ACCESS AND UTILISATION OF MATERNAL HEALTH CARE SERVICES IN GBOKO LOCAL GOVERNMENT AREA OF BENUE STATE, NIGERIA.

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Abstract
Pregnant women lack access to affordable and effective ante natal and post natal care services. Even when these services are available, social cultural and economic factors impede them from accessing these facilities, the consequences of this is maternal death resulting from complications from pregnancy and delivery. This study examines women access to ante-natal and post-natal care service in Gboko Local Government area of Benue state. The following objectives were formulated for the study, to determine availability of Ante-natal and postnatal care services in the study area, to determine women's access to antenatal and post natal care services in Gboko Local Government Area of Benue state. The sample size was calculated with resource to Cochran's *(1977*) sample side determination for unknown population. Data was collected from 440 respondents. The study revealed that there are quite a number of health care facilities found in Gboko Local Government Area that offer ante natal and post natal healthcare service, both in the urban and rural areas. The study also revealed that most of the respondents were unable to access maternal health care services because of distance, refusal by husbands and lack of needed funds to pay for hospital bills and transportation. The study further revealed that most of the respondents patronize traditional medicine and birth attendants. The study recommends that state and Local Government should build and maintain more maternal health care centres in the rural areas of the study area to

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ensure more access to maternal health care to women. The study also recommend that a better orientation should be given to men especially those in the rural areas, by the Government and NGOs, through Radio massages, religious gatherings, town meetings and local market square to allow their women attend maternal health care services.

Introduction

Maternal mortality is regarded as the second-most common cause of death among women aged 15 – 44 years worldwide (de Zoysa, 2010) Most deaths occur during labor, delivery, and in the immediate postpartum period due to hemorrhage, infection, unsafe abortion, and eclampsia (Wichaidit et al., 2016). Approximately 536,000 maternal deaths occur annually, of which over 95% occur in Africa and Asia (WHO, 2007). However, Africa has the highest burden of maternal mortality in the world and sub-Saharan Africa is largely responsible for the dismal maternal death figure, contributing approximately 98% of the maternal deaths for the region. The lifetime risk of maternal death in sub-Saharan Africa is 1 in 22 mothers compared to 1 in 62 for Oceania, 1 in 120 for Asia, and 1 in 29 for Latin America and the Caribbean (WHO, 2007).

Nigeria is a leading contributor to the maternal death figure in sub-Saharan Africa. With an estimated 59,000 maternal deaths, Nigeria with approximately two percent of the world's population contributes almost 10% of the world's maternal deaths (FMOH, 2005). Maternal health care access is related to utilization of maternal healthcare services, timely decision to seek care, physical accessibility to health facilities, and receiving adequate healthcare (WHO, 2003). Maternal healthcare services are designed to ensure that pregnant women have access to maternal health care before and after birth, by identifying complications associated with the pregnancy or diseases that might adversely affect them. Through antenatal visits, women benefit from various interventions, including counselling about healthy lifestyles, the provision of iron/folic acid supplements, and tetanus vaccinations reported to protect new-borns against neonatal death (Titaley *et al.,* 2010). During the last 15 years, access to skilled care during delivery and antenatal care coverage, have not significantly improved. Estimates by NPC (2014), show that the overall ante-natal care (ANC)

coverage in Nigeria stood at 61% which is an abysmal three percentage increase from 58% a decade ago; 36% of deliveries were delivered in a health facility while only 14% of newborns received postnatal care within two months of delivery. The ANC coverage of 61% falls short of the recommended 90% of ANC coverage required to reduce most deaths among mothers and their newborn (Tukur & Oche, 2015).

A study by Uya (2018) on maternal health facilities and services in Benue State, shows that, pregnant women in labour have to trek long distances in search of reproductive healthcare facilities. The study also shows that there are inadequate supplies of qualified health workers in the State especially in the rural areas. Christian Ai, (2015), under its CAID partners' intervention program across 8 Local Government Areas in Benue State, shows that utilisation figures for most of the services (ante-natal, post-natal, deliveries, outpatient, under 5 and immunization services) increased over the period of 4 years. However, it was discovered that family planning service, delivery services were far below expectation. This study therefore examines access and utilization of maternal healthcare services in Gboko local government area of Benue State.

Consequent upon the statement of the problem, the following objectives of the study are stated;

i. To determine women's access and availability to antenatal and post-natal care services in Gboko Local Government Area of Benue state.
ii. To examine the impact of antenatal and postnatal care on maternal and infant mortality in Gboko Local Government Area.

RESEARCH METHODOLOGY

Research Design

A cross-sectional design was used for this study because of its capability to evaluate women's accessibility to antenatal and postnatal care and their overall maternal conditions in Gboko Local Government Area.

Study Area

The study area is Gboko Local Government area of Benue State. The local government was created in 1976 and is one of the largest and most populous local Government Area in Benue State. It is made up of five districts and

seventeen council wards, with Majority of the population residing in the rural areas, with poor road network and sparsely located healthcare centres. The health system in the local government area is very weak. There is low health staff ratio to patient, doctor to population, nurse to population and midwives to women in reproductive age. There is a General Hospital and over 100 hospitals and clinics that are spread across its 5 major clans of Mbatiav, Mbayion, Mbatierev, Ipav and Yandev.

Population of the Study

The population for this study was made up of pregnant women and women of child bearing age, 15-49years. The decision to involve both genders in the study was informed by the fact that firstly, women are the central focus for antenatal and postnatal care; and secondly, men are also involved in the decision making process that may determine women's accessibility and utilisation of these services. Health care providers are the main character that pregnant women meet for maternal health care therefore they will be in position to know how accessible and available these services are in the study area.

Sample Size Determination Since the total population of pregnant women and those with children and married men in Gboko is not known, Cochran's (1977) sample size determination formula for unknown population was used:

The assumption is that the maximum variability is equal to 50% (p = 0.5) and taking 95% confidence level with ±5% precision, the calculation for the required sample size will be as follows:

So, $n_o = \frac{1.96^2 \; 0.5 \; (0.5)}{(0.05)^2}$

$= 384.16$

$n_o = 384$ *(in approximation)*

14.5% was added to make room for attrition cases. This brings the sample size to 439.68 which approximates to 440 persons. This population is sub-divided into seven strata's viz; Pregnant women, 170, women with children, 130, husband 120, Doctors 5, nurses 5, traditional birth attendants 5, making a total of 440 respondents.

Sampling Technique/Procedure

This study employed both cluster and purposive sampling techniques in selecting respondents for the study in order to get a sample size that is representative. In the first stage, Gboko Local Government Area was clustered into five major districts; Mbayion, Mbatierev, Mbatiav, Yandev and Ipav. Each of the clusters has a public converging centre or place for people of the districts. Then the Purposive sampling was used to select the targeted population for the study. In each of the houses visited, the researcher sought to know whether there are either pregnant women or those with infants in the compound at the time of visit. After the desired information was gotten and consent properly sought, these women with their husbands were randomly selected as part of the respondents.

To this effect, eighty-four (84) respondents comprising of twenty-four (24) men and sixty (60) women were selected in each cluster. This is to ensure fair representation of respondents in each cluster. On the whole a sample size of respondents comprising of 120 men and 300 women representing 28.5% and 71.5% for men and women respectively, were drawn across the five major districts to participate in the study. For the qualitative study, 20 (twenty) participant were randomly selected, these include, 5 nurses, 5 doctors and 5 traditional birth attendance.

Method of Data Collection

The questionnaire and in-depth interview were used as methods of data collection. A self-constructed semi-structured questionnaire was administered to the respondents. The questionnaire was divided into five sections, A – C. Section A was the socio-demographic attributes of the respondents; sections B-C contained 10 questions regarding the research objectives. The questioners were administered with the help of two research assistance who were selected by direct contact and were person's that understood both Tiv and English language. The researcher administered the questionnaire through face-face method.

IDI was administered to women who could not read nor write, traditional birth attendants and some healthcare workers. In each of the above mentioned, five (5) persons were selected for interview. The researcher made a preliminary trip to the study areas in order to make

contact with informants and familiarise with them. From these visits, dates and venues for interviews were decided. Where an informant became unavoidably absent at the scheduled date or venue, the visit was rescheduled for a later date. To collect data, an interview guide containing questionnaire was used. The interview sessions were conducted at the respondent place of residence; this was to allow interviewees greater freedom for discussion and to express their views on topical questions in the study. Data gathering gadgets such as phone recorders and writing materials were used.

Techniques of Data Analysis

The data collected through questionnaire were first arranged and coded, then entered into Microsoft excel (21) and analysed through the Statistical Package for Social Sciences (SPSS, v.21). Descriptive statistics were used and percentages and frequencies distribution were used as tools of analysis. The decision rule were based on the higher or lower the value of percentage for a particular response as this showed the magnitude of acceptance or rejection of views regarding the question. Thus, conclusions were drawn from analysis based on the weight of particular response as determined by the percentage. Thus, all recorded discussions were transcribed and coded into themes in accordance with the research objectives. The data were further categorized and analysed using narrative discussion method. The results of the quantitative and qualitative data were then triangulated to see areas of convergence and divergence.

DATA PRESENTATION, ANALYSIS AND DISCUSION OF FINDINGS

Socio-Demographic Attributes of Respondents

This subsection examines the socio-demographic attributes of respondents.

Table 1: Socio-Demographic Attributes of Respondents

Variables	Frequency	Percentage
Marital Status		
Single	84	21
Married	300	75
Divorce	16	04
Total	**400**	**100**
Sex		
Male	110	27
Female	290	73
Total	**400**	**100**
Age		
15-20	12	03
21-30	224	56
31-40	128	32
41-45	36	09
Total	**400**	**100**
Occupation		
Farmer	64	16
Business person	96	24
Civil Servant	84	21
Others	156	39
Total	**400**	**100**
Educational Attainment		
SSCE	108	27
Diploma	104	26
HND/Degree	48	12
Others	140	35
Total	**400**	**100**

Source: Field Survey, 2017

Table 1 reveals that 75% of the population were married, 21% were single while 4% were divorced. This distribution takes into account that it is the married or pregnant women mostly that attend maternal health care services. The data further reveals that 73% of the respondents were women while 27% were men. This distribution reflects the conscious efforts and decision of the study to ensure that the needed population involved ante-natal and post-natal services are well captured. About 3% of the respondents were between 15-20 years, 56% were between 21-30, years, 32% were 31-40 years, while 9% of the respondents were 41-45 years. 16% were farmers, 39%, were engaged in other forms of occupations, 24% were

engaged in business, and 21% of the respondents were civil servants. 27% of the respondents were holders of SSCE, 26% while 12% were either HND or degree holders.

1. Availability of Health Care Facilities in Gboko

The study revealed that there are over 100 maternal health care providers spread across Gboko Local Government area of Benue state. Majority of the maternal health care units are established by the local government and Christian missionary churches in the rural areas. However, interviewees revealed that there are no specialized hospitals in the localities that offer ante-natal and post-natal health care systems. Due to non-availability of such specialised facilities, they often resort to any health care outfit for both ante-natal and post-natal cares. A pregnant woman interviewed on the 10/8/2017 at Anyira Mbatierev remarked;

> *There is a Federal Medical Centre and NKST Health Clinic in Ikpa in Mbateriev district that provides ante-natal and post-natal cares. But due to the long distances from those health care providers to my locality I make use of the dispensaries that offer similar services, though most of the outlets are not well equipped to have the status of a maternity centre.*
> *(Female, 25yrs, SSCE, Mbatierev)*

Table 2 b Types of Maternal Health Care Services Available in Rural areas in Gboko LGA

Services		Frequency	Percentage (%)
Ante-natal care only		40	26.7
Both ANC and PNC		30	20.0
Post Natal care only		00	0.0
TBA		80	53.3
Total		150	100.0
Mean	0.76		
Median	1.00		
Std. Deviation	0.711		

Source: Field survey

Table 2b revealed that, 53.3% (80), respondents in the rural area access traditional birth attendance for their maternal health care services 26%, (40) of the respondent access both antenatal and post-natal health care service, 20% (30) access only Antenatal care services while none of the respondent in the rural area access only Post-natal health care series. This can be attributed to the distance between respondents and health care facilities; also this is also attributed to the non-support from the husband to their wife with regards to ante and postnatal services. Their responses generated an average mean value of 0.76 and a median value of 1.00, the study show that the distance between the mean value and the set of observation/ data is 0.711

Responses		Frequency	Percentage
Visit to centre		40	26.7
Word of mouth		80	53.3
Health workers from centre		30	20.0
Total		150	100.0
Mean	.93		
Median	1.00		
Std. Deviation	.682		

Source: Field Survey, 2017

Table 3 reveal that majority of the respondents in the rural areas of Gboko Local government area representing 53.3% stated that they got their information about maternal health care through word of mouth, 26.7% of the respondents stated that they were told about the importance of the maternal health care services from visit to the health care centres, 20% of the respondents stated that they got information from the health workers at the various health care centres. Their responses generated an average mean value of 0.93 and a median value of 1.00, the study show that the distance between the mean value and the set of observation/ data is 0.682 One of the

interviewees, a housewife said;

> Although, I have been hearing about maternal health care services, I never thought it was very important until health care workers from the NKST health centre in Ikpa came to our house and explained to us why pregnant women must attend ante-natal care. Since then, I started attending the clinic during pregnancy to access the ante-natal health care services.
>
> (A pregnant woman, 28yrs, FSLC, Mbatierev)

2 **Accessibility to maternal Health Care Service.**

This Subsection examines the accessibility of maternal health care centres to the households in the various localities across the 17 council wards of the study area.

Table 4: Distances to Health Care Centres in Gboko LGA Localities Distance (km)

Cluster					Freq.	(%)
	Mbayion	Mbaterev	Mbatiav	Yandev	Ipav		
Near (< 1km)	70	17	33	58	62	240	60
Far (> 1km)	09	38	26	21	18	112	28
Very Far (5 km)	03	07	07	07	04	28	07
Not estimated (> 5 km)	02	06	05	03	04	20	05
Total						**400**	**100**

Source: Field Survey, 2017

Table 4 revealed that 60% (240) of the respondent in the urban areas indicated that the health care centres are near their households, 28%, (112) of the respondents indicated that the health centres are far from their households. For those who reside in the rural areas 7% (28) or of the respondents stated that the health care centres are very far from their households with an estimate of about 5km away from their homes and 5% (20) of the respondents affirmed that the distance of the health care centres

to their household is above 5km away. There were divergent views from respondents on the issue of distance to maternal healthcare facilities. A nurse at Baki hospital, Gboko-north, said;

> *There are many private hospitals and primary health care facilities that offer maternal health services. Although, most of these medical outfits provide only ante-natal care services, thus, pregnant women within the environment have adequate opportunities of accessing these services. As a result of this availability and the proximity of these medical facilities to the people, the attendance at the ante-natal services is very high.*
> *(Nurse, 32yrs, Nursing, Gboko)*

But another respondent interviewed in Anyira (Mbaterev) shared different experiences with those of the earlier interviews conducted.

> *In the community we lived, there is no hospital that is equipped to administer ante-natal services. Therefore, it is always difficult for us to access these services, because you have to go to Ikpa Mbaterev which is very far away to get these services. So my wife used to deliver at home with the help of a traditional birth attendant*
> *(Female, 25yrs, primary Education, Mbatierev)*

Table 5 Types of Maternal Care Services Receive During Antenatal/Postnatal Services

	Frequency	Percentage
Collection of (mother's) medical history	132	33.0
Checking (mother's) blood pressure	64	16.0
(Mother's) height and weight	88	22.0
Pelvic examined	116	29.0
Total	400	100.0
Mean 1.47		
Std. Deviation 1.222		

Sources: Author's Computation using SPSS 23.

Table 5 shows that 33% of the respondents (Mother's) medical history where collected at the healthcare facility to determine if they had any past medical problem that might engender the child, 29% of the respondents (mothers) had their pelvic examined in case of any complications, similarly, 22% of the respondents had their weight and height measured, while, only 16% of the respondent's blood pressure were checked. The responses have a mean value of 1.47 and a standard deviation of 1.22. A mid wife interviewed on the on the type of services they render to women during antenatal visit has this to say:

When the pregnant women come, we do Physical examinations example collection of (mother's) medical history, checking blood pressure, height and weight pelvic exam Doppler foetal heart rate monitoring, blood and urine tests, Ultrasound among others.
(Female, Nurse, Gboko South/ 16/5/2019

3 Impact of Maternal Health Care Service

Table 6. Efficiency of maternal healthcare

Efficient	Frequency	Percentage
Not Efficient	52	13
Efficient	212	53
Moderately Efficient	92	23
Highly Efficient	44	11
Total	**400**	**100**

Source: Field Survey, 2017

Table 6 shows that 13% of the respondents averred that the health care facilities in their localities were not efficient, 53% were of the opinion that they were efficient, 23% of the respondents however, opined that the health care facilities were moderately efficient, while, 11% of the respondent indicated that the services rendered were highly efficient. In an interview with an attendee at Gboko north-west, the interviewee responded was as follows;

The services rendered by this health people could at best be described as moderate. This is due to the fact that some of the essential services that are required are not there. Like if one treatment requires x-rays, they will refer you to Gboko or even Makurdi to go and do it. Even pregnant women encounter difficulty during the management of their pregnancies in cases that could have been easily handled if the services were efficient.
(female, 39ys, HND ,Gboko)

Table 7 Respondent views on whether they have experienced any miscarriage/ lost a baby after birth while attending postnatal health care services.

	Frequency	Percentage
No	107	71.3
Yes	43	28.7
Total	150	100.0
Mean .33		
Median .00		
Std. Deviation .473		

Source: Field Survey, 2017

Table 6 b shows that 71.3% of the respondents said they had not experienced any miscarriage or loss of baby after birth, while attending ante-natal or postnatal services, 28.7% of the respondents stated that they had lost their pregnancy and babies even when attending these services. Their responses have a mean value of 0.33 and a standard deviation value of 0.473.
This shows that majority of the respondents, both in the urban and the rural areas of Gboko expressed satisfaction with antenatal and post-natal care services in the study area. This shows that maternal services have helped in reducing rate of maternal mortality cases recorded in the study area.

Table 8: Challenges to accessing Maternal Health Care Systems

Hindrance	Frequency	Percentage
Lack of Money	272	68
Distance	48	12
Refusal by Husband	40	10
Others	40	10
Total	**400**	**100**

Source: Field Survey, 2017

Table 7 revealed that 68% of respondents identified lack of finance as their major challenge of attending Ante natal and post-natal health care services, 12% identify distance to health care centres, 10% identify refusal by husband to give them permission or money to attend.

This finding was collaborated with interview conducted with the women in the study area, a housewife interviewed on the 9/5/2019 at Ambighir, Igyorov said:

> Whenever I got pregnant and asked for money to attend ante-natal, my husband will always say he did not have money. So because of that I used to deliver at home with the help of a Traditional Birth attendant.
> (Female, house wife, Ambighir FSLC, 9/5/2019)

Discussion of Findings

The aim of the research was to examine women's access and availability to antenatal and Post-natal care services in Gboko Local government area of Benue state. Findings revealed that there are maternal healthcare services in the study area. Between 1990 and 2015, appreciable gains were recorded in the global maternal-child-health care with 43.9% and 48% reduction in Maternal Mortality Ratio (MMR) and under-five mortality rate (U5MR), respectively (WHO, 2017). Despite these impressive achievements, the challenge of maternal, neonatal and other childhood mortalities remains considerably high in several developing countries with wide-ranging disparities between and within different population groups (Lamichhane, Zhao & Adewuyi 2017).

The study also revealed that most of the women indicated that they have not lost a baby before or after delivery, this shows that maternal health care services have helped in mitigating cases of still birth, miscarriage and death arising from postpartum haemorrhage. This finding is in Line with Bergsjo &Villars (2013), who found out that the introduction of ante-natal and post-natal services has help in the reduction of maternal mortal. The study identified obstacles experienced by the respondents in accessing ante natal healthcare to include affordability, restriction by male spouse and long distances between the location of the health centres and their homes. This is in agreement with several studies that investigated the factors associated with the utilisation of child health services (Dunlop, *et al*, 2000; Sibanda, *et al*, 2001; Kaufmann, 2002; Chakraborty, *et al*, 2002).

Summary and Conclusion.

The study revealed that there are quite a good number of maternal health care facilities found in Gboko Local Government that offer maternal service such as Ante-natal, and Post-natal, both in the urban and rural areas. Majority of the respondents have access to maternal health care services in Gboko local government area of Benue State; however, some because of distance, refusal by husbands and lack of money for transport and medical bills could not access these services. Furthermore, it was found out from the study that the introduction of maternal health care services in the area has reduced the number of maternal mortality cases recorded in the area,

The study revealed that respondent in the rural area still patronise Traditional medicine and birth attendance for their maternal health care.Ante natal and post natal healthcare services are an important precursor of a nation's healthcare system that guarantees the survival of pregnant women and their newborn babies. It is necessary that all efforts are made by governments all over the world to reduce impediments to maternal healthcare, provide accessible and affordable ante natal and post natal healthcare services to pregnant women and their children.

Recommendations

Based on the finding of this study, the following recommendations are made:

i. State and Local government should build and maintain more

maternity centres in the rural areas to ensure availability of maternal health care services to women.

ii. Free maternal health care services from all tiers of government especially in the rural area to assist women who cannot afford medical bill to access maternal services.

iii. A better orientation should be given to men especially those in the rural areas, by the Government and NGOs, through Radio massages, religious gathering, Town meetings and local market square to allow their women attend maternal health care services.

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