



Factors Influencing Utilization Of Home Delivery Among Women Of Childbearing Age In Etche Local Government Area Of Rivers State, Nigeria

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ABSTRACT

Home births are a popular traditional belief that childbirth is a natural process that doesn't need medical assistance. It should be carried out at home by a family member or a traditional birth attendant who is reputable, easily accessible, and reasonably priced. This study aimed at investigating the factors influencing utilization of home delivery among women of childbearing age in Etche Local Government Area of Rivers State, Nigeria. Descriptive survey research design was used for the study. The population of the study consisted of all women of childbearing age in Etche Local Government Area. Simple random sampling technique was used to select a sample of 300 respondents for the study. The Statistical Package for Social Sciences (SPSS) ANOVA was used to test the null hypotheses at 0.05 level of significance. That there was significant association between educational background ($P=.012$), socioeconomic status ($P=.020$) and utilization of home delivery among women of childbearing age in Etche Local Government Area. The study concluded that to a high extent, educational background and socioeconomic status influence utilization of home delivery among women of childbearing age in Etche Local Government Area. There is significant association between educational background and socioeconomic status on utilization of home delivery among women of childbearing age in Etche Local Government Area. Therefore, the government of Rivers State, Nigeria in collaboration with the Rivers State Ministry of Education and development partners should strive to empower women in terms of education and employment as a means of combating female illiteracy and low socio-economic status as a means of minimizing home-delivery patronage

Keywords: Utilization, Home Delivery, Childbearing, Women, Etche.

INTRODUCTION

The traditional belief behind home delivery is that labor is a natural procedure does not need medical treatment. It should be carried out at home by a family member or a traditional birth attendant who is reputable, easily accessible, and reasonably priced. Traditional birth attendants deliver babies at home as a matter of cultural custom in poor nations, including Nigeria. This holds true for both urban and rural settings. In Nigeria, most women prefer to give birth at home due to this mindset, poverty, illiteracy, and misunderstanding of the complications involved in childbirth ¹.

The World Health Organization (WHO) expressed concerns in 2016 about the practice of home delivery of babies, which was largely supported by traditional birth attendants (TBAs). As a result, the WHO defined TBAs as people who offer basic healthcare, support, and guidance before, during, and after pregnancy and childbirth, primarily using their informal knowledge and experience gained from local customs and practices². The term "traditional midwives," "community midwife," or "lay midwife" refers to traditional birth attendants who assist in home deliveries. They are the primary providers of maternity care in many developing and rural communities in Nigeria, including Etche Local Government Area in Rivers State. These people, who are frequently respected members of their communities and elderly ladies, administer healthcare at home and see themselves as private health care providers who attend to patient needs. Because they might not have had official education or training in providing health care, they typically work in rural, isolated, and other medically underserved locations. Additionally, the lack of explicit professional requirements like certification or license raises the likelihood of maternal death².

There is a lack of knowledge about the causes of the frequent home deliveries by women in developing nations, particularly in remote areas like Etche Local Government Area. This has led to the claim that hospitals should continue to be the preferred option for many because they offer the safety of advanced medical technology in the event that a mother or child has a medical emergency³. Some women who want labor to be as natural as possible push for home delivery as an option, but most doctors advise against it because emergencies can be disastrous when they happen. Medical necessity or emergency becomes inevitable when mothers find themselves in extreme situations, such as failure to progress in labor, a very large baby, a breech position, and premature babies. Other examples include when the mother has had previous low-back surgery or a history of herniated disk, when the mother has a blood clotting disorder or low platelet count, and when fetal distress is extreme and immediate delivery becomes urgent⁴. The majority of maternal deaths that happen are caused by these extreme cases, and there is growing agreement in the professional debate that these deaths can be avoided if deliveries are made in hospitals with advanced medical technology rather than at home⁴.

Global health systems continue to face challenges due to the high rate of maternal mortality. The availability of data regarding maternal death rates and trends is crucial for planning and assessing the progress made toward achieving Millennium Development Goal 5, which calls for a 75% decrease in the maternal mortality ratio (MMR) between 1990 and 2015⁵. The Safe Motherhood Initiative was launched in 1987 as a response to rising awareness that primary health-care programs in many developing nations did not sufficiently focus on maternal health. This marked the beginning of global initiatives to enhance policy intervention for maternal mortality. International support for reproductive health was bolstered by the 1994 International Conference on Population and Development. Reducing maternal mortality was one of the eight development goals included in the Millennium Development Goals of the Millennium Declaration, which brought increased attention to the issue⁶.

While there has been significant progress, the yearly decline rate in the number of women dying from pregnancy and delivery has dropped by 34% from an estimated 546 000 in 1990 to 358 000 in 2016. However, this reduction rate is still less than half of what is required to meet the millennium development goals⁶. To achieve millennium development goal the annual decline rate should be 5.5% instead of the current one of 12.3% in average. Since the WHO reports that in Sub-Saharan Africa, 1 in 22 women risks dying from maternal causes in her lifetime, the adjusted maternal mortality ratio (MMR) was 900 deaths per 100,000 live births in 2015⁷.

The annual decline rate in the number of women dying during pregnancy and childbirth has decreased by 34% from an estimated 546 000 in 1990 to 358 000 in 2016, despite notable progress. To reach the Millennium Development Goals, this reduction rate is still less than half of what is needed⁸. The majority of perceived barriers to women's access to health care services are lack of money (24%) followed by distance to health facilities (19%) and unwillingness to go alone (11%). Only 2% of women cite obtaining permission as a major issue. Approximately 50% of women give birth in medical facilities, and 48% do so at home⁹. Since the establishment of the Safe Motherhood Program in 1987, Nigeria has implemented

a number of efforts to increase access to maternal health care. These initiatives have enhanced expectant mothers' access to prenatal care and marginally improved delivery in medical facilities.

Another major reason for the prevalence of home delivery was the attitude of health care workers¹⁰. This was reflected in the disposition of health care workers towards their patients when they attend antenatal care, the support the pregnant women needed and the encouragement to continually attend antenatal care and also make use of facility based delivery was not received by the pregnant women¹⁰.

Cultural beliefs have also been linked to influence utilization of home delivery. This was evident as it was narrated that one was a product of his culture and environment¹¹. Pregnant women are predisposed to norms and cultural beliefs which influences their choice of place of birth. Some communities' belief that when women delivered at home it signified been strong and healthy, whereas facility based delivery was attributed to poor health. Women who deliver at home often pride themselves as been fertile, been pure African and posed a strong spirit¹¹.

As though the challenge of cultural belief was not enough, accessibility to modern health care facilities was observed to be a major obstacle to utilization of home delivery by women. This was the major reason why most mothers preferred to make use of home delivery instead of facility based delivery⁶. Distance, lack of professional health care professionals at available health care facilities, lack of necessary equipment's, and medicines were major sources of dissatisfaction among women in utilization modern health care facilities which ultimately led to use of home delivery by pregnant women⁶. Since there are still high prevalence rate of pregnant women seeking home delivery method which by observation is high among women of childbearing age in Etche Local Government Area which prompted the need for this investigation.

Generally, maternal and infant mortality rate had been on the increase especially in rural areas. Efforts have been made by the government and health sectors to reduce killer diseases but little or no effort is made towards reducing the utilization of home delivery by pregnant women and reproductive health. However, the researcher has observed over time women suffering complications during and after delivery which would have ordinarily been taken care of by professionals (skilled birth attendants). Despite those complications or health consequences of using home delivery service; some pregnant women still prefer to use the service of traditional birth attendants even when some are seeing these cases of deaths. This has become a public health concern and efforts have been made to ensure that women especially pregnant women utilize the services of skilled birth attendants including modern health care services. However certain factors might have influenced their choice but such factors is not known. Thus, the study was meant to focus on the factors influencing utilization of home delivery among women of childbearing age in Etche Local Government Area of Rivers State.

METHODOLOGY

Design and study area

Descriptive research design was used for the study. The study was conducted in Etche Local Government Area which is in Rivers State, South-South geopolitical zone of Nigeria. It is bounded by Abia State in the East and in the West and South by Ikwerre and Obio/Akpor Local Government Areas and North-East by Oyiibo Local Government Area, Rivers State and has its headquarters in the town of Okehi. Several towns and villages are in Etche Local Government Area and they include Akwu/Obuor, Chokocho, Egwi, Afara, Mba, Okehi, Ulakwor, Odufor, Umuebulu, Umuechem, Egbeke, Sigbo-Etche, Igbodo the ancestral home of Etche, Igbodo comprises of Umuohiaukwu, Umusharam, Umuoga, Okonocho, Umuine, Umudi, Umunkwa, Umuochie, Amaku, Obibi, Ezelaka. The estimated population of Etche LGA is 649,513 inhabitants with the most populous tribe being the Etche ethnic group.

Population

The population of the study comprised all women of child bearing age in the study area. The participant must be a resident of Etche Local Government Area of Rivers State in the past one year.

Sample size determination

The sample size used for the study was 300 women of childbearing age which was calculated using the formula developed by Kirkwood and Stern (2006) in determining the sample size for an unknown population.

$$n = \frac{z^2 p(100-p)}{\epsilon^2}$$

Where

n=Number of pregnant women recruited for the study. P=Proportional of home delivery in the area which was estimated at 30%. Z= The level of statistical significant set up at the level of 95% confidence interval. ε=Maximum likely error between the means which was estimated at 6%.

Using the above formula, the estimated sample size of the study were 200 women of childbearing age. By multiplying by the design factor which was 1.5, the numbers of women recruited for study was 300.

Sampling Technique

Due to a wide area of the targeted study, the researcher adopted simple random sampling technique to select ten (10) communities out of the 44 communities in Etche Local Government Area. The communities included; Abara, Afara, Ahia, Akporku, Akwa, Akwu, Amaku, Chokocho, Odufor, Egbu, Egwi, Igbo, Igbo-Etche, Umuechem, Ikwerrengwo, Isu, Ndashi, Nihi, Obibi, Obite, Opiro, Agbalu, Akwukabi, Odagba, Elele, Ogida, Ihie, Okehi, Okudu, Okomoko, Okomoko-Akpoku, Okoroagu, Ulakwo, Opiro, Owu, Ozuzu, Rukwangwo, Rumuebulu, Umuaturu, Umuchoko Village, Umudi-Igbo, Umuede, Umuoku-Igbo, Umuoye. The sampling frame consisted of ten (10) communities; Chokocho, Igboh, Egwi, Ozuzu, Umuechem, Abara, Okomoko, Rumuebulu, Okehi and Ogida in Etche Local Government area of Rivers State. From each selected community, convenience random sampling was used to select 30 women of childbearing age given a total 300 for the study.

Variables

Dependent variable

The dependent variable of this study is home delivery.

Independent variables

Following the results of the review of previous studies, we consider here two categorical factors that may influence utilization of home delivery by women as educational background and socio-economic status.

Data collection procedures

A structured questionnaire was developed by the researcher titled “Factors Influencing Utilization of Home Delivery Questionnaire” (FIUHDQ). This instrument was made up of two sections. Section A; contained socio-demographic information’s such as socioeconomic background, and educational background while section B; consisted of 8 items and it was structured on a four point modified Likert Scale of Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1.

Method of Data Collection

The researcher personally visited the ten (10) selected communities in Etche Local Government Area of Rivers State and administered copies of the questionnaire to the women. Three research assistants assisted in the distribution and collection of the instruments.

Data processing and analysis

The data collected were analyzed using Statistical Package for Social Sciences (SPSS, version 28). The analysis only included the individuals who finished responding to the survey. The mean and standard deviation (SD) were calculated to either agree or disagree with the items for the research questions with a 2.50 criterion mean. The One-Way Analysis of Variance (ANOVA) measured the statistical significance of the difference in data as P values < 0.05 was considered statistically significant.

Ethical consideration

The study was approved by the Research and Standing Committee of the Department of Human Kinetics Health and Safety Education. Participants in the study were guaranteed data confidentiality and were allowed to leave the study at any time.

RESULTS

Table 1: Mean and standard deviation showing the extent educational background influence utilization of home delivery among women of childbearing age in Etche Local Government Area. Criterion $\bar{X} = 2.5$

S/N	Educational Background and Utilization of Home Delivery	No Formal Education N=28 \bar{X}	Formal Education N=28 SD	Primary N=101 \bar{X}	Primary SD	Secondary N=109 \bar{X}	Secondary SD	Tertiary N=62 \bar{X}	Tertiary SD
1	I would not want to deliver at home due to my awareness of its attendant risk	2.06	0.60	2.54	0.70	2.86	0.91	3.65	0.59
2	I wouldn't mind practicing home delivery as I am not aware of any risk	2.09	0.43	2.52	0.64	3.35	0.12	2.76	0.17
3	I constantly learn about best methods of child delivery and should be encouraged to use the hospital	2.52	0.44	2.59	0.58	2.86	0.91	3.92	0.74
4	Haven been informed about the dangers associated with home delivery, I would not want to practice it	2.63	0.99	3.31	0.74	3.31	0.70	3.80	0.50
Grand Mean/SD		1.82	0.61	2.74	0.57	3.09	0.39	3.53	0.61

(Survey Data, 2022)

Table 1 shows that items 1, 2, 3 and 4 respectively were all accepted, as the extent educational background influence utilization of home delivery among women of childbearing age in Etche Local Government Area. Specifically the result in the table shows a grand mean for influence of educational background (No formal education as $\bar{X} = 1.82; SD = 0.61$), (Primary education as $\bar{X} = 2.74; SD = 0.57$), (Secondary as $3.09; SD = 0.39$) and (tertiary as $3.53; SD = 0.61$) which is higher than the criterion mean of (>2.50). This implies that to a high extent, educational background influence utilization of home delivery among women of childbearing age in Etche Local Government Area.

Table 2: Mean and standard deviation showing the extent socioeconomic status influence utilization of home delivery among women of childbearing age in Etche Local Government Area. Criterion $\bar{X} = 2.5$

S/N	Socioeconomic Status and Utilization of Home Delivery	#50,000-Below N=133		#51,000-100,000 N=189		#101,000-Above N=40	
		\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
5	The high cost of services at a health centres is among my reasons for practicing home delivery	3.12	0.88	2.96	0.85	3.06	0.90
6	Not been able to afford medicines at the health centres are my reasons for patronizing home delivery	2.72	0.60	3.07	0.10	3.09	0.93
7	I find it difficult to afford three square meal a day, this makes it difficult for me to contemplate giving birth at a hospital	2.74	0.58	2.79	0.90	3.01	0.34
8	At work, I and my friends often discuss on which of the traditional birth attendants we will patronize	3.01	0.90	3.06	0.40	3.06	0.76
Grand Mean/SD		2.89	0.57	2.97	0.39	3.05	0.61

(Survey Data, 2022)

Table 2 shows that items 5, 6, 7 and 8 respectively were all accepted, as the extent socioeconomic status influence utilization of home delivery among women of childbearing age in Etche Local Government Area. Specifically the result in the table shows a grand mean for respondents with (#50,000-Below as $\bar{X} = 2.89$; $SD = 0.57$), (#51,000-100,000 as $\bar{X} = 2.97$; $SD = 0.39$), and (#101,000 – Above as 3.05 ; $SD = 0.61$) which is higher than the criterion mean of (>2.50). This implies that to a high extent, socioeconomic status influence utilization of home delivery among women of childbearing age in Etche Local Government Area.

Table 3: Anova Analysis on Association between Educational Background and Utilization of Home Delivery among Women of Childbearing Age in Etche Local Government Area
ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	65.829	2	23.791	5.611	.012
Within Groups	203.682	298	12.652		
Total	269.511	300			

The table shows the output of the ANOVA analysis as $F(2,298) = 5.61$, $p = .012$ which is less than the 0.05 alpha level. The table shows that there is a statistically significant difference between the group means of educational background and utilization of home delivery among women of childbearing age in Etche Local Government Area.

Table 4: Anova Analysis on Association between Socioeconomic Status and Utilization of Home Delivery among Women of Childbearing Age in Etche Local Government Area

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	58.035	2	20.134	4.812	.020
Within Groups	189.601	298	11.051		
Total	247.636	300			

The table shows the output of the ANOVA analysis as $F(2,298) = 4.81, p = .020$ which is less than the 0.05 alpha level. The table shows that there is a statistically significant difference between the group means of socioeconomic status and utilization of home delivery among women of childbearing age in Etche Local Government Area.

DISCUSSION

The objective of this study was to assess the factors influencing utilization of home delivery among women of childbearing age in Etche Local Government Area of Rivers State, Nigeria. The findings of the study which revealed that educational background positively influences utilization of home delivery among women of childbearing age in Etche Local Government Area is in tandem with the study of Mahama⁴ who observed that educational status of women influences the utilization of skilled delivery services. This finding is in line with the study of Obaid⁷ who observed that women of childbearing age would prefer to have a hospital or facility for delivery as opposed to home delivery irrespective of the level of educational background. This may have been due to increasing pace of awareness and campaign by government, non-governmental organizations and community health workers on the dangers and risks associated with home delivery.

The findings of the study which revealed that socioeconomic status positively influences utilization of home delivery among women of childbearing age in Etche Local Government Area collaborates with the study of Obaid⁷ who observed that there was significant relationship between respondents' socio demographics variables such as economic status ($p=0.000$) influencing the patronage of TBA centers. The study also agreed with the finding of Olayinka³ who revealed that social class and economic strength was a major factor in determining the choice of place of birth among women. The finding is not surprising to the researcher as ordinarily, there is a clear divide in the social and economic strata in the locality as most individuals in a social group and those with a particular class level may have been a driving force in promoting and influence the choice of delivery for most of its members through formal and informal methods.

RECOMMENDATIONS

1. Government at all level should strengthen their effort to improve access to modern health facilities in the rural areas by increasing the number of health facilities as well as provide emergency ambulance for transport in rural areas.
2. The ministry of health in collaboration with community health workers should intensify their campaign in reaching out to women in rural areas by educating them on the risk factors associated with home delivery and why facility-based delivery should be opted for.
3. The government and NGO's in collaboration with community heads should organize town hall meetings with women and men in the community to help raise their awareness in relinquishing the cultural believes that negates safe delivery of newborns and their mothers.
4. In view of this finding, the government of Rivers State, Nigeria in collaboration with the Rivers State Ministry of Education and development partners should strive to empower women in terms of education and employment as a means of combating female illiteracy and low socio-economic status which would minimize home-delivery patronage.

Strengths

This study considered the factors influencing utilization of home delivery among women of childbearing age, which, in spite of its vital importance has been mainly disregarded. An additional advantage is that the study's findings revealed that some socio-demographic factors affected women of childbearing age utilization of home delivery. Therefore, this study produced significant findings that provide insights into improving the use of facility-based delivery for women.

Limitations

Because of the nature of the study, women concerned with the utilization of home delivery were evaluated using the self-report approach. In addition, the researcher had little control over the impact of several elements, such as mothers' mental states and personality differences throughout the questionnaire-filling process.

CONCLUSION

It was concluded that to a high extent, educational background and socioeconomic status influence utilization of home delivery among women of childbearing age in Etche Local Government Area. There is significant association between educational background and socioeconomic status and utilization of home delivery among women of childbearing age in Etche Local Government Area. Therefore, the government of Rivers State, Nigeria in collaboration with the Rivers State Ministry of Education and development partners should strive to empower women in terms of education and employment as a means of combating female illiteracy and low socio-economic status to minimize home-delivery patronage.

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