

# Factors Influencing the utilisation of Skilled Birth Attendants (SBA) among Women of Childbearing Age in healthcare facilities in the rural communities of Akpabuyo Local Government Areas of Cross River State, Nigeria

<sup>1</sup>Uka, Victoria, Nsemo, <sup>2</sup>Alberta David, <sup>3</sup>Ojong, Idang Neji

<sup>13</sup>Department of Nursing Science, University of Calabar, Calabar, Cross River State, Nigeria.

<sup>2</sup>Department of Nursing Science, University of Calabar, Calabar, Cross River State, Nigeria, [nsemoalberta560@gmail.com](mailto:nsemoalberta560@gmail.com)

## Abstract

Skilled birth attendance during delivery is a crucial factor in reducing maternal and newborn morbidity and mortality. This study investigated the factors influencing utilisation of Skilled Birth Attendants (SBA) among women of childbearing age in healthcare facilities in the rural communities of Akpabuyo Local Government Area of Cross River State, Nigeria. The need for this study arose because women attend antenatal care during pregnancy but do not come to the facility to deliver. They were only seen when complications arise. Cross sectional descriptive design was adopted for the study. A multi-staged sampling was used to select a total population of 208 respondents who attended antenatal and child welfare clinic at the time of this study, with the return rate of (207) 99.52%. The Cronbach's alpha was used to ascertain the reliability of the instrument and the reliability coefficient was 0.8. Data analysis was done using frequency counts, simple percentages and logistic regression. The study findings revealed that those who utilized SBA were 80.7% and only 19.3% demonstrated low utilisation, hence, a high proportion women of reproductive age utilise SBA in Akpabuyo. The findings also revealed that economic factors such as poverty and husband unemployment (95.1%) influence the utilisation of SBA. Similarly, most participants (66.1%) disagreed that utilisation of SBA is not against their cultural belief while 33.9% agreed that using SBA is against their cultural belief such as use of herbs, husband approval and other traditional practices. Test of the hypothesis also revealed that the proportion of utilisation of SBA is not statistically significant related to economic and cultural factors among women of childbearing age in Akpabuyo LGA. It was recommended that deliberate programs should be put in place to encourage male involvement in reproductive health services in order to encourage and support their spouses financially to utilise the services of SBA.

**Keywords:** Factors, Skilled Birth Attendants, Women of Childbearing age, Healthcare Facilities, Rural Communities.

## INTRODUCTION

Each day, pregnancy and childbirth related complications account for approximately 830 maternal deaths around the world. According to the World Health Organisation (2018), 303,000 women of child bearing age died

during and following pregnancy and childbirth in 2015. The WHO report also shows that nearly all 302,000 (99%) of the maternal deaths occurred in developing countries, the majority of which are in sub Saharan Africa 66% (201,000) and Southern Asia (66,000) these

regions accounted for 85% of global burden with sub Saharan Africa alone accounting for 56%. The Global Maternal Mortality Ratio (MMR) is 216 maternal deaths per 100,000 live births which is 15 times higher than in developed regions where the figure is only 12 deaths per 100,000 live births (WHO, 2018), yet still with a large disparities between countries and between women with high and low income and those living in rural versus urban areas. One Nigerian woman dies every 13 minutes that is 109 women dying each day – from preventable causes related to pregnancy and child birth (African Population and Health Research Centre, 2017).

Although maternal deaths have declined globally since the 1990's the pace of reduction has been much slower in Nigeria compared to the rest of Africa. The most common direct obstetric causes are postpartum haemorrhage, abortion complications and puerperal sepsis while indirect obstetric cause are human immune deficiency virus (HIV/AIDs) malaria and tuberculossis. Most of these causes are preventable and treatable by access to emergency obstetric care by Skilled Birth Attendance (Desai et al., 2013). Reducing maternal mortality as well as improving maternal and reproductive health represents an important area of concern in the world today as well as in Nigeria, thus the 2030 agenda of Sustainable Development Goals (SDG). Skilled Birth Attendance is one of the most important indictors established for monitoring the achievements of Millennium Development Goal 5 (National Roadmap, 2010) which now falls under the Sustainable Development Goals (SDGs) 3, which is to ensure healthy lives and promote wellbeing for all at all ages (United Nations Population Fund, 2015). The SDGs establish a transformative new agenda for maternal health towards ending preventable maternal mortality; target 3.1 of SDG 3 is to reduce global MMR to less than 70 per 1000,000 live births by 2030 (WHO, 2018).

The majority of Nigerian people (women) live in rural areas where the burden of reproductive ill health is higher while the issue of health-seeking behaviour of these women is one of the most neglected maternal mortality research

activities in the country (Nsemo et al., 2016; Osubor et al. 2006). In Nigeria, maternal mortality indices vary across regions, cultures, and settings, with the worst statistics recorded in remote rural communities. Study by Doctor, et al. (2012), revealed that in many parts of rural Nigeria, most pregnant women do not deliver in a facility with a Skilled Birth Attendant (SBA). The same source reported that most women had little or no contact with the healthcare system for reasons of custom, lack of perceived need, distance, lack of transport, and lack of permission (Doctor et al., 2012). According to these authors, the findings indicated that social influence is important in encouraging women to seek both antenatal and delivery care. Accordingly, the very poor maternal health indices in the Cross River State has been attributed to poor antenatal, intra-natal and postnatal practices and to various socio-economic factors which expose women to adverse maternal health outcomes (Agan et al., 2010). Furthermore, study by Nsemo (2019); Nakambale, Nzala and Hazemba (2014), revealed poor understanding of Birth Preparedness (BP) and Complication Readiness (CR) among the rural women which reflected in the high patronage of TBAs, irrespective of their poor knowledge of maternal and child care. The fact remains that most of the deaths are preventable by simple, affordable and available interventions as well as attitudinal change (Archibong, 2010). Personal factors, such as lack of knowledge of a condition and its consequences, are associated with a person's denial of symptoms pointing to a condition, and of people often trying to manage the symptoms rather than accessing appropriate health services (Lavender, et al., 2007).

Furthermore, it was noted that in most community studies, social and cultural norms and attitudes of particular communities are strongly related to personal factors, since the attitudes and patterns of coping are community specific (Trans, 2008). [New, 2006) identified the cultural insensitivity of service providers which was further supported by evidence from other studies that cultural ignorance and underlying beliefs among many health professionals, could have significant impact on

the services they provide (Lavender, 2007). Low levels of knowledge and awareness of risk factors, causes, and treatment for given conditions was observed among those failing to take up services( Nsemo, 2019; Nakambale, Nzala and Hazemba (2014). Likewise, problems that communities encounter in trying to obtain information in their own language also limits knowledge about particular conditions and the services available to them. The same source indicated that knowledge might be a contributor to behavioural change. Lavender et al., (2007) Posit that expectations of health services formed from past experiences can pose as barriers to further accessing services, for example having experienced culturally insensitive service and/or professional negative attitudes and being blamed could form specific barriers to individuals. Negative experiences may affect access and engagement of service by the community. The fit among personal, social, cultural, economic, and system-related factors can promote access to maternal health care services among individuals, families, and communities to have a timely, needed, continuous, and satisfactory health service (Blomfield et al.,2009).

Osubor, (2006), study on maternal health-seeking behaviour and associated factors revealed poor maternal health-seeking behaviour with a high preference for Traditional Birth Attendants who are unskilled to respond to emergency obstetrical conditions.

Reasons advanced included greater accessibility, better interpersonal relationships, lower cost, greater convenience, and freedom to use traditional birthing positions, which has also been documented in other studies (Fatusi et al., 2003). Perception and knowledge of the community members in Nigeria regarding maternal health problems play a role in their care-seeking behaviour (Fatusi, 2004). For instance study by Osubor (2006), found that local beliefs, such as those that link pregnancy-related problems to witchcraft and other supernatural causes, ignorance regarding warning signs in pregnancy were noted among community women, as some respondents attributed bleeding episodes and swollen feet to normal conditions experienced during pregnancy. Such misguided opinions and folklore are likely to result in a delay in seeking medical attention on time (Fatusi, 2004). Same source posits that, when spiritual factors were linked to a particular problem, community and family members often believe that such conditions cannot be handled by orthodox medical practitioners, such people are taken to traditional healers and Traditional Birth Attendants rather than orthodox health facilities in most Nigerian communities.(Fatusi, 2004). It is based on this premise that the study seeks to determine the factors influencing utilisation of SBA among women of child bearing age in Akpabuyo, Cross River State, Nigeria.

### Theoretical Framework

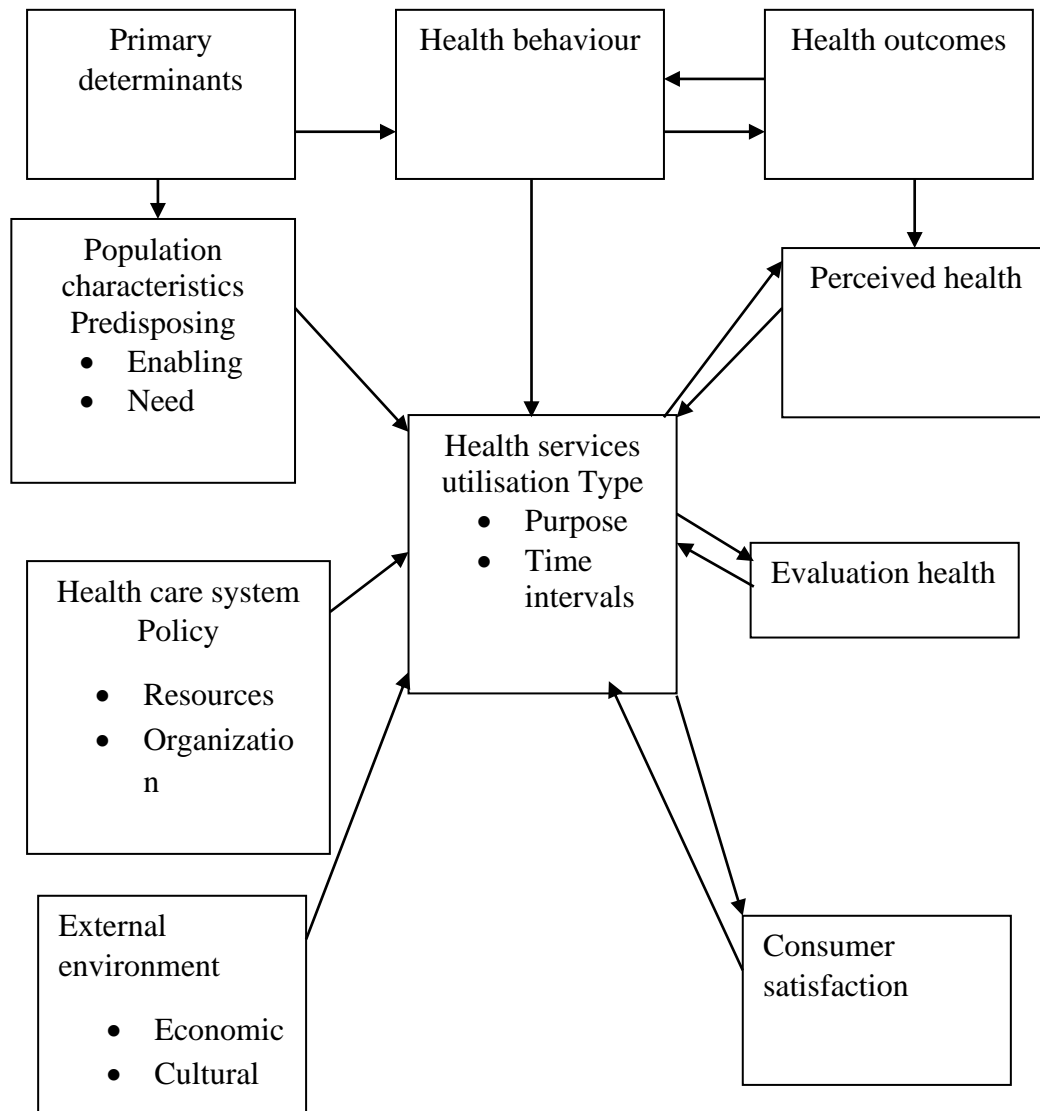


Fig.1: Andersons model of health services utilisation (Anderson,1968)

The theoretical framework used for this study is the Andersen healthcare Utilisation Model developed by Ronald M. Anderson in 1968. It is aimed at demonstrating the factors that lead to the usage of health services (including skilled birth attendant). It is determined by three dynamics which act as drivers of health service use. These are: Predisposing factors, Enabling factors and Needs.

Predisposing factor refers to characteristics that exert influence on individual's perception prior to the occurrence of a given health behaviour by encouraging or inhibiting the uptake of health facility delivery. They can take the form of demographic factors like age, reproductive history (parity), cultural beliefs (religion) marital status education, health beliefs, attitude,

values and knowledge that people have concerning skilled birth. Enabling factors are related to the resources that facilitate or impede the utilisations of health services. It is the logical aspect of obtaining care: financial status, social support, the means and know how to access health services, health insurance, available health personnel facilities and waiting time. Anderson's model proposes that the perception of need for care is important for influencing behaviour whether perceived or actual need.

In the 1970's Anderson's model was later expanded and refined to include the health care system which includes health policy, resources and organization as well as the changes in these over time. Resources comprise the volume and

distributing of both labour and capital including education of health care personnel and available equipment. Organization refers to how a health care system manages its resources which ultimately influences access to and structuring health services thus according to the revised model whether or not a specific health care services is utilised and the frequency a services is utilised, will have different determinants based on characteristics of the population and the health services. During the 1980's and 1990's Anderson's model was again revised to form three components with a linear relationship. Primary determinants, health behaviours and health outcomes. Primary determinants are noted as the direct cause of health behaviour, they include characteristics of the population (demographics), health care system (resources and organization). External environment (cultural and economic influence on utilisation. Health behaviour are the direct cause of health outcomes and these includes personal health characteristics and utilisation of health service. Health outcomes include; perceived health status, evaluated health status and consumer satisfaction. Consumer satisfaction includes availability of the needed services, price or cost of the services, provider characteristics, attitudes, skills, proficiency. These will lead to the utilisation of SBA.

#### Statement of Problem

In spite of all the programs and interventions by the Federal Government to strengthen and improve safe motherhood and health programs, the cases of morbidity and mortality remains on the increase, especially in rural areas. Nigeria is a leading contributor to the high maternal deaths figure in sub-Saharan Africa with maternal mortality ratio of 1:100. Maternal death is estimated to be more than 20 million women each year. They suffer ill health and death due to pregnancy and childbirth. Most of these maternal deaths can be prevented when deliveries are overseen by SBAs. Observably, in Akpabuyo Local Government Area, women attend antenatal clinic during pregnancy but do not show up during deliveries. They prefer to deliver at home while others go to traditional birth attendants. This often lead to a lot of

complications. This act undermines the efforts of government at sensitization and provision of primary and basic healthcare facilities. The resultant effect is usually morbidity and mortality. The researchers sought to investigate the factors influencing the utilisation of skilled birth attendants in healthcare facilities of Akpabuyo Local Government of Cross River State, Nigeria.

#### Objective of the Study

The objective of this study is to determine the factors influencing the utilisation of skilled birth attendants among women of child bearing age in healthcare facilities in the rural communities of Akpabuyo Local Government Area, Cross River State, Nigeria.

Specifically, the study sought to;

1. Determine the proportion of women of childbearing age who utilise skilled birth attendant in healthcare facilities in the rural communities of Akpabuyo Local Government Area.
2. Identify the economic factors influencing the utilisation of skilled birth attendants in healthcare facilities in the rural communities of Akpabuyo Local Government Area.
3. Examine cultural factors that influence the utilisation of skilled birth attendants in healthcare facilities in the rural communities of Akpabuyo Local Government Area.

#### Research Questions

1. What is the proportion of women of childbearing age that utilise skilled birth attendants in healthcare facilities in the rural communities of Akpabuyo Local Government Area?
2. What are the economic factors that influence the utilisation of skilled birth attendants in healthcare facilities in the rural communities of Akpabuyo Local Government Area?.
3. What are the cultural factors that influence the utilisation of skilled birth attendants in healthcare facilities in the rural

communities of Akpabuyo Local Government Area?.

### Research Hypothesis

The proportion of utilisation of SBA among women of child bearing age in healthcare facilities in the rural communities of Akpabuyo Local Government Area is not statistically significantly related to economic and cultural factors.

### Materials and Methods

The study adopted cross sectional descriptive design which was used to assess the proportion of women who utilise skilled birth attendant and the cultural and economic factors influencing the utilisation of skilled birth attendant in Akpabuyo Local Government Area (LGA).

#### Research settings

The rural setting of Akpabuyo LGA was used for the study. The town has 10 autonomus villages which are Atimbo east, Atimbo west, Ikot Edem Odo, Ikot Eyo, Eneyo, Ikot Nakanda, Idundu, Ikang Central, Ikang North and Ikang South. The main ethnic group in the study area are the Efiks. However the 2011 population project shows that the population was 314,750 and the indigenes are mostly farmers, fishermen and traders. Akpabuyo LGA has a secondary health care facility (General hospital situated in Ikot Ene), and ten (10) Primary healthcare (PHC) facilities, one in each of the villages and a few health posts. There is one private health facility located at Atimbo West. Random selection of three Primary Healthcare facilities (Ikot Offiong Ambai, Idundu and Ikang North PHCs) from the ten, plus the secondary facility making a total of four healthcare facilities used for the study. All the facilities selected provides antenatal, delivery, postnatal /immunization and family planning services.

#### Population of the study

The accessible population for the study comprised of 208 women of child bearing

age(15-49 years) who attended antenatal clinic and immunization in the selected healthcare facilities at the period of the study and are either pregnant or nursing a baby at the time of this study.

Table 1: *Showing the study population from each selected healthcare facilities*

Facility	Type	No. of Respondents
St Joseph Hospital, Ikot Ene	Secondary	104
PHC Ikot Offiong Ambai	Primary	33
PHC Idundu	Primary	51
PHC Ikang North	Primary	20
	<b>TOTAL</b>	<b>208</b>

Source: Field work, 2021

#### Sample and sampling technique

The study employed multi-staged sampling technique. Random sampling was used to select 4 PHCs out of the ten in the study area plus one secondary facility which was purposively selected being the only one in the area. Then a convenient non-probability sampling technique was used to select 208 women of child bearing age who were at hand in the health facilities under study during the time of data collection. Taro Yamane formula was used to calculate sample size from the total population of 360 women of reproductive age who utilize healthcare facilities in the study setting.

The formula is stated thus:  $n = \frac{n}{1+N(e^2)}$

n – sample size

N – Population size

e – Sampling error (0.05) =

constant

$$n = \frac{360}{1+360(0.05^2)}$$

$$n = \frac{360}{1+360 \times 0.05 \times 0.05}$$

$$n = \frac{360}{1.9} = 189$$

Adding 10% of the required sample size for attrition

$$10\% \text{ of } 189 = 19$$

$$189 + 19 = 208$$

Therefore, two hundred and eight (208) respondents was used for the study.

#### Instrument for data collection

A self-developed, validated and structured questionnaire which comprised of close ended questions was used to elicit information from the respondents. The instrument was divided into 4 sections based on the objectives of the study. The administration was one on one with a 100% retrieval rate.

#### Validity of the instrument

Validity of an instrument refers to the degree to which an instrument is measuring what it is supposed to be measuring (Polit & Beck, 2010). Face and content validity of the instrument was achieved through the instrument reflecting the variables under investigation. The items on the instrument were based on the specific objectives.

#### Reliability of instrument

The reliability of an instrument is the degree of consistency with which it measures the attribute, it is supposed to be measuring (Polit & Beck, 2010). The reliability of the instrument was determined using Cronbach's alpha method. This measures the internal consistency of the instrument. Ten percent (10%) of the questionnaire, representing 21 copies, was administered to women of child bearing age with the same characteristics as those of the study participants but were not part of the study in General Hospital Calabar. The scores were computed and the coefficient of reliability for the 3 subscales (proportion of utilisation, economic factors and cultural factors) measured 0.63, 0.85 and 0.92 respectively with an overall was Cronbach's alpha coefficient of 0.8.

#### Ethical consideration

Approval for the study was gotten from the Cross River State Ethical Committee and permission obtained from the Chairman of Akpabuyo LGA, the Medical Director of St. Joseph's Hospital through the Head of Nursing services and the Directors of Public Health in charge of Ikot Offoing Ambai, Idundu and Ikang North PHCs, who then introduced the

researchers to the women in the various facilities. The participants (respondents) were duly informed of the purpose of the study to gain their consent. The participants were allowed to voluntarily participate in the research and were assured of confidentiality and the freedom to withdraw from the study at any point they feel uncomfortable.

#### Method of data collection

The questionnaire was administered to the respondents face to face by the researchers and collected on the spot with a 99.52% retrieval rate as only one questionnaire was not correctly ticked. Respondents who could not read were assisted using vernacular to explain the items to them. Data collection took a period of 7 days.

#### Data analysis

The data collected was analysed using percentages and frequencies while the hypothesis was tested using Logistic regression

## Results

#### Socio-demographic characteristics of the participants

Table 2 reveals the socio-demographic characteristics of study participants. From a total of 207 study participants, 56 (27.1%) were aged 15-27 years, 120 (58.0%) were aged 28-37 years, 31 (15.0%) were between 38 and 49 years. On participant's marital status, 35 (16.9%) were single, 135 (65.2%) were married, 28 (13.5%) divorced, those that were separated constituted 9 (4.3%) while no participant was widowed. Regarding the religion of participants, 179 (86.5%) were Christians, 7 (3.4%) was of the Islam faith and others constituted 21 (10.1%). Data on educational status showed that 51 (24.6%) had primary education, 99 (47.8%) had Secondary education, 9 (4.3%) had tertiary education while 48 (23.2%) had non-formal education. On occupation, 17 (8.2%) were students, 137 (66.2%) were traders, civil/public servants 23 (11.1%) while applicants were 30 (14.5%).

Table 2: *Participant's socio-demographic characteristics (N=207)*

Variables	Response options	Frequency(N)	Percentage (%)
Age	15- 27 years	56	27.1
	28- 37years	120	58.0
	38-49years	31	15.0
	<b>Total</b>	<b>207</b>	<b>100</b>
Marital status	Single	35	16.9
	Married	135	65.2
	Divorced	28	13.5
	Separated	9	4.3
	Widowed	-	-
	<b>Total</b>	<b>207</b>	<b>100</b>
Religion	Christianity	179	86.5
	Islam	7	3.4
	Others	21	10.1
	<b>Total</b>	<b>207</b>	<b>100</b>
Educational status	Primary education	51	24.6
	Secondary	99	47.8
	Tertiary education	9	4.3
	Non-formal	48	23.2
	<b>Total</b>	<b>207</b>	<b>100</b>
Occupation	Student	17	8.2
	Trader	137	66.2
	Civil/Public servant	23	11.1
	Applicant	30	14.5
	<b>Total</b>	<b>207</b>	<b>100</b>

(Field survey, 2021)

Research question 1: What is the proportion of women of childbearing age who utilise skilled birth attendants in healthcare facilities in the rural communities of Akpabuyo Local Government Area, Cross River State, Nigeria?

Table 3 reveals the proportion of women of childbearing age who utilise skilled birth attendants in healthcare facilities of Akpabuyo Local Government Area, Cross River State, Nigeria. Out of 207 study participants, 154(74.4%) accepted that they attended antenatal clinic in a healthcare facility with a skilled birth attendant (SBA) while 53(25.6%) said 'no'. Regarding the statement 'my delivery was assisted by a SBA' 171(82.6%) said 'yes'

while 36(17.4%) said 'no'. On whether participant's previous pregnancies were delivered by SBA, 80(38.6%) said 'yes' while 127 (61.4%) said 'no'. Concerning the statement 'I would use SBA in my subsequent pregnancy', 196(94.7%) said 'yes' while 11(5.3%) said 'no'. On recommending the use of SBA to other women, 203(98.1%) said 'yes' while 4(1.9) said 'no' to the statement. The final score for proportion of women of childbearing age who utilise SBA was obtained by adding up participant's scores on all items in section B. The minimum score was 5 while the maximum score was 10. Participants who scored 5- 7 were grouped as 'Non-users of SBA' indicating those who did not utilise SBA while those who scored 8- 10 were categorised



as 'Users of SBA' representing those who utilise SBA. Therefore, Non-users of SBA were 40(19.3%) while users of SBA were 167(80.7%) . This summary is indicated in Fig.2.

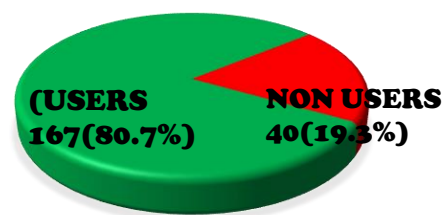


FIG.3: A pie chart showing summary of proportion of women of childbearing age who utilise skilled birth attendants in healthcare facilities of Akpabuyo Local Government Area. (n=207)

Table 3 Proportion of women of childbearing age who utilise skilled birth attendants in healthcare facilities of Akpabuyo Local Government (n = 207)

Statements	Yes	No
I attended Antenatal clinic in a healthcare facility with a skilled birth attendant (SBA)	154 (74.4%)	53 (25.6%)
My delivery was assisted by a SBA	171 (82.6%)	36 (17.4%)
My previous pregnancies were delivered by SBA	80 (38.6%)	127 (61.4%)
I would use SBA in my subsequent pregnancy	196 (94.7%)	11 (5.3%)
I would recommend the use of SBA to other women	203 (98.1%)	4 (1.9%)

(Field survey, 2021)

Research question 2: What are the economic factors that influence the utilisation of SBA among women of child bearing age in healthcare facilities in the rural communities of Akpabuyo Local Government Area?

Table 4: Economic factors influencing the utilisation of SBA in Akpabuyo Local Government Area(n=207)

	Strongly agree	Agree	Disagree	Strongly disagree
The use of SBA is an expensive venture/service	26 (12.6%)	39 (18.8%)	108 (52.2%)	34 (16.4%)
Women who are gainfully employed or financially capable can utilise SBA	155 (74.9%)	42 (20.3%)	8 (3.9%)	2 (1.0%)
Before delivery, I plan for money to use for the process	100 (48.3%)	34 (16.4%)	64 (30.9%)	9 (4.3%)
Husbands unemployment can affect use of SBA	104 (50.2%)	83 (40.1%)	15 (7.2%)	5 (2.4%)
Poverty can affect women's use of SBA	110 (53.1%)	87 (42.0%)	9 (4.3%)	1 (0.5%)

( Field survey, 2021)

Table 4 shows the influence of economic factors on the utilisation of SBA in Akpabuyo Local Government Area. From the total of 207 participants of the study, 26(12.6%) strongly agreed that the use of SBA was an expensive venture/service, 39(18.8%) agreed, 108(52.2%) disagreed while 34(16.4%) strongly disagreed

to the statement. On the statement, 'women who are gainfully employed or financially capable can utilise SBA' 155(74.9%) strongly agreed, 42(20.3%) agreed, 8(3.9%) disagreed while 2(1.0%) strongly disagreed. As regards the opinion, 'before delivery, I plan for money to use for the process' 100(48.3%) strongly

agreed, 34(16.4%) agreed, 64(30.9%) disagreed while 9(4.3%) strongly disagreed to this opinion. Also, on whether husband's unemployment can affect the use of SBA, 104(50.2%) strongly agreed, 83(40.1%) agreed, 15(7.2%) disagreed and 5(2.4%) strongly disagreed to the assertion.

Research question 3: What are the cultural factors that influence the utilisation of skilled birth attendants in Akpabuyo Local Government Area?

Table 5 shows the influence of cultural factors on the utilisation of skilled birth attendants in Akpabuyo Local Government Area. Out of 207 participants of the study, 8(3.9%) strongly agreed that delivery with a SBA was against their cultural belief, 62(30.0%) agreed, 122(58.9%) disagreed while 15(7.2%) strongly

disagreed. On the opinion, 'traditional practices are effective and can lead to safe vaginal delivery without problems' 76(36.7%) strongly agreed, 75(36.2%) agreed, 44(21.3%) disagreed and 12(5.8%) strongly disagreed to the opinion. On whether the use of herbs was more effective than delivery with a SBA, 18(8.7%) strongly agreed, 70(33.8%) agreed, 93(44.9%) disagreed while 26(12.6%) strongly disagreed to the statement. Also, on whether husband's approval affects women's utilisation of SBA, 105(50.7%) strongly agreed, 96(46.4%) agreed, 6(2.9%) disagreed while none of the participants strongly disagreed. Concerning the assertion, 'societal norms and values influence child birth and the use of SBA by women' 9(4.3%) strongly agreed, 132(63.8%) agreed, 58(28.0%) disagreed and 8(3.9%) strongly disagreed to the assertion.

Table 5: *Cultural factors influencing the utilisation of skilled birth attendants in Akpabuyo Local Government Area (N=207)*

Statements	Strongly agree	Agree	Disagree	Strongly Disagree
Delivery with a SBA is against my cultural belief	8 (3.9%)	62 (30.0%)	122 (58.9%)	15 (7.2%)
Traditional practices are effective and can lead to safe vaginal delivery without problems.	76 (36.7%)	75 (36.2%)	44 (21.3%)	12 (5.8%)
Use of herbs are more effective than delivery with a SBA	18 (8.7%)	70 (33.8%)	93 (44.9%)	26 (12.6%)
Husbands approval affects women's utilisation of SBA	105 (50.7%)	96 (46.4%)	6 (2.9%)	-
Societal norms and values influence child birth and the use of SBA by women.	9 (4.3%)	132 (63.8%)	58 (28.0%)	8 (3.9%)

(Field survey, 2021)

#### Test of Hypothesis

Ho: The proportion of utilisation of SBA among women of child bearing age in healthcare facilities in the rural communities of Akpabuyo LGA is not statistically significantly related to economic and cultural factors

Logistic regression was used to test the hypothesis at 0.05 level of significance. The result is presented in Table 6. Two predictor variables were used (economic and cultural

factors measured in sections C and D of the questionnaire respectively). Result shows that the overall predicting model is statistically significant (model X<sup>2</sup>= 167, p=.000). The p-values of the predictor variables – economic and cultural factors directly predicted the utilisation of SBA by women of childbearing age. Thus, the likelihood of use or non-use of SBA among women of childbearing age was dependent on or relates to the predictor variables (economic and cultural factors). The model was significant with an overall correct classification of 94.2%. Since the model is

significant, the null hypothesis which states that, the proportion of utilisation of SBA is not statistically significantly related to economic

and cultural factors among women of childbearing age was rejected.

Table 6: *Summary of logistic regression analysis of the relative contribution of economic and cultural factors on the prediction of utilisation of SBA by women of childbearing age in Akpabuyo Local Government Area (N=207)*

Predictor variables		S.E.B	Wald	Df	P value	Exp(B)/odd ratios
Economic factors	14.995	834.729	.000	1	.986	3251612.8
Cultural factors	15.018	804.551	.000	1	.985	3328984.5
Constant	-390.036	15073.352	.001	1	.979	.000
Unstandardized logistic regression						
-2 Log Likelihood		35.89				
Model Chi-square (df=2)		167.336				
Overall rate of classification		94.2%				

### Discussion of findings

Findings from our study revealed that majority of the respondents attended antenatal clinic in a healthcare facility with a SBA and also a majority utilised SBA during delivery. A few of the respondents demonstrated non-attendance of antenatal and did not utilise SBA during delivery. The result of the study is in line with findings by Nwokoro (2014) in her study to determine the choice of birth place and utilisation of SBA by women in Akanu, Abia State. She revealed that utilisation of SBA was ranked highest. Her study also revealed that women believed strongly that in healthcare facilities there is availability of qualified healthcare personnels and quality services which translates to low patronage for unskilled attendants. Findings from this study were also in agreement with the results from studies conducted by Sina et al. (2019) using the National Demographic health survey 2013, that the use of SBA increased as compared to previous survey. However, results from this study is contrary to findings by Singh et al (2012) on determinants of SBA service utilisation among married adolescence in India which showed unacceptably low utilisation of

SBA services. Findings from the study is also contrary to findings from Agholor (2010) on need to focus on SBA in Northern Nigeria, who reported that the overall coverage for SBA at delivery in Nigeria was only 39% which may be due to various economic and cultural factors including high level of poverty.

As revealed in our study, most of the respondents agreed that utilisation of SBA is expensive and that poverty can affect women's use of SBA while majority were of the opinion that it is not expensive because of the modern health services they render. These findings collaborates with findings of Awotunde et al. (2012) to assess the determinants of utilisation of TBA services among pregnant women in Ogbomosho, which revealed that respondents who were of higher socioeconomic status were 90% less likely to utilise unskilled birth attendants because they can afford the services. Ogunyomi et al. (2016) also revealed that women with higher earnings were less likely to patronize unskilled attendants compared to their counterparts with low earnings. Okoth (2014) also revealed that women whose husbands were in a formal employment delivered by SBA's more, compared to their counterparts whose husbands were not working, hence husband's occupation can be considered a proxy of family income which is an enabling factor in the acquisition of better healthcare. However these findings contradicts a study by Gwamaka (2012) to explore the utilisation and factors affecting delivering in health facility in Tanzania, where findings

showed that women in the rural areas earn little or no income because they are typically subsistent farmers and the low economic power can hinder a woman's use of SBA. Even when formal fees are low or non-existent there may be informal or other unofficial fees or cost that pose significant barrier to women's use of SBA. It also contradicts a study by Ogunyomi et al (2016), who studied assessment of perceived factors influencing utilisation of SBA in Ibadan that most of the respondents agreed to prefer unskilled birth attendance because it is cheap and that SBA's are too expensive to afford.

Regarding the cultural factors influencing utilisation of SBA, findings from our study shows that only a few respondents asserted that delivery with SBA is against their cultural belief and that traditional use of herbs are more effective. But a majority of the respondents were of the opinion that utilisation of SBA is not against their culture and also stated that husbands approval affects women's utilisation of SBA. These results are not in tandem with findings from a study carried out by Okigbo et al (2015) on skilled birth attendant in Nigeria: a function of frequency and content of Antenatal care. It was revealed that there may be some underlying cultural norms around seeking to utilise unskilled birth attendants; that there are contextual factors such as restrictive religions and gender norms which needs to be addressed in order to improve women's access to SBA. In another development, a study carried out by Mbaya (2017) on influence of cultural factors in women preference of SBA's services in Nakuru County. Kenya, revealed that most of the respondents strongly agreed that cultural norms such as prudish restrictions encourage men to carry out the tasks of deciding on providing maternal services need of their choice instead of women choices, hence traditions and societal norms have a significant influence in women and individual perception of the modern health facility as well as religions association determine access to maternal health services. However, findings from this study is consistent with findings from a study by Samson (2012) who examined utilisations and factors affecting delivery in

health facility among recently delivered women in Tanzania, where a larger proportion of the respondents reported that there is no cultural issue concerning utilisation of SBA and delivery in a health facility and that there are no traditional medicine that must be taken before or after delivery. The finding is so because of the constant sensitization carried out in their communities on utilisation of maternal health services as a strategy for reducing maternal mortality. Rural women are now more aware of health services than before. Women empowerment has brought autonomy and decision making power to rural women thereby influencing their choice of utilisation of birth attendants.

Test of the null hypothesis which states that 'the proportion of utilisation of SBA is not statistically significantly related to economic and cultural factors among women of childbearing age in Akpabuyo Local Government Area was rejected', revealed that there is a significant association between the proportions of utilisation of SBA and the economic and cultural factors. This is similar to the assertion of Nwokoro (2014) that the choice of utilisation of SBA during delivery is a multi-factorial issue since so many factors interact to guide a women and her family in choosing where to deliver and who should attend the delivery.

## Conclusion and Recommendations

The study was set to determine the factors influencing the utilisation of skilled birth attendants among women of child bearing age in healthcare facilities in the rural communities of Akpabuyo Local Government Area, Cross River State, Nigeria. The study noted that utilisation of SBA during delivery has an important influence on maternal and child health and wellbeing in Nigeria and as such should be encouraged. Achieving this led to specific recommendations:

1. Nurses should be careful not to indirectly encourage non-health facility based deliveries by delivering women in churches and homes;

2. Perinatal care in the clinics and hospitals should be subsidized since cost is one of the major deterrents in health seeking;
3. Nurses and midwives need to take leading roles in the promotion of attitudinal change and corrections of misconceptions that intending mothers have concerning healthcare facility based delivery services;
4. Every health education, counseling, information and attitudinal change programmes must target both the educated, non-educated, primigravidas as well as multigravidas;
5. Provision of basic amenities like light, security incentives by the government to motivate nurses and midwives posted to the rural communities stay in to render all round services in order not to leave the pregnant women in need of care in the hands of unskilled attendance.
6. Deliberate programs should be put in place to encourage male involvement in reproductive health services in order for them to support their spouses and encourage them to deliver in health facilities.
7. Traditional birth attendance should be encouraged to carry out sensitization to people at the community level. They can be used to identify pregnant women with health problems and facilitate their referral. They can also be called upon to escort women in labour to health facilities for delivery.
8. There is need to empower the women economically since those who are under privileged economically may not afford skilled healthcare services.

### **Implication of findings to Nursing and Midwifery practice**

The findings of this study provide an overall picture of the factors influencing utilisation of skilled birth attendance for pregnancy, delivery and post partum care. This finding will inform healthcare providers (Nurses and Midwives) of those factors influencing rural women's health seeking behaviour during pregnancy, choice of place of delivery and who attends the delivery.

this, this will help them device strategies towards the delivery of an efficient and affordable maternal healthcare services. Nurses and midwives providing healthcare services in the rural communities should intensify health education campaigns and sensitisation of the community members on the importance of utilising healthcare facilities for skilled birth attendance during pregnancy, delivery and after delivery. The need for attitudinal change among nurses and midwives to make maternal healthcare services more user friendly will also be given attention. Nurses should also try to debunk misconceptions about use of herbs and traditional methods of delivery among women in the rural communities.

### **Acknowledgement**

We express our gratitude to the management and entire staff of the four healthcare facilities (St. Joseph's Hospital, Ikot Ene, and Ikot Ofioing Ambai, Idundu and Ikang North PHCs) selected for the study for their cooperation and support throughout the study period. To our participants, we owe unreserved appreciation, for making time to participate in our study.

Funding: The study was not funded.

Conflicts of Interest: The authors declare that they have no conflict of interest.

### **Reference**

- [1] Adelaja, I. M. (2011). A survey of home delivery and newborn care practices among women in sub urban areas of Western Nigeria. *ISRN Obstetric and Genealogy Article*, 10983542 doi10.5402/2011/983.54
- [2] African Population and Health Research Centre (2017). *Maternal health in Nigeria. Facts and Figures* Retrieved. 13 April, 2019 from <http://www.aphrc.org/publications/maternalhealthnigeriaupdate/>
- [3] Agan, T. U., Archibong, E. I., Ekabua, J. E., Ekanem, E. I., Abeshi, S. E., Edentekhe, T. A., & Bassey, E. E. (2010).

- Trends in maternal mortality at the University of Calabar Teaching Hospital, Nigeria, 1999–2009. *International journal of women's health*, 2, 249.
- [4] Aidengwa, H. (2018). Comparison of factors associated with utilisation of child delivery services among multiparous and grad multiparous women in Namibia.
  - [5] Ansari, Z. (2007). A review of literature on access to primary health care. *Australian Journal of Primary Health*, 13(2), 80-95.
  - [6] Anyait, M. Oundo & Nuwana (2012). Predictors for health facility delivery in Busia district Uganda, Makerere School of Public Health Uganda.
  - [7] Archibong, E. I., & Agan, U. (2010). Review of policies and programs for reducing maternal mortality and promoting maternal health in Cross River State, Nigeria. *African journal of reproductive health*, 14(3), 37-42.
  - [8] Awotunde, O. T. Awotunde T. A. Fehiatola, F. O., Adesina, S. A., Oladeyi, O. A., Fehintola, A. O. et al. (2017). Determinants of utilisation of traditional birth attendant services by pregnant women in Ogbornoso, Nigeira. *Int Reprod Contracept Obslet Gynecol*. 6:2684-9.
  - [9] Blomfield, M., & Cayton, H. (2009). *Community engagement: a report for the Health Foundation*. London: The Health Foundation.
  - [10] Canavan, A. (2009). Review of global literature on maternal health interventions and outcomes related to provision of skilled birth attendance. Amsterdam: Royal Tropical Institute.
  - [11] Choudhury, N. Moran, A. C., Alan, M. A., Ahan, K. Z., Rashid, S. F. & Streatfied, P. K. (2012). Beliefs and practices during pregnancy and childbirth in urban Slons of Shaka, Bangladesh, *BMC Public Health*, 12(91).
  - [12] Deesim, Phillips-Harand, P. A., Odhuarmbo, F. O. Katana, A., Ouma, P., Hamal, M. J. & Laseson, K. I. (2013). An analysis of pregnancy related mortality in the KEMRI/CDC health and demographic surveillance system in Westen Kenya, *Plos One*, 8(7), 6873.
  - [13] Doctor, H. V., Findley, S. E., Ager, A., Cometto, G., Afenyadu, G. Y., Adamu, F., & Green, C. (2012). Using community-based research to shape the design and delivery of maternal health services in Northern Nigeria. *Reproductive health matters*, 20(39), 104-112.
  - [14] Fatusi, A. (2004). Maternal mortality situation and determinants in Nigeria. Review commissioned by the FMOH.
  - [15] Gwamaka, S. (2012). Utilisation and factors affecting delivery in health facility among recent delivered women in Nkasi District, Mohimbili. University of Health an Allied Science, Tanzania.
  - [16] Lavender, T., Downe, S., Finnlayson, K., & Walsh, D. (2007). Access to antenatal care: a systematic review. University of Central Lancashire, Preston.
  - [17] Narin, J. T. & Febastian, M. S. (2011). Factors affecting the use of maternal health services in Madhya Pradesh State of India: A Multilevel analysis *international Journal by Equity in Health*, Available at <http://www.requityhealth.com>.
  - [18] Machira, K., Palemuleni, M. (2017). Factors influencing women utilisation of public health care services during childbirth in Malawi public health facility utilisation. *Afrihealth Sci*, 17(2), 400-408. <http://dx.doi.org/10.43114/abv/7;2.14>
  - [19] Maternal and Neonatal Health Program (2004) Birth preparedness and complication readiness: A matrix of shared responsibilities.
  - [20] London: English Introductory Press.
  - [21]
  - [22] Nakambele, A. Nzala, S., Hazenva, A. (2014). Factors affecting utilisation of SBA by Women in Northern Zambia.
  - [23] Nsemo, A. D. (2019). Birth Preparedness (BP) and Complication Readiness (CR) among women of child bearing age in the rural communities of Cross River State, Nigeria. *Nursing and Palliative care*, 4, 1-13.
  - [24] Nsemo, A.D., Chipps, J., Offiong, D., Umoh, D.E. (2016). Prevention of Maternal Health Complications: Voices of the Rural Women through the Lens. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 5(6), 62-95
  - [25]
  - [26] Nwokoro, U. I. (2014). Choice of birth place and use of birth attendants among childbearing women in Akanu, Ohafia Local Government Area. Abia State Nigeria. Enugu University of Nigeria.

- [27] Nyarko, M. (2018). Factors influencing utilisation of skilled delivery services in Tanteakwa district eastern region University of Ghana <http://ugspace.ug.edu.gh>.
- [28] Okigbo, C. C. Eke, A. C. (2015). Skilled birth attendance in Nigeria. A Functioning Frequency and Content of Antenatal care African Journal Reproductive Health, 19(1), 25.
- [29] Okonofua, F. E. Exeanochie, M. C., Olagbuji, B. N. & Agholor, K. N. (2010). Attaining millennium development goals in Northern Nigeria: Need to Focus on Skilled Birth Attendance. African Journal of Reproductive Health, 14(2), 9-11.
- [30] Okoth, C. A. (2014). Utilisation of skilled birth attendants among women of reproductive age in Central Division Kajaiidi Country Kenya.
- [31] Osubor, K. M., Fatusi, A. O., & Chiwuzie, J. C. (2006). Maternal health-seeking behavior and associated factors in a rural Nigerian community. Maternal and child health journal, 10(2), 159-169.
- [32] Polit, D. F. & Beck, C. T. (201). Essentials of nursing research appraising evidence for nursing practice (7 ed.), Lippincott Williams & Watkins.
- [33] Pathak, P. K., Sing, A., Sobranldman, S. V. (2010). Economic inequalities in maternal healthcare. Prenatal and Skilled Birth Attendance in India 1992-2006; Plos ONE 5(10) 3593.doi:10.1371/journal.PON 0013593.
- [34] Sina, O. J. & Adekeye, D. S. (2019). Sociocultural factors and utilisation of healthcare facilities: Implication for Maternal Mortality in Urban Areas of Ekiti State, Nigeira. All Med. Chiro Practice OA/2019, 2(1), 180012.
- [35] Sing, P. K. Rai, R. K. Alagaraja, M. & Singht, (2012). Determinants of maternity care services utilisation among married adolescents in rural India. PLOS ONE7(2): e31666.doi137/Journal Pone 003166.
- [36] Thomas, V. N., Saleem, T., & Abraham, R. (2005). Barriers to effective uptake of cancer screening among Black and minority ethnic groups. International journal of palliative nursing, 11(11), 562-571.
- [37] Titaley, E. R. Hunter, C. L. Dibley, M. S. & Heywood, P. (2010). Why do some women still prefer TBA and home delivery: Quantitative Study on Home Delivery Service in West Java Province, Austria. School of Public Health Idonesia, BNC Pregnancy. Childbirth 10-43.
- [38] Tod, A. M., Read, C., Lacey, A., & Abbott, J. (2001). Barriers to uptake of services for coronary heart disease: qualitative study. Bmj, 323(7306), 214.
- [39] United Nation Population Fund (2014). The maternal health thematic fund towards the 2030 agenda leaving no one behind in the drike for maternal health. New York. UNFPA <http://www.unfpa.org/sownmmy>.
- [40] World Health Organization (2018). Definition of skilled health personnel providing care during child birth. Retrieved 13 April 2018 from <http://www.who.int/preproductive/definining-competent-mnh-professionals>.