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Perception, Attitude and Practices of Home Birth among Mothers of Under-Five Children in a Migrant Community of Southwest, Nigeria

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Abstract

Homebirth practice and its associated risks have not been adequately explored in Nigeria. This study therefore, investigated perception, attitude and homebirth practices of mothers of under-five children in a Nigerian migrant community. A total of 399 mothers were sampled and data was collected using mixed methods. The average age of the respondents was 32.1±8.8 years, 50% of them had secondary education, 81.5% were housewives and 80% perceived homebirth as safe. A total of 61.9% of the respondents registered for antenatal care. In this study, home delivery practices refer to the involvement skilled attendant (17.2%), monitoring of deliveries (10.7%), cutting umbilical cord with sterilized material (95.7%), birth timing (36.7%) and provision for referral (5.3%). Factors influencing preference for homebirth included economic status, time the labor started, health workers' attitude, cultural belief and distance to health facility. The study found that homebirth among the target population lacked the involvement of skilled birth attendants. Thus, community engagement and awareness on the importance of having a skilled attendant during home birth is highly recommended.

Keywords

Home birth; perception; practices; skilled birth attendant

Introduction

Home birth refers to giving birth at one's place of residence. Out of an estimated 130 million world birth annually, nearly half occur at home (Darmstadt, Lee, Cousens, Sibley, Bhutta et al., 2009). Home birth can be planned and unplanned and could contribute to maternal morbidities and mortality (Johnson & Daviss, 2005). 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 professionals such as obstetricians, doctors and certified midwives (Johnson & Daviss, 2005, Vernon 2007).

Unplanned home births are associated with adverse outcomes for both mother and her baby. This may include maternal, fetal and neonatal mortality that are reported to be considerably worse than those reported at hospitals (Koblinsky, Matthews, & Hussin, 2006; Lawn, Haws, Darmstadt, Yakoob, Menezes, et al 2009). Home births account for 63% of all births in Nigeria, and this may be with or without the presence of skilled birth attendants (NPC & ICF, 2014).

There is little information about home birth attendants' roles, both in terms of managing childbirth and in implementing effective referral systems which could lead to a reduction in maternal and child mortality (Darmstadt, Bhutta, Cousens, Adam, Walker, de Bernis, 2005).

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This data is important as Nigeria strives towards achieving Sustainable Development Goal 3 to promote healthy living and well-being.

Migrant Hausa communities in Nigeria are among the first settlers in Ibadan Oyo state. They remain distinct from the rest of the communities and have their own dress, food and customs and continue to speak in their own language. The community is headed by a Hausa chief, referred to as Seriki Hausawa, and majorly dominated by the Hausas with few residents from other tribes. The original Hausa settlement in Ibadan was in Omiadeyegun, along the Abeokuta road. As the Hausa considered this settlement too far from the town, they moved to a new location named Oja Oba. After World War I, the Hausa moved to an unoccupied area in Mokola and Race course section of Ibadan near the army barracks. As a symbol of their hope and dedication, they named it New Town, or Sabon Gari/ Sabo (Lloyd, Mabogunje, Awe 2009).

This study investigated attitude, perception and practice of homebirth as well as factors influencing these practices among mothers of under-5 children in Sabo community who are predominantly Hausas, known for their conservative outlook in addition to having a distinct Islamic culture known as "Pudha". This culture restricts most of their women from both formal education and utilizing public facilities including the health facility. They therefore, engage in home births which are usually attended to by unskilled birth attendants thereby increasing their exposure to risks associated with childbirth. The aim of this study therefore is to identify ways of preventing maternal, neonatal morbidities and mortality resulting from home birth practices.

Methodology

Research design, study area, population and scope

Cross-sectional study design utilizing both quantitative and qualitative methods was used to study the Sabo community at Ward 6, Ibadan North Local Government Area, Oyo state. Sabo is the new settlement of Hausas. The community has conservative educational resources (Arabic schools, formal schools majorly private except for one government owned which is situated at the community's boundary with Mokola (St. Gabriel Secondary School, Mokola). There is a government primary healthcare facility, a Traditional Birth Attendants clinic and a number of Patent Medicine Vendors. Sabo residents are mostly traders and are known for their tailoring skills. They also sell meat/suya, furniture, car and fruit among others. There are boreholes, shopping complexes, public toilets, religious places of worship dominated by mosques and few churches. The major means of disseminating information in the community is through the public-address system situated at the central mosque. Decisions about the community are majorly carried out by the Seriki alongside the ruling council (Community development report, Ibadan North LGA – unpublished). The description of this migrant community reflects their conservativeness and maintenance of their culture and customs irrespective of their location. The study population comprised mothers of under-five children in Sabo community. It excluded those who were not available for interviews and those who were not selected via a ballot system.

Sample size and sampling technique

The sample size was 399 which conformed to Lwanga and Lemeshow's (1991) with a prevalence of 63% and 5% level of significance; a 10% attrition rate was factored in as well. A cluster sampling technique was used to select the study population which was later divided into seven clusters with 57 respondents in each cluster. Additionally, four participants aged 25, 29, 32 and 36 years who were housewives, one with basic (primary) education, two with secondary education and one with National Certificate of Education, were purposively selected for an in-depth interview. Their selection was based on their experience and practice of homebirth, including their availability and willingness to participate in the interview.

Data collection

A semi-structured interviewer-administered questionnaire and an in-depth interview guide were provided in the indigenous language, Hausa. The questionnaire consisted of questions on socio-demographic characteristics, perception of home birth, attitudes towards home birth, practices of home birth and factors influencing home birth practices to achieve the set objectives. The in-depth interview guide, which served to keep the discussion in focus while allowing room for free expression, consisted of open-ended questions relating to home birth (delivery) practices and experiences. Each of the discussion sessions lasted between 20 and 30 minutes. All interviews were recorded, translated to English and transcribed verbatim in English. Data collection was carried out in January 2016 from 10 am until 5 pm since many of the respondents were housewives and could be accessed at any time of the day.

Validity and reliability of the instruments

Validity of the instruments was ensured through in-depth review of literature related to the study. The reliability of the instruments was ascertained through a pre-test conducted on 10% of mothers of under-5 children in Shasha, a community with similar characteristics with Sabo. Reliability analysis was conducted using Cronbach's Alpha test with an acceptable co-efficient of 0.9.

Data analysis

Data was analyzed using the SPSS version 20. It was subjected to descriptive and inferential statistical analyses while the interviews were summarized as narrative information and organized based on themes.

Ethical Consideration

Ethical approval for the study was obtained from the UI/UCH ethical review board. Informed consent was obtained from the participants after they were briefed about the objective and nature of the study. Participation in the study was voluntary and participants were assured that anonymity would be observed. Confidentiality of participants was maintained by making sure the questionnaire and recorded interviews were carefully stored. Accessibility of the information was restricted to only the research team members.

Results

Socio-demographic characteristics of respondents

The age of respondents ranged between 14 and 55 years with a mean of 32.1±8.8 years. A total of 388 (97.2%) of the respondents were Muslims, 379 (95.0%) of them were married, 189 (47.4%) had secondary education while 124 (31.1%) had primary education. Most of the respondents 363 (91.0%) belonged to the Hausa ethnic group and a majority of the respondents 325 (81.5%) were housewives. Details pertaining to respondents' socio-demographic characteristics are shown in Table 1.

Table 1: Respondents' Socio-demographic Characteristics

N = 399 (100%)

Socio-demographic Variables	Frequency (n)	Percentage (%)
Age (Years)*		
14-22	73	18.3
23-31	121	30.3
32-40	134	33.6
41-49	55	13.8
50-55	16	4.0
Religion		
Christianity	11	2.8
Islam	388	97.2
Marital Status		
Married	379	95.0
Separated	8	2.0
Divorced	9	2.3
Widowed	3	0.8
Educational level		
No formal Education	82	20.6
Primary education	124	31.1
Secondary Education and above	193	48.4
Ethnic Group		
Hausa	363	91.0
Yoruba	29	7.3
Others**	7	1.8
Occupation		
House Wife	325	81.5
Trading	53	13.3
Artisan	17	4.3
Others	4	1.0

**Mean age =32.1±8.8 **other ethnic group include Igbo and Fulani*

Perception towards home birth

As shown in Table 2, 79.4% of the respondents perceived homebirth as safe. Two hundred and fifty-four (63.7%) of them perceived home births posed no risks to both mother and child, 17.0% perceived hospital birth as a waste of time and resources while 54.6% perceived that child birth was easy and there was no need for a hospital delivery. Three hundred and thirty-five (84.0%) of the respondents acknowledged the benefits of home birth over hospital ones, such as less expenses (39.4%), easy access to care by neighbors (21.2%) no disturbance or interference by health workers (18.2%), privacy (12.1%), mother readily available to do the household chores and care for the family (6.1%), and good sleep and rest (3%).

Table 2: Perception of respondents towards Home birth

N = 399 (100%)

Variables	Frequency (n)	Percentage
Homebirth is safe		
Yes	317	79.4
No	82	20.6
Homebirth have some risks to both mother and child		
Yes	145	36.3
No	254	63.7
Hospital birth is a waste of time/resources		
Yes	68	17.0
No	331	83.0
Child delivery process is easy, there is no need for a hospital birth		
Yes	181	45.4
No	218	54.6
Hospital birth has benefit over home birth		
Yes	255	63.9
No	144	36.1
Homebirth has benefit over hospital birth		
Yes	335	84.0
No	64	16.0
Skilled birth attendant during delivery is necessary		
Yes	310	77.7
No	89	22.3
Skilled birth attendant during delivery can help prevent maternal or neonatal mortality		
Yes	303	75.9
No	96	24.1
Child delivery with unskilled birth attendants is an unhealthy thing to do		
Yes	132	33.1
No	267	66.9
Women have the ability to birth a baby naturally without medical intervention		
Yes	282	70.7
No	117	29.3

This was corroborated by respondents during the in-depth interview.

One respondent said:

> *"To me, by God's power (Isha Allahu), it is safe, it has no risk. There is no problem, it is safe, and we do give birth in peace at home, no problem at all".*
>
> *[IDI-1/29yrs/primary education]*

Another participant said:

> *"To me, there is no problem, it is just the ease it brings because I don't experience pains in my leg or pains in my body, it always come with ease that is why I give birth at home in peace without any problem".*
>
> *[IDI-2/32years/NCE]*

Another interviewee felt:

> *"All births are God's work".*
>
> *[IDI-4/36yrs/secondary education]*

A total of 310 (77.7%) of the respondents perceived that having a skilled birth attendant during delivery was necessary while 75.9% of them opined that having a skilled birth attendant

during delivery could help prevent maternal or neonatal mortality. Interviewees perceived both home and hospital as safe for child birth since birth attendants are usually invited during home delivery. In one of the respondent's words:

> *"There is no one that is not safe because at home we don't do it alone we call nurses, we have nurses in Sabo who take delivery that is what they do".*
> *[IDI-3/25yrs/secondary education]*

About 66.9% of the respondents did not perceive that child delivery with the presence of unskilled birth attendant was unsafe. They opined that women have the ability to give birth naturally without technological/medical intervention.

Respondents' attitude towards home birth

Respondents' attitude towards home birth are shown in Table 3; 61.9% of the respondents did registered for ante-natal care in a hospital but gave birth at home. Only 23.8% did not want to have a hospital birth because of medical interventions while 13.3% had cultural objection to hospital birth. Two hundred and seventy-nine (69.9%) of the respondents planned a homebirth while 79.9% of them agreed that it was necessary to have their sterile pack and supplies needed for the delivery process ready; 81.2% of the respondents saw it as their responsibility to ensure regular visits by skilled birth attendants. Skilled birth attendants were present during the home birth of 26.1% of the respondents. Three hundred and seventy-six (94.2%) were concerned with the safe delivery of their baby and their perinatal and postnatal well-being.

Table 3: Respondents' attitude towards homebirth

N= 399 (100%)

Variables	Frequency (n)	Percentage (%)
Register for ante-natal in a hospital and gave birth at home		
Yes	247	(61.9)
No	152	(38.1)
Don't want to have a hospital birth because of medical interventions		
Yes	95	(23.8)
No	304	(76.2)
Plan having a homebirth		
Yes	279	(69.9)
No	120	(30.1)
Can engage in homebirth		
Yes	321	(80.5)
No	78	(19.5)
Home birth is a natural process of child delivery therefore I prefer it		
Yes	316	(79.2)
No	83	(20.8)
Having my sterile pack ready, supplies needed for the delivery process is necessary		
Yes	319	(79.9)
No	80	(20.1)
Ensuring regular visits with my skilled Birth attendants is my responsibility		
Yes	324	(81.2)
No	75	18.8
Concerned with the safe delivery of my baby as well as my good health during and after birth		
Yes	376	(94.2)
No	23	(5.8)
Have a cultural objection to hospital birth		
Yes	53	(13.3)
No	346	(86.7)

Interviewees confirmed that they attended ante-natal care in a hospital although they gave birth at home, and in the words of one of the interviewees:

> *"I used to attend very well, even the week I'm going to give birth I will go, because even the child I'm backing I went for clinic on Tuesday and I delivered on Wednesday.*
>
> *[IDI-1/29yrs/primary education]*

In the words of another interviewee:

> *"Yes, I do attend but for one of my children I did not go till I gave birth to her but for all other pregnancies I did go to the hospital but I didn't give birth at the hospital".*
>
> *[IDI-2/32yrs.NCE]*

All interviewees planned to have homebirth although they registered for ante-natal care in a hospital:

> *"By God's grace, I plan having a homebirth, I do plan having a homebirth".*
>
> *[IDI – all]*

As for whether they had their sterile pack ready for the child birth, there were divergent of opinions. One respondent remarked:

> *"We buy all the things that will be necessary for the delivery at the hospital, another said, when we go to the hospital, as am coming, I am from the hospital, they will give us list, the ones the mother will use and the ones the child will use, it is the list that we use to buy everything we are told to buy".*
>
> *[IDI-2/32yrs/NCE]*

However, another interviewee opined that:

> *"There is nothing one buys, we don't buy anything at home, if we want to give birth. If one is in labor, we don't say it is a must for her to buy some things, the only thing we say we will use at home is the razor blade that we will use to cut the child's cord, that is the first thing we get, if I am pregnant, I used to buy the razor blade because if one gives birth that is the first thing one will use and there has been no problem".*
>
> *[IDI- 1/29yrs/primary education]*

Cultural objection to hospital birth was confirmed by one of the mothers interviewed:

> *"Hmm…… culture, our culture did not allow for it, because in the olden days, we don't usually go to the hospital for child delivery, till now some people did not believe in delivering a child at the hospital, giving birth at home is better than giving birth at the hospital but the world has become modernized".*
>
> *[IDI-4/36yrs/secondary education]*

Homebirth practices

Table 4 showed the home birth practices of the respondents. A total of 79.9% of the respondents have had home births. To guide the delivery process, 13.5% of them said the birth attendants enquired about their birth plans, 0.9% of the respondents were asked about parity and age, 5.6% about the character and outcomes of previous labor and in only 0.6% of the respondents were asked about their blood result. Twenty-four (7.5%) had their pulse rate examined during labor and 7.2% of the respondents had their temperature checked. Blood pressure measurement, urinalysis and abdominal examination were carried out in 4.4% of the women. Instrument such as fetoscope was used to monitor the delivery process of 10.7% of the respondents. When asked about the instrument used to cut the cord, 95.6% indicated use of new or boiled blade, 2.5% did not know, 1.6% mentioned scissors and 0.3% indicated use of household knife. People who were present and assisted during home birth included relatives (64.9%), Skilled birth Attendant (17.2%), Traditional Birth Attendant (2.2%) and nobody i.e. delivery was done all alone (15.7%).

Table 4: Variables related to homebirth delivery process in a Home birth practices

N = 399 (100%)

Variables	Frequency (n)	Percentage (%)
Have you had any home birth before?		
Yes	319	79.9
No	80	20.1
Questions asked to guide in the delivery process birth Plan		
Yes	43	13.5
No	276	86.5
Parity and age		
Yes	3	0.9
No	316	99.1
Character and outcomes of previous labor		
Yes	18	5.6
No	301	94.4
Blood result		
Yes	2	0.6
No	317	99.4
Examinations carried out during labor pulse rate		
Yes	24	7.5
No	295	92.5
Temperature		
Yes	23	7.2
No	296	92.8
Blood Pressure		
Yes	14	4.4
No	305	95.6
Urinalysis		
Yes	14	4.4
No	305	95.6
Abdominal Examination		
Yes	14	4.4
No	305	95.6
Fetoscope used to monitor the delivery process		
Yes	34	10.7
No	285	89.3

The in-depth interviews provided detailed account of the home delivery practices in terms of who was involved, what the pregnant woman did during labor and what happened post-delivery. When asked about who was involved in the homebirth, the interviewees said:

> *"It was me and my husband, but for my first born it was me and my grandma, she has taught me what to do, when I want to give birth".*
>
> *[IDI-4/36yrs/secondary education]*

Another said

> *"Nobody, it was only me, my mother in-law"*
>
> *[IDI-1/29yrs/primary education]*

While one other interviewee said

> *"As for me when I wanted to give birth to my child at home, me, grandma and nurse, they were the ones over me and my husband".*
>
> *[IDI-2/32yrs/NCE]*

All the birth took place in their bedrooms.

The practice by mothers during labor was explained as follows:

> *"We do drink 'rubutu'; it is God's names in Arabic that is written on a slate. We write it and when we write it they will help us to wash it after, it has been washed, if one is in labor one will drink it that is all."*
>
> *[IDI-1/29yrs/primary education]]*

Another interviewee said:

> *"me, if I want to give birth, I will kneel down, if the child is coming I will know in my body when I see that it is time, because kneeling down for a long time can make one tired, but when I see that it is time, we exercise our body by going up and down in the house, those are the things we do at home, but when the child is coming, we kneel down and hold a stool until the child comes out".*
>
> *[IDI-3/25yrs/secondary education]*

As a means of caring for the new-born, the following activities were carried out: drying baby's skin (97.8%), keeping the baby warm (95.6%) and early initiation of breastfeeding (95.9%). About 95.9% of the respondents practiced personal hygiene. Two hundred and seventy-one respondents (85.0%) immunized the new-born and 37.0% went to a hospital for medical check-up after delivery.

Measures put in place for the care of the new-born are as follows:

> *"When the child is out, my husband is around and where I first lived we were many there, so he will just go and call my neighbors who will then cut the cord, clean up the blood, bath the baby"; "when the child is out, I will wait for some time and the placenta will also come out, when it is out, I will sit down*

on a 'potty', when I sit on the 'potty', my needle will be around me and I will take the needle, there is an elderly woman in my house, she will help me tie the cord with a good wool. She will carry the baby and pour oil on the child, she will take pad and use it to clean, clean and clean the baby's body, hot water will already be available, she will use the water with sponge and black soap and use it to bath the child, after bathing the baby, 'debino' and 'shamsham' (locally prepared concoctions)is the first thing we give to the child, we will put some drops in their mouth, that is the first thing we give to our babies, it is what our Prophet told us to give our children when they are born, after that we will then give the child breast milk until he/she sleeps".

[IDI-4/36years/secondary education]

How long the birth attendant/midwife stayed after delivery to monitor/observe mother and child in case of complications or emergency varied; 49.8% reported that the midwife/birth attendants stayed between 30 minutes and 1 hour, 23.2% of them stayed between 1 hour and 2 hours, and 4.7% between 2 and 3 hours. Only 5.3% of the respondents made provisions for hospital transfer in case of an emergency. Fifty-four (16.9%) respondents reportedly needed referral due to delivery complications.

Perceived factors influencing home birth practice

The factors influencing home birth practice are shown in Table 5. About 36.8% of the respondents indicated low economic status as influencing home birth practice while 35.6% of them said their labor started at night, 35.3% of the mothers believed that home birth was safer while 24.3% pointed to health workers attitude as a factor. Socio-cultural belief and encouragement by significant others for homebirths were factors mentioned by 22.3% and 21.6% of the respondents respectively. Other factors cited for preference for home birth included fear of medical intervention (12.8%) and distance to health facility (4.5%).

Table 5: Factors influencing home birth practice

N = 399 (100%)

Factors	Frequency (n)	Percentage (%)
Low economic status		
Yes	147	36.8
No	252	63.2
Labor started at night		
Yes	142	35.6
No	257	64.4
Believe that homebirth is safe		
Yes	141	35.3
No	258	64.7
Health workers attitude		
Yes	97	24.3
No	302	75.7
Socio-cultural belief		
Yes	89	22.3
No	310	77.7
Encouraged by relatives		
Yes	86	21.6
No	313	78.4
Fear of medical interventions		
Yes	51	12.8
No	348	87.2
Distance to health facility		
Yes	18	4.5
No	381	95.5

Relationship between respondents' socio-demographic variables and home birth practices

As shown in Table 6, there is a statistically significant relationship between respondents' socio-demographic variables and home birth practices. The fisher exact test showed a significant relationship between ethnic group (p=0.000), education (p= 0.000) and occupation (p=0.000) including perception and attitude of respondents towards home birth practice (p=0.000 and 0.000 respectively). Table 7a contains a further analysis using logistic regression of the significant variable of the bivariate analysis. There was significant association between the perception and attitude of the respondents and their practice of home birth. Women with high perception had good scores and had positive attitudes towards homebirth (OR=0.093; CI=0.021-0.407, p=0.002 and OR=1,954.051 (CI=286.270 – 13,338.172, p=0.000 respectively). A further regression of all socio demographic variables with home birth practice corroborates with the results and reveals a significance between perception and attitude of respondents with home birth practices (OR=0.093; CI=0.021-0.407, p=0.002 and OR=1954.051 (CI=286.270 – 13,338.172, p=0.000 respectively) (Table 7b). There was however, a statistically significant relationship with religion of respondents in this model (OR=0.011; CI=0.000 – 0.786, p=0.038) indicating that more Muslim women practiced home compared with the Christians. This was contrary to what was been observed in the bivariate analysis.

Table 6: Respondents' socio-demographic variables and home birth practices

Socio-demographic variables	Home birth practice		Total	Fishers exact test
	Yes n (%)	No n (%)	n (%)	(P – value)
Total	319 (79.9)	80 (20.1)	399	
Age				.502
14 – 22	53 (72.6)	20 (27.4)	73	
23 – 31	100 (82.6)	21 (17.4)	121	
32 – 40	107 (79.9)	27 (20.1)	134	
41 – 49	46 (83.6)	9 (16.4)	55	
50 - 55	13 (81.2)	3 (18.8)	16	
Religion				.467
Christianity	8 (72.7)	3 (27.3)	11	
Islam	311 (80.2)	77 (19.8)	388	
Marital Status				
Married	303 (79.9)	76 (20.1)	379	.629
*No Longer Married	16 (80.0)	4 (20.0)	20	
Level of Education				.000***
No formal education	75 (91.5)	7 (8.5)	82	
Primary education	110 (88.7)	14 (11.3)	124	
Secondary and above	134 69.4()	59 (30.6)	193	
Ethnic group				.000***
Hausa	305 (84.0)	58 (16.0)	363	
Yoruba	11 (37.9)	18 (62.1)	29	
others	3 (42.9)	4 (57.1)	7	
Occupation				.000***
Housewife	274 (84.3)	51 (15.7)	325	
Trading	33 (62.3)	20 (37.7)	53	
Artisan	10 (58.8)	7 (41.2)	17	
Others	2 (50)	2 (50)	4	
Perception				.000***
Low	190 (92.2)	16 (7.8)	206	
High	129 (66.8)	64 (33.2)	193	
Attitude				.000***
Negative	12 (13.3)	78 (86.7)	90	
Positive	307 (99.4)	2 (0.6)	309	

**No longer Married includes Separated, Divorced and widowed*
**** = significant variables*

Table 7a: Logistic Regression of Significant variables from the bivariate analysis of socio-demographics and home birth

Socio-Demographic Characteristics	Significance	OR (95% C.I)
Level of Education		
No formal education		
Primary education	0.238	0.351 (0.062 – 1.999)
Secondary and above	0.696	0.0737 (0.159 – 3.413)
Ethnic group		
Hausa		
Yoruba	0.889	1.195 (0.099 – 14.355)
Others	0.264	6.222 (0.252 – 135.643)
Occupation		
Housewife		
Trading	0.844	0.222 (0.000 – 678,220.597)
Artisan	0.688	0.046 (0.000 – 150,870.939)
Others	0.972	0.762 (0.000 – 2,991,912.403)
Perception		
Low		
High	0.002*	0.093 (0.021 – 0.407)
Attitude		
Negative		
Positive	0.000*	1,954.051 (286.270 -13,338.172)

**Significant variables*
**-2 log likelihood = 65.770 Cox and Snell R Square = 0.569 Nagelkerke R Square = 0.899*

Table 7b: Logistic Regression of socio-demographics and home birth

Socio-demographic variables	Significance	OR (05%C. I)
Age		
14 – 22	0.302	
23 – 31	0.127	15.634 (0.456 – 536.342)
32 – 40	0.529	2.850 (0.109 – 74.320)
41 – 49	0.184	8.568 (0.360 – 204.068)
50 – 55	0.646	2.059 (0.095 – 44.813)
Religion		
Christianity		
Islam	0.038*	0.011 (0.000 – 0.786)
Marital Status		
Married	0.298	0.154 (0.005 – 5.191)
*No Longer Married		
Level of Education		
No formal education	0.826	
Primary education	0.595	0.617 (0.104 – 3.667)
Secondary and above	0.908	1.119 (0.164 – 7.618)
Ethnic group		
Hausa	0.077	
Yoruba	0.278	0.131 (0.003 – 5.132)
Others	0.594	2.759 (0.066 – 114.588)
Occupation		
Housewife	0.111	
Trading	0.935	0.559 (0.000 – 610,260.752)
Artisan	0.692	0.060 (0.000 – 68,624.426)
Others	0.972	1.292 (0.000 – 1,794,835.427)
Perception		
Low		
High	0.006*	0.089 (0.016 – 0.506)
Attitude		
Negative		
Positive	0.000*	5,134.016 (433.868 – 60,751.472)

**significant variables*
**-2 log likelihood = 72.385 Cox and Snell R Square = 0.560 Nagelkerke R Square = 0.885*

Discussion

Most of the respondents belonged to the Hausa ethnic group and the study area was about two kilometers away from the main tertiary institution in the state. Their highest level of education is secondary and majority of them were housewives. Due to the respondents' limited formal education, most of these women were either unemployed or have very low income. In Nigeria, the level of education has been linked with home delivery (Okeshola & Ismail, 2013). A study conducted in Bangladesh by Rahman et al. (2008), found gainfully employed women were those living more than one hour away from a health center while employment status does not play a role among those who live less than an hour away from the health facility. This could be due to employed women being better equipped to overcome access barrier including transportation costs or mobility.

Most of the respondents in this study perceived home birth as being safe. A study carried out in Kaduna South in Northern part of Nigeria by Okeshola and Ismail (2013) confirmed this. The authors reported that most mothers perceived home birth as not having any risk/danger. This also points to their conservative outlook and distinct ways of life as migrants. Lamina (2011) in a study carried out in Western Nigeria, also found that women perceived home birth as easy and convenient. This was at variance with the findings of Otis and Brett (2008) in Bolivia where child delivery at home was not deemed easy. Many of the respondents in the current study perceived that having a skilled birth attendant during delivery is necessary but this was not the case in a study carried out by Christiana, Cynthia, Michael and Peter (2010) in Indonesia where they found the services of a health professional were solicited only for cases of obstetric complications. Okeshola and Ismail (2013) who conducted a similar study in Kaduna South, found women considered home child birth as being natural.

The perceived benefits of homebirth over hospital ones expressed by this study participants were corroborated by Christiana et al. (2010) who noted that Indonesian women could ill afford the cost of hiring a midwife or accessing health care facilities and therefore, preferred a home birth. Easy access to care by neighbors was also noted as perceived benefit of home birth, which was supported by Cohen (2003).

Participants also cited rest and good sleep as benefits of homebirth which were confirmed by Cohen (2003) where the respondents reported that mother and baby can be tucked into their own bed to rest and sleep. Mwifadhi et al. (2007) who studied the case of Tanzanian mothers, found privacy as a perceived benefit of homebirth which was also noted in the present study as most of respondents pointed to lack of privacy in some health facilities as reasons for home birth.

Almost all the women surveyed in this study showed an acceptable attitude to health care services. They agreed to the need for access to antenatal care in pregnancy, skilled care during childbirth and care and support in the weeks after childbirth. However, despite the high number of women who registered for antenatal in the health facility, very few gave birth there. This is confirmed by Envaladu et al. (2014) in Jos, North Nigeria, where 74% of the mothers interviewed attended ante-natal classes but only 39% of them chose a home birth. Majority of the respondents in the present study (69.9%) planned a home birth, which was supported by Lamina (2011) in Western Nigeria (66.7%) and MacDorman, Matthew and Declercq (2012) in United States (87%). One major issue identified in the current study was the need to increase the proportion of skilled birth attendants and to make them as close to the people as possible since lack of skilled birth attendants during delivery has contributed to maternal and neonatal mortality in Nigeria. This study revealed that only 17.2% of the mothers had skilled birth attendants present during their home birth, which was consistent with that of Lamina (2011) in Western Nigeria as only 13.4% of home deliveries were conducted by a skilled birth

attendant. Bukar and Jauro (2013) in Madagali, Nigeria also reported similar findings as only 15.5% of home births were conducted by skilled birth attendants.

Studies have shown that majority of women who deliver without the help of skilled attendants did so at home and were attended to by their neighbors. Participants in this study reported relatives, skilled birth attendants and traditional birth attendants as involved in their home births. Women delivering at home were mostly attended to by relatives as revealed in this study, consistent with the findings of Rajendra, Svend and Birgitte (2004). The bedroom was the most common venue for giving birth, as revealed by 84.3% of the respondents. This finding is supported by Bukar and Jauro (2013) in Madagali, Nigeria.

This study found that the process of homebirth was not guided by questions such as birth plan, age, character and outcomes of previous labor and blood result as recommended by Fraser, Cooper and Fletcher (2003) at the onset of labor. Only 2 (0.6%) of the respondents had their blood results checked during the delivery process. Lack of blood test may lead to transmission of infections from mother to child. Majority of the women were not examined during labor, and only 7.5% of the respondents' pulse rate was examined while 7.2% of them had their temperature checked, and 4.4% underwent blood pressure, urinalysis and abdominal checks.

Lamina (2011) reported that 93.0% of the children's' umbilical cords were cut with a new boiled blade (sterilized blade) which is consistent with s the findings of this study where 95.7% of the respondents reported that they used a new or boiled blade to cut the cord. Recording the time of birth of the baby was not the norm during home deliveries where the current study found only 38.6% of the respondents did so. This had led to inadequate information in the birth documents. As home births may be associated with complications due to the absence of skilled birth attendants, majority of the women who deliver at home do not make provisions for transferability to the hospital in case of emergency. In this study, only 5.3% of the mothers made provisions for this while a great majority of them did not; about 16.9% had to be transferred to the hospital due to complications.

Clean environment is encouraged in Nigeria and emphasis is laid on personal hygiene before, during and after birth. This is to enable caring for the new-born. About 95.9% of the respondents said that personal hygiene was a priority. The respondents also indicated their new born babies were kept warm which was supported Lamima (2011) who reported that most of the new-borns were wrapped and bathed. Early initiation of breastfeeding and immunization as key factors in the prevention of common childhood illness were carried out by majority of respondents in this study.

Rajendra et al. (2004) pointed to low socio-economic status as influencing home birth practices, which was corroborated by some of respondents in this study. Other factors include labor starting at night, believe that home birth is safer, health workers attitude, socio-cultural belief, encouragement by relatives, and fear of medical interventions. These were also reported in some studies (Mwifadhi et al., 2007, Boucher et al., 2009, Ravi, Rejoice, & Ravishankar 2014; Vernon, 2007; Lily et al., 2013). Distance to the nearest health facility was identified as a factor influencing home births by Gabrysch et al (2009), Van den Broek et al (2003). However, the present study did not find distance an issue. Other factors included quick labor, easy labor and premature labor. This supports the findings of Envuladu et al. (2014) in Nigeria and Bukar and Jauro (2013) in Madagali.

Interestingly, in this study, respondents identified cultural style of kneeling down instead of lying when delivering as a factor influencing their choice for home birth. This was confirmed by Bazzano et al. (2008) who revealed that women chose home birth because they believed health professionals did not pay sufficient attention to traditional norms of society. The

authors pointed out what influenced home birth practices were good first experience of home birth, presence of their husbands and personal interest.

Conclusion

This study revealed that home birth was still very common among the uneducated and unemployed and factors such as low economic status, quick labor, and belief that safe delivery is in the hands of God played a role. Majority of the home births are attended to by unskilled and untrained midwives. Knowing and understanding these factors is therefore a step towards helping to improve the health care status of women and their babies. The information provided by this study pointed to the need for interventions focused on making homebirth safe and increasing utilization of health facilities for delivery. This invariably would contribute to a long-term focus of reducing maternal and neonatal mortality. It is therefore suggested that regular community health promotion and educational activities that focus on the dangers of home delivery by unskilled birth attendants are held. It would also tackle religious and socio-cultural beliefs about labor and delivery. There is also a need for advocacy on girl-child education in the community where the study was carried out. This would improve the status of women and their economic power. Male involvement could be a key in attaining this. Furthermore, there should be a continuous training to improve patient-provider relationship as health care worker attitude is a key determinant of use of antenatal services.

Limitation of the Study

One major limitation of this study was that the findings were based on reported practices by the respondents. Actual observation of the home birth process could offer different views. This hopefully would be the basis for a future study in which participatory observational method could be used as a methodology. Additionally, the scope of the study was limited to migrant community in line with the research design. Future research using a comparative method on the same subject matter among different groups is recommended.

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