

## **KNOWLEDGE AND ACCESSIBILITY OF MATERNAL HEALTHCARE SERVICES AMONG WOMEN OF REPRODUCTIVE AGES IN BENUE SOUTH SENATORIAL DISTRICT**

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### **Abstract**

*One of the major challenges faced by women of reproductive ages in the developing countries overtime is complications from pregnancy and child birth. Many reasons have been advanced for the minimal decline in maternal mortality. This paper assessed women's knowledge and extent of accessibility to maternal healthcare services in Benue South Senatorial District. The Andersen healthcare utilization model is a conceptual model was adopted. The study adopted a cross-sectional design. The population for the study covered all women of reproductive age ( 15-49 years) in the nine local government areas that make up the Benue South Senatorial District. Taro Yamane (1967) sample size determination formula for finite population will be used in determining the sample size for this study. The study revealed that women have knowledge on maternal healthcare services such as antenatal, delivery and postnatal services in their communities. Findings on accessibility to maternal health care services in Benue South Senatorial district revealed that while maternal health care services are available for women in the study location it is not all services that are readily accessible to women. The study recommended that Nigerian Government, Non-Governmental Organizations (NGOs), health personnel in communities, medical sociologists and religious leaders should, therefore, intensify efforts of enlightenment on importance of maternal health care services and the need of engaging in utilization of such services, as well as the health implications of non- utilization of maternal services on mothers and their unborn babies.*

**Keywords: Knowledge, Accessibility, Maternal Healthcare Services, Women of Reproductive Ages**

### **Introduction**

One of the major challenges faced by women of reproductive ages in the developing countries overtime is complications from pregnancy and child birth. These do not only affect their participation in the public enterprise but it is also the leading cause of death among married women in developing countries. There is no single cause of death or disability for women between the ages 15 to 44 that is close to the magnitude of maternal death and disability. In 2015, approximately 99% of maternal deaths occurred in developing regions with sub-Saharan Africa accounting for 66% with Nigeria and India specifically accounting for over one third of all worldwide maternal deaths in 2015(WHO 2020).While developed countries have reduced their maternal mortality level and contributed to the global decline of maternal death thereby enhancing positive pregnancy outcomes, that situation in the developing countries remains a grave one. (United Nations, 2015; Dereje, Telake, Yalemzewod & Yayehirad, 2017.

Maternal health is enhanced through adequate provisioning and utilization of maternal health care services. According to WHO (2018), 293 mothers per 100,000 live births in developing countries. Many of these deaths are related to pregnancy induced complications. Though the causes and determinants of

maternal mortality vary from place to place, scholars have identified women's limited access to quality maternal health care services especially in rural areas as a major contribution to the challenge of maternal deaths (Ntoimo et al 2020). Maternal health care services are expected to provide primary, secondary and tertiary level of care to achieve better pregnancy outcomes.

In the developing countries, maternal health care is affected by availability and the utilization of the maternal healthcare services. In sub-Saharan Africa, the factors that influence the increase in negative pregnancy outcomes are also associated with prenatal care coverage, skilled attendance at delivery and postnatal care. The non-use of these maternal healthcare services is a key predictor of perinatal mortality (WHO (2017, Nuamah, Baffour, Mensah, Boateng, Quansah, Dobin & Addai-Donkor, 2019).

In 2020, World Health Organization (WHO), estimated 152 deaths per 100,000 maternal deaths (WHO, 2020). However, majority (99%) of these deaths were in the developing countries, where, 65% of these deaths are recorded in five Asian countries (Afghanistan, Bangladesh, India, Indonesia, and Pakistan) and six sub-Saharan African countries (Democratic Republic of the Congo, Ethiopia, Kenya, Nigeria, Sudan, and Tanzania) (WHO, United Nations International Children Endowment Fund (UNICEF), United Nations Fund for Population Activities (UNFPA), & World Bank, 2020).

In sub-Saharan Africa, the worst performing countries in terms of Maternal Health Care Services are in the West African region, which has the highest lifetime risk (1 in 26) of a woman dying as a result of direct and indirect pregnancy related complications (WHO et al., 2010). In Nigeria, the maternal mortality ratio is estimated at 814 deaths per 100,000 live births with 58,000 maternal deaths annually (WHO 2020). In response to the international calls for the enhancement of maternal health care as well as services, the Nigerian government as well as International and local Non- Governmental Organizations have implemented a number of programmes including the Society for Family Health Maternal and Child Health Project, HIV/AIDs Programme Development Project, Maternal and Child Health Intergrated Programme, Partnership for Transforming Health Systems among others. In addition to this there was the training of Traditional Birth Attendants to enhance deliveries in the rural areas. These efforts aimed at improving maternal health and reducing social and economic barriers that can influence maternal health, resulted in a minimal reduction in the rate of mortality. According to Akinyemi et al 2018 and Yaya Sanni Nigeria experienced a minimal decline in maternal mortality from 576 per 100,000 live birth in 2013 to 512 per 1000 live births in 2018. The pace of reduction appears to be slow considering the investment and various programmes and projects targeted at enhancing maternal health and positive pregnancy outcomes.

Many reasons have been advanced for the minimal decline in maternal mortality. Some scholars have cited the poor utilization of maternal healthcare services. This has serious implications on maternal and child health outcomes (Bello, Esan Akerele, Fadare, 2022). It is important to investigate why pregnancy outcomes have remained largely negative in spite of these investments on enhancing maternal health. It is against this background that this research aimed at assess the effect of access and utilization of maternal healthcare services on pregnancy outcomes in Benue South Senatorial District. Assess women's knowledge and extent of accessibility to maternal healthcare services in Benue South Senatorial District.

## **Theoretical Framework**

### **Andersen and Newman Framework of Health Services Utilization**

The Andersen healthcare utilization model is a conceptual model aimed at demonstrating the factors that lead to the use of health services. It was developed by Ronald M. Andersen, a health services professor at UCLA, in 1968. According to the model, usage of health services is determined by three dynamics: predisposing factors, enabling factors, and need. Predisposing factors could be characteristics such as race, age, and health beliefs. For instance, an individual who believes health services are an effective treatment for an ailment is more likely to seek care. Examples of enabling factors could be family support, access to health insurance, one's community among others. Need represents both perceived and actual need for health care services.

The purpose of this framework is to uncover conditions that either facilitate or impede utilization. The goal being, to develop a behavioral model that provides measures of access to medical care. The framework was first developed in the 1960s and has since gone through four phases. This research is based on the fourth phase which was developed in the 1990s.. An individual's access to and use of health services is considered to be a function of three characteristics:

**1) Predisposing Factors:** The socio-cultural characteristics of individuals that exist prior to their illness. These include

- i. Social Structure: Education, occupation, ethnicity, social networks, social interactions, and culture
- ii. Health Beliefs: Attitudes, values, and knowledge that people have concerning and towards the health care system
- iii. Demographic: Age and Gender

**2) Enabling Factors:** The logistical aspects of obtaining care.

- i. Personal/Family: The means and know how to access health services, income, health insurance, a regular source of care, travel, extent and quality of social relationships
- ii. Community: Available health personnel and facilities, and waiting time
- iii. Possible additions:
- iv. Genetic factors and psychological characteristics

**3) Need Factors:** The most immediate cause of health service use, from functional and health problems that generate the need for health care services. "Perceived need will better help to understand care-seeking and adherence to a medical regimen, while evaluated need will be more closely related to the kind and amount of treatment that will be provided after a patient has presented to a medical care provider." (Andersen, 1995)

i. Perceived: "How people view their own general health and functional state, as well as how they experience symptoms of illness, pain, and worries about their health and whether or not they judge their problems to be of sufficient importance and magnitude to seek professional help." (Andersen, 1995)

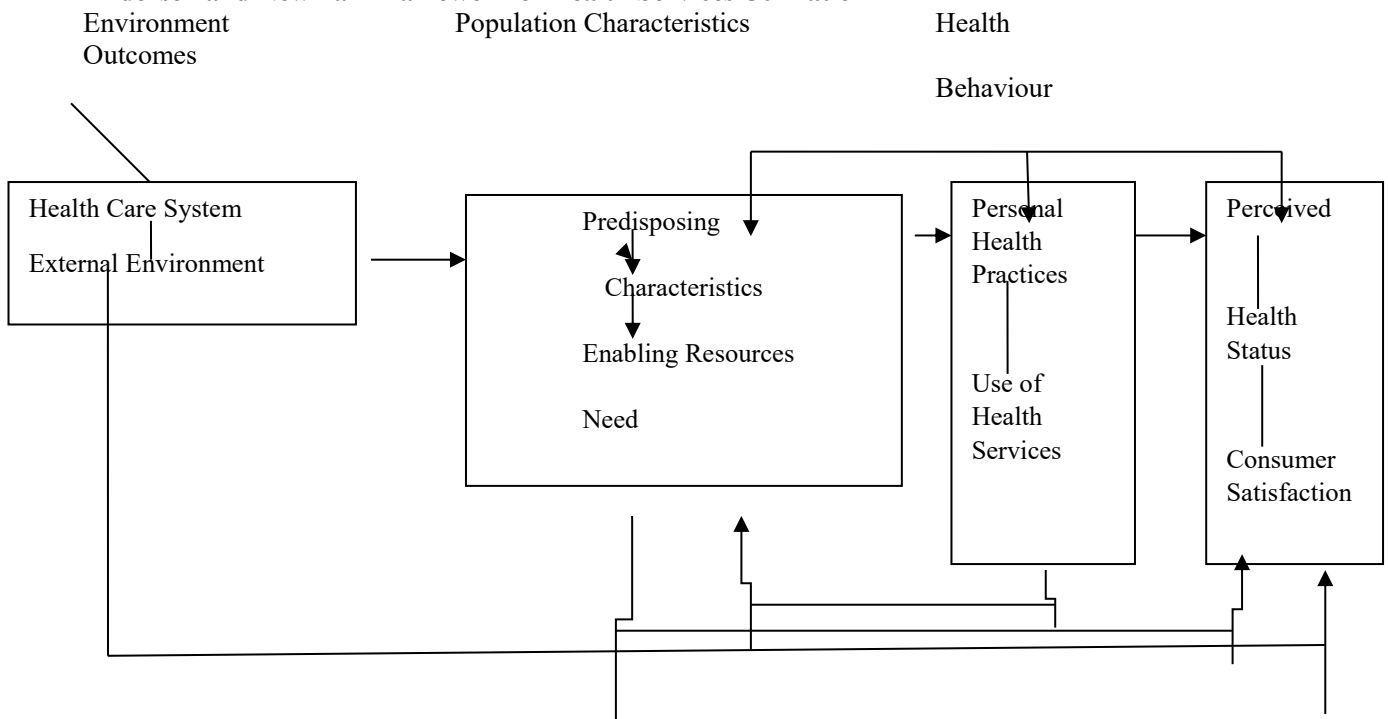
ii. Evaluated: "Represents professional judgment about people's health status and their need for medical care." (Andersen, 1995) .

A major motivation for the development of the model was to offer measures of access. Andersen discusses four concepts within access that can be viewed through the conceptual framework. Potential access is the presence of enabling resources, allowing the individual to seek care if needed. Realized access is the actual use of care, shown as the outcome of interest in the earlier models. The Andersen framework also makes a distinction between equitable and inequitable access. Equitable access is driven by demographic characteristics and need whereas inequitable access is a result of social structure, health beliefs, and enabling resources.

Andersen also introduces the concept of mutability of his factors. The idea here being that if a concept has a high degree of mutability (can be easily changed) perhaps policy would be justified in using its resources to do rather than a factor with low mutability. Characteristics that fall under demographics are quite difficult to change, however, enabling resources is assigned a high degree of mutability as the individual, community, or national policy can take steps to alter the level of enabling resources for an individual. For example, if the government decides to expand the Medicaid program an individual may experience an increase in enabling resources, which in turn may beget an increase in health services usage. The RAND Health Insurance Experiment (HIE) changed a highly mutable factor, out-of-pocket costs, which greatly changed individual rates of health services usage. The initial behavior model was an attempt to study of why a family uses health services. However, due to the heterogeneity of family members the model focused on the individual rather than the family as the unit of analysis. Andersen also states that the model functions both to predict and explain use of health services. This model is further differentiated from its predecessors by using a feedback loop to illustrate that health outcomes may affect aspects such as health beliefs, and need. It added genetic susceptibility as a predisposing determinant and quality of life as an outcome. By using the framework's relationships we can determine the directionality of the effect following a change in an individual's characteristics or environment. For example, if one experiences an increase in need as a result of an infection, the Andersen model predicts this will lead to an increased use of services (all else equal). One potential change for a future iteration of this model is to add genetic information under predisposing characteristics. As genetic information becomes more readily available it seems likely this could impact health services usage, as well as health outcomes, beyond what is already accounted for in the current model.

The model has been criticized for not paying enough attention to culture and social interaction but Andersen argues this social structure is included in the predisposing characteristics component. Another criticism was the overemphasis of need and at the expense of health beliefs and social structure. However, Andersen argues need itself is a social construct. This is why need is split into perceived and evaluated. Where evaluated need represents a more measurable/objective need, perceived need is partly determined by health beliefs, such as whether or not people think their condition is serious enough to seek health services. Another limitation of the model is its emphasis on health care utilization or adopting health outcomes as a dichotomous factor, present or not present. Other help-seeking models also consider the type of help source, including informal sources. More recent work has taken help-seeking behaviors further, and more real-world, by including online and other non-face-to-face sources.

**Andersen and Newman Framework of Health Services Utilization**



Source; Conceptual model adapted from Anderson and Newman Model (2018)

**Methods**

The study adopted a cross-sectional design. Cross sectional design allowed a study to assess different groups of people who differ in the variable of interest but share other characteristics, such as socioeconomic status, educational background, and ethnicity. The study was carried out in Benue South Senatorial District, Nigeria. Benue South is a one of the senatorial district of Benue State, and comprises of nine local government areas including Ado, Agatu, Apa, Obi, Ogbadibo, Okpokwu, Ohimini, Oju and Otukpo. Apa local government area is located in the northwestern part of Makurdi, the capital of Benue State.

The population for the study covered all women of reproductive age ( 15-49 years) in the nine local government areas that make up the Benue South Senatorial District including Ado, Apa, Obi, Okpokwu Otukpo, Agatu, Ohimini, Ogbadigbo and Okpokwu. The study however focused on women how must have experienced pregnancy at least once or must have birthed a child or children. The Taro Yamane (1967) sample size determination formula for finite population will be used in determining the sample size for this study. The formula is given as:

$$n = \frac{N}{N + 1}$$

$$1 + N(e)^2$$

Where;

n = Sample Size (?)

N = Study Population (379,929)

e = Error of Precision 95%

1 = Constant

Thus;

$$n = \frac{379929}{1 + 379929(0.05)^2}$$

$$n = \frac{379929}{1 + 379929(0.0025)}$$

$$n = \frac{379929}{1+949.8}$$

$$n = \frac{379929}{950.8}$$

$$n = 400$$

Multi-stage sampling was used in the selection of respondents for the study. The Questionnaire and key Informant Interviews (KII) were used to collect data for the study. Data were analyzed qualitatively and quantitatively.

### Results

A total of 400 copies questionnaire were distributed out of which 90.3% (376) were duly completed and returned. Therefore, the analysis of data is based on responses of the 376 respondents as well as qualitative data generated from Key Informant Interviews(KIIs)

### Socio-Demographic Characteristics of Respondents

This section of the study presents the socio-demographic characteristic of respondents. This include the variables of sex, age, marital status, educational attainment and religion among others. The findings were summarised and presented on Table 1

**Table 1: Socio-demographic Characteristics of Respondents**

Sex	Frequency N=376	Percentage (100%)
<b>Marital Status</b>		
Currently Married	290	77.1
Divorce	45	12.0
Widow	41	11.0
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Age</b>		
15-19	23	6.1
20-24	66	17.6
25-29	72	19.1
30-34	105	28.0
35-39	45	12.0
40-44	35	9.3
45-49	30	8.0
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Education</b>		
No formal education	36	9.6
Primary education	191	50.8
Secondary education	107	28.5
Tertiary education	42	11.2
<b>Total</b>	<b>376</b>	<b>100.0</b>
<b>Occupation</b>		
Farming	159	42.3

business		107	28.5
Civil servants		110	29.3
<b>Total</b>		<b>376</b>	<b>100.0</b>
<b>Religion</b>			
Christianity		258	68.7
Islam		102	27.1
Traditional Realign		16	4.3
<b>Total</b>		<b>376</b>	<b>100.0</b>
<b>Number of live births</b>			
1-2	69		18.4
3-4		137	36.4
5-6		92	36.5
7-8		60	16.0
9 above		18	4.8
<b>Total</b>		<b>376</b>	<b>100.0</b>
<b>Pregnancies ever carried</b>			
1-2		70	18.6
3-4		109	29.0
5-6		151	40.2
7above		46	12.2
<b>Total</b>		<b>376</b>	<b>100.0</b>
<b>Monthly income</b>			
Below30000		72	19.1
31000-40000		62	16.5
41000-50000		64	17.0
51000-60000		34	9.0
61000-70000		18	4.8
71000-80000		53	14.1
81000and above		73	19.4
<b>Total</b>		<b>376</b>	<b>100.0</b>

**Source: Field Survey, 2023**

The findings on socio-demographic characteristics of women presented in Table 3 showed that majority (77.1%) of the women were currently married and the age distribution of the respondents showed that that more of the respondents were within peak periods of child birth and are likely to continue having children. Utilization of maternal health care services will therefore have significant implications for them and pregnancy outcome. Also, there may be much need for maternal health care services in the communities. Respondents in the study area with primary education were more (50.8%) and next to them were those with secondary education (28.5%). Only few of the respondents (9.6%) had no formal education. This showed that females in the study area acquired a form of formal education and will be able to respond to simple questions on the questionnaire. The educational level which is more of primary education is however capable of having influence on utilization of maternal health care services. The findings on religion of the respondents showed that the study area was dominated by Christians.

In terms of occupation, the findings showed that more than forty percent (42.3%) of the women were farmers. The massive engagement of women in farming activities as a means of livelihood could be due to agrarian nature of the study area or due to lack of white collar jobs and inability of the government to employ people in the formal sector. Findings also revealed that income of the respondents is relatively low. With low financial status women may find it difficult to utilize maternal health care services if services are not cost free or even if they are relatively cheap, having to share low income with other pressing needs may affect their attitude towards utilization of maternal health care services and this could result to poor or negative pregnancy outcomes. In terms of pregnancies ever carried(40.2%) of the women have carried pregnancies between five to seven times however the number of pregnancies that resulted to live births for

most of the women were reported to be between three to four (51.1%) this may be due to negative pregnancy outcomes such as spontaneous abortions or still births as a result of low or none utilization of maternal healthcare services in communities.

### **Knowledge of women on maternal healthcare services in Benue South Senatorial District.**

This section presents findings on knowledge of maternal health care services among women. The findings were summarised and presented on Table 2

**Table 2: Knowledge of women on maternal healthcare services in Benue South Senatorial District**

S/N	Variables on knowledge	Aware	Unsure	Unaware	Mean	Std.Deviation
1	Aware of antenatal care services	301	29	46	2.68	.682
2	Aware of delivery care services	321	31	24	2.79	.548
3	Aware of post natal care services	201	118	57	2.38	.735

### **Source: Field Survey, 2023**

Findings on knowledge of maternal healthcare services in Benue South senatorial district were scaled on a 3 point likert scale. From the 3 point likert scale ranging from aware (3), unsure (2) and unaware (1) presented on Table 4 majority of the women had knowledge of maternal healthcare services which are antenatal care, delivery care services and postnatal care services with mean scores of 2.68, 2.79 and 2.38 respectively which were all above average scaling mean score of 2.0. The low standard deviations on all the variables indicate that all the responses are not far from the mean and this imply that there is stability in opinions of the respondents.

The respondents however demonstrated that they were more aware of the antenatal and delivery a services with stronger means of 2.68 and 2.79 respectively. This implies that postnatal services may not be optimally utilized since women in the communities were more aware of the antenatal and delivery services. Knowledge may however not necessarily translate to high or low use of services as other factors may set in and determine utilization by women.

The responses from participants during the interviews granted were also inline with findings of the quantitative data. A 29 year old woman observed that:

I am much aware of maternal health care services such as antenatal care and delivery services available in health facilities but I dont't know much about postnatal services whether available or what it entails. I use to think when a woman attends antenatal or even if she doesn't attend the antenatal but goes for hospital deliveries and she is successfully delivered of her baby with no complication and is immediately taken care of there. That marks the end of maternal care. She then resumes her activities as normal and only go to the clinics occasionally for immunization of her baby alone and not for herself because she will be fine by then.

A 33year old woman on the other hand stated that:

I am aware of maternal health care services such as antenatal and deliveries It is easy to clearly observe that antenatal care and delivery services are for women who become pregnant and start going for routine checkups and then to be delivered of their babies whenever they are due. I also know a bit about postnatal services which is cleaning women and the baby after child birth. But I think post natal are children concern so they can get proper immunization. Although I know of post natal care I don't think they are particularly meant for women. I think it is for the babies to be receiving immunization. So I say I know much about the postnatal health care services for women.

Another participant a 35 years old woman observed that:

I know of maternal healthcare services available in health care facilities. For instance I am aware of antenatal services were pregnant women go for routine

check during pregnancy, I have also visited maternal health care facilities for services. I however, believe it is when a woman is having issues with a pregnancy that she frequents the clinic for antenatal.

A 49 years old male health personnel during an interview in one of the health centres noted that:

We normally do our best to enlighten women in this community about maternal care services available at our various facilities and quite a number are aware of it and there is significant improvements as compared to a few years back. As the women are now aware some women now normally turn up for antenatal services, most of them are however usually not regular, sometimes they skip antenatal only to turn up when they start experiencing complications during delivery or at other points while carrying the pregnancies. But if to have knowledge on availability of services I will say most of them are aware of availability.

A 34 years old woman noted during an interview that:

Many of the health care facilities in my community offer maternal healthcare services and many women are aware of that. Even if some women don't approach the hospitals or clinics they are aware. These days it is common in my community to hear women talk about maternal care services, even those that don't attend hear from others and they know such services.

### **Accessibility to Maternal Health Care Services in Benue South Senatorial District**

#### **Zone C**

This section presents findings on accessibility to maternal health care services in Benue South Senatorial District. The findings were summarized and presented on table 5

**Table 5: Accessibility to Maternal Health Care Services in Benue South Senatorial District**

S/N	Variable	Always	None	Sometimes	Mean	Std.Deviation
<b>1</b>	<b>Antenatal care</b>					
	Maternal health education	313	36	27	2.76	.579
	Monitoring pregnancies	269	59	48	2.59	.706
	Routine checks/test	186	66	124	2.16	.894
	Nutritional support	22	252	102	1.79	.534
<b>2</b>	<b>Delivery care</b>					
	Vaginal delivery	309	21	46	2.68	.682
	Assisted vaginal delivery(Vaccums)	111	164	101	2.30	.457
	Assisted vaginal delivery (Forcepts	98	175	103	1.99	.732
	Cesarean Section (CS)	167	33	180	1.97	.961
<b>3</b>	<b>Post natal care</b>					
	Immediate postnatal care for mothers	307	31	38	2.74	.638
	Later post natal care for mothers	88	102	186	1.74	.814

**Source: Field Survey, 2023**

Findings on accessibility to maternal health care services in Benue South Senatorial district. The responses were rated on a 3 point likert scale and the pattern of responses and mean values from the responses showed that under antenatal services women in the study location had more access to health education, monitoring and checking of pregnancies and routine checks as indicated with means of 2.76, 2.56, and 2.16 respectively. While nutritional support was not accessible in health facilities in Benue south as indicated with low means of 1.79 below the average mean of 2.0. This shows that it is not all the services under antenatal care are accessible to women with implications for pregnancy outcome.

In areas of delivery services the findings showed that many facilities in the location render delivery services which were more of normal vaginal deliveries as indicated with a very high mean of 2.68. Although



other forms of deliveries such as assisted vaginal delivery using vaccums was also accessible as indicated with a mean value of 2.30 the assisted vaginal delivery with forceps were not readily accessible. This could be as a result of lack of equipment in some of the health facilities to help assist in carrying out such deliveries when the need arise. The implication of this is that in a situations where the need arise for women to be delivered of their babies using such services there will be challenges, with no such assistant the women may be left to continue with prolonged labour and this can pose complications and potential negative pregnancy outcome. The finding of the study also showed that Ceasearean Section (CS) were not readily accessible as indicated with mean rate of 1.97. This indicates that while ceasearean services are available in the study location it is not all health facilities that render such services. In a situation were women are to be delivered of their babies through CS and a health facility lack the capacity to carry out ceasearean section she will be referred to another health facility that renders such services. This could result to delays in accessibility of service with significant effects.

The study also found that under postnatal care services the immediate post natal care services were more accessible for women in health facilities in the study location as indicated with high means of 2.74 while the later post natal services were less accessible with a mean value of 1.70 which is below the average means of 2.0 from results of the scaling. The responses from participants during the interviews granted corroborated findings of the quantitative data. A 43 years old woman observed that:

The health facilities in the communities are trying in terms of delivery of maternal health care services but there are still challenges because it is not all the maternal health care services that are available. For instance in my community we have a Primary Health Care post that offers antenatal and delivery services but in many cases when a woman is taken there for delivery and she cannot deliver on her own and needs assistance they usually find it difficult and refer to be rushed to the closest general hospital. Because they do not have the equipment it takes to assist them. I am saying this based on what happened to me when I was in labour that was prolonged at the end of the day I was referred to the general hospital in Otukpo. I almost gave up on the way, it was only God that intervened. Immediately I got to the General hospital I was rushed into the theatre for operation (Ceasearean Section). I have heard seen women who were not lucky as I was because clinics in the community could not carry out operation and before they were taken to other places they died.

Corroboating, 45 years old female health personnel noted that;

We are doing our best in rendering maternal healthcare services in the Primary Healthcare centre I work with and many others in the community. But there are services that are not accessible to women because of some challenges. For instance when a woman is brought in for delivery and we see that she can not be helped to deliver normal without use of equipment such as forcecepts, we refer them somewhere else, not because we cannot help her deliver through that way but because we lack what to use and assist.

Another health personnel, a 40 years old male observed that;

Over the years there have been significant improvement in areas of maternal health care services in health facilities in this community and neighbouring ones. Maternal services such as antenatal and delivery services are readily available and accessible to women who reach out for such services it is just that there are some services we cannot render to them because provision is not made for us. For instance when women come for antenatal care it is expected that they are supported with a form of nutrition but we do not do that.

A 45 years old female health personnel, on the other hand observed that;

Although we attend to maternal health care needs of women such as taking them in for deliveries it is not every thing we do. For example we don't carry out Ceaserean Section in this facility because we do not have qualified health personnel that can do that. When a women is in labour and is brought in here and

we notice that it is complicated and the women may need assistance using forceps or a caesarean section we refer such immediately to avoid problems.

A 29 year old woman on the other hand noted that:

I normally go for antenatal and services are easily accessible for me and other women who come for it. We usually receive maternal health education. Many times they educate us on what to do or not do whenever pregnant and this have been really helpful. I lost my first pregnancy before I started attending antenatal as I became pregnant again. That was when I realised the importance of the maternal healthcare education they give at health facilities. Any time we go we are educated on one thing or the other. First timers are usually told what to be doing and mothers who have given birth before are also told. Any pregnant woman can easily access maternal health education so long she registers for antenatal and attends.

### **Discussion of Findings**

The knowledge of women on maternal health care services among women in Benue South senatorial district was assessed and findings revealed that many of the women have knowledge on maternal healthcare services such as antenatal, delivery and postnatal services in their communities. Contrary to finding of this study, a previous study conducted elsewhere by Butawa, Tukur, Idris, Adiri, and Taylor (2010) on knowledge and perceptions of maternal health services in rural communities in Kaduna State, Northern Nigeria observed that knowledge of maternal health services was very low, the study noted that low education and knowledge appeared to limit optimal utilization of maternal health services in the study area. Another study carried out by Onasoga, Osaji, Alade, and Egbuniwe (2014) on awareness and barriers to utilization of maternal health care services in Amassoma community in Bayelsa State revealed that majority of the respondents (94.8%) have heard of maternal health services however only few actually knew the main services available at maternal health facilities. The study further noted that despite high awareness of maternal health services, lack of in-depth knowledge of some services rendered could limit utilization because the utilization of maternal health services could be dependent on knowledge about the existing services.

Similar to findings of this study however, a study carried out by Jimoh, Akande, Tanimola, Salaudeen, Uthman, Durowade and Aremu (2016) on pattern of utilization of ante-natal and delivery services in a semi-urban community of North-Central Nigeria on the other hand, revealed that 89.8% of respondents in the community were aware of antenatal services and majority of respondents, (90.1%) also had knowledge of antenatal and delivery services in the community. The findings contradict the findings from a study carried out by Mohamadirizi, Bahrami and Moradi (2015) and also the findings of Feyisso and Addisu, (2016) where it was found that women have insufficient knowledge on postnatal care.

Knowledge is an important determinant of health including maternal health anywhere in the world. Lack of knowledge can lead to poor utilization services and poor pregnancy outcomes. Knowledge may however not necessarily translate to utilization of services as so many factors could combine and determine utilization.

Access to health care is a multidimensional process involving availability of right type of care for those in need, accessibility of service among other forms of accessibility. Findings on accessibility to maternal health care services in Benue South Senatorial district however revealed that while maternal health care services are available for women in the study location it is not all services that are readily accessible to women. In the areas of antenatal care while women have access to health education, monitoring and checking of pregnancies and routine checks nutritional support was not accessible in health facilities.

In areas of delivery services the findings showed that women had access to normal vaginal deliveries more than assisted vaginal delivery using forceps were not accessible for many women in communities. The study also revealed that Caesarean Section (CS) services were also not readily accessible to women in the study location. The study also found that under postnatal care services the

immediate post natal care services were more accessible for women in health facilities in the study location when compared to the later post natal services.

In line with the findings of this study, a report by the World Health Organization (WHO,2008) on community-directed Interventions for major health problems in Africa observed that health care services are paramount to optimizing population health yet services are not always readily accessible. This is evident that many women go without maternal health care services from which they could benefit for positive health outcome.

### **Conclusion/Recommendations**

Maternal health care services remains vital for positive maternal health outcomes among women of reproductive age. Evidence from this study however revealed utilization of services in communities are not without challenges, several factors were found to influence use of services by women in communities.

Low utilization of maternal health care services have negative implications on pregnancy outcomes, families, communities and society at large. Since the primary aim of maternal healthcare services is to ensure women have healthy babies and to be healthy themselves there is a need for improvement on provision of not only health facilities in communities but maternal health facilities with services that will be readily accessible to women and thus enhance utilization. This thus calls for urgent attention and improvement in provision of maternal health care services because if these challenges are not addressed maternal healthcare service utilization will remain low with poor maternal health outcome in the communities of Benue South, Benue State as a whole and the Nigeria society at large.

Based on findings of the study and of the achievement of optimal maternal health outcomes the following recommendations became necessary:

- I. Nigerian Government, Non-Governmental Organizations (NGOs), health personnel in communities, medical sociologists and religious leaders e.t.c should, therefore, intensify efforts to enlighten women on importance of maternal health care services and the need of engaging in utilization of such services, as well as the health implications of non- utilization of maternal services on mothers and their unborns. This can be achieved through campaigns using mass media and community sources of information such as church, mosques for announcements, organizing talk shows, sponsoring of bill boards that will display benefits and effects of utilization and non-utilization of maternal health care services. This will help add to existing knowledge and clarification in some areas and thus utilization of services by women.
- II. Although the Government have improved in provision of health facilities in communities efforts should be made towards establishment of maternal health facilities closer to places of residence in the communities and efforts should be intensified in areas of provision of all maternal care services needed by women in all available health care facilities. Adequate equipment, drugs and adequate health personnel should also be ensured so as to make all maternal health care services are available and readily accessibility for all women in communities.

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