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Utilization of maternal and child health services in Enugu, South East, Nigeria

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ABSTRACT

Background: Nigeria continues to have one of the highest rates of maternal mortality in the world at 814 deaths per 100,000 live births despite several efforts. Various factors can influence appropriate utilization of services during pregnancy, childbirth and postpartum. This study examined the perceived factors that influence the utilization of maternal and child-health services among mothers in Enugu, South-East Nigeria.

Methods: A descriptive survey design was adopted for the study. The study population of 323 pregnant women was determined using the Power Analysis formula. The instrument used for data collection was a self-developed questionnaire. Demographic information of the women was also obtained for the study. The analysis was done with the software statistical package for Social Sciences (SPSS) Version 16.0. Study period was from April 2016 to August 2016.

Results: There was high antenatal clinic attendance (93.1%) and utilization of postnatal care services (93.1%). Also, the major factors that influenced the utilization of maternal and child health services were professionally defined needs, accessibility of health care services and economic status.

Conclusions: There was high utilization of maternal and child health care services which was influenced by some factors. There is a need for nurses and other health workers to be actively engaged in educating mothers during antenatal visits. Sustainable financial subsidies and community-based initiatives should be developed to encourage early antenatal clinic visits and to provide the necessary information on the importance of facility-based antenatal and postnatal care.

Keywords: Pregnancy, Utilization, Healthcare services, Nigeria, Maternal, Child

INTRODUCTION

The arrival of a baby makes a big difference to family life, bringing both new joy and new challenges. Pregnancy and the period surrounding it is a dangerous time for too many of the 9.2 million women and girls

who become pregnant in Nigeria each year. Over the last decade, great efforts have been made to improve maternal and child health in Nigeria with some improvements. Maternal complications and the poor perinatal outcome are highly associated with poor usage of skilled maternal health care services.¹ Pregnancy-related complications

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are the leading causes of death and disabilities for women aged 15-49 in developing countries. World Health Organization estimates that more than half a million women lose their lives in the process of reproduction worldwide yearly, with about 99 per cent often from developing countries.² Sub-Sahara Africa is responsible for more than fifty per cent of maternal deaths occurring in developing countries and lifetime risk of dying from pregnancy is extremely high, that is for every 26 mothers, one mother dies as a result of pregnancy and childbirth in Sub-Sahara Africa.^{3,4}

These outrageous deaths have been attributed to poor/lack of utilization of maternal and child health care service, hence the risk of women in a developing country dying from maternal related causes during their lifetime is about eighty times higher compared to a woman living in developed countries.^{3,5} Of the 40 countries with the world highest rates of maternal deaths, 30 are from Sub-Saharan Africa.

Every year in Nigeria, there are about 40,000 maternal deaths which account for about 14% of the global total.³ A woman's chance of dying from pregnancy and childbirth in Nigeria is 1 in 13.²

The deaths of newborn babies in Nigeria represent a quarter of the total number of deaths of children under five. According to UNICEF Nigeria, every single day, Nigeria loses about 2,300 under- five and 145 women of childbearing age. This makes the country the second largest contributor to the under-five and maternal mortality rate in the world. The majority of these occur within the first week of life mainly due to complications during pregnancy and delivery.

The desired outcome of every pregnancy is always a healthy mother and a healthy child. During pregnancy, a woman can develop serious life-threatening complications. Improving the wellbeing of mothers, infants, and children is an important public health goal as every birth counts.

Maternal and child health services are health care services provided to the women of childbearing ages in order to preserve the life of the mother and the wellbeing of the baby. It is one of the components of primary health care services aimed at providing health for all. The goal of maternal and child health services is to detect any potential complications of pregnancy and childbirth and early prevention of complications. The elements of maternal health services include prenatal care, intrapartum care and postpartum care.

Utilization of maternal and child health services has been associated with improved maternal and neonatal outcomes as health education is an important component of such service. Hence, skilled antenatal care and birth attendance have been advocated globally as the most crucial intervention to reduce maternal and child

mortalities, since the majority of the complications occur during or shortly after delivery. The World Bank estimates that 74 per cent of these deaths could be averted if all women had access to interventions that address complications of pregnancy and childbirth especially emergency obstetric care. 11

Utilization of maternal and child health services may depend on socio-economic and demographic factors, such as level of education, discrimination of the women disease pattern and health care system itself. ¹² Apart from poverty, bad hygienic conditions and limited access to medical treatment, lacking often is a major cause of mortality among babies (8-20% in their first year of life) and mothers. ⁶

There are reports of inadequate utilization of health facilities in the Obiagu community, Enugu despite the availability of maternal and child health services. This is evidenced by the findings from the antenatal register of the Obiagu health centre 2015, which showed that 1452 women registered in the health centre, but only 130 women delivered in the health centre. It was equally observed that many of them registered late for antenatal care and do not attend the postnatal clinic. This informed the objective of this study which was to examine the perceived factors that influence the utilization of maternal and child healthcare services among mothers in Obiagu Community, Enugu, South East, Nigeria.

METHODS

This is a descriptive survey of the factors determining the utilization of maternal and child health services in Obiagu community in Enugu North Local government of Enugu State, Nigeria. According to the Local government demographic data, the population of women in Obiagu community is 9,536. Therefore, the population of this study is 9,536 mothers in Obiagu community. A sample of 323 women of childbearing age in Obiagu community was used for the study. The sample size of the study was determined using the power analysis formula.

The simple random sampling was adopted in selecting respondents for the study utilizing inclusion criteria; women of childbearing age between of 15 to 49 years, resides in Obiagu community, physically and mentally stable and willing to participate in the study. The instrument for data collection was a researcher selfdeveloped questionnaire. This was constructed to cover the research question and objectives. The questionnaire is divided into three sections: section A, B and C-section A included questions on the respondents of demographic information and it has seven (7) items, section while section B-C solicited information regarding the objectives of the study. Ethical clearance was obtained from the Health Research Ethics Committee of the University of Nigeria Teaching Hospital, Ituku-Ozalla, Enugu (NHREC/05/01/2008B-FWA00002458-IRB00002323). Also, approval was obtained from community primary health care coordinator. The questionnaires were distributed in Obiagu community with the aid of research assistants that have been trained on the purpose of the study, selection of the subject and interpretation of the questions. The questionnaires were shared and collected immediately. A total of 323 questionnaires were administered and 304 were properly filled, making a return rate of 94.1%. Data generated for the study were presented using frequency, percentage and mean. All analysis was done with the aid of the software statistical package for social sciences (SPSS) version 16.0.

RESULTS

Socio-demographic data of the respondents

From Table 1, the mean age of respondents was 28.9 ± 6.8 years, with 213 (70.1%) within 21–29 years age group. 286 (94.1%) were married. 132 (43.4%) had tertiary education while 33 (10.9%) had no formal education. 136 (44.7%) and 77 (25.3%) of the respondents are catholic and Pentecostal respectively.

Table 1: Socio-demographic data of the respondents (n=304).

Category	Option	N	%
Marital	Married	286	94.1
status	Single	18	5.9
	Mean±SD	28.9±6.8	
	Less than 20	24	7.9
Age (in	21–29	213	70.1
years)	30–39	34	11.2
	40–49	26	8.6
	50 and above	7	2.3
Religion	Traditional	23	7.6
	Islam	6	2.0
	Catholic	136	44.7
	Anglican	62	20.4
	Pentecostal	77	25.3
	No formal education	33	10.9
Education	Primary	48	15.8
	Secondary	75	24.7
	Tertiary	148	48.7
Number	1	54	17.8
	2	106	34.9
of children	3	132	43.4
cinaren	4 and above	12	3.9

Utilization of antenatal care services

Most of the respondents 283 (93.1%) had ever attended antenatal clinic, however only 276 (90.8%) of the respondents attended antenatal clinic during their last pregnancy. 106 (38.4%) attended antenatal clinic once in a month while 87 (31.5%) attended antenatal clinic twice in a month. Among the services received during antenatal clinic attendance included; 144 (52.2%) laboratory tests,

106 (38.4%) received counselling and physical examination each. 187 (61.5%) of the respondents mentioned that antenatal care promotes good healthy living for both the mother and the foetus while 166 (54.6%) mentioned that it enhances birth preparedness (Table 2).

Table 2: Utilization of antenatal care services (n=304).

Category	Option	N	%
Ever attended	Yes	283	93.1
antenatal clinic	No	21	6.9
Attended	Yes	276	90.8
antenatal clinic during last pregnancy	No	28	9.2
	Every week	48	17.4
Frequency of antenatal clinic	Twice in a month	87	31.5
attendance	Once in a month	106	38.4
during last pregnancy	Once in two months	31	11.2
(n=276)	Once in three months	4	1.5
Antenatal	Counselling	106	38.4
services received	Physical exam	106	38.4
during	Laboratory tests	144	52.2
attendance	Medications	75	27.2
	It enhances birth preparedness	166	60.1
Benefits of attending antenatal during	It promotes healthy living for both the mother and the foetus	187	67.8
pregnancy	It provides the patient with education and communication	39	14.1

Utilization of skill birth attendant at delivery

Half of the women 154 (50.7%) delivered their babies in hospitals while 80 (26.3%) delivered in maternity clinics. Half of them 166 (54.6%) said midwife conducted their last delivery, 285 (93.8) noted that it was important for midwives to conduct delivery whereas 266 (87.5%) said having any skilled health personnel during delivery is important (Table 3).

Utilization of post-natal services

Majority, 283 (93.1%) of the respondents went back to the hospital after six months of delivery, 139 (49.1%) were motivated by the doctor's advice to go back while 107 (37.8%) went back because of the need to know the state of their child health. 180 (63.6%) received immunization service each time they visited the hospital and 88 (21.1%) received physical examination. 218 (77.9%) of the respondents attend the hospital after delivery very often (Table 4).

Table 3: Utilization of skill birth attendance at delivery (n=304).

Category	Option	N	Percentage (%)
Place of last delivery	Traditional birth home	64	21.1
	Hospital	154	50.7
	Clinic	80	26.3
Who conducted your last delivery	Faith house	6	1.9
	Midwife/nurses	166	54.6
	Physician	35	11.5
	Obstetrician	25	8.2
	Medical doctors	78	25.7
Do you think it is important for midwife to	Yes	285	93.7
conduct delivery	No	19	6.3
Respondents' opinion regarding the	Yes	266	87.5
importance of utilizing skilled Health personnel during delivery	No	38	12.5

Table 4: Utilization of post-natal services (n=304).

Category	Option	N	Percentage (%)
Those who went back to the hospital six weeks after delivery	Yes	283	93.1
	No	21	6.9
Reasons for going back to the hospital after six weeks of delivery	The doctor/nurse advice	139	49.1
	The child became sick	54	19.1
	Needed to know the state of child health	107	37.8
	Family friend advice	29	10.2
	I know am meant to go back	79	27.9
Post-natal services received during each visit to the hospital	Physiotherapy	32	11.3
	Physical examination	88	21.1
	Immunization	180	63.6
	Health education	68	24.0
	Family planning advice	58	20.5
Frequency of attending hospital after delivery	Very often	218	77.0
	Sometimes	62	21.9
	Rarely	3	1.1

Table 5: Factors that influence the utilization of maternal and child health care services (n=304).

Category	Option	N	Percentage (%)
	Accessibility of health care services	159	52.3
	Economic status	116	38.2
Which of the following factors do think	Cultural belief	91	29.9
influences the utilization of maternal and	Expertise	36	11.8
child health services	Professionally defined need	164	53.9
	Social network	66	21.7
	Demographics, genetics and pregnancy	37	12.2

Approximately half 159 (52.3%) of the respondents opined that accessibility of health care services influences their utilization of maternal and child healthcare service.

116 (38.2%) mentioned economic status while 91 (29.9%) and 164 (53.9%) identified cultural beliefs and professionally defined needs respectively (Table 5).

DISCUSSION

Majority of the women attended an antenatal clinic in their last pregnancy, however, a significant number (6.9%) did not which is a risk factor for maternal mortality and morbidity.¹³

The respondents asserted that antenatal clinic attendance enhances birth preparedness, as well as promotes healthy living for both the mother and the foetus. This could explain why most of them attended it in their last pregnancy.

Most of the respondents had a skilled birth attendant during their last delivery. This is unlike what was earlier reported in Nigeria. This could be due to the fact that the study area is an urban area with many hospitals and maternity clinics available, in addition to the opinion of the majority of the respondents' opinion that the presence of a skilled birth attendant is important during delivery.

The high level of postnatal care (93.1%) in our study was in contrast with a previous study done in Nigeria which reported that only 43.7% of the women received postnatal care. ¹⁰ This could be explained by the fact the mothers in our study were adequately counselled on the importance of postnatal care by the health personnel and this should be encouraged.

Some of the maternal and child healthcare services utilised by the respondents included physical examinations, laboratory tests, immunization, family planning counselling, which is similar to the findings of another study done in urban slums of Lucknow, India.¹⁴

More than half of the respondents had laboratory tests during their antenatal visits which are part of the efforts by the health personnel to ascertain the wellbeing of the woman and her foetus.

Studies both within and outside Nigeria have shown that utilization of maternal and child health care services is affected by a multitude of factors namely autonomy, access to transport, quality of facilities, incentive-based programs, cultural beliefs, socio-demographic status, women's autonomy, economic conditions, physical and financial accessibility and health services issue. ^{10,15-20} The respondents in our study similarly identified with some of them also. According to the respondents, the major factors influencing their utilization of maternal and health child healthcare services were the accessibility of health care services, professionally defined needs, economic status and cultural beliefs.

CONCLUSION

Significant barriers exist to timely maternity and postpartum care, particularly related to professionally defined needs, accessibility of health care services and economic status.

Recommendations

Though maternity care use is nearly universal, there is still need for reach out to few who do not attend antenatal clinic, educating women and decision-makers about the importance of quality antenatal early in pregnancy and postnatal care.

Also, the midwives and other health care workers should actively be engaged in educating pregnant help to reduce the infant and maternal mortality ratios.

Efforts should be made to fill health service gaps with substantial success through more community-based facilities, and financial subsidies.

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