

Predictors To Utilization Of Delivery Services Among Women Attending Health Facilities In Etche Local Government Area, Rivers State

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ABSTRACT

This study investigated the the predictors to utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State. Four research questions and four hypotheses guided the study. A descriptive design was adopted for the study. Population for the study was 64,250 in Etche Local Government Area. The study sampled 450 mothers using multistage sampling procedure. A validated self-structures questionnaire titled predictors to utilization of delivery service” (PUDS) with a reliability coefficient of 0.70 was used to collect data. Collected data were analysed using simple percentage, mean, standard deviation and regression. The findings of the study showed that there was a significant relationship between proximity, cost of service, educational level and attitude of healthcare workers and utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State ($p < 0.05$). Conclusively, the study disclosed that the utilization of delivery services was influenced by proximity, cost of service, educational level and attitude of healthcare workers. It was recommended among others that Primary Health Care Management Board should create a functional counseling unit in all the PHC facilities to sustain and improve the good level of utilization of PHC services provided in the State.

Keywords: predictors, utilization, delivery services, women, health facilities.

INTRODUCTION

The utilization of maternal healthcare is a complex phenomenon influenced by several factors. Evidence shows that factors that influence the choice of healthcare utilization include socioeconomic status such as low income status type of family, place of residence. Quality of care, distance to health facility, lack of transport, women’s low social status, age, caste, religion, educational level, economic status of the household, lack of autonomy and decision-making power and cultural norms are some of the factors that have been found to be associated with the utilization of maternal care services in different settings (Edmond & Sibley 2012; Joshi, et al 2014; Masters, et al 2013). Babalola and Fatusi (2009) reported that several studies have assessed the individual and household determinants of utilization of maternal services although, the studies did not yield a consistent pattern of relationships between service utilization, individual and household predictors. In some cases, even when a strong association was reported, such as in the case of the positive relationship between education and the use of skilled attendants at delivery, the extent and nature of the relationships are not uniform across social settings. Related Studies of Kalkingham (2003) shows that women of childbearing age with primary level education were more likely to make right choice and utilize maternal health services as compared with

others those without any formal education. Studies of Osubor, et al (2006) affirmed that the use of health care services shows no significant difference with educational status among women of childbearing age. Some of the factors that influence choice of health care services include availability of health facilities, accessibility to health facilities, socio cultural factors and socioeconomic backgrounds and among others. Indications most women has no capability to be able to afford the care service.

Proximity to the wellbeing facility could influence the utilization of delivery services. Regarding the WHO recommendation that medical care facility ought not be more than 4 kilometer from the spot of residence. It is obvious that if medical care service is not reachable from the spot of residence it would influence the choice of using the wellbeing facility. Studies of Ohiyemi, et al (2019) affirmed that the choice of wellbeing facility is dependent on distance from the home (5.1%), quality service and professional skill. The expense of transportation to the wellbeing facility will be much if the location of medical care place is excessively far from the compass of the general population. That is, if wellbeing facility is somewhat more streakable ladies will not have a hesitation about how is the medical care facility and there will be simple utilization of medical services service. Studies of Ayele et al (2014) detailed that (95%) of ladies will approach wellbeing facility if it is ever closer 1.8% have no admittance to wellbeing facility. That is, most ladies of childbearing age will make great choice of medical care service if it is near their home. The willingness to visit medical care service will not there especially when it require cash to pay for transport before getting to the medical care facility. Ayele et al (2014) uncovered that majority of ladies (74.7%) who gave birth at home without the assistance of medical services professionals is because of distance and 20.9% of provincial ladies were less opportunities to utilize wellbeing institution during delivery as analyzed with 35.9% of metropolitan ladies. The method for transport to the closest wellbeing facility and residence are central point that predict the choice of medical care service among the weak gathering (Ayele, 2014). Additionally, Mwani and Oleche (2017) uncovered that the expense per visit, space of residence among others significant influence the choice of medical care service.

Ladies of childbearing age who had gone to primary education or no formal education may less likely to make right choice of medical care service as analyzed with ladies who have full formal education. This is on the grounds that educational attainment help to fix the threat of ignorance about the utilization of medical care service. Nwami et al (2017) uncovered that as individual (mother) with high level of education are all the more likely to make choice of utilizing medical services than moms with low degree of education. Ladies of childbearing age who attain auxiliary or more degree of education will tend to utilize medical care service consistently more that house child whose degree of education is low. This is consistent with the expectation that education compromises ignorance. All things considered, a more instructed lady tend to comprehend the importance of utilizing medical care service just as the need of being solid. Similar to the finding of a few studies (Lisse, 2006; Adam and Awunor, 2015; Kimani, et al 2016) discovered that higher educational level has a positive impact on the choice of utilization of medical care services from qualified or trained wellbeing professionals. There is no wonderment that informed ladies are likely to understand and appreciate the importance of choosing medical care service. Zyaambo, et al (2012) added that higher education attainment is accepted to equip the individual with increase familiarity with the need of medical care service.

Income level of moms determines the rise and comprehensiveness of medical care service. Accordingly, socio-economic status plays an influential job on the choice of medical care services. Most ladies with low socio-economic status, for example, have no sensible occupation may not be willing to pick medical care service as analyzed with ladies of high socio-economic status. Studies of Kimani et al (2016) uncovered that low business status significantly lessens the interest of wellbeing services. The size of the family and abundance index is a determinant factor to the choice of medical care service utilization (Mwami et al, 2017). Thusly, family with sensible measure of income will not find it difficult to manage the cost of medical care service at all level. In any case, the destitution striking ladies might not have the choice of utilizing medical care service on the grounds that they would perceive that medical care service is exorbitant. Notwithstanding, increase in family size significantly decline the inclination of utilizing medical care service and could make wrong choices. Evidence shows that destitution levels provided by

family abundance index indicate that low income index has a negative impact on the choices of utilization of medical care service (Mwami et al 2017). The economic activity of ladies is typically low in determining the utilization of medical care services. Additionally, Garki (2013) saw that huge family size is less to utilize medical care service when contrasted with little with moderate family size. It is plausible to take note of that individuals from a huge family size will likely to go after the availability of assets henceforth forego the interest of seeking for medical care service in event of wellbeing challenges. It is in this light that the specialist is poised to report the predictors to utilization of delivery services among ladies attending wellbeing facilities in Etche Local Government Area, Rivers State.

Statement to the Problem

There are striking inequities in the utilization of medical care services in Nigeria over the new time. The predominance of low socio-economic status and destitution among the citizen (which more pervasive in most piece of Nigeria, Rivers State inclusive with the greater part of population in least abundance index) have the financial risk of utilizing medical care service. The spotlight of maternal passing in Nigeria where almost 20% of all worldwide maternal passings that occur (WHO, 2019). Report from World Health Organization (2019) showed that in 2015, the estimated maternal passing ratio was around 800 for every 100,000 live births with the approximation of 58000 maternal demise during that year. In reality, a Nigeria lady has a 1 in 22 lifetime risk of dying during pregnancy. Childbirth or post pregnancy, post abortion as looked at with lifetime risk of 1 in 4900 in created nations. This indicate or reflects inequities and poor utilization of medical care services.

In spite of administrative endeavors to guarantee everyone approach medical care service, there is variation between ladies of childbearing age. A few ladies are holding unto fictitious, social beliefs, finance, availability of medical care facilities among others. This have prompted increase mortalities and morbidities of normal vaccine preventable diseases like measles, cholera, malaria, lockjaw, tuberculosis, cerebrospinal meningitis among others. This has likewise contributed to spread of communicable diseases among children and deformities in various communities. The dread of complication or condition following immunization of infants had called for incomplete immunizations which influence the effectiveness of immunization.

It is against the foundation that the hole in the choice of using medical care service care be identified to disentangle the difficulties that defaced the choice of medical care service and utilization among ladies. So that the condition of ladies of childbearing age in Etche Local Government Area particularly their mindfulness towards the need of medical care service will be improved. There are deficiency of literatures on the variables that shorten the choice of medical care service in late time. Thus, this study will identify the variables influencing the choice of medical care services among ladies of childbearing age in Etche Local Government Area, Rivers State.

Aim of the Study

The aim of this study is to determine the predictors to utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State.

Research Questions

The following research questions were formulated to guide this study;

1. To what extent does proximity to health facility predict the utilization of delivery service among women attending health facilities in Etche Local Government Area, Rivers State?
2. To what extent does cost of healthcare services predict the utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State?
3. To what extent does educational level predict the utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State?
4. To what does the attitude of healthcare givers predict the utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State?

Hypotheses

The following null hypotheses will be tested at 0.05 alpha level.

1. There is no significant relationship between proximity to health facility and level of utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State.
2. There is no significant relationship between cost of healthcare services and level of utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State.
3. There is no significant relationship between educational level and level of utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State.
4. There is no significant relationship between attitude of healthcare givers and level of utilization of delivery services among women attending health facilities in Etche Local Government Area, Rivers State.

METHODOLOGY

Area of the Study

This study was carried out in Etche Local Government Area in Rivers State. Etche occupies a geographical area of about three thousand, six hundred square kilometres (3600km²) mainly used for farming and hunting. Etche is situated in the north eastern part of Rivers State. It is bounded by Imo State at the North, Asa and Ngwa of Abia and Oyigbo LGA of Rivers State at the east, Obio/Akpor L.G.A of Rivers State at the West and Ikwerre L.G.A, at the South. The L.G.A was created in 1996, and has a population of two hundred and forty nine thousand, four hundred and fifty four (249, 454) persons as at the 2009 census (National Population Commission NPC, 2006). Etche Local Government Area is made up of thirty-one (31) communities and headquartered in Okehi town. There are two (2) general hospitals and thirty-five (35) health centres in Etche. The common diseases prevalent in Etche are malaria, diarrhea, dysentery, measles, cholera and typhoid. Their major occupation is farming. The crops mostly planted are cassava, yam, maize, cocoyam, melon, pumpkin, pepper, garden egg, sugar cane, plantain and okra.

Research Design: A descriptive survey design was adopted for the study.

Population of Study: The population of the study consisted of 64,250 women of child bearing age in Etche Local Government Area of Rivers State (National Bureau of Statistics, 2011)

Sample and Sampling Techniques: The sample size for this study was 450 women of child bearing age. The sample size was determined using Taro Yamane formulae for finite population. A multi-stage sampling procedure was adopted for the study.

Instrument for Data Collection: The instrument for data collection was a structured questionnaire titled "predictors of utilization of delivery service" (PUDS). It comprised of four sections; A, B and C D. Section A, elicited demographic information of the respondents. While, Section B provided information on cost of delivery services, while section C gave information on attitude of health care providers.

Reliability of Instrument: The reliability index was determined using Kuder-Richardson. The instrument attained a reliability co-efficient of 0.84. The instrument attained 0.83 and 0.85 attitude of health care workers and cost of treatment.

Method of data Collection: The instrument was administered to respondents with the help of three research trained assistants. The research assistants were trained on how to approach respondents, retrieve instrument on the spot and provide confidentiality assurance to the respondents. The instrument were retrieved immediately after completion. The researcher maintained close supervision of research assistants throughout the period of data collection. The period for data collection lasted for one month.

Method of Data Analysis: Data collected were analyzed using descriptive statistics such as percentages and mean. Statistical Product for Service solution (SPSS) was the computer software used for data entry and analysis. The inferential statistics of regression were used to analyse data.

RESULTS

Research question 1: *To what extent does proximity predict the utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State?*

Table 4.6: Regression analysis on the extent to which proximity predicted the utilization of delivery services among women attending health care facilities in Etche

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	Decision
1	.845 ^a	.714	.714	1.62783	1.431	High extent

Table 4.5 showed the extent to which proximity predicted the utilization of delivery services among women attending health care facilities in Etche. The result showed that, 84.6% of the utilization was predicted by the proximity to the health care facility ($R^2 = 0.866$). Thus, the extent to which proximity predicted the utilization of delivery services among women attending health care facilities in Etche was high.

Research question 2: *To what extent does cost of service predict the utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State?*

Table 4.7: Regression analysis on the extent to which cost of service predicted the utilization of delivery services among women attending health care facilities in Etche

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	Decision
1	.952 ^a	.906	.906	0.92865	1.965	High extent

Table 4.7 showed the extent to which cost of service predicted the utilization of delivery services among women attending health care facilities in Etche. The result showed that, 90.6% of the utilization was predicted by the cost of the health care services ($R^2 = 0.906$). Thus, the extent to which cost of service predicted the utilization of delivery services among women attending health care facilities in Etche was high.

Research question 3: *To what extent does educational level predict the utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State?*

Table 4.8: Regression analysis on the extent to which educational level predicted the utilization of delivery services among women attending health care facilities in Etche

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	Decision
1	.913 ^a	.833	.832	1.23949	1.595	High extent

Table 4.8 showed the extent to which educational level predicted the utilization of delivery services among women attending health care facilities in Etche. The result showed that, 91.3% of the utilization was predicted by educational level ($R^2 = 0.913$). Thus, the extent to which educational level predicted the utilization of delivery services among women attending health care facilities in Etche was high.

Research question 4: *To what extent does attitude of healthcare givers predict the utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State?*

Table 4.9: Regression analysis on the extent to which attitude of healthcare givers predicted the utilization of delivery services among women attending health care facilities in Etche

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	Decision
1	.955 ^a	.911	.911	0.90190	1.854	High extent

Table 4.9 showed the extent to which attitude of healthcare givers predicted the utilization of delivery services among women attending health care facilities in Etche. The result showed that, 95.5% of the utilization was predicted by the attitude of the healthcare givers ($R^2 = 0.913$). Thus, the extent to which

attitude of healthcare givers predicted the utilization of delivery services among women attending health care facilities in Etche was high.

Testing of Hypotheses

Hypothesis 1: There is no significant relationship between proximity to healthcare facilities and utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State

Table 4.13: Regression analysis on relationship between proximity and utilization of delivery services among women attending health care facilities in Etche

Model		Sum of Squares	df	Mean Square	F	Sig.	Decision
1	Regression	2578.395	1	2578.395	973.036	.000 ^c	Rejected
	Residual	1030.790	389	2.650			
	Total	3609.185 ^d	390				

P < 0.05

Table 4.13 showed the regression analysis on the relationship between proximity and utilization of delivery services among women attending health care facilities in Etche. The findings of the study showed that there was a significant relationship between proximity and utilization [$f(1,389) = 973.036$, $p < 0.05$]. Thus, the null hypothesis which stated that there is no significant relationship between proximity and utilization of delivery services among women attending health care facilities in Etche was thus rejected.

Hypothesis 2: There is no significant relationship between cost of service and utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State

Table 4.13: Regression analysis on relationship between cost of service and utilization of delivery services among women attending health care facilities in Etche

Model		Sum of Squares	df	Mean Square	F	Sig.	Decision
1	Regression	3378.939	1	3378.939	3918.12	.000 ^c	Rejected
	Residual	350.129	406	.862			
	Total	3729.067 ^d	407				

P < 0.05

Table 4.13 showed the regression analysis on the relationship between cost of service and utilization of delivery services among women attending health care facilities in Etche. The findings of the study showed that there was a significant relationship between cost of service and utilization [$f(1,406) = 3378.93$, $p < 0.05$]. Thus, the null hypothesis which stated that there is no significant relationship between cost of service and utilization of delivery services among women attending health care facilities in Etche was rejected.

Hypothesis 3: There is no significant relationship between educational level and utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State

Table 4.14: Regression analysis on relationship between educational level and utilization of delivery services among women attending health care facilities in Etche

Model		Sum of Squares	df	Mean Square	F	Sig.	Decision
1	Regression	3067.763	1	3067.763	1996.82	.000 ^c	Rejected
	Residual	616.065	401	1.536			
	Total	3683.827 ^d	402				

P < 0.05

Table 4.14 showed the regression analysis on the relationship between educational level and utilization of delivery services among women attending health care facilities in Etche. The findings of the study

showed that there was a significant relationship between educational level and utilization [$f(1,401) = 3067.76, p < 0.05$). Thus, the null hypothesis which stated that there is no significant relationship between educational level and utilization of delivery services among women attending health care facilities in Etche was rejected.

Hypothesis 4: There is no significant relationship between attitude of healthcare workers and utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State

Table 4.15: Regression analysis on relationship between attitude of healthcare workers and utilization of delivery services among women attending health care facilities in Etche

Model		Sum of Squares	df	Mean Square	F	Sig.	Decision
1	Regression	3398.818	1	3398.818	4178.42	.000 ^c	Rejected
	Residual	330.249	406	.813			
	Total	3729.068 ^d	407				

P < 0.05

Table 4.15 showed the regression analysis on the relationship between attitude of healthcare workers and utilization of delivery services among women attending health care facilities in Etche. The findings of the study showed that there was a significant relationship between attitude of healthcare workers and utilization [$f(1,406) = 4178.42, p < 0.05$). Thus, the null hypothesis which stated that there is no significant relationship between attitude of healthcare workers and utilization of delivery services among women attending health care facilities in Etche was rejected.

DISCUSSIONS

Hypothesis 1: There is no significant relationship between proximity to healthcare facilities and utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State

The findings of the study showed that there was a significant relationship between proximity and utilization [$f(1,389) = 973.036, p < 0.05$). The results also corroborates that of Neeta, et al (2018) which reported a significant relationship between accessibility to healthcare services and utilization of delivery services. The results are in keeping with that of Onasoga, et al (2012) which disclosed that distance to health care facilities impedes utilization of such services. In the same vain Adewuyi et al (2013) also report that region of residence affect utilization of health care services.

Hypothesis 2: There is no significant relationship between cost of service and utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State.

The findings of the study showed that there was a significant relationship between cost of service and utilization [$f(1,406) = 3378.93, p < 0.05$). The results confirms the study of Butawa, et al (2010) which reported a significant relationship between cost of services and utilization of healthcare services. The findings are in keeping with that of Muhammed, et al (2013) which reported that high cost of services impedes the utilization healthcare services. Similarly, Oladigbolu, et al (2017) reported cost of services predict the utilization of health care services. Furthermore, Enrenreich (2012), poverty is in the inability to maintain the living standards customary in the society such as inability to afford cost of healthcare services. Similarly, studies of Ibebuike, et al (2017) also supports that high cost of drugs and services significantly impedes utilization to health care services.

Hypothesis 3: There is no significant relationship between educational level and utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State

The findings of the study showed that there was a significant relationship between educational level and utilization [$f(1,401) = 3067.76, p < 0.05$). This means that educational attainment influences women utilization of delivery services. The findings are in line with that of Egbewale and Odu (2013) which reported that educational level significantly related to utilization health care services. The results also

confirms the study of Butawa, et al (2010) which reported a significant relationship between educational level and utilization of healthcare services. The findings also corroborates that of Oladigbolu, et al (2017) which reported a significant influence of educational level on the utilization of healthcare services. However, the results of Adebowale and Akinyemi (2016) reported a non-significant relationship between educational status and utilization of healthcare services. The difference in results maybe attribute to different educational opportunities in the different areas at which the studies were carried out.

Hypothesis 4: There is no significant relationship between attitude of healthcare workers and utilization of delivery services among women attending health care facilities in Etche Local Government Area, Rivers State

The findings of the study showed that there was a significant relationship between attitude of healthcare workers and utilization [$f(1,406) = 4178.42, p < 0.05$]. The findings are in line with the study of Inyang and Walker (2016) which holds that there is negative effect of worker's attitude on primary health care services utilisation. This also agrees to view by Penchansky and Thomas (2010) that people will not seek healthcare if they feel unwelcome or unappreciated (not accommodated) by the health personnel, attitude of a service provider to the clients constitutes a barrier to accessing health care as people needs compassion and care rather than distress. The results also supports that of Olayinka, et al (2013) which recorded that attitude of the health care provider was significant associated with health care services utilization.

CONCLUSION

Conclusively, the study disclosed that there was a significant relationship between proximity, cost of service, educational level and attitude of healthcare workers and utilization of delivery services.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations were made:

1. The health care workers should improve on the delivery of the PHC services to encourage and increase its utilization.
2. The PHC staffs should not relent in their effort to provide health education for the community members to enable them make informed health decisions and inculcate better ways of preventing communicable disease.
3. The National programme on immunization and its partners should not relent in their effort to providing and distributing appropriate vaccine and sanitation services at the different PHC facilities.

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