

Research Article

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## Barriers to utilization of maternal health services in southern senatorial district of Cross Rivers state, Nigeria

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### Abstract

Maternal health care is grossly underutilized in Nigeria and the rate of its underutilization differs from region to region resulting from different factors. This study examines the factors that impede the utilization of maternal health care by women in Southern Senatorial District of Cross River State Nigeria. The study population consists of women of childbearing age residing in the seven (7) Local Government Areas that make up the Southern Senatorial District of Cross River State, Nigeria. By adopting Yamane's (1967) formula for sample size determination, 375 copies of the questionnaire were distributed in four randomly selected Local Government Areas comprising Calabar Municipality, Akpabuyo, Odukpani and Biase Local Government Areas where a simple random (balloting) method was used to pick two (2) electoral wards from each of the selected Local Government Area. Four (4) communities in each of the two selected electoral wards in the selected Local Government Areas were purposively selected. This amounts to a total of eight (8) communities from each Local Government Area which also amount to thirty-two (32) communities used for the study. Only 300 returned copies of the questionnaire were valid. The analysis showed that traditional beliefs, distance and attitude of health workers were variables that significantly motivated the health seeking behaviour of the respondents, leading to their non-utilization of the maternal health care. Locating health care facilities nearer to the communities, provision of good road network and improved cordial relationship between health workers and pregnant women were suggested as solutions to improve the utilization of maternal care in the study area.

### Keywords

Maternal health care,  
barrier,  
women,  
utilization

## 1. Introduction

Maternal health services, which refers to the healthcare of women during pregnancy, childbirth and post delivery period (Ajaegbu, 2013) is aimed at reducing maternal mortality and morbidity by ensuring that all pregnant women remain healthy throughout their pregnancy and afterwards. Although procreation is one of the cherished aspects of human existence, its medical process which starts with pregnancy and extends to post

delivery, exposes women to health risks which sometimes lead to death even when health services are provided and are utilised. World Health Organization (2014) affirms in their Maternal Mortality Rate (MMR) estimate that 280,000 women of childbearing age died from pregnancy and childbirth related complications in 2013, and in almost all-maternal deaths, 99 percent (286 000) occur in developing countries with sub-Saharan Africa region alone

accounting for 62% (179 000). The adult lifetime risk of maternal mortality in women from sub-Saharan Africa was the highest at 1 in 38, in sharp contrast to 1 in 3700 among women in developed countries. Nigeria is therefore on the list of African countries with the highest Maternal Mortality Rate (MMR).

One of the factors that contribute to the high maternal mortality rate is the lack of access to maternal health care services. When these health services are available, their under utilization by women becomes another contributing factor to high maternal mortality rate (Barah *et al.*, 2012). Barah *et al.* (2012) further emphasize that about 81% of deliveries take place at home without the assistance of skilled health worker in the health facility. According to World Health Organization (2012), the risk of a woman dying as a result of pregnancy and child birth is 1 in 39 as compared to 1 in 4,700 in industrialized countries of the world. World Health Organization (2015) also states that in Africa, countries like Kenya, Ethiopia, Central African Republic and Nigeria have maternal mortality ratio of 360, 350, 890 and 630 per 100,000 live births respectively, with India, Nigeria, Chad, Sierra lone and Central African Republic leading in the world with high maternal mortality ratio. In Nigeria, mortality ratio in 2013 was 560 per 100,000 live births with annual maternal deaths put at 40,000 (National Population Commission (NPC) [Nigeria] and ICF International (2014). Nigeria is the second largest contributor to the global maternal death toll and accounts for 14% of global maternal deaths, with an estimated 36,698 maternal deaths in 2013 (Austin *et al.*, 2015). High maternal mortality in Nigeria has been attributed to low under utilization of maternal health services (Austin *et al.* 2015). Women's utilization of maternal health care services has a significant value to the wellbeing and survival of both mother and child during pregnancy and childbirth (Alvaro & Oducado, 2015). The assessment of the survival of both mother and child during pregnancy and childbirth is through antenatal care (ANC). Antenatal is a medical supervision given to pregnant women and their unborn babies by a physician, midwife or obstetrician or a combination of these professionals. It includes regular monitoring of the mothers and the unborn babies through pregnancy by a variety of routine regular examinations and tests. It also includes planning for pregnancy and continues into early neonatal and post partum period (The Partnership for Maternal, Newborn and Child Health, 2006).

World Health Organization recommends a minimum of 4 antenatal visits for normal pregnancy, that is one visit in the first and second trimester and two visits in the third trimester (1-1-2 frequency) (Agus & Horiuchi, 2012).

Although four (4) visits are recommended by World Health Organisation, Atekyereza and Mubiru (2014) observe that pregnant women do not usually conform to medical recommendations. Some factors have been identified as responsible for pregnant women's inability to adhere to the antenatal recommendation by World Health Organisation. For instance, Odetola (2015) identifies cost of services, socio demographic and educational level of clients, women's level of autonomy in making health care decisions, physical accessibility to health care services rendered and health workers attitude as some of the factors that influence ante-natal care utilization and health care seeking behaviour. The identification of these factors by Odetola (2015) corroborates the findings in Akah *et al.* (2014) with the exception of the inclusion of cultural beliefs by Akah *et al.* (2014), which are not listed in the factors identified by Odetola (2015).

Distance as a factor influences antenatal care service utilization. This has to do with the extent to which pregnant women in a given location who seeks health care could access or obtain health care services. Aluko (2008) states that if the location of hospital, health centres and other maternal health delivery outfits are too far from the population or health users, the stressful travel could make some women reluctant to patronize orthodox health/maternity service. Geographic accessibility has to do with travel time and distance. Distance to health service plays a crucial role in health service accessibility. Long distance can be a significant obstacle to reaching health facilities when someone is trying to seek care. Fagbamigbe and Idemudia (2015) attribute the failure to utilize health care services by women of child bearing age to lack of funds, distance from health facilities, availability of transport, poor attitude of health providers, cultural beliefs, obtaining permission from spouse or significant others, inability to guarantee confidentiality of information, etc. These findings point to the fact that some factors are common among the various localities in Nigeria. These common factors include cultural or traditional beliefs, distance to the maternal health care facility as well as the attitude of health workers.

In Cross River State, the State Government has invested so much to train primary healthcare (PHC) workers. The government regularly distribute drugs, vehicles with medical personnel to different locations (including the rural areas), in addition to the existing medical facilities, as part of its effort to ensure effective health care service delivery particularly to pregnant women. However, in spite of the numerous health care interventions and achievements in Cross River State health sector, many pregnant women in Southern Senatorial District of Cross River State have no access to or contact

with health professionals before they are delivered and delivery still occur without a skilled birth attendant thereby exposing the women to different maternal health risks including death.

This study therefore set out to examine the factors that impede the utilisation of the maternal health care in Southern Senatorial District of Cross River State. Although some previous studies such as Aluko (2008); Akah *et al.* (2014); Odetola (2015) and Fagbamigbe and Idemudia (2015) have examined factors responsible for the non-utilisation of maternal health services by pregnant women in Nigeria, none has specifically studied these factors in the Southern Senatorial District of Cross River State. None has also determined if the same factors that cause barriers in other localities are equally responsible for the same phenomenon in the Southern Senatorial District of Cross River State. This is the focus of this study. The specific objectives of the study are (a) to determine whether traditional beliefs cause barrier to maternal health care utilisation among women in the study area; (b) to determine if distance impedes health care utilization among women in the study, and (c) to ascertain if the attitude of health workers is an impediment to health care utilisation among women in Southern Senatorial District of Cross River State,

## **2. Theoretical Framework**

This study adopts the Health Belief Model as its theoretical framework. According to Janz and Becker (1984), the Health Belief Model was developed in the early 1950's by some social psychologists at the U.S Public health service. It was originally developed to explain preventive 'health behaviour', which Kasl and Cobb (1966) defined as "any activity undertaken by a person who believes himself to be healthy for the purpose of preventing disease or detecting disease in an asymptomatic stage." This differs from 'illness behaviour' which is meant to define the sickness and to find a remedy for it. The underlying principle of HBM is that health behaviour of the patients is determined by their personal beliefs or perceptions about the disease and the strategies available to decrease its occurrence (Hochbaum, 1958). Personal perceptions depend largely on intrapersonal factors. This model is a major framework used for explaining and predicting the acceptance of health and medical services by patients.

HBM is of the view that an individual's health decisions can be broken down into different stages and these stages largely influence the person's decision, behaviour or action towards his or her perceived health threat. Four dimensions (stages) are identified. These are perceived

susceptibility, perceived severity, perceived benefits of an action and Perceived barriers to action. Perceived susceptibility refers to the personal feeling of vulnerability one has regarding a condition, health risk, outbreak, etc. In other words, this dimension captures the persons view regarding whether or not he or she is likely to contract a disease, become ill, or has any health risk. Janz and Becker (1984) refer to this dimension as "one's subjective perception of the risk of contracting a condition" (p.2). Perceived severity simply refers to the person's feeling or conclusion with regard to the seriousness of the condition. That is, if there is the possibility of contracting an illness, leaving it untreated or how to go about treating it if contracted. The medical consequences of the severity of the condition (pain, disability, death, etc) also influence the person's behaviour. The combination of perceived susceptibility and perceived severity is termed perceived threat (Hochbaum, 1958).

Perceived benefits of an action underscore a person's opinion of value or usefulness of a new behaviour in decreasing the risk of getting a disease or condition. This includes the person's opinion of the effectiveness of the available options aimed at reducing the threat. In other words, a person's behaviour will depend to a large extent on how he considers the action efficacious and capable of reducing the threat. Perceived barriers to action on the other hand imply that the person's perceived action may actually be detrimental to undertaking recommended behaviour. This means that the behaviour of the person may rather than prevent or resolve the threat, become a barrier to his reduction of the threat in actual fact. For instance, if a person considers that the cost of getting the recommended medical care is too high, he may likely obtain a cheaper care irrespective of whether it is appropriate or not. This may in turn cause more medical challenges.

The Health Belief Model is applied in this study to account for the maternal health seeking behaviour of the women (respondents) with regard to their utilization of antenatal medical care and to what they consider as barriers to obtaining this care. This theory also gives an insight to the understanding of the challenges that motivate the subjects' maternal health decisions.

## **3. Methods**

The research adopted a survey design facilitated by a carefully designed questionnaire instrument. Survey design is used with the aim of extracting data from a target population through the use of observations, questionnaire or interviews, and subjecting the data that

are obtained to analysis for the purpose of drawing conclusions (Akpabio & Ebong, 2010). The population of the study comprised women of childbearing age residing in the seven (7) Local Government Areas that make up the Southern Senatorial District of Cross River State, Nigeria. This study area has a total population of 579,099 women (NPC, 2006). The sample size was determined using Yamane (1967) formula for sample size determination. This results in the distribution of three hundred and seventy-five (375) copies of the questionnaire in four randomly selected Local Government Areas comprising Calabar Municipality, Akpabuyo, Odukpani and Biase Local Government Areas where a simple random (balloting) method was used to pick two (2) electoral wards from each of the selected Local Government Area. In the final stage,

purposive sampling method was adopted in selecting four (4) communities in each of the two selected electoral wards in the selected Local Government Areas. In all, eight (8) communities from each Local Government Area were selected which amount to (32) thirty-two communities used for the study. However, only three hundred (300) copies of the returned questionnaire were valid for analysis. The data were analysed quantitatively using frequency and simple percentages.

## 4. Results

### 4.1 Demographic Description

Table 1 shows the demographic analysis of the data.

**Table 1: Socio-demographic data of respondents**

Variables	Category	Frequency	Percentage
Age	18-24yrs	63	21
	25-30yrs	33	11
	31-36yrs	99	33
	37-42yrs	60	20
	43yrs & Above	45	15
	Total	300	100.0
Marital Status	Married	140	46.6
	Single	70	23.3
	Separated	55	18.3
	Divorced	35	11.6
	Total	300	100.0
	Educational Qualification	Incomplete Primary	62
Complete Primary		101	33.7
Incomplete secondary		45	15
Complete secondary		52	17.3
Tertiary education		40	13.4
Total		300	100.0
Religious Denomination	Catholic	67	22.3
	Protestant	94	31.3
	Pentecostal	104	34.7
	Muslim	17	5.7
	African Traditional Religion	18	6
	Total	300	100.0
Age at first pregnancy	18-24yrs	98	32.7
	25-30yrs	96	32
	31-36yrs	53	17.7
	37-42yrs	40	13.3
	43yrs & Above	13	4.3
	Total	500	100.0
Occupation	Civil servant	28	9.3
	Trader	164	54.7
	Farmer	20	6.7
	Unemployed	88	29.3
	Total	500	100.0
	Income level	N1, 000- \$410,000	96
141 1,000- N20,000		102	34
1421.000- W30,000		53	17.6
M3 1,000- N40,000		36	12
\$441. 000 & above		13	4.3
Total		300	100.0

The result indicates that 1\% of the respondents (n = 63) were within the age range 18-24yrs, 11% (n = 33) within the range 25-30yrs, 33% (n = 99) 31-36 yrs, 20% (n=60) 37-42yrs and 15% (n = 45) 43yrs and above. In terms of marital status, 46.6% (n = 140) were married, 23.3% (n = 70) were single, 18.3% (n = 18.3) were separated and 11.6% (n = 53) were divorced. By educational attainment, 20.6% (n = 62) had incomplete primary education, 33.7% (n = 101) completed primary education, 15% (n = 45) had incomplete secondary education, 17.3% (n = 52) had complete secondary education and 13.4% (n = 40) had tertiary education. In terms of religion, 22.3% (n = 67) were Catholics, 31.3% (n = 94) were Protestants, 34.7% (n = 104) Pentecostals, 5.7% (n = 17) were Muslims and 6% (n = 18) were African traditional religion worshippers.

Regarding their age at first pregnancy, 32.7% (n = 98) had their first pregnancy between 18-24yrs, 32% (n = 96) between 25-30yrs, 4.17.7% (n = 53) when they were 31-36yrs, 13.3% (n = 40) between 37 and 42yrs and 4.3% (n = 13) when they were 43yrs and above. With regard to occupation, 9.3% (n = 28) were civil servants, 54.6% (n = 164) were traders 6.7% (n = 20) farmers and 29.3% (n = 88) were unemployed. By income level, 32% (n = 96) earned N1, 000- N10, 000; 34% (n = 102) earned W11, 000 - M20, 000, 17.6% (n = 53) earned N21, 000 - M30, 000; 12% (n = 36) earned £431, 000 - £440, 000 while 13% (n = 4.3) earned N41, 000 and above. Thus the distribution of the data was considered heterogeneous enough for the study.

#### **4.2: Traditional Beliefs**

With regard to the items on traditional beliefs which are likely to cause barrier to the utilisation of maternal health care by the subjects, Table 2 shows that 39.6% (n = 119) agreed that pregnancy issues are better handled traditionally, while 60.4% (n = 181) disagreed. About 43.4% (n = 130) agreed that normal delivery should be at home while 56.6% (n = 170)

disagreed. About 7.0% (n = 21) agreed that those with pregnancy related complication should attend antenatal care and deliver in hospital while 93 percent (n = 279) objected to this view. However, 42.3% (n = 127) were of the view that traditional birth attendants handle pregnancy and other delivery issues better than nurses and midwives but 57.7% (n = 173) disagreed. Similarly, 57.3% (n = 172) agreed that western style of medical care may not handle spiritual issues associated with pregnancy and labour while 42.7% (n = 128) disagreed. Thus more respondents believed in traditional handling of pregnancy issues based on its "spiritual" connotation.

#### **Distances to Health Facility**

Table 3 shows the result of the analysis of the subjects' responses to items relating to the distance to health facility. The table shows that 53.7% (n=161) of the respondents agreed that they attend antenatal care and deliver in the hospital because the hospital is near their home while 46.3% (n=139) disagreed. About 30.3% (n=91) accepted that they neither attend antenatal care nor deliver in the hospital because it is far from their home but 69.7% (n = 209) disagreed to the item. Also, 48.3% percent (n=145) of them agreed that they do not attend antenatal care nor deliver in the hospital as the cost of transportation to the hospital is high but 51.7 percent (155) disagreed. About 56% (n=168) agreed that they do not attend antenatal care because there is no access road from their village while 44% (132) disagreed. Those who trek long distance to attend antenatal were 64% (n=192) while 36% (n=108) did not trek such distance. Similarly 44% (n=132) agreed that they spend so much on transport to attend antenatal but 56 percent (n=168) disagreed to the item. On the whole the results showed that 54.07% agreed that distance was a factor to be considered when attending antenatal care and hospital delivery while 45.93 percent felt it did not matter.



**Table 3: Frequency of responses to item on distance**

Item parameter	SA	Item content	Item	Responses					
				A	D	SD			
13	I attend antenatal care and deliver inN	the hospital because the hospital is near my home	%	61	100	98	41		
					20.3	33.3	32.7	13.7	
14	I neither attend antenatal care nor deliver inN	the hospital because it is far from my home	%	56	35	109	100		
					18.7	11.7	36.3	33.3	
15	I do not attend antenatal care nor deliver inN	the hospital as the cost of transportation to the hospital is high	%	75	70	80	75		
					25	23.3	26.7	25	
16	I do not attend antenatal care as there is no access road from the village to the clinic%		N	108	60	85	47		
				36	20	28.3	15.6		
17	I have to trek a long distance to attend antenatal		n	122	70	58	50		
			%	40.6	23.3	19.3	16.7		
18	I spent so much on transport to attend antenatal care		N	61	21	90	78		
			%	20.3	7	30	26		

**4.4 Attitude of Health Workers**

The analysis of items on attitude of health workers (Table 4) showed that 56% (n=168) of the respondent dislike the uncooperative of attitude of nurses/mid wives While 44% (n=132) did not. In addition, 41.3% (n=124) dislike the attitude of doctors but 58.7 percent (n=176) did not. About 65.6% (n=197) dislike the uncooperative behaviour of community health workers but 34.3% (n=103) did not. While 37.6% (n=113) agreed that doctors are rude and unsympathetic 62.3% (n=187) did

not agree. On the item that state that nurses/midwives are rude and unsympathetic, 52% (n=156) agreed but 48% (n=144) did not agree. While 78% (n=234) agreed that some doctors are patient and pay attention to patients' complaints, 22% (n=66) disagreed. About 78% (n=234) agreed that nurses and midwives help bring out what will explain their condition to doctor but 22% (n=66) did not. On the average, 54 percent said the attitudes of health workers were bad but 46.0% of them said it was not so bad.

**Table 4 Frequency of responses to item on Attitude of health workers**

Item	Item content SA parameter	Item	Responses	A	SD	D
19	I dislike the uncooperative behaviour of nurses and midwives.	N	102	66	34	98
		%	34	22.3	11.3	32.7
20	I dislike the attitude of doctors not listening before prescriptions.	N	64	60	75	101
		%	21.3	20	25	33.7
21	I dislike the uncooperative behaviour of community health workers.	N	103	94	49	81
		%	34.3	31.3	16.3	27
22	Doctors are rude and unsympathetic.	N	65	48	87	100
		%	21.7	16	29	33.3
23	Nurse/midwives are rude and unsympathetic.	N	50	116	87	47
		%	16.7	38.7	29	15.6
24	Some doctors are patient and pay attention to patient's complaints.	N	117	117	39	27
		%	39	39	13	9
25	Nurse/midwives help bring out what will explain my condition to doctor.	N	114	121	31	35
		%	38	40.3	10.3	11.6,

## 5. Discussion

From the foregoing analysis, it is evident that the three variables traditional beliefs, distance and the attitude of health workers significantly influence the maternal health behaviour of the respondents thereby posing as barriers to their utilisation of maternal health in the study area. With regard to the traditional beliefs, the analysis revealed that although these beliefs informed the decision/behaviour of some of the subjects towards antenatal care utilisation, majority of them object to four out of the five items in the instrument with the exception of item 12. This implies that in spite of the influence of these beliefs, more women are beginning to appreciate the importance of discountenancing most of them (the beliefs). However, the fact that 57.3% of the respondents still believe that there are spiritual issues associated with maternal health, and that these issues cannot be effectively handled by western medical care, emphasises the danger posed by traditional beliefs in the study area. This is because such a traditional belief is likely to cause most of the women to refuse medical care services available to them and probably influence them to patronise unorthodox caregivers.

The analysis has also shown that distance is a barrier to the utilisation of maternal health care. About 53.7% claimed that they attend antenatal care because of its proximity to their homes. This means that nearness to a medical facility where maternal health services are available encourages the utilisation of the services by the women. Alternatively, when the services are available at a far distance, it discourages these women from utilizing it as it often forces them to trek long distances or spend so much paying for transport fare in order to be able to utilize the services. This may influence their decision to resort to other options such as visiting traditional health providers or to resort to self-medication.

The attitude of health workers were also found to significantly influence the behaviour of the respondents regarding their utilisation of antenatal care. When health workers such as doctors, nurses and midwives, are uncooperative or unfriendly to the pregnant women, some of who may be highly irritable due to their pregnancy, it is likely to discourage them from attending antenatal care. This may lead them to decide whether or not they would want to continue with such health care facility.

Based on the analysis of the data in relation to the set objectives of the study, the following findings are made (a) traditional beliefs are barriers to maternal health care utilisation among women in Southern

Senatorial District of Cross River State (see Table 2). (b) The response of the subjects indicate that distance is a barrier to health care utilisation among women in Southern Senatorial District of Cross River State (See Table 3) and (c) the attitude of health workers is an impediment to health care utilisation among women in Southern Senatorial District of Cross River State (See Table 4). These findings corroborate the findings of some previous studies such as Aluko (2008); Akah, Emeribe and Edem (2014); Odetola (2015) and Fagbamigbe and Idemudia (2015). However, other variables investigated by these studies such as level of income, education, etc were not part of this study as the items and the subjects' response focused on the; three barriers analysed. This means that other barriers that affect the subjects in these previous studies may be peculiar to the subjects studied and may not be applicable to the women in our study area.

## 6. Conclusion

This study set out to investigate barriers to the utilisation of maternal health services in the Southern Senatorial District of Cross River State Nigeria. The study has shown that there is a strong relationship between traditional belief and utilization of health care among women of childbearing age. Women's belief in the services of traditional midwife is an age long one as they are seen as knowledgeable in what they do and have skills for pregnancy care. Women often consider home environment more comfortable than the hospital because they receive support from their family members. Access to maternal health services can be improved by the nearness of these services to the women who need them especially in the rural areas. This will eliminate the' challenges posed by distance which discourages many women from utilising the maternal health services. There is also the need to have a cordial and relationship between the health workers and the maternal patients. Every woman has a right to have access to maternal health care.

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