



## FACTORS AFFECTING THE ADOPTION OF HOME DELIVERY AMONG HAUSA WOMEN IN AKINYELE LOCAL GOVERNMENT AREA (LGA), OYO STATE

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### Abstract

Maternal and newborn morbidity and mortality remain one of the public health problems in Nigeria especially in Hausa communities. The consequence of un-assisted delivery by skilled personnel in the home among Hausa women is life threatening to the mother and child. This study was therefore designed to investigate factors influencing HBD among Hausa women in Akinyele Local Government Area (LGA) Oyo State. The study was descriptive cross-sectional in design. A five-stage random sampling technique was used to select LGA, three communities, (Sasa, Moniya and Akinyele), streets, household, 400 consenting respondents who had delivered more than two children. A semi-structured, interviewer-administered questionnaire which included questions on socio-demographic characteristics, 30-point knowledge of risks associated with HBD was used for data collection. Knowledge scores  $\leq 10$ ,  $>10-20$  and  $>20$  were rated as poor, fair and good, respectively. Quantitative data were analysed using descriptive statistics, Chi-square test and logistic regression model at  $p=0.05$  while qualitative data were analysed thematically. Age of respondents was  $32.7 \pm 8.8$  years. About Forty-nine percent (48.8%) had no formal education, 53.0% had  $>5$  children and 93.2% were Muslims. Knowledge score was  $2.3 \pm 1.5$  and 69.7% had poor knowledge of risks associated with HBD, 43.3% correctly defined antenatal as care given to pregnant women during pregnancy. Sixty-eight percent reported that pregnancy has no associated maternal risk and 75.8% said HBD cannot lead to death of mother and child. Eighty-one percent said the first step to take when a pregnant woman is in labour is to call the aged women to assist her. Ninety-five percent delivered their last baby at home and 83.7% reported they were satisfied with HBD. Eleven percent 10.5% had ever visited health facilities for treatment or delivery and 3.4% received antenatal care during their last delivery. Majority (89.7%) preferred to deliver at home if they were pregnant again. Overall 89.0% stated that HBD is the better than hospital delivery and 59.0% said their culture did not support hospital delivery. There was a significant ( $p=0.005$ ) association between level of education and HBD. There was a significant association between parity  $>5$  and HBD. Mothers with more than  $>5$  children were more likely to deliver at home compared with those with less than five children (OR: 4.1 =CI= 5.1-6.2). Home delivery is preferred mode of delivery among Hausa women. This is reinforced by socio-cultural factors. Opinion leaders within the community could be targeted for proper health education to encourage hospital utilization for child delivery

**Keywords:** Home birth delivery, Antenatal care, Hausa women, Socio-cultural factors.

### Introduction

Home birth was the only method of delivery until the advent of modern medicine. In developing countries, where women may not be able to afford medical care or it may not be accessible to them, a home birth may be the only option available, and the woman may or may not be assisted by a professional attendant of any kind (Montagu, Yame, Visconti, Harding, Yoong, Joanne & Mock, 2011).

Home delivery is rapidly gaining popularity without women knowing all the risks and one reason many women choose home birth is because of frustration with the medicalization of childbirth and the lack of power that they have in the hospital and there are just not lots of great information out there on giving birth at home. What information does exist seems to point to the conclusion that home births may be more dangerous and pose a higher risk of the baby dying.

More than 20 million women each year, suffers ill health or death during pregnancy and childbirth (Safe Motherhood Newsletter, 2002). Recent estimates suggest that more than 500,000 women die annually of

pregnancy related complications, ninety-nine percent (99%) of those deaths occur in less developed regions particularly Africa and Asia.

The 12th Perinatal and Infant Mortality Report of Western Australia (PIMC) (2007) reports deaths in the years 2002-2004 and relates them to birth place, maternal behaviours, population health and other causative factors. This report found, when combining data from 2000-2004, the perinatal mortality rate for planned homebirths was significantly higher than the rate for hospital births. A home birth in a developed country is an attended or an unattended childbirth in a non-clinical setting, typically using natural childbirth methods, that takes place in a residence rather than in a hospital or a birth centre, and usually attended by a midwife or lay attendant with expertise in managing home births. Women with access to high-quality medical care may choose home birth because they prefer the intimacy of a home and family-centred experience or desire to avoid a medically-centred experience typical of a hospital or clinical setting (Montagu, Yamey, Visconti, Harding, April, Yoong, Joanne & Nancy, 2011). Furthermore, professionals attending home births can be an obstetrician and or a certified midwife. Analysis of the mortality of term babies whose mother choose home birth for the year 2000-2004 showed that the mortality of babies in a homebirth programme was 6.7/1000 total births, compared to a term perinatal mortality of 2.1/1000 total births in planned hospital births at term gestation during the same period (Homer & Nichol, 2009). The same study also stated that there are around 200 planned homebirths in West Australia each year <1% and this proportion has been relatively stable over the past 15 years. Furthermore, of the women transferred, either antenatally or during labour, 14% had a history of a prior caesarean section. The most common reasons for transfer from home to hospital in the pre-labour or antenatal period were pre-labour rupture of membranes and premature labour. The most common reasons for transfer during labour were foetal distress and 'failure' to progress at >3cm cervical dilatation. Postpartum haemorrhage accounted for 48 transfers from home to hospital 23% of the women whose intended place of birth at onset of labour was home. Of the women who were transferred to hospital but whose intended place of birth at onset of labour was home, 46% had a normal vaginal birth and 37% had an emergency caesarean section. Of the women who were transferred to hospital antenatally, 48% had a normal vaginal birth, 10% had an elective caesarean section and 30% had an emergency caesarean section (Homer & Nicholl, 2009).

In a study conducted in three Northern states of Yobe, Katsina and Zamfara in Nigeria revealed that the proportion of women delivering at home has been increasing among recent cohorts: 92.4% and 93.2% of women who gave birth in the 3 years and 1 year preceding the survey respectively gave birth at home (Henry, Radheshyam Sally Stephane & Tukur, 2005 ).Sullivan and Ranzcog (2008) stated that lack of choice for women with risk associated pregnancies make some women with high risk pregnancies to choose home rather than hospital birth. This can be seen within a context where home birth and hospital birth both carry different risks and offer different benefits to individual women.

Women in Kigoma district value to deliver at home in the presence of the significant others because of their traditional culture. In this case even if complications develop it is difficult for these significant others to detect them early enough hence refer them to higher centres with no delay. Moreover, clarification of values of an individual woman or her family will facilitate women's intention to seek medical care early during their illness.

Lastly, this study aims at looking at the factors influencing adoption of home birth delivery among Hausa women in Akinyele LGA, Oyo State.

### **Statement of the problem**

A larger group of mothers are not knowledgeable to maternal risks during pregnancy and delivery and the dangers associated with home delivery. In Nigeria, three in five births (62%) occur at home according to the 2008 National Demographic and Health Survey, but with regional variations, the northern part of the country having the highest. In the absence of a skilled health worker, a traditional birth attendant was the next most common person assisting a delivery (22 percent). Nineteen percent of births were assisted by a relative or other person, and an equal proportion of births were attended by no one (National Demographic and Health Survey, 2009). The majority of women who received no antenatal care services delivered at home (96 percent) (NDHS, 2009). In these circumstances most of the home deliveries are not attended by skilled personnel.

The delivery in the home subjects a woman into complications such as lacerations (vaginal or uterine), retained placenta, ruptured uterus, postpartum haemorrhage and puerperal sepsis. Home delivery also increase the rate of child morbidity and mortality, transmission of infections such as HIV/AIDS, Vesico vaginal fistula, Recto-vaginal fistula and sepsi. It increase cost of treatment and poverty's, It often happens to some women who agree to enter health unit only when birth complications have advanced and tend to increase the incidence of maternal mortality (Ahmed 1998: Mathew *et al*, 1995). The consequences of un-assisted delivery by skilled personnel is devastating and threatening to the life of both mother and the child. Therefore, this document intends to highlight on some effective measures which could be used to address the problem of home deliveries.

### **Research questions**

The following research questions were set for the study:

1. What is the prevalence of home delivery among Hausa women in Akinyele LGA?
2. What are the factors that hinder the rate at which Hausa women access health facility in Akinyele LGA?
3. What is the effect of significant others on home delivery among Hausa women in Akinyele LGA?

### **Hypotheses**

The Following Null Hypothesis were tested;

1.  $H_0$ : Parity has no Influence on adoption of Home birth delivery among Hausa women in Akinyele LGA.
2.  $H_0$ : Knowledge has no influence on adoption of Home birth delivery among Hausa women in Akinyele LGA.
3.  $H_0$ : Level of education has influence on adoption of Home birth delivery among Hausa women in Akinyele LGA.
4.  $H_0$ : Religion has influence on adoption of Home birth delivery among Hausa women in Akinyele LGA.
5.  $H_0$ : Culture has influence on adoption of Home birth delivery among Hausa women in Akinyele LGA.

### **Material and Methods**

The study was a descriptive survey that focuses on factors influencing home birth among Hausa women in Akinyele LGA, Ibadan. It was cross-sectional in design which allows data to be collected at one point in time on

several variables such as age, education and parity. The study was conducted in Akinyele LGA Ibadan, Oyo State. These areas (Sasa, Akinyele, Moniya) are densely populated commercial areas with each having its own main market where people of the city come to shop for foodstuff, farm products and materials. The study focused on Hausa women only because majority they do not go to the hospital for delivery rather they delivered at home and the area was dominated by Hausa women. A probability sampling technique was adopted for the study; which gives every member of the target population an equal and independent opportunity of being selected for the study.

**Stage one:** The three Hausa communities (Sasa, Akinyele and Moniya) in Akinyele LGA were selected using total sampling method.

**Stage two:** Purposive sampling method was used to select Sasa and Akinyele because the two communities have one cluster each while simple random sampling method (Balloting) as used to select Banki cluster out of the two clusters within Moniya communities.

**Stage Three:** Simple random sampling technique was used in selecting households within the three clusters.

**Stage Four:** Simple random sampling technique was used in selecting 140 respondents from each of the three clusters. The participants who were available in a household during data collection were interviewed till the targeted sample size of 400 was met. Any household that did not have an eligible respondent was skipped.

Quantitative methods were used for data collection through questionnaire. The collected data were used to investigate the practices of home delivery among Hausa women in Akinyele LGA Ibadan Oyo of State. The research instrument was subjected to construct, face and content validity measures for consistency. The reliability of the instrument was ascertained a 0.79 reliability coefficient. Data analyses were made using descriptive statistical tools used were mean, inferential statistics of Chi-square ( $X^2$ ) and logistic regression model for the analysis. Frequency and percentage tables were generated and Cross tabulations of some variables done using Chi-square ( $X^2$ ) test. The research hypotheses were tested to establish associations between the independent and dependent variables using the Chi-square test at 5% probability level for rejecting the null hypotheses. Cross tabulation of dependent and independent variable was also done to establish associations between the variable.

## Results and Discussions

Basically, the findings of this study are presented in this chapter. The results were presented under the following sections.

**Table 1: Socio-demographic characteristics of the Respondents (N=400)**

Socio-demographic characteristics of the Respondents	Freq. (%)
<b>Age of the respondents</b>	49 (12.3)
1. 14-23 years	198 (49.4)
2. 24-33 years	77 (19.3)
3. 34-43 years	76 (19.0)
4. 44-53 years	
<b>Do you live together with your husband</b>	
1 Yes	379 (94.7)
2 No	45 (5.3)
<b>Religion</b>	27 (6.8)
1 Christian	373 (93.2)

2	Islam		
<b>Tribe</b>		2	(0.5)
1	Yoruba	2	(0.5)
2	Igbo	394	(98.5)
3	Hausa	2	(0.5)
4	Others		
<b>Highest level of education</b>		195	(48.8)
1	No formal education	118	(29.5)
2	Primary education	77	(19.2)
3	Secondary education	10	(2.5)
4	Tertiary education		
<b>Occupation of the respondents</b>		8	(2.0)
1	Civil servant	135	(33.8)
2	Trading	257	(64.2)
3	Housewife		
<b>Husband's occupation</b>		34	(8.5)
1	Civil servant	326	(81.5)
2	Trading	32	(8.0)
3	Farming	8	(2.0)
4	Others		
<b>For how long have you been living in Ibadan</b>		290	(72.5)
1	Up to 5 years	110	(27.5)
2	More than 5 years		

A completion response rate of 100% (400 out of 400) was obtained with the questionnaire among the Hausa women selected for the study, the ages of the respondents ranged from 14 to 53 years and the mean age of  $32.8 \pm 8.8$  respectively with almost half (49.4%) of the respondents within 24-33 years age bracket. Majority (88.7%) of the respondents were married while 1.0% of the respondents were widowed. Majority (94.7%) of the respondents said they were living with their husband while majority (93.2%) were Muslims. The distribution of the respondents based on their level of education shows that, almost half (48.8%) of the respondents had no formal education while only 2.5% of the respondents had tertiary education. Sixty-five per cent of the respondents were housewife; majority (81.5%) of the respondents' husbands' occupation was trading while majority (72.5%) of the respondents claimed they have been living in Ibadan for at least 5 years (See table.1).

**Test of Hypotheses**

**Hypothesis One**

**Table 2: Parity and Prevalence of home delivery of the respondents**

Parity	Prevalence of home delivery			$\chi^2$	P-value
	1 to 5 Children Freq. (%)	6 Children and Above Freq. (%)	All Children at home Freq. (%)		
Less than six children	65 (16.2)	0 (0.0)	123 (30.8)	27.069	0.000
Children and above	36 (9.0)	15 (3.8)	161 (40.2)		
Total	101 (25.2)	15 (3.8)	284 (71.0)		

The first null hypothesis which stated that there is no significant relationship between respondents' parity and their prevalence of home delivery was tested.

Table .2 shows the cross tabulation of respondents' parity with respondents' prevalence of home delivery using Chi-Square statistic. There was a significant relationship between respondents' parity and their prevalence of home delivery at 95 per cent confidence interval ( $p < 0.05$ ). Respondents' parity has a role to play in their prevalence of home delivery. The null hypothesis was therefore rejected.

**Hypothesis Two**

The second null hypothesis which stated that there is no significant relationship between respondents' knowledge of antenatal care services and their prevalence of home delivery was tested.

**Table 3: Cross tabulation of Knowledge of ANC and Prevalence of home delivery of the respondents**

Knowledge of ANC	Prevalence of home delivery			$\chi^2$	P-value
	1 to 5 Children Freq. (%)	6 Children and Above Freq. (%)	All Children at home Freq. (%)		
Poor	61 (15.2)	7 (1.8)	211 (52.8)	24.063	0.000
Average	32 (8.0)	4 (1.0)	65 (16.2)		
Good	8 (2.0)	4 (1.0)	8 (2.0)		
Total	101 (25.2)	15 (3.8)	284 (71.0)		

Table 3. shows the cross tabulation of respondents' knowledge of antenatal care services with respondents' prevalence of home delivery using Chi Square statistic. There was a significant relationship between respondents' knowledge of antenatal care services and their prevalence of home delivery at 95 per cent confidence interval ( $p < 0.05$ ). Respondents' knowledge of antenatal care services has a role to play in their prevalence of home delivery. The null hypothesis was therefore rejected.

### Hypothesis Three

The third null hypothesis which stated that there is no significant relationship between respondents' level of education and their prevalence of home delivery was tested.

**Table 4.: Cross tabulation of level of education and Prevalence of home delivery of the respondents**

Level of education	Prevalence of home delivery			$\chi^2$	P-value
	1 to 5 Children Freq. (%)	6 Children and Above Freq. (%)	All Children at home Freq. (%)		
No formal Education	35 (8.8)	6 (1.5)	76 (19.0)	50.573	0.000
Primary Education	31 (7.8)	6 (1.5)	159 (39.8)		
Junior Secondary Education	18 (4.5)	1 (0.3)	24 (6.0)		
Senior Secondary Education	13 (3.3)	1 (0.3)	21 (5.3)		
Technical School	0 (0.0)	1 (0.3)	0 (0.0)		
OND	4 (1.0)	0 (0.0)	34(1.0)		
Total	101 (25.2)	15 (3.8)	284 (71.0)		

Table 4. shows the cross tabulation of respondents' level of education with respondents' prevalence of home delivery using Chi Square statistic. There was a significant relationship between respondents' level of education and their prevalence of home delivery at 95 per cent confidence interval ( $p < 0.05$ ). Respondents' level of education has a role to play in their prevalence of home delivery. The null hypothesis was therefore rejected.

### Hypothesis Four

The fifth null hypothesis which stated that there is no significant relationship between respondents' culture and their prevalence of home delivery was tested.

**Table 5: Cultural factors and Prevalence of home delivery**

Does your culture support hospital delivery?	Prevalence of home delivery			$\chi^2$	P-value
	1 to 5 Children Freq. (%)	6 Children and Above Freq. (%)	All Children at home Freq. (%)		
Yes	73 (19.9)	9 (2.5)	68 (18.6)	77.252	0.000
No	21 (5.7)	6 (1.6)	189 (51.6)		
Total	94 (25.7)	15 (4.1)	257 (70.2)		

Table 5. shows the cross tabulation of respondents' culture with respondents' prevalence of home delivery using Chi-Square statistic. There was a significant relationship between respondents' culture and their prevalence of home delivery at 95 per cent confidence interval ( $p < 0.05$ ). Respondents' culture has a role to play in their prevalence of home delivery. The null hypothesis was therefore rejected.

**Binary logistic regression**

Variable	Odds ratio (95% CI)	p-value
<b>Number of years lived in the area</b> <5 (reference) ≥5	1.0 4.2 (1.5-11.4).	p = 0.002
<b>Sex</b>  Female (reference)  Male	1.00 2.2 (1.2 – 7.1)	p = 0.013

Categorically, after effecting adjustment, it was revealed that respondents with more than five years experience in motorcycle riding were 0.39 less likely to be involved in CMA compared with those with lesser years. (Table 6).

**Conclusion**

However, the contributing factor to home delivery among Hausa women in Ibadan was poor knowledge (low level of education) poverty, cultural belief, traditions, religion, mothers being unfamiliar with hospital and influence of friends, environment, uncomfortable about being examined by male nurse and physician, worried about cost, being unhappy with separation from their families.

Maternal health care services provided by well trained and equipped health workers is widely recognized as an important protective factor against maternal and new borne morbidity and mortality. In this current study, about 43.3% of the respondents defined it correctly as the treatment given to pregnant women while forty percents of the respondents were able to list two benefits of antenatal care services however delivery in health facility was still low (10.0%) compared to National target of 80%, the findings was lower compare to findings by Nigeria demographic survey of 2010 which was 30% for North central region.

The results from both bivariate and multivariate logistic regression analysis confirmed the strong significant in the association between respondents level of education, respondents knowledge, respondents parity and respondents culture with the prevalence of home deliivery. Delivery in health facility increased with increase the level of education and by increased the number of antenatal care visits, but decreased as the distance between health facility and home increases.

**Recommendations**

Based on the results of this study, the following recommendations are made:

- Improving education among girls, especially beyond primary school needs to be strongly encouraged by the Government as education has an impact on the women decision on the place of delivery.



- Community awareness needs to be raised on maternal health seeking behavior and families and community in general need to be prepared for means of transport or transport costs.
- Community-based health education should continue to focus on discouraging some of the non-beneficial traditional practices, and promote modern evidence-based practices
- Health facility should be a functional unit for maternal health care equipped with skilled and motivated staff, essential drugs and supplies to provide basic and comprehensive obstetric care.
- Strengthen the effort to improve accessibility of health facilities by increasing the number of health facilities as well as transport.
- Early booking of antenatal care clinic and completion of more than four visits need to be promoted at community level as those attending antenatal clinic early acquire enough information about safe delivery and majority of those attending more than four visit ending up deliver in health facility.

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