

Assessment of Accessibility Determinant of the Utilization of Traditional Birth Attendants (TBAS) Services among women of Childbearing Age in North East Zone, Nigeria

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Abstract

The purpose of this research was to assess accessibility determinant of the utilization of traditional birth attendants' services among women of childbearing age in North East Zone, Nigeria. Accessibility of healthcare facility was found to be one of the major determinants of utilization of Traditional Birth Attendants services during pregnancy, delivery postpartum period in Asia and in African countries. Descriptive research design of Ex-post facto was used. The population of the study consists of women of childbearing age in North East Zone, Nigeria with the total number of 26, 249, 800. The sample size was 800 women of childbearing age which were drawn. Multistage sampling procedures that involve more than one were used: stratified, simple random, proportionate, systematic and simple random sampling technique was used. Stratified to divide the zone into three strata, simple random to select three states and six LGAs and also simple random sampling technique to select twelve 12 wards while proportionate sampling technique was use to select 22% of women of childbearing age per each selected ward, systematic sampling procedure were used to administered the instrument to the respondents. Researcher developed four points Likert scale questionnaire was used in this research that contained section A- G. Data was collected and analyses using SPSS vision 25.0 and result were presented in frequency count and percentage, mean and standard deviation, one sample T test. The variable of the study was a dependant variable. This shows that accessibility was a significant determinant of the utilization of traditional birth attendant services among women of child bearing age in North-Eastern zone, Nigeria. The result of the findings shows that accessibility is a determinant of the Utilization of traditional birth attendants' services among women of childbearing age in north east zone, Nigeria. It was recommended that, government should integrate traditional birth attendants because their services were culturally acceptable by the women of childbearing age in the North East Zone, Nigeria, Symposium, lectures, seminars and training of Traditional Birth Attendants should be organized from time to time to update their professional knowledge and meet modern health care technology.

Keywords: Accessibility, Women, Childbearing, TBA Services, Utilization

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I. Introduction

Distance to maternal and child healthcare services play an important role in the utilization of Traditional Birth Attendants services in the rural women of underdeveloped countries. It makes sense that a Traditional Birth Attendants service is easily accessible to where clients. This enables mothers to have the means of accessing these services (Joonas & Hills, 2015). The case of accessing maternal healthcare services may be facilitated or hindered by the location and physical distance of the services from the clients (Kabiru, Ogustin & Tukur, 2016). In other words, the effectiveness of healthcare services may be hindered by physical distance, lack of transportation, or other way round. Distance to orthodox care may enhance utilization of Traditional Birth Attendants services. Many complained of lack of accessible health facility particularly in event of emergencies that is why some times they have rely on close Traditional Birth Attendants than going to modern health centre's (Ewa, Lasisi, Ibor & Anjorin, 2016). In most rural areas in Africa one of three (3) women lives more than five kilometers from nearest health facility. The scarcity of vehicles for transporting them especially in remote areas and poor road conditions can make it extremely difficult for women childbearing mothers to reach even relatively nearby facility. Walking is the primary mode of transportation even for women in labour (World Bank, 2012).

More so, Onah, Ikeako & Iloabachie, (2016) prefer women of childbearing age to access Traditional Birth Attendants services without understanding or knowing whether the services are equipped with potentialities or not in case of emergency. According to Michael & Peter, (2013) narrated that, the reasons related to the issues of accessibility to healthcare services were physical distance; time constrains location of health facility and the availability of health care providers.

It is against this background that, the researcher intends to carry out an assessment of the accessibility as a determinant of the utilization of traditional birth attendants' services among women of childbearing age in North East zone, Nigeria.

II. Statement of Problem

Access to healthcare services particularly at the critical time of birth, can help ensure that childbirth a successful event. Accessibility of healthcare facility was found to be one of the major determinants of utilization of Traditional Birth Attendants services during pregnancy, delivery postpartum period in Asia and Tanzania in East Africa countries. For example, in Nepal, people who were close to the roads were more likely to use health services than people who were far away (Bhatia & Cleland, 2015). Mustapha, Dahiru, & John (2017) reported that, in rural communities of Africa, women could not easily access modern health facilities due to long distance, transportation fee, medical charges fee, therefore, they prefer to use Tradition Birth Attendants services close to them.

In rural areas there was better access to the Traditional Birth Attendants compared to the village midwife. Some rural villages have more than ten Traditional Birth Attendants compared with one midwife (Adekunle, Olufemi, & Okanlawon, 2016). (Kamisu & Mohd, 2016). Nemetet, (2016). (Liu, Wu, Peng & Fu, 2013). Mothers and mothers-in-law often assisted their daughters with delivery and depend on Traditional Birth Attendants services, if issues or complications were to arise (Jean, 2014). Traditional Birth Attendants services in Nigeria have the potential to contribute significantly to maternal health outcomes because of their high utilization within the country (World Health Organization, 2017). Despite the introduction of modern healthcare facilities, safe motherhood initiative program, free medical services etc., statistics showed that majority of children are born by Traditional Birth Attendants both in rural and urban areas (Falle, Mullany. & Thatte, 2017)

National Population Commission & Nigeria Demographic & Health survey, 2016 reported that, one in every three births in Nigeria is attended by skilled personnel, thus confirming the fact that Traditional Birth Attendants services utilization rate in Nigeria is still very high. Studies conducted in some African countries have shown that most pregnant women still prefer Traditional Birth Attendants services due to several reasons such as, poor accesses road, distance to health facility, transport cost and embarrassment by health care providers. The researcher observed that, there was wide Gap between utilization of skilled healthcare services and poor access road, time spend and transports by women of childbearing age to access healthcare facilities in Africa countries, Nigeria not exceptional particularly, North-East Zone, Nigeria. Research evidences have consistently shown that maternal mortality due to conditions during, prenatal, labour and postnatal period. It is against this aforementioned that, the researcher conducts the assessment of accessibility determinant of the utilization of traditional birth attendant's services among women of childbearing age in North east zone, Nigeria is intended.

Research Question

Does accessibility determine the utilization of traditional birth attendants in North East zone, Nigeria?

Hypothesis

Accessibility (location of health facility, access roads, time spend, transportation cost) is not significant role and the Utilization of traditional birth attendants services among women of childbearing age in North East zone, Nigeria.

III. Methodology

Expo- facto research design was used as in expo facto experimentation is not possible; the information is on ground with the respondents therefore, the researcher cannot manipulate the dependent and independent variables. Population of this study was 1,270,489, sample size was 800 women of childbearing age, sampling technique, multistage sampling technique. Researcher developed four points Likert scale contained section A assess information of demographic characteristics that has five items and section B which assessed socio-cultural determinant. The instrument was vetted by five jurors in the department of Human Kinetics and Health education, nursing science, Ahmadu Bello University, Zaria. Data was collected using pretested structured interviewer-administered questionnaire. Data analysis was done using SPSS version 25.0 and results were presented in frequencies and percentages, mean and standard deviation and one sample T Test.

IV. Result

The purpose of this research was to assess accessibility determinant of the utilization of Traditional birth attendants 'services among women of childbearing age in North East zone, Nigeria. To achieve this purpose, the data collected was statistically analyzed with the help of Statistical Package for Social Science (SPSS) version 25.0, a total of eight hundred (800) copies of questionnaire were distributed to women of childbearing age in North east zone, Nigeria through multi-stage sampling technique. Seven hundred and eighty-nine (789) 98.6% questionnaire copies were retrieved and also found valid for analysis. The responses were scored based on four (4) points Likert Scale. The relative mean for each of the item was calculated with 4 as the highest and 1 the lowest score. Thus, the criterion or acceptance mean of 2.5 was used in making decisions. If the relative means of an item was equal to or greater the 2.5, it was considered that the respondents agreed with the suggested item, while any mean score less than 2.5 implied disagreement. The demographic variables are presented in frequencies and percentages, while all other items are represented by their mean scores as expressed by the respondents. The corresponding standard deviations for each of the items are also shown in the respective tables. One sample t-test was used to test the stated hypothesis.

4.1: Demographic Characteristics of the Respondents

Table 4.1: Description of Demographic Characteristics of respondents

Variable		Frequency	Percentage
Age	15-23yrs	234	29.7%
	24 - 32yrs	424	53.7%
	33-42yrs	109	13.8%
	43-49yrs	22	2.8%
	Total	789	100%
Marital status	Married	732	92.8%
	Single	10	1.3%
	Widow	31	3.9%
	Divorce	16	2.0%
	Total	789	100%
Education	Non-Formal	549	69.6%
	Primary	156	19.8%
	Secondary	66	8.4%
	NCE/OND	17	2.2%
	HND/DEG	1	0.1%
	Total	789	100%
Income	1-18,000	101	12.8%
	19-39,000	19	2.4%
	60,000 and above	8	1.0%
	None of the above	661	83.8%
	Total	789	100%
Religious Belief	Islam	636	80.6%
	Christian	130	16.5%
	Non religious	5	0.6%
	Traditional belief	18	2.3%
	Total	789	100%

Table 4.1 shows the description of demographic variables of the respondents. The tables revealed that majority of the respondents were within the age range of 24-32yrs (53.7%), followed by 15-23yrs (29.7%), 33-42yrs (13.8%) and 43-49yrs (2.8%). The lowest percentage observed from the age range 43-49yrs (2.8%) is due to the fact that only few women still give birth to children; this is because of their age. Women stop childbearing when they are at the middle of 40s. In the same vein, the table also revealed that majority of the respondents were married (92.8%), while 3.9% were widowed, 2.0% were divorcees while 1.3% were still single. Furthermore, majority of the respondents had non-formal education (69.6%) followed by those with primary

school education (19.8%), secondary school education (8.4%), NCE/OND (2.2%), while only 0.1% had HND/Degree. Also, based on income, 12.8 of the respondents earned within the range of 1-18,000 Naira per month while 2.4% earned between 19-39,000 naira per month and only 1.0% earned 60,000 and above. The table also revealed that majority of the respondents practices Islam (80.6%), 16.5% were Christians, 0.6% were non-religious while 2.3% were traditional belief accessibility (location of health facility, access roads, time spend, transportation) do not have significant role of the Utilization of traditional birth attendants' services among women of childbearing age in North East zone, Nigeria

Table 4.2: One sample t-test analysis on Accessibility as a determinant of the utilization of traditional birth attendants services among women of childbearing age in north east zone, Nigeria

Variable	N	Mean	Std. Dev.	df	t-cal	t-crit	p-value
Accessibility	789	29.74	2.519	788	303.708	1.962	0.000

Significant at $p < 0.05$

Decision mean = 2.50

df (788), $t = 1.96$, $p < 0.05$

Table 4.2 shows the summary of one sample t-test analysis, accessibility as a role of the Utilization of traditional birth attendants' services among women of childbearing age in north east zone, Nigeria. The table revealed that the p-value (0.000) is less than 0.05 alpha level of significant, and the t-cal of 303.7 is greater than t-crit of 1.960 at df (788). Therefore, the hypothesis is rejected. This implies that Accessibility is a determinant of the Utilization of traditional birth attendants' services among women of childbearing age in north east zone, Nigeria.

V. Discussion

Findings on accessibility revealed that, accessibility is a significant determinant of the Utilization of traditional birth attendants' services among women of childbearing age in North east zone, Nigeria, research observe that it could be due to the fact that, long distance, transportation charges, poor location of the health facility, poor roads networks among others. Joonas & Hill, (2015) in international journal of community medicine, obstetrics and Gynecology revealed that, distance and time consuming to the healthcare facilities is a determinant of the utilization of healthcare services among childbearing mothers of developing nations. The researcher observed that, most of women of childbearing especially in rural areas are difficult to access modern maternal healthcare services due to location, transportation and poor roads base on that the researcher agrees with their findings because the findings are in vein (Nemet & Bailey, 2010) in General Hospital Okrika Rivers state, a University journal of medicine and social science published in University of Ibadan, Nigeria revealed that, modern healthcare services access by the rural women childbearing mothers hindered by physical distance, location, transportation issues which consequently enhance the utilization of traditional birth attendants services, more especially during emergency that is why they have rely on close traditional birth attendants. The researcher observed that, the high increase utilization of traditional birth attendants' services could be due to the physical distances, time consumed and transport charges. The findings is similar with study conducted by Adekule, Olufemi and Okoanlawon, (2016) in selected rural land of Ijebu, south western part of Nigeria whose reported that, the choice maternal healthcare services: care during pregnancy, labour and postpartum period are issues related to the accessibility especially rural communities where by physical distance, time taking, location of health facilities inhibit accessibility as such resorted to Traditional birth attendants services compared with to village midwife. Some villages have more than ten (10) Traditional Birth Attendants services with only one midwife. The researcher agreed with their findings because he observed physical distance, transports, location of health facility, time consumption are barriers to the access of maternal health care services in the north east zone, Nigeria. Ahmed and verber, (2011) conducted a research in global journal of medical science on factors affecting maternal and newborn care and utilization of healthcare services in Nigeria Reported that, Accessibility of healthcare services was found to be one of the major determinants of utilization of Traditional Birth Attendants services added that even in most of the developing nations including Asia and Tanzania in East Africa countries. For example, in Nepal, people who were close to the roads were more likely to use health services than people who were far away. The present study agrees with the researchers because their finding is in line with his result that accessibility is a determinant of the utilization of traditional birth attendants in the study area. Another study done by Mrisho, Mushi and Mrishinda, (2009) a journal of tropical medicine Trop med.int. Health (2007) reported that, rural communities in Africa, women could not easily access modern health facilities due to long distance, transportation, medical charges fee, therefore, they prefer to use Tradition Birth Attendants services close to them. This shows that, their findings agreed with the present (Sakala and Corry, 2009) in Cambodian. Perspective of Reported. Health (2010) in Cambodia reported that, accessibility to healthcare services among women bearing mothers was affected due to poor roads and weather do not favour the women; during the rainy seasons the only accessible means of transport is by boat, leaving women to turn to

traditional birth attendants services as decision of the family. The researcher agrees with the findings of this great scholars because is in the same vein with the present study in north east zone Nigeria where the finding revealed that women of childbearing accessibility is a significant determinant. Findings agree with that, of Ewa, Lasisi, Ibor and Anjorin, (2016) in Ibadan north south, Nigeria who reported that, the perceived factors influencing the choice of maternal and child healthcare services by women childbearing age in north south Ibadan, Nigeria are distance to orthodox care, cost of services, and family decision making enhanced the utilization of Traditional Birth Attendants services, many complained of lack of accessible health facility particularly during emergencies that is why some times they have rely on close Traditional Birth Attendants than going to modern health centre's. the researcher agrees with These scholars because their findings revealed accessibility and affordability including family decision were the significant determinants as that of his own.

World Bank, (2012) in Washington, DC World bank maternal and child healthcare utilization and health systems development project research reported that, most rural developing nations of Africa, one of three (3) women lives more than five kilometers from nearest health facility. The scarcity of vehicles for transporting them especially in remote areas and poor road conditions can make it extremely difficult for women childbearing mothers to reach even relatively nearby facility. Walking is the primary mode of transportation even for women in labour. The findings agreed with the researcher present study findings shows that accessibility is a determinant of the utilization of traditional birth attendants' services among women of childbearing age in north east zone, Nigeria. Other study by Oyerinde, Osayi, Afolayan and Adeyanju, (2015) care in Amssoma community, south IJAWA LGA, Bayelsa state, Nigeria wrote on patronage of traditional birth attendants services, maternal delivery and newborn care in Amssoma community, south IJAWA LGA, Bayelsa state, Nigeria reported that, accessibility of maternal healthcare services has been shown to be an important determinant of utilization Traditional Birth Attendants services in developing countries. The researcher these great scholars because their finding is in same line with the findings of present study which vindicated that, accessibility is a significant determinant of the utilization of traditional birth attendant services in north east zone, Nigeria.

Relevant study was conducted by Majali, (2013) in a journal of Asia pacific Findings indicated that, the rural areas are still extremely poor and lack access to health facilities. In fact, rural areas were arguably better off, in terms of healthcare services, many rural health care challenges, the one that particularly afflicts African nations contemporary rural society is access to maternal and child care services. The researcher agrees with their findings because present study indicated that, accessibility affordability are significant determinants of the utilization of traditional birth attendant's services among women of child bearing age in north east zone, Nigeria. Study done by Sani and Lekan, (2010) University of Ibadan, a journal of Public Medicine, university of Ibadan, Nigeria who reported that, factors determine the choice of maternal healthcare services includes: accessibility that is location of health facility, healthcare services.. They added that, majority of women (76%) utilized the nearby traditional birth attendants which takes less than 30 minutes without vehicular transportation from their residence while only 5.9% of women travelled to access health care services from facilities that need more than 45 minutes to arrive., distance to the nearest health facilities is one of important factors on utilization of traditional birth attendants services. The researcher agrees with these scholars because their findings conchored with the present study finding revealed that accessibility, significant determinants of the utilization of traditional birth attendants services among women of childbearing age in north east zone Nigeria.

VI. Summary of Finding

Accessibility was a significant determinant of the utilization of traditional birth attendants' services among women of child bearing age in North east zone, Nigeria (p value $0.00 < 0.05$, and the t-cal of $303.7 > t$ -crit of 1.96)

VII. Conclusion

Based on the findings of the study, conclusion was drawn:

1. Accessibility determines the utilization of Traditional Birth Attendants services among women of child bearing age in North east zone, Nigeria.
2. Demographic characteristics (Age, educational level, level of income and religious belief) do not determine the utilization of Traditional Birth Attendants services among women of childbearing age in North east zone, Nigeria.

VIII. Recommendation

It was recommended that, seminars and training of Traditional Birth Attendants should be organized from time to time to update their professional knowledge and meet modern health care technology. Traditional Birth Attendants should be enlightened on other primary health care components with the view to incorporate them into the healthcare sector so that they can be trained to keep records of their service.

Limitation of the Study

The limitations of this study were some part of the study area (North east zone, Nigeria). The study was delimited to the assessment of determinants of accessibility and demographic characteristics determine the utilization of Traditional Birth Attendants services among women of childbearing age in North east zone, Nigeria. The study was also delimited to the Target population of women of childbearing age in North east zone, Nigeria which was one million, two hundred and seventy thousand, four hundred and eighty seven (1,270,487) 22% of the total population of women childbearing age in North east zone, Nigeria (5,774,956)..

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Appendix

Sample Questionnaire

Section A: Demographic Information of the Respondents

Please tick (✓) in the box in front of your responses.

1. Age range:
 - a. 15 – 25 years { }
 - b. 24 – 32 years { }
 - c. 33 – 42 years { }
 - d. 43 – 49 years { }
2. Marital Status:
 - a. Married { }
 - b. Single { }
 - c. Divorced { }
 - d. Widowed { }
3. Level of Education:
 - a. Non-Formal Education
 - b. FSL Certificate { }
 - c. SSCE { }
 - d. NCE/OND { }
 - e. HND/First Degree{ }

- f. Master’s Degree { }
- g. PhD { }
- 4. Income Level:
 - a. 1,000 – 18,000 per month { }
 - b. 19,000 – 39,000 per month { }
 - c. 60,000 or above per month { }
 - d. None of the above { }
- 5. Religious Belief:
 - a. Christianity { }
 - b. Non-Religious { }
 - c. Traditional Belief { }

Section B: Accessibility of Traditional Birth Attendants Services as a Determinant of the Utilization of Traditional Birth Services

S/No.	Statement	Responses			
		SA	A	D	SD
	Traditional birth attendants’ services are easily located in many community				
	I always deliver at my husband house using nearby traditional birth attendants’ services				
	Each locality is endowed with Traditional Birth Attendants services, who are readily accessible to render services at any time, thus motivate me to use their services in my locality				
	Traditional birth attendants are operating their services within for 24 hours, this motivate me to use their services				
	Traditional Birth Attendants services are available within the community.				
	Transportation is free to access traditional birth attendants’ services in my area				
	Traditional Birth Attendants services are readily accessible within short time.				
	Traditional Birth Attendants’ services are not too far from my home.				

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