

Full Length Research Paper

## Awareness and barriers to utilization of maternal health care services among reproductive women in Amassoma community, Bayelsa State

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Nigeria is on the verge of not meeting the fifth millennium development goals of improving maternal health due to a high maternal mortality rate which is estimated to be 630 women per 100,000 live births and lack of utilization of maternal health care services is a major contributing factor. Hence, the study was designed to explore awareness and barriers to the utilization of maternal health care services among reproductive women (15 to 45 years) in Amassoma community, Bayelsa State, Nigeria. The study population consists of women of reproductive age (15 to 45 years). A purposive sampling technique was used to select the sample size of 192. Data were collected using a questionnaire and descriptive and inferential statistics were used to analyze the data generated. The study revealed that the majority of the respondents [182 (94.8%)] have heard of maternal health services but only few actually knew the main services rendered at maternal health care services. Regression coefficient showed significant association between educational status and utilization of maternal health care services (MHCS) among the respondents ( $\beta = 0.47, p = 0.000$ ); parity and utilization of MHCS ( $\beta = -0.14, p = 0.016$ ); and age and utilization of MHCS ( $\beta = -0.19, p = 0.001$ ). The major variables associated with barriers to utilization of maternal health services among respondents were poor knowledge of the existing services, previous bad obstetric history; attitude of the health care provider, availability, accessibility and husband's acceptance of the maternal healthcare services. It is recommended that Government should subsidize maternal health services in order to make it affordable, acceptable and available to women. Also nurses should encourage women of reproductive age to utilize maternal health by providing a welcoming and supportive attitude at all contacts.

**Key words:** Awareness, barrier, utilization, maternal health care services, reproductive age, women.

### INTRODUCTION

High maternal morbidity and mortality rate is a huge public health problem in the developing countries of the world, including Nigeria. The maternal mortality rate in Nigeria is 630 deaths per thousand live births and Nigeria

ranks 10th position in the world record of health indicators of maternal mortality which is far behind our neighboring developing country, Ghana and Benin with 350 deaths per 1000 live birth each; with marked variation

in maternal mortality ratio between the six geo-political zones and between urban and rural areas (CIA World Fact book, 2012).

With an estimated 52,000 annual deaths, Nigeria accounts for about 10% of all maternal deaths, globally, and has the second highest mortality rate in the world, after India. It is also reported that, for every woman that dies from pregnancy-related causes, 20 to 30 more will develop short- and long-term damage to their reproductive organs resulting in disabilities such as obstetric fistula, pelvic inflammatory disease, a ruptured uterus, etc (World Health Organization (WHO), 2007; Shiffman and Okonofua, 2007).

Despite the existence of national programs for improving maternal and child health in Nigeria, maternal mortality and morbidity continue to be high and studies suggested that the majority of maternal deaths can be prevented or reduced if women had access to, or visited maternal health services during pregnancy, childbirth and the first month after delivery (Dayaratna, 2000; WHO, 2004; Federal Ministry of Health, 2005). However, many women in developing countries do not have access to maternal healthcare services and it is reported that the use of such services remain low in Sub-Saharan Africa including Nigeria (Babalola and Fatusi, 2009); where only 58% of women have attended at least one antenatal clinic during pregnancy, 39% of births are attended to by a skilled professional, 35% of deliveries take place in a health facility and 43.7% receive postnatal care (NDHS, 2003; WHO et al., 2012).

Darmstadt et al. (2005) are of the opinion that accessibility of health services has been shown to be an important determinant of utilization of health services in developing countries. In most rural areas in Africa, one in three women lives more than five kilometers from the near-rest health facility (World Bank, 2002). The scarcity of vehicles, especially in remote areas, and poor road conditions can make it extremely difficult for women to reach even relatively nearby facilities. Walking is the primary mode of transportation, even for women in labor (World Bank, 2002). Addai (2000) stated that women in higher socioeconomic groups tend to exhibit patterns of more frequent use of maternal health services than women in the lower socioeconomic groups, factors such as education appear to be important mediator. Another important factor in the utilization of maternity care services, especially in Africa, is the cultural background of the woman. The cultural perspective on the use of maternal health services suggests that medical need is determined not only by the presence of physical disease but also by cultural perception of illness (Addai, 2000). In most African rural communities, maternal health services co-exist with indigenous health care services; therefore, women must choose between the options (Addai, 2000). The use of modern health services in such a context is often influenced by individual perceptions of the efficacy of

modern health services and the religious beliefs of individual women (World Bank, 2002).

World Health Organization (WHO) contends that the immediate cause of maternal deaths is the absence, inadequacy or underutilization of the healthcare system (WHO, 2004, 2007). Maternal health care services are underutilized particularly among those who are in the greatest need despite the fact that they are available in most of the hospitals in Nigeria, though each hospital operates according to its own rules, regulations, policy and conditions of services depending on the available resources.

Mothers are expected to seek maternal health care before, during and after delivery in the hospital, but it was observed that a low number of women came to the hospital to fully utilize these services in the study setting despite the beneficial impact. This study was planned to explore awareness and barriers to utilization of these services among reproductive women in Amassoma community in Bayelsa State

## METHODOLOGY

A descriptive research design was used and the study setting was Amassoma community, Bayelsa State, Nigeria. Amassoma community is one of the largest communities in Southern Ijaw Local Government Area of Bayelsa State. The target population were all reproductive women who were either pregnant at the time of interview or had delivered within the last two years. Purposive sampling technique was used to select 192 reproductive women from the target population. The instrument for data collection was a self-developed questionnaire divided into sections relevant to the objectives of the study. Informed consent of the respondents was sought and the purpose of the study was explained to the respondents. Information provided by the respondents was treated with confidentiality and respondents' anonymity was maintained. The necessary translation of the contents of the questionnaire was given to the women for proper understanding. The data obtained was analyzed using statistical package for social sciences (SPSS) for windows 19.0. Both descriptive and inferential statistics were used to analyze the data collected and level of significance was set at 5% (0.05) such that significant associations were established when  $p < 0.05$ .

## RESULTS

Table 1 shows that the majority of the respondents 112 (58.3%) were between the ages of 20 to 30 years, followed by 31 to 40 years 60 (31.3%), and 41 to 50 years constituted only 20 (10.4%). 174 (90.6%) were Christians and 18 (9.4%) were Muslims. The majority of the respondents 128 (66.7%) had tertiary education, followed by 42 (21.9%) who had secondary education, while 22 (11.4%) had primary education. Most of the respondents 70 (36.5%) were civil servants and artisans, while 44 (22.9%) were students and only 8 (4.2%) were full time housewives. The majority of the respondents 82

**Table 1.** Demographic characteristic of the respondents.

Variable	Other parameter	Frequency	Percentage
Age group (Years)	20 - 30	112	58.3
	31 - 40	60	31.3
	41 - 50	20	10.4
Religion	Christian	174	90.6
	Islam	18	9.4
Educational status	Primary	22	11.4
	Secondary	42	21.9
	Tertiary	128	66.7
Occupation	Civil servant	70	36.5
	Artisan	70	36.5
	Housewife	8	4.2
	Student	44	22.9
Average income per month	Below N20,000	82	42.7
	N20,000- N40,000	44	22.9
	N41,000-N60,000	8	4.2
	Above N60,000	58	30.2
Parity	Primigravida	33	17.2
	Primiparous	74	38.5
	Multiparous	85	44.3
Marital status	Single	12	6.3
	Married	180	93.7

(42.7%) had a monthly average income of below N20,000, followed by 58 (30.2%) who earned above N60,000 monthly, 44 (22.9%) earned N20,000 to N40,000, while the remaining 8 (4.2%) earned N41,000 to N60,000 monthly. Most of the respondents 85 (44.3%) were multiparous women, followed by primiparous which constituted 74 (38.5%), and only 33 (17.2%) were primigravida. The majority of the respondents 180 (93.7%) were married and 4 (6.3%) were single. Respondents.

Table 2 shows that the majority of the respondents 182 (94.8%) have heard of maternal health care services while 10 (5%) have not. Out of the 182 (94.8%) who have heard about maternal health care services, 106 (55.2%) of them first learned about it from the hospital, 35 (18.2%) from friends and family, 22 (11.6%) from mass media, 14 (7.3%) from school while other sources contributed only 5 (2.6%). Out of the 182 (94.8%) who claimed to know the services rendered at maternal health care centers, only 2 (10.4%) agreed that preconception care is part of the services while 88 (45.8%) included postnatal care and 75 (12.5%) included family planning; only 50 (28%) included

immunization as part of the services. However all the respondents 182 (94.8%) are of the opinion that antenatal care and delivery are part of the services rendered in maternal health care.

Table 3 shows that the majority of the respondents stated that lack of knowledge about the existing services 187 (97.4%), availability of facilities/equipment 185 (96.4%), previous history of complication during pregnancy labour or post delivery 175 (91.1%), schedule of maternal health care clinic 166 (86.6%), affordability of maternal health care services 164 (85.4%), attitude of the health care provider 162 (84.4%), previous experience of the services rendered 158 (82.4%), accessibility to maternal health care services 149 (77.6%) and the husband's acceptance of the maternal healthcare services 139 (72.4%), were the major barriers affecting utilization of maternal health care services. Cultural acceptance 66 (34.4%) and language barrier 68 (35.4%) were identified as the least factors affecting the utilization of maternal health care services, respectively.

Table 4 shows that the higher the B value, the greater

**Table 2.** Awareness of maternal health services.

Question		Frequency	Percentage
Have you heard of maternal health care services before	No	10	5.2
	Yes	182	94.8
What is your initial source of information	Hospital	106	55.2
	School	14	7.3
	Mass media	22	11.6
	Friends and family	35	18.2
	Others	5	2.6
Do you know what services are rendered at maternal health care centers	No	10	5.2
	Yes	182	94.8
**Which of these services rendered in maternal health care services	Preconception care	2	8.3
	Antenatal care	182	94.8
	Delivery care	182	94.8
	Postnatal care	88	26.0
	Family planning	75	12.5
	Immunization	50	5.2

\*\*respondent tick more than one option as applicable

**Table 3.** Barrier to utilization of maternal health care services.

Barrier	Frequency	Percentage
Attitude of the health care provider	162	84.4
Availability of facilities/equipment	185	96.4
Lack of knowledge about the existing services	187	97.4
Language barrier	68	35.4
Schedule of maternal health care clinic	166	86.6
Accessibility to maternal health care services	149	77.6
Previous experience of the services rendered	158	82.3
Previous history of complication during pregnancy, labour or post delivery	175	91.1
Affordability of maternal health care services	164	85.4
Cultural acceptance	66	34.4
Husband's acceptance of the services rendered	139	72.4

\*Respondents listed more than one barrier

the contribution of the predictor variables. This shows that educational status is an important factor that influences utilization of maternal health care services (MHCS) among the respondents under study. Since the association is positive, it shows that higher the level of education, the more likely they will utilize maternal health care services. The finding also revealed that age and parity are key factors in utilization of maternal health care services (MHCS) among the respondents. Since the association is negative, it shows that higher the age and

parity, the less likely they will utilize maternal health care services.

## DISCUSSION

Majority of the respondents 182 (94.8%) have heard of maternal health services but only few actually knew the main services rendered at maternal health services. This implies that despite high awareness of maternal health

services, there is lack of in-depth knowledge of some services rendered such as preconception care and postnatal care. This may have influenced their utilization because for these women to utilize the maternal health services, they must be knowledgeable about the existing services.

The study revealed that only 2 (8.3%) mentioned preconception care as part of services rendered. This is not surprising, since many women in Nigeria do not see preconception care as necessary. According to WHO (2012), there is growing evidence that extending the maternal, newborn and child health to include prenatal care which is a woman's health before she becomes pregnant can increase the well-being of women and improve subsequent pregnancy and child health outcomes.

Only 88 (26.0%) of the respondents mentioned postnatal care as part of services rendered. Postnatal care is regarded as one of the most important maternal healthcare services which is crucial for monitoring and treating complications in the first six weeks after delivery. Postnatal services are primarily comprised of physical examination, immunization, health education and family planning services (Safe Motherhood, 2002; NPC, 2004; United Nations, 2002). According to Safe Motherhood (2002), the majority of women in developing countries receive almost no postpartum care after delivery; only about 5% of women receive postnatal care in the Sub-Saharan Africa.

The study revealed that previous history of a complication during pregnancy, delivery or post-delivery influences utilization of maternal health care services. This is in line with the finding of Kebebe et al. (2012) that women with perceived risk and previous experience of pregnancy related complications are highly likely to attend African National Congress (ANC). The attitude of the health care provider and previous experience of the mothers about the care received, also influence utilization of maternal health services. This is not surprising since negative attitudes by health care providers elicit negative outcome in the utilization of maternal health care services and on the other hand, positive behaviours of health care providers to women will bring about positive outcome. Various studies have shown that there is a relationship between attitude of health care providers and mother's choice of where to receive antenatal, delivery and postnatal care (D'Ambruso, 2005; Natukunda, 2007; Onasoga, Opiah, Osaji and Iwolisi, 2012). The attitude of health care providers towards women is a major influence on women's decision whether to use or not to use a particular type of maternal health care service.

The husband's acceptance of the maternal healthcare services is also one of the main factor identified and according to WHO (2004), women's decision making power is extremely limited in many parts of Africa, particularly in matters of reproduction and sexuality. In this regard, decisions about maternal care are often made by

husbands or other family members. The finding of this study agreed with Ladipo (2008) and WHO (2010) that affordability and accessibility are also important determinant of utilization of health services in developing countries.

The study also revealed that level of education is a significant predictor to utilization of maternal health care services. This is in line with Wong et al. (2004) that the higher the educational level and experience, the more likely the utilization of health care. In other words educated women are more likely to use maternal health care services than women with no formal education (Addai, 2000; Mekonnen and Asnaketch, 2002). Age of the mother also has a significant negative association on utilization of maternal health care services. Studies have shown that younger mothers are more likely to deliver in health facilities than their older counterparts. Furthermore, the study also revealed a significant negative association between parity and utilization of maternal health care services. This corroborates the finding of Kebebe et al. (2012) that women in a larger household are less likely to deliver at health facilities. However no significant association was found between occupation and marital status of respondents and their utilization of maternal health care services.

## Conclusion

The study was designed to determine awareness and barriers to utilization of maternal health care services among reproductive women in Bayelsa Local government Area, Bayelsa state. Literature showed that utilization of health services is a complex behavioral phenomenon, related to the availability, acceptability, quality and affordability of services, social structure, health beliefs and characteristics of the users. In this study, most of the women (94.8%) were aware of maternal health services in general but lack comprehensive knowledge of services provided. The study has shown that age, education, and parity have significant impact on mother's utilization of maternal health care. The major variables associated with barriers to utilization of maternal health services were lack of knowledge about the existing services, previous bad obstetric history; attitude of the health care provider, availability, accessibility and husband's acceptance of the maternal healthcare services.

## IMPLICATION OF THE STUDY TO NURSING PROFESSION

It is imperative for the Nurse-Midwives to understand the barriers that hinder women from utilizing maternal health care services as this provides evidence to address women's problems and ensure effective utilization of available

maternal health services. Therefore, nurses-midwives should encourage and build up a trusting relationship with the woman and her family in order to ensure maximum use of these services as well as liaise with policy makers in order to eradicate these barriers.

## REFERENCES

- Addai, I (2000). Determinants of use of maternal-child health services in rural Ghana. *J. Biosoc. Sci.* 32(1):1-15.
- Babalola S, Fatusi A (2009). Determinants of use of maternal health services in Nigeria: looking beyond individual and household factors. *BMC Pregnancy Childbirth* 9:43.
- Central Intelligence Agency (CIA) World Fact book (2012). Maternal Mortality Rate: Country Comparison.
- D'Ambruoso L (2005). *Midwives Attitudes to Women in Labour in Ghana* Accra, Mikono Publisher.
- Darmstadt GL, Bhutta ZA, Cousens S, Adam T, Walker N, de Bernis L (2005). Evidence-based, cost-effective interventions: how many newborn babies can we save? *Lancet* 365:977-88.
- Federal Ministry of Health (2005). *National Reproductive Health Policy and Strategy*. Abuja, Nigeria: Federal Ministry of Health.
- Kebebe E, Medhanit G, Dawit S, Kassahun N (2012). Determinants of Community Based Maternal Health Care Service Utilization in South Omo Pastoral Areas of Ethiopia. *J. Med. Med. Sci.* 3(2):112-121.
- Ladipo OA (2008). Delivery of an Effective Maternal and Child Health Services in Nigeria. [www.ngnhc.org/.../delivery%20of%20effective%20materna](http://www.ngnhc.org/.../delivery%20of%20effective%20materna) Accessed May 20, 2011.
- Mekonnen Y, Asnaketch M (2002). *Utilization of Maternal Health Care Services in Ethiopia*. Calverton, Maryland, USA: ORC Macro.
- National Population Commission (NPC) [Nigeria] and ORC Macro (2004). *Nigeria Demographic and Health Survey*. Maryland: Calverton.
- Natukunda C (2007). *Midwifery Behaviour and Practice*. Accra: Mikono Publishers.
- NDHS (2003). *Infant and Child Mortality*. Nigerian Central Bank Annual Report Statement of Accounts. Abuja, Nigeria: Nigerian Central Bank.
- Onasoga OA, Opiah MM, Osaji TA, Iwolisi A (2012). Perceived Effects Of Midwives Attitude Towards Women In Labour In Bayelsa State, Nigeria. *Appl. Sci. Res.* 4(2):960-964.
- Dayaratna V, Winfrey W, Hardee K, Smith J, Mumford E, McGreevey W, Hardee K, Smith J, Mumford E, Sine J, Berg R (2000). "Reproductive Health Interventions: Which Ones Work and What Do They Cost?" Policy Project Occasional Paper 5. Futures Group International, Washington, DC.
- Safe Motherhood (2002). *Safe Motherhood: a matter of human rights and social justice*. [www.safemotherhood.org.htm](http://www.safemotherhood.org.htm)
- Shiffman J, Okonofua FE (2007). The state of political priority for safe motherhood in Nigeria. *Brit. J. Obstet. Gynecol.* 114:127-133.
- United Nations (2002). *World Programme of Action Concerning Disabled Persons*. [www.un.org/esa/socdev/enable/diswpa01.htm](http://www.un.org/esa/socdev/enable/diswpa01.htm)
- Wong EL, Popkin BM, Gullkey DK, Akin JS (2004). Accessibility, quality of care and prenatal care use in the Philippines. *Soc. Sci. Med.* 24:927-944.
- World Health Organization, UNICEF, UNFPA and The World Bank (2012). *Trends in maternal mortality: 1990 to 2010*. WHO, UNICEF, UNFPA and The World Bank estimates. Geneva: WHO. 59p.
- World Bank (2002). *Health Systems Development Project II*. Washington, DC: World Bank.
- World Health Organization (2004). *Advancing Safe Motherhood through Human Rights*.
- World Health Organization (2007). *Maternal mortality in 2005: estimates developed by WHO, UNICEF, UNFPA, and the World Bank*. Geneva: WHO.
- World Health Organization (2010). *Maternal health*. [http://www.who.int/topics/maternal\\_health/en/](http://www.who.int/topics/maternal_health/en/)
- World Health Organization (2012). *Meeting to Develop a Global Consensus on Preconception Care to Reduce Maternal and Childhood Mortality and Morbidity*. WHO Headquarters, Geneva Meeting report. Geneva: WHO.