spiritual explanations for all normal and abnormal physiological and structural states, particularly in relation to pregnancy and labour, and hence contribute immensely to poor utilisation of antenatal services where the women would have learnt how to prepare for birth and be complication ready, and negative perceptions about medical care [49]. On the aspect of pregnant women and their relatives feeling more at home at the TBA homes, supported that various studies have confirmed that TBAs do play an important role in traditional societies in the course of their services by the provision of emotional and social support to pregnant women and their relatives [50].

Sub-theme 4: Physical proximity to service points

Participants' responses affirm that many pregnant women in the community's access Antenatal Care and other healthcare services at the TBA homes. One of the reasons provided by the participants is the proximity of the TBA. TBAs are physically closer to them either in the form of relatives, friends, or neighbours, while the health centres are usually situated far from their homes and sometimes don't have health personnel available.

"Sometimes labor starts at night and there is no transport to go to the clinic that night.....most TBAs live close to us, some are our relations. When it happens like that...we enter the closest place and born our baby". (Participant 2)

On the other hand, the fact that pregnant women leave their own homes and go to the TBAs home a few weeks prior to their delivery dates affirms some level of Birth Preparedness in terms of addressing the issue of transportation at the onset of labour.

Discussion: Proximity is a major consideration of use of healthcare services. Assert that some women prefer home delivery because it affords them the opportunity to perform their household chores and also to take care of other members of their households [51]. According to documentation, poor transport networks in developing countries, especially in rural areas, do not allow easy access to medical care that is often located in cities, thus making the TBA more accessible [52]. The Prevention of Maternal Mortality Programme found that inadequate funds and transport were the key cause of the delay in seeking care and reaching facilities, and in Nigerian rural communities, vehicles are

scarce and in poor condition, making the cost of arranging emergency transportation very challenging [47].

Sub-theme 5: Confidence in the TBAs

Confidence in the TBAs is one of the sub-themes supporting the main theme. Participants' responses depict their awareness of the absence of a clean and disinfected environment, a proper delivery bed, lighting system, oxygen, drip stand, shock vest, and other items normally expected in a delivery room. However, the environment appeared not to deter the participants thus revealed that there is high patronage of TBAs which indicates the confidence the women have in TBAs, irrespective of the high-risk situations that pregnant women and their babies are exposed to in the homes of TBAs. This further highlights the fact that the community women are not complication ready.

"The TBAs deliver women of their babies on the floor with a mat only. Most times the new baby and their mothers are left naked for hours..... the environment dirty, the delivery room is often located at the backyard of the main house. Those who manage to use gloves repeat same for many women, others don't even use at all but deliver with bare hands. Some mothers and babies are left in the pool of blood after delivery....., no good disinfectant".(Participant 11)

The participants' narratives clearly depict the trust the community women have for the TBAs despite the TBAs unhygienic practices.

"Women believe in TBAs. They believe their pregnancy can be preserved till delivery".(Participant 2)

"The TBAs takes so many deliveries a month even more than the hospital".(Participant 9)

"Even with the poor environment, nothing will happen to the baby. God is protecting them. The baby will grow up to be very strong". (Participant 5)

Linking to the context, the participants' narratives confirmed the faith that the community women have in the TBAs.

"Our women do not really care about how a TBA place is. They just trust them and keep going to them". (Participant 15)

"Poverty, ignorance and wrong beliefs are killing us here. Most women see nothing good in the hospital because they are already used to the TBAs". (Participant 20)

"This TBAs are very popular in this community... I was born to see every pregnant woman delivering with them. They are doing a great work here by saving the lives of the pregnant women. In case there is problems, some do take the women to the clinic for help". (Participant 4)

Participants' responses reveal their recognition of the high maternal mortality rate in the community but fail to trace the root cause to lack of Birth Preparedness and Complication Readiness due to non-utilization of skilled care during pregnancy, delivery and after delivery.

"I have seven children. I born all of them in the house, only three in TBA house. But no problems ... no problems at all. If blood comes out plenty, TBA will give you some roots to chew and it will stop. Things have changed. This new age is wicked. Now small things, you will hear a woman has died, the baby has died ... what is the cause, we don't know. Was it not this same TBA that were taking care of us? The world is just wicked now". (Participant 18)

Discussion: According to the study findings, women consider TBAs as trusted and experienced figures in the community. This faith

in the TBAs usually prompts women to opt for home delivery with the help of TBA. Some studies show similar findings of heavy reliance on TBAs for delivery in rural settings. For example, study showed that people in Pakistan have strong faith in Dai (TBA) based on family tradition [53]. Research conducted in rural settings in Nigeria, revealed similar results of reliance on home delivery by the TBA who is well known and trusted figure of the family [54]. Studies observed that the community's traditional beliefs are that the TBAs possess special skills that they use in providing preventive and curative services to pregnant women and newborn babies [55]. Also, study revealed that the services of traditional and local reproductive health experts are often preferred and sought by women during pregnancy and birth [56]. The reasons were traced to the need for privacy and the community's beliefs in mystical forces and the supernatural aetiology of certain reproductive problems [56]. However, the women were not ignorant of the inadequate care of the baby and mother by the TBAs as they are not in position to identify and manage complications and the poor sanitary condition of the environment. Despite their knowledge on this, women still ended up delivering at TBA homes. Probably the women always felt they would always have normal deliveries, therefore there was no need to go a health facility. Specifically, services of skilled birth attendants were perceived important only during complications [57,51].

Sub-theme 6: Past experience and the belief that "first place of birth is safe"

A further sub-theme that was identified was the role of past experiences and the belief that 'first place of birth is safe'. Reflecting on the reasons for the high patronage of TBAs, it was deduced from the participants' responses that women who patronise the TBAs from their first pregnancy were generally unwilling to consider a change to utilise orthodox healthcare facilities.

"Women are comfortable to deliver in TBA houses. They are used to this practice. It is safe and ok for them. They have no problems when they go there. If anything happens ... it means God wants it so. Nobody can help" (Participant 17).

"...apart from money; ehmm! Like me, it's not because of money ... I am not saying we have money but to me why I am going to the TBA is because that is where I had my first delivery so I have said that is where I will have all my children because she is good to me ... she will pray"(Participant 7).

"Our women are always happy being together. The TBA is friendly and welcomes everybody". (Participant 3)

In addition, participants commented on their positive past experiences with a positive attitude of a TBA. One participant stated:

"I have always delivered with the TBA in all my three pregnancies without any problems. We are safe in their care, nothing happens to us. They give us herbs to drink during pregnancy and the babies come out fast".(Participant 2)

"She is always very kind to women in labour. She pets them ... in fact, I suggest that government should support her to do better".(Participant 10)

"Apart from that ... the TBAs know us, they live with us, and they take good care of us, no shouting, and no abuse. They pet the women and know the leaves to give if labour is long. Not like a hospital that will rush and operate".(Participant 9)

"What about those that even register in hospital, but if they want to be born at night, you go there, no nurse. Sometimes those small, small

people that know nothing will be there. Even TBA is better than them". (Participant 5)

Discussion. According to the responses of the study participants, TBAs have a lot of experience, they are always available at the time of need and services may be obtained free of cost. A study conducted in rural Cambodia also found that TBA services can be obtained without spending cash money [58]. Study revealed how good experiences of giving birth at home influence other pregnant mothers to have delivery at home [59]. The study showed that community women preferred home delivery by TBA because of their long-time good experience from generation to generation. Similarly, a Ghanaian study reported that rural women perceived TBAs were more considerate and provide more passionate care than the orthodox healthcare providers [60].

Theme 3: Understanding of skilled care and prompt interventions in hospitals

The six women who expressed their preference for modern healthcare facilities were observed to be those who had utilised such services at one time or the other during pregnancy or delivery. The reasons for their preference which emerged as five sub-themes, included: Good care of the mother and baby, the safety of their babies through cleanliness and immunisation; positive experiences in hospitals; education on birth preparedness; and provision of prompt and emergency care.

Good care of mother and baby: Women who patronise hospitals affirmed receiving good health care for both the mother and the baby.

"Delivery in the hospital, it is good because after delivery, they take good care of your baby". (Participant 20)

"In the hospital they will give that baby injection, immunisation, and also give the mother injection. Giving birth at home, sometimes you can start bleeding so much, the TBA may not know what to do". (Participant 15)

"Hospital is good because they will give you injection, give you tablets, look after both the baby and mother too". (Participant 16)

In addition, they reported the assurance of being received in a hospital after being referred from a Primary Health Care facility than from a TBA, and the availability of equipment to manage likely emergencies.

"because one, ...when you have pregnancy, when you come to register, they will register you, they will take care of you till that time will come, that you will be delivered, that is why I like to go there, then anytime you have a headache, anytime you come to them, they will take care of you that is why I so much like hospital". (Participant 11)

"If a pregnant woman develops a serious problem, the nurses will quickly know and transfer you to a bigger hospital for a better care to save you and your baby..... That hospital will not argue but will accept you and continue the care". (Participant 20)

Safety of babies through cleanliness and immunisation: Some of the women highlighted their childbirth experiences with respect to a clean environment, being assured that their babies would receive proper medical attention (drugs and vaccines) immediately after birth.

"Why I like hospital is because I have benefitted from the nurses, I have also benefitted from doing ... and taking care of babies, because when you have trust in hospital when pregnant, they will tell you how to take care of your baby, then hospital, hospital will make all my baby's things to be very clean". (Participant 1)

"Why I decided to deliver in the hospital is because I used to receive immunisation in the hospital until the day I was to deliver, when that day reaches, I will deliver freely without anything happening". (Participant 16)

Positive experiences of the hospital: Those participants expressed their reasons for preferring hospital delivery based on their previous positive experiences in the hospital. Some verbatim responses captured includes thus;

Why I say so.....is that hospital is good, like me because I take example from myself, when I was pregnant, I went to the health centre at Idundu, my stomach was very big, people used to say that I will deliver twins. So, I went to the hospital and did scan, and I saw that hospital is good. They also looked and told me what my problem was. I then know that if a pregnant woman has a problem and you go to the hospital, the doctors can help". (Participant 20)

"It would have been good for a woman to go to the hospital when she is pregnant, because they will look after her, take good care of her, check her, she goes for check-up, they will advise her, give her dates to be coming for check-ups. They check her well, whenever she has problems they give her some drugs, so it is good for one to go to the hospital when pregnant". (Participant 15).

Education on birth preparedness: An important aspect mentioned by two participants were the provision of education on birth preparedness and the benefit of this for all future pregnancies.

"The main reason that I want to deliver in the hospital is that I like hospital due to how they look after a pregnant woman. Secondly, in the hospital, I have been given a list for me to use at home to prepare for hospital delivery". (Participant 11)

"I have derived a lot of experience about delivery and nursing a baby, and those problems that if it happens, a woman should rush to the hospital immediately and report to nurses. The first time I had a baby, I had no experience. The second one I delivered, I had experience concerning caring for the baby, personal hygiene, washing baby's thing very clean and taking good care of the baby. Immunising my baby whenever due". (Participant 1)

Provision of prompt and emergency care: One participant specifically highlighted the importance of interventions in case of emergencies.

"Labour can pain you for a very long time, you can become breathless and die. That is the reason. So, I see that the hospital is better than a TBA's place that is why I started going to the hospital because hospital people will quickly know the problem and help you not to die". (Participant 20)

Discussion: Several studies corroborate the above findings. Study found that the reasons for choosing orthodox care include regular check-ups and investigations (BP), weight, ultrasound scan, and urine and blood tests), better management of postdate pregnancy and prolonged labour, and immunisation of the newborn [61]. It has been observed an association between the proportions of births attended to by skilled health personnel and maternal mortality, and according to them the proportion of births by skilled health personnel is a key indicator for the Millenium Development Goal (MGD) 5, of improving maternal health and its target of reducing the Maternal Mortality Rate (MMR) [62].

Estimates posit that with 90% coverage of Skilled Birth Attendants present in developing countries, interventions for pregnancy, labour, and postnatal care up to 24 hours after birth would result in a 15-30%

reduction in newborn mortality, with improvements in maternal health [63]. Though skilled birth attendance is one of the strategies aimed at reducing maternal and newborn mortality and assert that in most low-income countries especially those in the sub-Saharan region, the majority of women deliver at home with the assistance of family members, friends or TBAs and most healthcare facilities that offer comprehensive emergency care services are located in urban areas [62,64-66].

Theme 4: Poor skills on maternal and child care in TBA homes

Overall a strong theme of poor skills of maternal and child care in TBA home emerged from the participants. Two sub-themes were identified in support of this theme namely, TBAs lack of skills on proper delivery procedures and care, and lack of education on Birth Preparedness and Complication Readiness in TBA homes.

Sub-theme 1: TBAs lack of skills on proper delivery procedures and care

Interviews with participants revealed that they are aware of the TBAs' lack of skills on the proper delivery procedures and care.

"A TBA delivery room is often very small, not well kept and very dark and air may not enter well".(Participant 1)

"In a TBA home, after delivery the mother may be left lying there on the delivery mat, not well cleaned. Her baby may be left naked for a long while, cold catches the baby".(Participant 15)

"The baby's cord is left exposed in blood. A general blade is used to cut the cord of every baby born there. The cord can be infected".(Participant 7)

There is a strong reliance on divine help, and the mothers and their babies are believed to be at the mercy of God in the case of emergencies. Contributions by participants confirm the non-availability of basic child delivery equipment and emergency precautions such as screened blood, the use of shock vests, and other birthing room equipment. The likelihood of infection for both mother and child is very high.

"This baby is exposed for long. He can be cold and sick and even die. This environment is very dirty. Even the hand gloves the TBA uses can be used also on another woman. This cannot happen in the hospital".(Participant 11)

"Good care for mother and baby is lacking in TBA homes. They use salt, palm oil, herbs and other unhygienic things on the babies' cords. This cannot happen in the hospital. The environment is dirty".(Participant 1)

"They could use same gloves for many deliveries and it is not good at all".(Participant 16)

"Women in this community should be educated about the problems that this type of environment can cause. Even exposing baby in blood and without clothes for a long time can kill the baby. Our women do not know this. In fact, no idea about the problem that can happen".(Participant 20)

Despite the risks that the mother and child are exposed to, comments from some participants revealed that they view the practice as normal.

"Nothing will happen to the baby. God is protecting them. The baby will grow up to be very strong".(Participant 3)

"The TBAs we have here in our community are very good. They deliver so many women in a month even more than the hospital".(Participant 12)

"For me ... I say ... oo! Our TBAs cannot be left like that without anything. Some of them are very good in this work. Train them, give them knowledge, knowledge is power. So that they will be doing it small small and know when there is problem and can send to hospital". (Participant 17)

Discussion: Various studies have confirmed that there TBAs lack skills on proper delivery practice. Study revealed that the infection control methods employed by the TBAs were found to be poor [67]. These findings are also similar to a Guatemalan study among midwives that revealed that rural midwives worked without gloves, soap, or running water and performed poor cord management since only less than half (42.2%) used methylated spirits to treat the cord, worst still, some used sand, which could readily be a source of neonatal tetanus infection [68]. Similarly, findings from studies in Edo state, Eastern Nigeria, revealed that TBAs were very much in short supply of modern facilities and most times are forced to use whatever is available, which are often substandard [54]. In addition, studies submitted that services provided by TBAs are unhygienic, as only very few of them use any form of personal protective devices in the course of their duties [69].

Sub-theme 2: Lack of education on Birth Preparedness and Complication Readiness in TBA homes

From the interviews with the participants, it is evident that at the TBA homes pregnant women and mothers received little or no education regarding danger signs, preparation for birth and how to be complication ready.

"I deliver all my 4 babies with the TBA. They care for me throughout pregnancy with herbs, this protects me and my baby from any problems. She also prays and fast with me, so when labour starts I deliver without problems".(Participant 10)

"We don't talk about problems there because we pray to God always and He answers our prayers...., women deliver there without problems.."(Participant 8)

While those women who had utilised and experienced care at the orthodox healthcare facility, commented thus:

"No good ante natal care to have information about the problems that can happen and what to do if it happens....".(Participant 15)

"Health education for women on how to know when there is problems to report to the nurse, how to prepare themselves and their homes in case they are in labour and how to plan in case labour starts at night is only given to us at the health centre when we go for clinic".(Participant 11)

Community women continue to have incorrect or incomplete information regarding Birth Preparedness and Complication Readiness, because more women visit TBAs who are themselves not knowledgeable and/or skilled. Hence, community women's continuous apathy towards orthodox healthcare services is exacerbated, because there is no access to skilled healthcare givers who are most often not available to breach the information gap. In the course of the interview, the above was confirmed:

"Nurses, Doctors, government people should be coming to us, tell us about what we should know and do to be good for us, our women, and our children. In churches, in markets, in our meetings, to our men, they should come and tell us about these things". (Participant 6)

Discussion: It has been commented that a typical TBA would be illiterate and may lack the knowledge and skills to educate the women

or recognise birth complications and other risks [51,67,70]. Therefore, TBA-provided maternal health services may be unsafe to the health of mothers and their babies. This theme highlights the recommendation made that it was important for women to utilise antenatal health care services since it has been proven to positively ensure the survival of mothers and their newborns [71-72].

Conclusion

This study explored the birth preparedness and complication readiness of women of childbearing age (pregnant and new mothers) in the rural communities of Cross River State. The study established that the rural women of Idundu and Anyanganse have poor understanding of what Birth Preparedness, Complication Readiness entail and the importance of facility delivery (i.e. delivery with the assistance of skilled health personnel). This led to the high preference of the services of TBAs by the women and total reliance on God for care and protection throughout pregnancy, while seeing a woman's death during pregnancy or delivery as normal and God's will. In the midst of these, the women acknowledged the fact that TBAs have poor skills on maternal and child care. These are partly the reasons for phase 1 delay (delay in the decision to seek care) and women's failure to utilise facility services for skilled care in the rural communities of Cross River State, Nigeria. However, women who had utilised health facility at one point or the other in the course of pregnancy and delivery, exhibited their understanding of skilled care and prompt interventions in health facilities.

Recommendation

Based on the findings of this study, the following recommendations were made:

1. There should be a collaboration between the rural communities and nurses/midwives and other serving in the communities, for the purpose of engaging the communities particularly the rural women in health education on Birth Preparedness, Complication Readiness and the importance of utilising skilled care during pregnancy, delivery and after delivery, thus bringing about prevention of maternal health complications and maternal mortality in the rural communities.
2. Maternal health literacy should be carried out by the health-care providers in the rural communities for the purpose of correcting baseless traditions and assumptions by rural women regarding health care facilities and providers, thereby promoting utilisation of skilled care by the rural women and the resultant reduction in maternal morbidity and mortality.

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