

FACTORS AFFECTING UTILIZATION OF MATERNAL HEALTHCARE SERVICES IN BAUCHI STATE, NIGERIA.

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ABSTRACT

This study determined factors affecting the utilization of maternal health care services among women of reproductive age in Bauchi State, Nigeria. Simple random sampling technique was used to select three sites within the metropolis using 348 respondents. Anderson health behavioural model was utilised as theoretical framework. Descriptive and inferential statistics were used to analyse the data generated and level of significance at 0.05. Findings revealed that majority of respondents were aware of the services rendered on maternal health care, also majority of respondents (95.7%) attend ANC. However, only few ever used family planning or delivered at the health facility. The findings also showed that majority of the respondents were of the opinion that affordability of antenatal services, religious acceptance and husband's acceptance of the services rendered as the major factors

Introduction:

Nigeria has recorded a high rate of maternal mortality and morbidity in recent years. According to the United Nations estimate, 529 000 women die each year as a result of complications from pregnancy and childbirth [AbouZahr&Wardlaw, 2004]. Approximately 59,000 of maternal deaths take place annually as a result of pregnancy, delivery and post delivery complications [WHO, UNICEF, UNFPA, 2007]. The 2018 NDHS reported that the pregnancy-related maternal mortality ratio (PRMR) is 556 deaths per 100,000 live births with marked variation between

influencing its utilization. Other factors included availability of the services, accessibility, lack of knowledge about some of the existing services, cultural acceptance, attitude of health workers and language barrier. A significant association exist between knowledge/awareness of respondents under study and their utilization of ANC services, delivery services and women utilization of delivery services with $p<0.05$ but there is no significant association between awareness and utilization of FP services at $p<0.05$.

Keywords: *maternal health, healthcare, services, Bauchi state, Nigeria*

Geo-political zones. There was an increase in pregnancy-related mortality from 545 deaths per 100,000 live births in the 2008 to 576 deaths per 100,000 live births in the 2013 and then a little reduction from 576 deaths per 100,000 live births in the 2013 to 556 deaths per 100,000 live births in the 2018 [NDHS, 2008, 2013 and 2018; NPC, 2008]. The trend of maternal mortality in developing countries has been increasing and various international organizations have reported that an important factor related to maternal and infant mortality has been linked to lack of antenatal care [Villar, et al. 2001]. Antenatal care is the care given to an expectant mother from the time conception is confirmed until the beginning of labor [Viccars, 2003]. Antenatal care is expected to have impact on the development of the fetus as well as mother and this can only be achieved through early booking and regular attendance of antenatal clinic. Adequate utilization of antenatal health care services is associated with improved maternal and neonatal health outcomes. According to Federal Ministry of Health [2005], some of the dangers of pregnancy and childbirth can be avoided if a pregnant woman attends antenatal regularly. In order to decrease these mortality rates, regular antenatal care has to be instituted with improved service delivery and these can only be achieved through identifying factors causing poor utilization of antenatal care services. According to WHO [2001] only 60% of women receive antenatal care in Nigeria, and not all of them attend the antenatal clinic regularly [Villar, et al., 2001]. To this end, the proportion of women receiving ANC

from a skilled provider in Nigeria increased steadily since 2008, from 58% to 67%. Between 2013 and 2018, there was a 6 percentage point increase in the proportion of women receiving ANC from a skilled provider. Over the same period, there was a 10 percentage point reduction in the proportion of mothers with no antenatal care [NDHS, 2008, 2013 and 2018].

In Nigeria, women have less access to health care services and use. Great discrepancies occur between the rich and the poor women, between the urban and rural women, between the young and the old women, and between the literate and non-literate women in accessing and utilising maternal health services in both developed and the developing countries (Adewoye, et al., 2013). This in Bauchi state may be attributed to high poverty and low literacy rate which necessitates most people to depend on government facilities especially in the provision of health care services. Accessing vulnerable groups who needed the preventive and curative health services is one of the challenges of the public health in Bauchi state. Reducing maternal mortality requires coordinated, long-term efforts at the household and community levels as well as at national level where legislation and policy formulation in the health sector is being made.

Community Information Empowerment and Transparency (CIET) survey in 2009, 2011 and 2013 in Bauchi state found that women had extremely poor knowledge of maternal health care services. Socio-cultural factors also influenced women's knowledge and access to maternal health care services and 21% of women in the state delivered their babies at home. Of all the studies carried out relating to access and utilisation of maternal health care services in Bauchi State, few focused on financial capability as a factor influencing use of maternal health care services.

METHODOLOGY

A community based cross-sectional study design that employs quantitative data collection method was adopted to assess factors affecting utilization of maternal health care services in Bauchi state. Simple random sampling technique was used to select three sites within the metropolis for the study.

The sites selected were (Birshi, Dan'lya, and Dawaki wards). Eligible participants were female of reproductive age (14-49 years) who met the study criteria and were willing to participate. A total of 348 women of child bearing age (14-49) participated in the study. The Data collected from the respondents was coded and entered into the Statistical Package for Social Sciences (SPSS) Version 23. The Data was presented using both descriptive and inferential statistics.

RESULTS AND DISCUSSIONS

Table 1. Socio-demographic characteristics of respondents (n=348)

Variable	Frequency	Percentage
Age		
< 18	54	15.5
18-35	193	55.5
>35	101	29.0
Religion		
Muslims	280	80.5
Christians	68	19.5
Ethnicity		
Hausa	102	29.3
Fulani	98	28.2
Jarawa	57	16.4
Igbo	18	5.2
Yoruba	21	6.0
Others	52	14.9
Education		
None	11	3.2
Islamic	25	7.2
Primary	36	10.3
Secondary	209	60.1
Tertiary	67	19.3
Occupation		

None	13	3.7
Petty trading	170	48.9
Unskilled labour	22	6.3
Skilled labour	103	29.6
Others	40	11.5
Average monthly income		
No Income		
Less than 10000	31	8.9
N10,000-20,000	97	27.9
N21,000-30,000	114	32.8
Above N30,000	44	12.6
	62	17.8
Number of children		
None		
1-2		
3-4	32	9.2
5-6	53	15.2
Above 6	98	28.2
	111	31.9
	54	15.5

Table 1 shows that majority of the respondents 193 (55.5%) were between 18-35 years, while 101 (29%) respondents were above 35 years and 54 respondents (15.5%) were below 18 years. Majority of the respondents 301 (86.5%) were married. 280 (80.5%) were Muslims and 68 (19.5%) were Christians. 102 (29.3%) were Hausa, 98 (28.2%) were Fulani, 57 (16.4%) were Jarawa, 18(5.2%) were Igbo, 21 (6%) were Yoruba while 52 (14.9%) were other tribes. Most of the respondents 209 (60.1%) had secondary education, 67(19.3%) had tertiary education, 36 (10.3%) had Primary Education, 25(7.2%) had Islamic education while 11 (3.2%) had No education.

Most of the respondents 170(48.9%) had personal businesses (petty trading), 103 (29.6%) had skilled labour (tailors, hair dressing etc), 22(6.3%) had unskilled labour, (washing clothes, plates etc), 13(3.7%) had No occupation while 40 (11.5%) are involved in other occupations. Average monthly income for most of the respondents 114(32.8%) is between N10,000-N20,000, 97 (27.9%) earns less than N10,000, 62 (17.8%) earns above N30,000, 44(12.6%) earns between N21,000-N30,000 while 31(8.9%) had no fixed monthly income. 111 (31.9%) had 5-6 children, 98(28.2%) had 3-4 children, 53 (15.2%) had 1-2 children, 54 (15.5%) had above 6 children while 32 (9.2%) had no children.

Table 2:Awareness on Maternal Health Care Services (n=348)

Variable	Response	Frequency	Percentage
ANC	Yes	339	97.4
	No	9	2.6
Delivery	Yes	333	95.7
	No	15	4.3
Family Planning	Yes	320	92.0
	No	28	8.0

Table 2 shows that almost all of the respondents 339 (97.4%) knew the services rendered at antenatal clinic, while 9(2.6%) does not know the services. Majority of the respondents 333 (95.7%) knew services rendered during delivery while 15(4.3%) does not and 320(92.0%) knew about family planning while 28(8.0%) answered No to this question.

Table 3: Utilization of Maternal Health Care Services among those who had delivery during the last 5 years (n=232).

Variable	Response	Frequency	Percentage
Ever used FP	Yes	59	25.4
	No	173	74.6

Currently using FP	Yes	56	24.1
	No	176	75.9
Attends ANC	Yes	222	95.7
	No	10	4.3
Deliver at the HF	Yes	84	36.2
	No	148	63.8

Table 3 shows that among the respondents who had delivery during the last 5 years, majority 173 (74.6%) never used any method of family planning while 59(25.4) have ever used any of the family planning methods. Most of the respondents 176 (75.9) are currently not using any family planning method to prevent pregnancy while 56 (24.1%) are currently using family planning methods. Among those who had delivery during the last 5 years, almost all the respondents 222(95.7%) attended ANC during their last pregnancies while only 10(4.3%) never attended ANC. 84 (36.2%) of the respondents delivered at the Health facility while 148 (63.8%) did not deliver at the Health facility.

Table 4: Factors Influencing the Utilization of Maternal Health Care Services (n=348)

Variable	Response	Frequency	Percentage
Attitude of the health care provider	Yes	250	71.8
Availability of facilities/equipment	No	98	28.2
Lack of knowledge about the existing services in MHCS	Yes	300	86.2
Language barrier	No	48	13.8
Accessibility to maternal health care services	Yes	267	76.7
Affordability of maternal health care services	No	81	23.3
Cultural acceptance			

Religious acceptance of the services rendered	Yes	211	60.6
	No	137	39.4
Husband's acceptance of the services rendered	Yes	273	78.4
	No	75	21.6
	Yes	320	92.0
	No	28	8.0
	Yes	248	71.3
	No	100	28.7
	Yes	292	83.9
	No	56	16.1
	Yes	302	86.8
	No	46	13.2

Table 4 showed that majority 320(92.0%) of the respondents identified Affordability of maternal health care services as the major factor that influences their utilization. 302(86.8%) mentioned Husbands acceptance of the services rendered, 300(86.2%) mentioned Availability of facilities/equipments, 292(83.9%) mentioned Religious acceptance of the services rendered as the major factor that influences their utilization, 273 (78.4%) mentioned Accessibility to the maternal health care services, 267(76.7%) mentioned Lack of Knowledge about the existing services in Maternal Health Care Services, 248(71.3%) mentioned cultural

acceptance, 250(71.8%) mentioned Attitude of the health care provider, while language barrier 211(60.6%) was identified as the least factors influencing the utilization of maternal health care services.

Table 5: Associations between Awareness and utilization of Maternal Health Care Services

Variable	Pearson's Chi square, X ²	df	p-value (p<0.05)	Remarks
Awareness on ANC	0.230	2	0.000	Significant association
Awareness on FP	0.008	2	0.874	No Significant association
Awareness on Delivery services	0.300	2	0.000	Significant association

Table 5 showed that there is significant association between Awareness on Ante Natal Care services and women utilization of the Ante Natal Care services and also there is a significant association between Awareness on delivery services and women utilization of delivery services with $p < 0.05$ but there is no significant association between Awareness on Family Planning services and women utilization of Family Planning services with $p < 0.05$.

DISCUSSION

The socio-demographic data shows that majority of the respondents were between the ages of 18-35. This result was expected because of the high fertility rate and the reproductive age of women in Nigeria. In (2013) Nigeria demographic surveys, Bauchi state and reported the largest number of pregnant women within this age range. This agreed with the findings of Adeniyi&Erhabor(2015) in a research on antenatal care services in Nigeria where the study found 51% of 13410 pregnant women who claimed to have used the ANC services at least once within five year

preceding the 2013 Nigeria Demographic and Household Survey (NDHS), were between age of 30-40. This also conforms to the findings of Yeoh, et al., (2016). Majority of the women (90.8%) have 3 children and above. This is the same with the study of Nwagha&Anyaehe (2008) in Enugu, Nigeria where majority of the respondents (62.07%) were multiparous. In the same vain Onasoga, et al., (2012) in Ife, Nigeria that majority of the respondents (72.5%) was multiparous. It is also in line with the study of Emelumadu, et al., (2014) in Anambara found that majority of respondents (64.6%) were multiparous.

Similarly, in a study conducted in Indonesia majority of the respondents (66%) were multiparous. It is also in the same line with the study of Grace, Oyin, et al., (2012) in Nigeria that majority of the respondents (87%) were multiparous. It could also be as a result of early marriage in the state that led women to have more children. Most of the respondents were Muslims, married and had some personal businesses (petty trading) and majority of them had at least primary school education and most of them had secondary education. Majority of the respondents knew the maternal health care services available in the community, which are for the benefits to women of reproductive age.

The findings revealed that majority of the respondents (95.7%) attend ANC but only little use family planning or deliver at the health facility. This corroborates with the statement of WHO (2001), that 60% of women receive antenatal care in Nigeria, and not all of them attend the antenatal clinic regularly and according to the WHO recommendation, every pregnant woman should receive at least four ANC visits during pregnancy. The results also showed that majority of the respondents identified Affordability of antenatal services, Lack of knowledge about the existing services in ANC and Husband's acceptance of the services rendered as the major factors influencing its utilization.

The findings also revealed that there was a significant association between knowledge of respondents under study and their attendance/utilization, with $p < 0.05$ there is significant association between Awareness of the respondents under study and their utilization of maternal health care

services like ANC and Delivery services but there is no association between awareness on family planning and their utilization with $P>0.05$. This means that awareness is not a determining factor in the utilization of family planning services but it is indeed a determining factor in the utilization of ANC and delivery services.

Mother's education is known to have a positive impact on utilization of maternal care services according to the work of Becker et al. (2003) in their research, mother's education was the most consistent and important determinant of the use of child and maternal health services and awareness is related to education. Several other studies also found a strong positive impact of mother's education on the utilization of health care services (Fosu, 1994; Costello et al., 1996). It is argued that educated women are more aware of health problems, know more about the availability of health care services, and utilize the information more effectively than non educated women. Bergsjö (1997) also affirms strongly that educated women are more likely to report four or more visits to ANC. This is not surprising since knowledge is synonymous to education.

In summary, this study was carried out to determine the factors influencing the utilization of maternal health care services among pregnant women in Bauchi State Nigeria. The findings revealed that majority of the respondents knew the services rendered at ANC, family planning and delivery clinics. The findings also revealed that majority of the respondents 58 (56.9 %) attend ANC but only few use family planning or deliver at the facility.

The study also showed that majority of the respondents are of the opinion that affordability of antenatal services, lack of knowledge about the existing services and Husband's acceptance of the services rendered as the major factors influencing its utilization. The findings also revealed that there was significant association between awareness of the respondents under study and their utilization of maternal health care services with $p<0.05$. Among safe motherhood advocates, antenatal care has been downplayed in recent years as an intervention for reducing maternal mortality. This has arisen in large part as a result of improved

understanding of the casual pathways that lead to maternal deaths, notably absence of effective management for obstetric complications. There is ample evidence that cares during the antenatal period represents and opportunity to deliver interventions that will improve maternal health, prenatal health and more than likely perinatal survival.

Conclusion

In Bauchi state, even though maternal healthcare centers are relatively and uniformly distributed throughout the state, some women within the metropolis still under-utilise maternal health services especially delivery services, and family planning services. Although there is no single solution to this problem in the State, some strategies that could result in enhanced utilisation of maternal health services can be outlined. The study showed that affordability, religion and education were important determinants of utilisation of maternal health services in the state and this creates disparities in access and utilisation of maternal health services. Quality of maternal health services, finance and male dominance were key factors in the women's access and utilisation of maternal health services. Lack of women empowerment and poor decision making power of the women were significantly responsible for poor utilisation of maternal health services. These modifying factors as described by the Anderson health behavioural model were mostly responsible for non-utilisation of maternal health services by the women. The study revealed that economic status and level of education and male dominance are the factors affecting utilisation of maternal health care services especially delivery and family planning services. The study also shows that antenatal care is the most utilised service among all the services of maternal health care.

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