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Research Article

UTILIZATION OF MATERNAL AND CHILD HEALTH CARE SERVICES IN AKPABUYO LOCAL GOVERNMENT AREA OF CROSS RIVER STATE, NIGERIA

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Abstract

Introduction: Pregnancy and childbirth are the leading causes of death and disability for women aged 15-49 years in most developing countries especially in sub-Saharan Africa. The culture of poor patronage of health services for regular antenatal care or even postnatal assessment is pervasive. Pregnant women who develop serious life threatening complication during the course of the pregnancy or during labour, often arrive late at the health facility after the failure of traditional practitioners to remedy the situation resulting sometimes in the death of the expectant mothers. Sub-Saharan African countries also suffer the double tragedy of high infant and under-five mortality, due to poor prenatal, perinatal and postnatal care. **Method:** A cross-sectional descriptive study was adopted to explore the knowledge, perception and utilization of maternal and child health services by reproductive women. A researcher administered questionnaire was used to elicit information about MCH services from 200 respondents age 14 to 49 years in Akpabuyo local government area of Cross River State, Nigeria. **Results:** Knowledge about MCH services was high (73%), however the overall utilization of ANC and PNC services were lower, (69.5%) and (61.5%) respectively. Moreover, the overall deliveries attended by skilled providers was 51%, while deliveries outside the formal health system was 49%. **Conclusion:** The low patronage of the formal health system where early and appropriate interventions can be instituted to address high risk pregnancies or even difficult labour was low, the unacceptably high rate of deliveries outside the formal MCH care system portends great risk to the women. Community-level advocacy, intensive health education and behavior change communication is required to engender positive change towards better patronage of MCH services.

Keywords: Maternal health services, Antenatal Care, Postnatal Care, Deliveries.

INTRODUCTION

Motherhood is an exciting and fulfilling experience that a woman can have in her life, but it can also be a life threatening experience as well. It is estimated that every day, about 800 women die from complications of childbirth; moreover, a pregnant woman from a developing country especially in sub-Saharan Africa is 36 times more likely to suffer from complications of pregnancy or childbirth compared with a pregnant woman from a developed country (WHO, 2010). The desired outcome of pregnancy is always a healthy mother and a healthy baby. However, since for most pregnancies, there may be no ominous signs in the early phase of the pregnancy to enable the reliable prediction of poor pregnancy outcomes, it is therefore needful that all pregnant women have access to high quality obstetric care throughout their pregnancy (W.H.O 2010). Maternal complications and poor prenatal outcome are highly associated with non-utilization of antennal and delivery care services and poor socio-economic conditions of the subjects. Poorer birth outcomes are usually seen among "un-booked" rather than booked patients. In the low and middle income countries, less than half of all pregnant women are able to attain the recommended minimum four antenatal care visits (Owalabi *et al.,* 2008). The death of an under-five child is in itself a risk factor for maternal death because when a mother loses a young child or has a stillbirth, depending on the number of living children she has, she would want to get pregnant almost immediately after the loss of the child even if there are indications that becoming pregnant at that point in time may be unadvisable. In 2013, an estimated 6.3 million under five children died, and 2.9 million of them were in the WHO African Region. This is equivalent to five (5) children below the age of 5 years dying every minute. Two thirds of these deaths can be attributed to preventable causes. A third of all these deaths are in the neonatal period. Moreover, 70% of child deaths in sub-Saharan Africa are attributed to a few mainly preventable causes such as acute respiratory infection, diarrhea, malaria, malnutrition and vaccine preventable diseases such as measles. Neonatal conditions that result in death include, suffocation, prematurity and low birth weight. These may occur singly or in combination (WHO, 2013). Most of the deaths involving children under 5-years in Nigeria, are largely from preventable and curable health conditions. Worldwide, Nigeria recorded the highest number (25%) of global malaria cases in 2018, which accounted for the highest number (24 %) of global malaria deaths (WHO, 2019). Infant mortality in Nigeria currently stands at 69 per 1,000 live births while under-fives mortality is estimated to be 128 per 1,000 live births. More than half of the under-five deaths (65%), result from malaria, pneumonia, diarrhea, measles or malnutrition (UNICEF, 2019). Over the past two decades, the global maternal mortality has declined slightly from 390 185 (95% UI 365 193–416 235) in 1990 to 374 321 (351 336–400 419) in 2000 before reducing further to 275 288 (243 757–315 490) in 2015. The overall reduction from 1990 to 2015 in global maternal deaths was roughly 29%, while the decrease in MMR was 30% (Lancet, 2016). Nigeria's estimated 40 million women of childbearing age (15-49 years of age), suffer a disproportionally high level of health-related problems surrounding pregnancy and childbirth. While the Nigeria represents 2.4 per cent of the world's population, it currently contributes about one tenth (10%) of global deaths for pregnant mothers; with a current maternal mortality rate of 576 per 100,000 live births, which is the fourth highest in the world (UNICEF, 2019). Globally, the reduction in maternal mortality

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has been attributed to reduction in total fertility, increase in maternal education, increase in access to skilled attendants, promotion of public health policies and interventions targeted to reduce anemia, improve nutrition, and prevent malaria in pregnancy, including the provision of micro-nutrient supplementations. Moreover, there has also been an expanded access of women to assisted delivery in health facilities that are equipped for emergency obstetrics care; including the discouragement of early motherhood (early marriage) and reduction in unsafe abortions. In Nigeria as in most developing countries, the maternal reproductive and child health program is aimed at providing the recommended four antenatal checks, abdominal examination, immunization against tetanus, iron and folic acid supplementations, as well as anemia management for pregnant women Chatterjee 1995). Children, especially the under-fives are provided with child health services such as immunization and nutrition, as well as insecticide treated nets and the health education of their mothers aimed at improving their health and reducing mortality rate (UNICEF, 2007). Women of childbearing age (15-49) and children under 5 years are characterized by relatively highly morbidity and mortality rates (WHO, 2010), Mothers and children under 5 years are both considered to be vulnerable groups. Moreover, the growing infant child is largely dependent on the mother for nourishment and care. Therefore, the need to integrate maternal and child health services with the aim of promoting the health and wellbeing of the mother and her child by reducing their morbidities and associated mortality.

Statement of the problem

Monitoring maternal mortality is difficult due to poor reporting and lack of proper methods for measuring actual death rates; therefore, obtaining exact figures of maternal deaths particularly in most developing countries is often quite difficult since all pregnant women do not deliver in health facilities. The gap of maternal death between rich and poor countries is quite wide; with over 90% of these death occurring in the developing world (WHO, 2019). In developed countries, it is estimated that about 97% of pregnant women receive ANC and 99% utilize skilled obstetric services during delivery, whereas in developing countries, only 65% of pregnant women receive ANC and 53% utilize skilled obstetric care during delivery. (WHO, 2019) In Nigeria, as at 2013, it was estimated that only 61% of women met the recommended number of four ANC visits during their last pregnancy and only about 38% of all births were attended to by a skilled provider (NPC, 2014). In Nigeria as in other developing countries, maternal and perinatal mortality rates are still high and this may be attributed to poor utilization of maternal services. The 2013 National Demographic and Health Survey report of maternal and child health (MCH) services in Cross River State (NPC, 2014), showed that the utilization of maternal health services in the State was sub-optimal. Only 72.6% of pregnant women received ANC from skilled providers, 3.9% received ANC from TBAs and 3.8% did not receive ANC at all. It was also reported that only 40.4% of deliveries were assisted by skilled provider while 59.1% pregnant women delivered at home or with TBAs. 30.7% of women did not receive postnatal care (PNC) after delivery. 68.3% received PNC from skilled provider, while 10.2% received PNC from TBAs (NPC, 2014). Due to poor utilization of available maternal and child health services, pregnant women and children are subjected to preventable deaths. The causes of these deaths among the pregnant women range from obstructed labor, unsafe abortion, hemorrhage, eclampsia and infections; while the children die mainly from acute respiratory infections, diarrhea and malaria. Nigeria represents only 2% of the world population, according to the Nigeria Demographic and Health Survey but has a maternal ratio of 576 per 100,000 live births, accounting for over 14% of the world's maternal deaths (NPC, 2014). The estimated maternal mortality ratio in Cross River State is 140.3 per 100,000 live birth (Archibong & Agan, 2010), while the under-five mortality rate is 18.8 per 1000 live births (NBS, 2011). Although the State's mortality figures are lower than the national average, they are still worrisome. This informed the need to determine the knowledge, perception and utilization of maternal and child health services among women of childbearing age in Akpabuyo, a rural Local Government Area (LGA) of the state. The study covered the period January –June 2016.

Study objectives

The specific objectives of this study were:

1. To determine the knowledge of women of child-bearing age (15-49) about the available maternal and child health services in Akpabuyo LGA
2. To identify the factors that influence the utilization of maternal and child health services by women of child-bearing age in Akpabuyo LGA.
3. To assess the perceived benefits of the study subjects of utilizing maternal and child health services in Akpabuyo LGA.

To guide the study, the following research questions were formulated:

1. What is the knowledge of women within child-bearing age (15-49) about the available health services in Akpabuyo LGA?
2. What are the factors that influence the utilization of maternal and child health services in Akpabuyo LGA?
3. What are the perceived benefits of utilizing maternal and child health services in Akpabuyo LGA?

METHODOLOGY

Study setting

Akpabuyo LGA is located in the Southern part of Cross-River State and lies between latitude $4^{o}5^{1}$ and $5^{o}4^{1}$ North and longitude $8^{o}25^{1}$ and $8^{o}32^{1}$ East. It has an area of 1,241km^{2} and a population of 341,750 at the 2006 Census (NPC, 2006). It has ten counsel wards with its headquarters located at Ikot Nakanda.

Scope of the Study

The study covered the socio-demo-graphic characteristics of our study participants, namely; women of childbearing age (15-49) years, their knowledge of the available maternal and child health (MCH) services, and the perceived benefit of utilizing the MCH services.

Study Design

A cross sectional descriptive study design was employed to determine the factor influencing the utilization of maternal and child health service in Akpabuyo LGA.

Sample Size Determination

The sample size for this study was determined by Cochran's formula (1963) which is given as:

$$n = \frac{Z^2Pq}{d^2}$$

Where:
n= sample size
Z = 1.96 (i.e. 95% confidence level)
d = 0.07 (acceptable margin of error)
p = 37.3% (proportion of MCH service utilization, NPC (2013))

q = 1- p = 0.627

Therefore = n = $\frac{(1.96)2 \times 0.373 \times 0.627}{(0.07)2}$
= 184

The estimated sample size for this survey was 184, however, to allow for non-response, the sample size was increased by 10% giving a total sample size of 208.

Sampling procedure

A multi-stage sampling technique was employed in the selection of respondents. Stage 1 involved a selection of four (4) wards (i.e. districts) out of the existing 10 wards using the lottery method. The second stage involved the selection of two (2) communities from each of the selected wards using a simple random sampling technique. making a total of eight (8) communities. For the third stage, as the households were not clustered together in each community a systematic sampling procedure was adopted in the selection of 21 households in each community, based on a calculated sampling interval. In all, 208 households were randomly selected from which the 208 eligible women of child bearing age (15-49 years) were selected.

Instrument for Data Collection

The instrument for data collection was a pretested and validated semi-structured questionnaire with both open and close ended questions. The questionnaire was interviewer-administered to respondents that were willing to participate in the study.

Methods of Data Analysis

Data entry and analysis was done using the statistical package for social science software (SPSS 20.0 version 2010). Results were presented as percentages, tables and charts.

Ethical Consideration

Ethical clearance was granted for the study by the ethical committee of the Department of Public Health, University of Calabar. Verbal clearance for the conduct of the survey was granted by the village heads of the respective communities. Verbal informed consent was also duly sought and obtained from the respondents that were willing to participate in the study after the objectives, significance and benefits of the study had been explained to them, with the knowledge that their participation was voluntary and their confidentiality would be guaranteed.

RESULTS

Socio-demographic characteristics of study respondents

Only 200 of the 208 questionnaires were duly retrieved for analysis, giving a response rate of 96%). Of the 200 questionnaires analyzed 85 (42.5%) of the respondents were married, 52 (26%) were single, 48 (24%) were separated, while 8(4%) were co-habiting. Majority 108 (54%) of the respondents were in the (20-29) years age category, while 27 (13.5%) were in the (15-19) years age bracket.

Majority 125 (62.5%) of the respondent had secondary school education, while those with primary education and those with no formal education were 42 (21%) and 19 (9.5%) respectively. With regards to their occupation, trading and farming ranked the highest 48.5% and 13.5% respectively. See Table 1.

Table 1. Socio Demographic Characteristic of study respondents (n=200)

Variable	Group	Frequency	Percentage (%)
Age (years)	15-19	27	13.5
	20-24	55	27.5
	25-29	53	26.5
	30-34	12	6
	35-39	18	9
	40-44	11	5.5
	45-49	24	12
	Total	200	100
Level of Education			
	No formal education	19	9.5
	Primary	42	21
	Secondary	125	62.5
	Tertiary	14	7
	Total	200	100
Marital Status			
	Married	85	42.5
	Single	52	26
	Divorced	1	0.5
	Separated	48	24
	Cohabiting	8	4
	Other	6	3
	Total	200	100
Occupation			
	Farming	27	13.5
	Fishing	4	2
	Trading	97	48.5
	Student	24	12
	Civil servant	11	5.5
	Other	37	18.5
	Total	200	100
Religion			
	Christian	198	99
	Moslem	1	0.5
	Traditional	1	0.5
	Total	200	100

Knowledge of the respondents about the available MCH services in the study area

As shown in Figure 1, majority 160 (80%) of the respondents in the study area had some knowledge about the maternal and child health services rendered in the health facilities located within their communities. Majority 106 (66.3%) of the respondents got their information about the available MCH services through health workers, while 22 (3.8%) of them obtained their information through friends as shown in Figure 2.

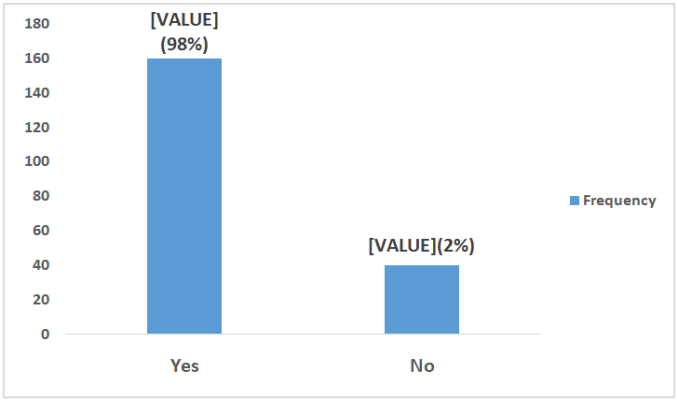

Figure 1. Knowledge of maternal and child health services

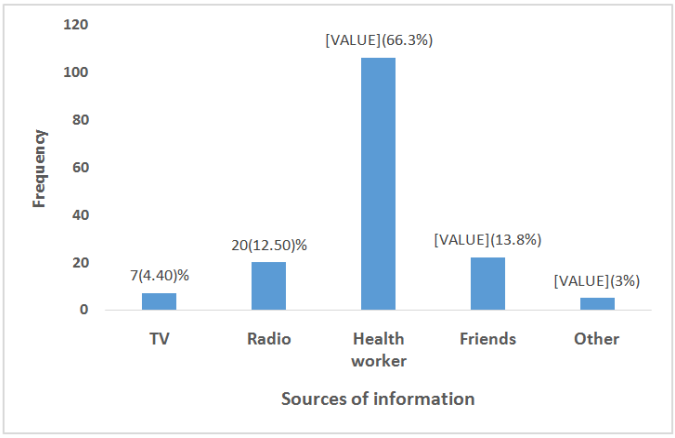

Figure 2. Sources of information about MCH services

Utilization of MCH services

Utilization of antenatal care (ANC) service: Results as shown in Table 2, indicates that the rate of utilization of ANC services by women of child bearing age who were in the (15-19) years age-category was the lowest compared to the other age groups. Those in the (35-39) years age-group recorded an ANC attendance of 55.6%. The rest of the age categories recorded ANC attendance above 70%, with those in the age (30-34) years age-group recorded 83% ANC attendance.

Age and the utilization of MCH services for delivery: As shown in Figure 3, those age 15-18 years delivered the least in health facilities (18.5%); this was followed by those age 35-39 years (39%). The respondents in the 40-44, 25-29, and 45-49 and 40-44 years' categories recorded 64%, 66% and 66.7% skilled birth deliveries respectively. All the 7 age categories reported deliveries by TBAs. Similarly, all of the 7 age categories except the (30-34) years age group had women who delivered in a church-based delivery center.

Utilization of Post-natal care (PNC) service: From Table 2, it can be seen that post-natal attendance rate among those age 15-19 years was very low 37%. This was followed by those in the 30-34 years and 35-39 years who reported 50% and 44.4% post-natal attendance respectively. The other age categories reported post-natal attendance above 60% with those in the age-group 40-44 years reporting post-natal attendance of 82%.

Utilization of immunization services: Those in the (15-19) years age-group were equally low on the utilization of immunization services. The group reported 41% utilization of immunization services compared with the other age categories that reported immunization service utilization rates of more than 70%, as shown in Table 2.

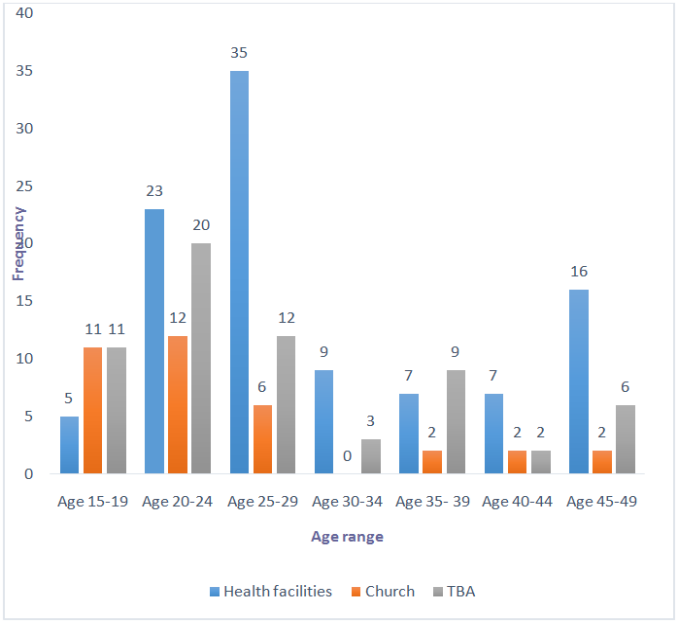

Figure 3. Age and place of delivery

Utilization of family planning services: Family planning service utilization was generally below 50% for all the age groups, except for the (40-44) years and (45-49) years age categories, that reported 73% and 75% rates of family planning service utilization respectively.

Respondents' factors affecting the utilization of MCH services

Parity and utilization of MCH services: As shown in Table 3, our respondents who have one child, 2-4 children or 5-7 children, recorded more than 70% immunization coverage for their children. Those with eight (8) or more children recorded only 55.5% child immunization coverage.

Table 2. Age and Use of MCH services

Age category (Years)	Number	Antenatal service utilization		Postnatal service utilization		Immunization service utilization		Family planning service utilization	
		(n)	(%)	(n)	(%)	(n)	(%)	(n)	(%)
15-19	27	10	37	10	37	11	41	2	7.4
20-24	55	42	76	33	60	45	82	20	36.4
25-29	53	40	75.5	38	72	48	90.5	22	41.5
30-34	12	10	83	6	50	9	75	3	25
35-59	18	10	55.6	8	44.4	13	72	5	28
40-44	11	8	73	9	82	10	91	8	73
45-49	24	19	79	19	79	20	83	18	75

The multiparous women with 8 or more children also recorded both low ANC (55%) and PNC (44.4%) coverages; while those with 2-4 and 5-7 children were able to achieve at least 70% ANC attendance.

Parity and place of delivery: With regards to place of delivery, none of the women grouped according to their parity recorded up to 60% health facility deliveries. Mothers with first deliveries recorded only 46% skilled birth deliveries in health facilities; 36% of the deliveries were undertaken by TBAs while 18% of the deliveries were in the church. Women with 8 or more deliveries had the lowest skilled birth health facility deliveries (22.2%) and the highest TBA deliveries of 78%; while women that had 2-4 children, recorded the highest rate of church deliveries (20%) compared to the other parity groups. See Table 4.

Table 3. Parity and utilization of MCH services

Birth order	Number	ANC		PNC		Completed child's immunization	
		(n)	(%)	(n)	(%)	(n)	(%)
1	67	44	65.7	36	54	48	72
2-4	105	76	72.4	70	66.7	88	84
5-7	19	14	74	13	68.4	15	79
8+	9	5	55.5	4	44.4	5	55.5

Table 4. Parity and the place of delivery

Birth order	Number	Health facility		Church		TBA	
		(n)	(%)	(n)	(%)	(n)	(%)
1	67	31	46	12	18	24	36
2-4	105	59	56.2	21	20	25	24
5-7	19	10	52.6	2	10.5	7	37
8+	9	2	22	0	0	7	78

Level of education and the utilization of MCH services: The result showed that the respondents with no formal education had the lowest (16%), utilization rate of skilled birth attendance and the highest (37%) rates of deliveries in the church and at the TBA (47.4%). Those with primary education exhibited similar trends, with health facility (SBA) delivery rate of 26.2%, as well as church and TBA delivery rates of 28.6% and 45.2% respectively. Respondents with secondary and tertiary education recorded higher levels of utilization of skilled birth attendance at 60% and 93% respectively; while those with tertiary education recorded no TBA delivery. See Table 5.

Table 5. Level of education and use of MCH services

Educational level	Total number	Health facility		Church		TBA	
		(n)	(%)	(n)	(%)	(n)	(%)
No formal education	19	3	16	7	37	9	47.4
Primary	42	11	26.2	12	28.6	19	45.2
Secondary	125	75	60	15	12	35	26
Tertiary	14	13	93	1	7	0	0

Perceived benefits to utilization of maternal and child health services

Majority 148 (73%) of the respondent were agreeable to the notion that the utilization of maternal and child health services was beneficial; while 42 (21%) said they did not know if there are any benefits to be derived from utilizing the services. 12 (6%) of the respondents said there was no benefit in utilizing MCH services. See Figure 4.

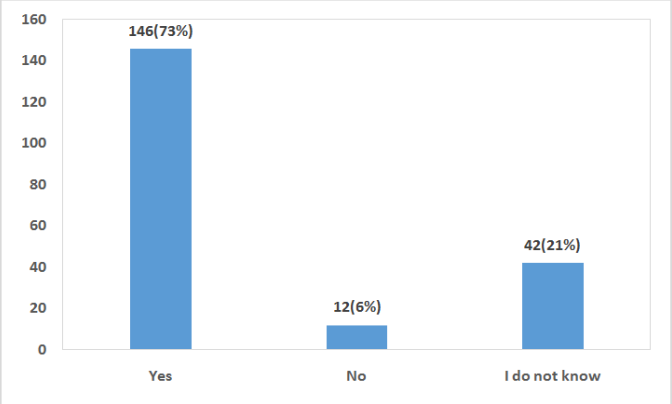

Figure 4. Percieved benefits of MCH services

DISCUSSION

Knowledge of the respondents about available MCH services

The findings of the study showed that majority 156 (78%) of women of child bearing age in the study area were knowledgeable about the available MCH services rendered in the health facilities domiciled in their communities, while 44 (22%) of them indicated that they were unaware of the MCH services. This finding is somewhat similar to what Abdiwali et al (2021) reported in their study conducted in Somaliland, in which majority of their respondent mothers 86(66.2%) were reported to have good knowledge about ANC services, while 26(20.0%) of them had poor knowledge of the services. In a related study by Yar'zever and SAID (2013) conducted among women of child bearing age in Kano, Northern Nigeria, the researchers found that their respondents in both urban and rural settings of the State, had extremely good knowledge of the State's MCH services and programs. The urban dwellers reported 99.0% knowledge level of MCH services, while those in the rural settings recorded a knowledge level of 82.4%.

Utilization of MCH services

The result shows that overall, 139 (87%) of the 160 respondents in our study who had knowledge about MCH services utilized the ANC services; while 123 (77%) utilized PNC services. Their use of immunization services was about 98%. However, only 78 (39%) of the respondent utilized family planning services. In the Kano study by Yar'zever and SAID (2013), although the overall knowledge about MCH services among their respondents was high, only 63.4% and 51.4% of urban and rural respondents respectively utilized the services provided by the health facilities. However, in a study conducted by Okpala et al. (2019), in Enugu State, which is in the South Eastern part of Nigeria, the researchers found that there was a comparably high (93.1%) ANC attendance and an equally high (93.1%) PNC service utilization by their study subjects.

Respondents' factors influencing the utilization of maternal and child health services

Age and MCH service utilization: The results from the study showed that those between the ages of 15-19 and 20-24 years recorded lower rates of MCH service utilization compared to

those between the ages of 30-34 and 35-40 years. Out of 27 respondents aged 15-19 only 5 (18.5%) had skilled birth attendants during delivery and out of 55 respondents aged 20-24, 32 (58.2%) utilized unskilled birth attendants. It is obvious from the findings of our study that skilled birth deliveries were sub-optimal among our respondents. This portends great danger because despite the availability of health facilities with skilled professionals to supervise their deliveries, a great number of the respondents still preferred to patronize unskilled birth attendants, who do not have the requisite skills or facilities to deal with certain obstetric emergencies that may arise such as obstructed labour or postpartum hemorrhage. The finding in the study revealed that utilization of unskilled birth attendant is high, this result is in line with the finding of similar study by Adedokun (2019) who reported that about 62% of the women did not utilize health service. A previous report by Lawoyin (2001) had reported this trend in the patronage of TBAs that over 58% of deliveries in Nigeria take place in homes whereas only about 37% of deliveries take place in health facilities.

Birth order (parity) and the utilization of MCH services

Our result shows that birth order or parity is an important determinant of MCH service utilization. The findings of our study showed that of 67 respondents with only 1 child, 31 (46%) utilized ANC services for their delivery, while 36 (54%) of them were delivered by unskilled birth attendants. First pregnancies are usually considered precious due to the associated risks with first pregnancies; and are usually guarded by expectant mothers, as well as health care providers. A greater proportion (54%) of our respondents with only one child who ought to have utilized the available MCH services due to the uncertainties or risks associated with first pregnancies, however, resorted to unskilled birth attendants for their deliveries. High parity is considered to be an obstetric risk factor. Our respondent whose parities were 5-7 or 8 children who have a greater potential risk of obstetric complications also reported patronage of TBAs for delivery, thereby exposing themselves to possible risks of complications that may arise in the course of labour or delivery. The result of study among women of child nearing age, by Dhakal et al (2019), found that The prevalence of institutional delivery was higher among primiparous mother than multiparous ones (P=0.007). In the study by Okwuikpo et al. (2019) on the factors that Influence the Place of Birth among Mothers attending the Infant Welfare Clinic at Iberekodo PHC, in Abeokuta, Ogun State, Nigeria, however, the chi-square test result of the association of parity with place of delivery, showed that no significant relationship existed between the women's parity and their choice of place of delivery (n = 90, P = 0.05).

Education and utilization of MCH services

Education is also an important factor in the utilization of MCH services, those with no formal education utilized MCH services less. Of the 19 respondents with no formal education, only 3 (16%) utilized skilled birth attendants, whereas, only 11(26%) of the 42 respondents who attained primary level of education utilized SBA. For those with secondary and tertiary education 75 (60%) out of 125 secondary school attendees and 13 (93%) out of 14 tertiary level attendees respectively utilized reported skilled birth attended deliveries. This finding is in consonance with that reported by Envuladu et al (2012) in their study among pregnant women in Russia Village, located Jos North, Plateau State, Nigeria in which they found a significant association (P=0.02), between education level and home deliveries. Those without formal education and primary school attendee were more inclined to deliver at home rather than in a health facility. In a similar study in Bangladesh by Munsur, Atia & Kawahara (2010) on educational attainment of women and the utilization of MCH services, their study finding indicated that women with secondary and higher education, had a 4 and 9 times more likely to utilize skilled birth attendance when in labour compared to their counterparts with incomplete education. Yar'zever IS. and SAID (2013) also found in their study a statistically significant association (p = 0.005) between the respondents' level of education, income, age and their knowledge score of MCH services; for both urban and rural respondents. The knowledge of MCH facilities was higher among those with formal education, high income and younger respondents

Perceived benefits of utilizing maternal and child health care services

The reasons for utilizing MCH services are numerous, it ranged from health education 22(10.9%) to safe delivery 37(18%), testing and counselling 25 (12.5%), free drugs 16 (6%), free treatment 33 (16.4%). Although there are benefits in utilizing MCH services, such as the monitoring of the pregnancy and counselling nutrition etc.; many women still have reasons why they prefer to deliver at home and patronize TBAs. These reasons include: the perception that child delivery as a normal phenomenon of life that does not require any precautions, the insistence and influence by mother-in-laws, and the poor human relationship exhibited by health care workers. In a study by Abdiwali et al. (2021), to determine the perceived benefits of MCH services in Somaliland, the researchers found that 72.3% of their respondents, had positive attitude towards MCH services compared to 23.4% of the respondents who had negative perceptions about MCH services. Generally, women consider NCH services to be beneficial to their own wellbeing and that of the fetus.

Conclusion and recommendations

This study was aimed at determining the knowledge of maternal and child health care services in Akpabuyo Local Government area in Cross River State. The result indicated although there was good knowledge about MCH services among the respondents in the study area, there was a disproportional utilization of the available services. Usually, health facilities in developing countries records high antenatal care attendance, but experience abysmal attendance for child delivery. Most times, the women only visit the clinic when complications arise in the course of the pregnancies or during labour. The findings of this local study showing the low prevalence of delivery by skilled birth attendants compared with the relatively high deliveries in the church and at the TBA homes are unfortunately the true reflection of the situation in Nigeria. This low MCH service uptake, succinctly explains the core reasons for the high maternal mortality ratio in Nigeria as well as the other poor MCH indices of Nigeria. The study showed that mother's age, birth order or parity and level of education of the study participants were determinant factors in the utilization of MCH services. Beyond these personal factors, there may also be several socio-cultural, religious and systemic factors that are responsible to the sub-optimal uptake of MCH

services in Nigeria. This implication of these findings is that context-specific strategic I.E.C. interventions that target not only the women but their partners and the communities in which the MCH service users reside. Additionally, healthcare providers need to be reoriented towards providing humane and client-friendly services that would motivate pregnant women to upscale their use of these services. With the high prevalence of maternal and child morbidity and mortality in Nigeria and the evidently high patronage of church and TBA delivery homes by pregnant women especially in the Southern part of Nigeria, the role of traditional birth attendants in providing reproductive health care in Nigeria needs to be re-assessed and reviewed. Their role will have to be redefined to that of having to refer pregnant clients to the formal health system. Public education and enlightenment is therefore crucial in eliminating inimical cultural practices that promote maternal mortality such as resorting to TBAs because that has been the accepted cultural norm for many centuries or generations. Additionally, Church and community leaders should be sensitized and educated about the life saving benefits of MCH services and the need to educate and encourage their members to take full advantage of the skilled professional services.

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