



Choice of Healthcare Facilities for Antenatal Care, Delivery Services and Satisfaction Received by Mothers of Infants in Lagos, Nigeria

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Abstract

INTRODUCTION

Increased utilisation of Antenatal Care (ANC) and delivery with a skilled birth attendant helps to prevent or effectively manage the majority of complications of pregnancy and delivery. This will improve the maternal mortality ratio nationally and globally. This study assessed the choice of healthcare facilities for ANC, child delivery services and satisfaction with the care received by mothers of infants attending child immunization clinics at selected Primary Healthcare Centres (PHCs) in Lagos, Nigeria.

MATERIALS/METHODS

A descriptive cross-sectional study was conducted among mothers who attended antenatal care (ANC) in a health facility during pregnancy, delivered at the same facility, and brought their infants for immunization at the selected PHCs in Lagos, Nigeria. A total of 355 respondents were recruited from the five selected PHCs. Data were collected with an interviewer-administered questionnaire. Descriptive and inferential statistics were conducted and the level of significance (p) was set at less than or equal to 5% ($p \leq 0.05$).

RESULTS

Less than half of the respondents 170 (47.9%) registered for ANC in the first trimester, 206 (58.0%) of the respondents utilised private hospitals only while very few 55 (15.5%) utilised PHCs for ANC and delivery. Most of the respondents (59.1%) had between 9 to 15 ANC visits during pregnancy, with a mean attendance of 11.3 ± 4.7 . Some of the reasons given for the choice of ANC and delivery centre by the respondents were quality service 325 (91.6%), availability of skilled healthcare staff 276 (77.7%), clean environment 236 (66.5%), and good staff attitude 234 (65.9%) among others. The majority of the respondents 349 (98.3%) were satisfied with the overall care received in the health facilities utilised for ANC and delivery services during pregnancy. Statistically significant associations were found between respondents' monthly income, spousal's level of education, enrolment in health insurance scheme and the choice of health facility used for ANC and delivery ($p < 0.05$).

CONCLUSION

Continuous health educational programs are recommended for women of reproductive age and their spouses on the benefits and importance of antenatal care in pregnancy at healthcare facilities and skilled birth attendants at delivery. Improved funding for government hospitals may enhance public trust in healthcare facilities and increase utilization.

Keywords: Antenatal Care Services, Delivery Services, Choice of Health Facility Utilisation, Satisfaction, Mothers of Infants, Nigeria.

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Introduction

Antenatal care (ANC) is the specialized care provided by a skilled health professional to pregnant women and adolescents to ensure optimal health conditions for both mother and child during pregnancy.¹ In Nigeria, only about 67% of pregnant women visited a skilled provider a minimum of once throughout their pregnancy, compared with the documented average of 79% for all lower-middle-income countries; while only 57% had four or more ANC visits during their pregnancy.^{2,3} This is below the recommended 90% ANC coverage required to reduce most maternal and newborn deaths.⁴ The low levels of ANC and institutional delivery are reflected in Nigeria's poor maternal outcomes, i.e. maternal morbidity and mortality rates and ratio.³ Quality ANC reduces maternal and perinatal morbidity and mortality directly through the identification and management of pregnancy-related complications, and indirectly through the identification of those at high risk of developing complications and prompt referral to appropriate care facilities.^{1,5} Antenatal care services also provide access to preventive and promotive services in pregnancy which include immunization against tetanus, intermittent preventive treatment (IPT), screening against infections e.g. Human Immunodeficiency Virus (HIV), detection of non-communicable diseases like hypertension, gestational diabetes, health counselling and education about mothers and child care.^{6,7} ANC visits also provide an opportunity to educate pregnant women on the dangerous signs and symptoms during pregnancy, delivery and the postpartum period and family planning.⁵

Globally, Maternal Mortality Ratio (MMR) has improved, falling by nearly 44% in the past 25 years.⁸ Nigeria however, has an MMR of 514 deaths per 100,000 live births, which is far higher than the global rates of 216 maternal deaths per 100,000 and the Sub-Saharan Africa (SSA) average of 546 deaths per 100,000 live

births.⁸ It accounts for about 19% of maternal deaths and is the second largest contributor to maternal mortality globally, with an estimated 40,000 maternal deaths annually as of 2017.^{3,7} Patient satisfaction with care received has been linked to the quality of services given and the extent to which specific needs are met, satisfied patients are more likely to come back to utilize the same services and also recommend the same to others.^{9, 10}

In 2018 less than half of the deliveries in the country occurred at healthcare facilities (43% of births in the past 5 years were delivered by skilled birth attendants (SBA), with only 39% in a health facility).² Forty-one per cent (41%) of women who utilised skilled ANC during pregnancy did not deliver in a healthcare facility.³ Dissatisfaction with the ANC experience may partly explain this low level of institutional delivery by ANC users.³ Approximately 830 women worldwide die daily due to preventable causes of delivery and childbirth, and about 90-95% of these come from developing countries.^{5,6} In Nigeria, a woman dies from preventable causes associated with pregnancy and delivery approximately every 13 minutes.⁷

The use of ANC and delivery at health facilities with skilled birth attendants helps in the prevention, early identification and management of complications of pregnancy and delivery,² and this is important for improving maternal and child outcomes.¹¹ MMR in Nigeria is high due to poor utilization of ANC services and delivery with SBA. Utilization of ANC and delivery with SBA in Nigeria is below recommended standards as well as the regional average, and this is evident in the poor maternal and child health indices. Maternal health has a particularly close relationship with the right to the highest attainable standard of health. Maternal mortality is overwhelming due to several interrelated delays which ultimately prevent a pregnant woman from accessing the health care she needs. Over half a million women die each year due to



complications during pregnancy and birth and the vast majority of these deaths are preventable.^{12, 13}

Improved maternal and neonatal outcomes have been linked with the utilization of maternal and child health services with health education as an important component. Most of the complications in pregnancy occur intrapartum or shortly after delivery, therefore, skilled antenatal care and birth attendance have been advocated globally as the most important intervention to reduce maternal and child mortalities.^{14,15} Improving the well-being of mothers, infants, and children is an important public health goal as every birth counts. Hence, a need to reach out to pregnant women to attend antenatal clinics, educating women and decision-makers about the importance of quality antenatal early in pregnancy and postnatal care to prevent maternal and child mortality¹⁶. This study identified the choice of utilisation of ANC and child delivery services, satisfaction with the care received, and the factors influencing the choice of healthcare facility for ANC and delivery among mothers of infants attending immunization clinics at selected PHC in Lagos, Nigeria.

Materials and Methods

Amuwo Odofin local government area (LGA) is one of the sixteen urban LGAs in Lagos State, Nigeria, with a population of 719,337 people as of 2016 which consists of 372,481 males, 346,856 females, and 202,295 women of reproductive age group.^{17,18} The LGA has 14 public and 71 private health facilities. The public health facilities include one tertiary, one secondary, and twelve primary healthcare centres (PHCs). Mothers of infants who have been pregnant and delivered within the last year, who brought their infants for immunization in the selected PHCs were recruited for the study.

The study was a descriptive cross-sectional study. The sample size of 294 was calculated using Cochran's formula¹⁹, based on an expected 5% error margin, 95% confidence interval, and a prevalence of 74.3% which

represents the proportion of women who were satisfied with overall antenatal care received in a similar study in Kaduna state, Nigeria.²⁰ The minimum sample size was increased by 20% to compensate for improperly completed questionnaires or opt-outs by any of the selected respondents, hence 355 respondents were recruited. Respondents were selected in two stages. The first stage involved the selection of five from the twelve PHCs in the LGA by simple random sampling through a ballot. The second stage involved a consecutive sampling method of eligible respondents from each of the selected PHCs until the desired sample size was attained. Seventy-one (71) respondents were selected from each PHC over three months using the formula N/n , where N is the sample size, and n is the number of PHCs to be used for the study; $(355/5)$. Mothers who brought their infants, attended ANC in the last pregnancy and delivered in the same health facility within the LGA were recruited. The questionnaire was administered while the respondents were waiting for their infants to be vaccinated.

The research assistants were three undergraduate medical students. They were properly trained by the lead researcher on how to select respondents how to obtain informed consent, and how to administer the questionnaires. The interview was conducted in the English language. Data was collected with a pre-tested interviewer-administered questionnaire adapted and modified from the reviewed literature.^{5,21-24} The questionnaire captured data on socio-demographic characteristics, choice of antenatal care and delivery services and satisfaction with the care received during pregnancy and delivery. Twenty questionnaires were pretested in a similar PHC in another LGA, far away from the study area, and findings were used to adjust the final questionnaire accordingly. Data were entered manually using Excel but imported and analyzed using the SPSS version 25 software program.



Descriptive statistics such as frequencies and proportions were computed and presented in frequency tables. Inferential statistics (Chi-square test) was used to test for association between the categorical variables, and the level of

significance (p) was set at less than 5% (< 0.05). A five-point Likert scale was used to assess satisfaction with care received during pregnancy and delivery.

Table 1:

Socio-Demographic/Economic Characteristics of Respondents and Spouse

Characteristics		Frequency (n=355)	Percentage (%)
Age group (years)	18-30	190	53.5
	>30	165	46.5
	Mean ± SD	30.43 ± 4.91	
Religion	Christianity	321	90.4
	Islam	34	9.6
Marital Status	Married/Co-habiting	340	95.8
	Others*	15	4.2
Family type (n=340)	Monogamous	320	94.1
	Polygamous	20	5.9
Ethnic Group	Igbo	237	66.8
	Yoruba	67	18.9
	Hausa	13	3.7
	Others	38	10.7
Highest Level of Education	No formal education/primary	5	1.4
	Secondary	130	36.6
	Tertiary	220	62.0
Employment status	Unskilled worker	122	34.4
	Skilled worker	90	25.4
	Professional	73	20.6
	Housewife/Unemployed	57	15.9
	Student	13	3.7
Average monthly income (Naira)	<30,000	118	33.2
	30,000-100,000	106	29.9
	>100,000	12	3.4
	Not disclosed	119	33.5
Health insurance	No	304	85.6
	Yes	51	14.4
Spousal education (n=346)	No formal education/primary	1	0.3
	Secondary	129	37.3
	Tertiary	216	62.4
Spousal income (n=346)	<30,000	6	1.7
	30,000-100,000	77	22.3
	>100,000	60	17.3
	Not disclosed	203	58.7
No. of living children	1-2	218	61.4
	3-4	117	33.0
	>=5	20	5.6

*Others(Widowed/ Separated/ Divorced/ Single)



Five aspects of care are assessed, which were accessibility of facility (4 statements), Facility related aspects of care (5 statements), Provider related aspects of care (6 statements), technical aspects of delivery care for vaginal delivery (2 statements) and technical aspect of delivery care (general) (3 statements) and satisfaction with healthcare workers (4 statements).

Score 5 was given for very satisfied, 4 for satisfied, 3 for neither satisfied nor dissatisfied (neutral), 2 for not satisfied and 1 for completely dissatisfied. The score for each aspect of care was calculated and the mean was calculated.

Ethical approval for the study was obtained from the Health Research and Ethics Committee (HREC) of Lagos University Teaching Hospital, (LUTH) Idi-Araba, Lagos (ADM/DCST/HREC/APP/577). Permission to use the PHCs was obtained from the Medical Officer of Health (MOH) of the LGA, and written informed consent was obtained from each respondent before the administration of the questionnaire.

Results

Table 1 shows that the mean age of respondents was 30.4 ± 4.9 years. The majority (90.4%) of the respondents were Christians, married (95.8%), Igbo (66.8%), and 62.0% had a tertiary level of education.

Most (34.4%) were unskilled workers while 57 (15.9) were unemployed. Most (33.2%) of the respondents who chose to disclose their income earned less than N30,000 monthly. Most (61.4%) had between 1-2 children with few (5.6%) had 5 or more children. The mean number of living children was 2.3 ± 1.2 children.

Table 2 shows that more than half of the respondents (58.0%) registered for ANC at private hospitals, over a quarter registered at an ANC centre more than an hour away (29.6%), less than half (47.9%) registered in the first trimester of pregnancy, and most 254 (71.5%) had more than 8 ANC visits with a mean of 11.3 ± 4.7 visits.

Table 2:
Choice of Health Facility for ANC and Frequency of ANC Visits

Variable		Frequency (n=355)	Percentage (%)
Health facility used for ANC during last pregnancy	Private hospital	206	58.0
	General Hospital/Federal Medical Center	86	24.2
	Primary Healthcare Center	55	15.5
	Tertiary hospital	8	2.3
Time taken to ANC Center	<10 minutes	51	14.4
	10-20 minutes	73	20.6
	>20-30 minutes	74	20.8
	>30 minutes-1 hour	52	14.6
Time of first ANC Contact	>1 hour	105	29.6
	First Trimester	170	47.9
	Second Trimester	162	45.6
Number of ANC visits	Third Trimester	23	6.5
	≤8	71	28.5
	>8	254	71.5
Mean ANC = 11.3 ± 4.7 visits			

Figure 1 shows that almost all the respondents (91.6%) chose their ANC centre because they perceived the quality of service as good, 77.7% because of the availability of skilled healthcare staff, and 66.5% because of the clean environment while only 14.4% did choose the ANC centres because of health insurance.

Table 3 shows that the majority (94.6%) were satisfied with the opening hours of the health facilities and 77.7% were satisfied with the waiting time. As regards maternal satisfaction with dimensions of care related to health facilities used for ANC and delivery, the majority (90.1%) were satisfied with the cleanliness of the hospital environment and 85.1% were satisfied with the cleanliness of the toilet facilities. Regarding maternal satisfaction with provider-related aspects of care, the majority (94.3%) were satisfied with the clinical consultation sessions during ANC and 84.5% were satisfied with the way their decisions were respected and supported. As regards maternal satisfaction related to technical aspects of delivery care, the majority (87.2%) of the respondents who had vaginal deliveries were satisfied with the way fetal heart sounds were monitored regularly during labour and 65.3% of the respondents were

satisfied with the way they were assisted with early ambulation. Concerning maternal satisfaction related to health workers in health facilities used for ANC and delivery, the majority (95.2%) were satisfied with the doctors; 90.7% were satisfied with the nurses/midwives; 87.7% were satisfied with the pharmacists/pharmacy technicians and 87.5% were satisfied with the laboratory scientists/technicians.

Figure 2 shows that almost all of the respondents (98.3%) were satisfied with the overall care received in the health facilities of their choice during ANC and delivery.

Figure 3 shows that 314 (88.5%) and 305 (85.9%) of the respondents showed a willingness to use the same health facility for ANC and delivery respectively in subsequent pregnancies, while 335 (94.4%) and 332 (93.5%) were willing to recommend same health facility to others for ANC and delivery respectively.

Table 4 shows statistically significant associations between respondents' monthly income and health facility used for ANC and delivery ($p < 0.05$) as respondents with higher monthly income ($> N100,000.00$) used private hospitals more for ANC and delivery.

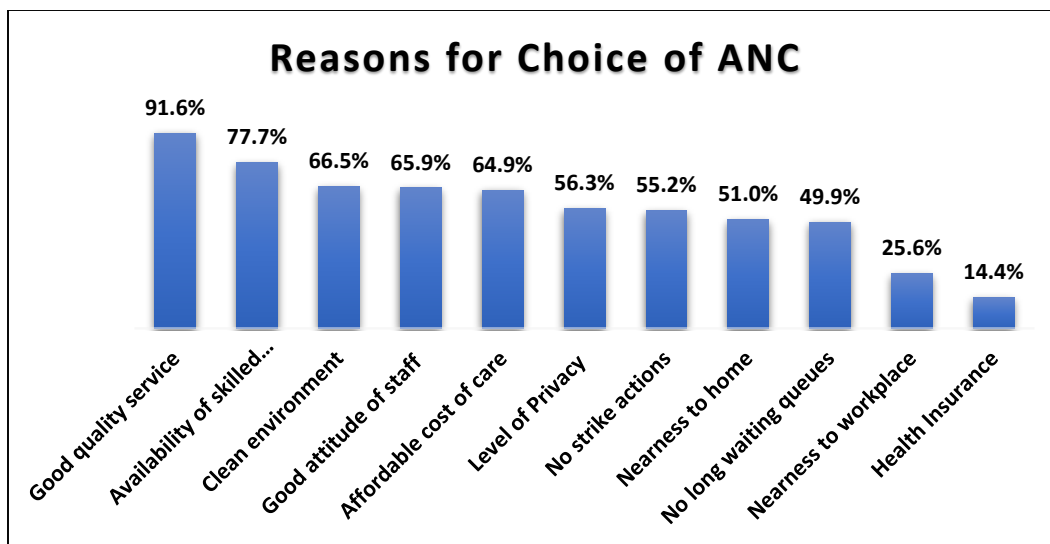


Figure 1: Respondents Reasons Given for the Choice of health Facilities for ANC (Multiple Response)



Table 3:
Maternal Satisfaction Related to Different Aspects of the Facility used During Pregnancy and Delivery

Item	VS (%)	S (%)	N (%)	NS (%)	TD (%)
Maternal satisfaction related to the accessibility of facilities used for ANC and delivery					
Cost of services	140 (39.4)	158 (44.5)	29 (8.2)	25 (7.0)	3 (0.9)
Distance from home	120 (33.8)	183 (51.5)	24 (6.8)	25 (7.0)	3 (0.9)
Waiting time	118 (33.2)	158 (44.5)	31 (8.7)	38 (10.7)	10 (2.8)
Opening hours of the facility	145 (40.8)	191 (53.8)	8 (2.3)	5 (1.4)	6 (1.7)
Maternal satisfaction with dimensions of care related to health facilities used for ANC and delivery					
Level of privacy	137 (38.6)	181 (51.0)	17 (4.8)	19 (5.3)	1 (0.3)
Environmental cleanliness	145 (40.8)	175 (49.3)	28 (7.9)	5 (1.4)	2 (0.6)
Cleanliness of toilet facilities	116 (32.7)	186 (52.4)	38 (10.7)	14 (3.9)	1 (0.3)
Waiting/sitting area	132 (37.2)	186 (52.4)	29 (8.2)	7 (2.0)	1 (0.3)
Provision of medicines and supplies	117 (33.0)	197 (55.5)	32 (9.0)	6 (1.7)	3 (0.8)
Maternal satisfaction with provider-related aspects of care					
Clinical consultation sessions	161 (45.3)	174 (49.0)	12 (3.4)	7 (2.0)	1 (0.3)
Communication skills	134 (37.7)	190 (53.5)	15 (4.2)	13 (3.7)	3 (0.9)
Willingness to entertain questions	145 (40.8)	176 (49.6)	23 (6.5)	10 (2.8)	1 (0.3)
Explanation of results/reports of tests	121 (34.1)	203 (57.2)	20 (5.6)	9 (2.5)	2 (0.6)
Involvement of client in decision-making	123 (34.7)	178 (50.1)	38 (10.7)	14 (3.9)	2 (0.6)
The client's decision was respected and supported	115 (32.4)	185 (52.1)	40 (11.3)	14 (3.9)	1 (0.3)
Maternal satisfaction related to technical aspects of delivery care					
Vaginal delivery (n=275)					
Monitored fetal heart sounds regularly	78 (28.6)	160 (58.6)	30 (11.0)	5 (1.8)	0 (0)
Monitored the progress of labour	81 (29.7)	155 (56.8)	30 (11.0)	7 (2.6)	0 (0)
General (n=355)					
Assisted in breastfeeding	112 (31.5)	141 (39.7)	66 (18.6)	33 (9.3)	3 (0.9)
Assisted in perineal/wound care	125 (35.2)	172 (48.4)	50 (14.1)	8 (2.3)	0 (0)
Assisted in early ambulation	85 (23.9)	147 (41.4)	93 (26.2)	29 (8.2)	1(0.3)
Maternal satisfaction related to health workers in health facilities used for ANC and delivery					
Doctors (n=334)	172 (51.5)	146 (43.7)	11 (3.3)	4 (1.2)	1 (0.3)
Nurses/midwives (n=355)	148 (41.7)	174 (49.0)	23 (6.5)	8 (2.2)	2 (0.6)
Lab technicians/scientists(n=303)	113 (37.3)	152 (50.2)	20 (6.6)	14 (4.6)	4(1.3)
Pharmacists/pharm technicians (n=292)	122 (41.8)	134 (45.9)	31 (10.6)	5 (1.7)	0 (0)

VS: Very Satisfied; S: Satisfied; N: Neutral; NS: Not Satisfied; TD: Totally Dissatisfied

Statistically, spousal education showed significance in facility choice; respondents with post-secondary-educated spouses favored private facilities. Those with spouses earning below N30,000.00 monthly mainly used public facilities. Health insurance enrollees preferred private facilities over non-enrollees ($p < 0.05$).

Discussion

This study found that most of the respondents utilised private hospitals for ANC and delivery. This finding is similar to the report of the studies carried out in Lagos and Tanzania which found maternal preference for private hospitals over public hospitals.²⁵⁻²⁷

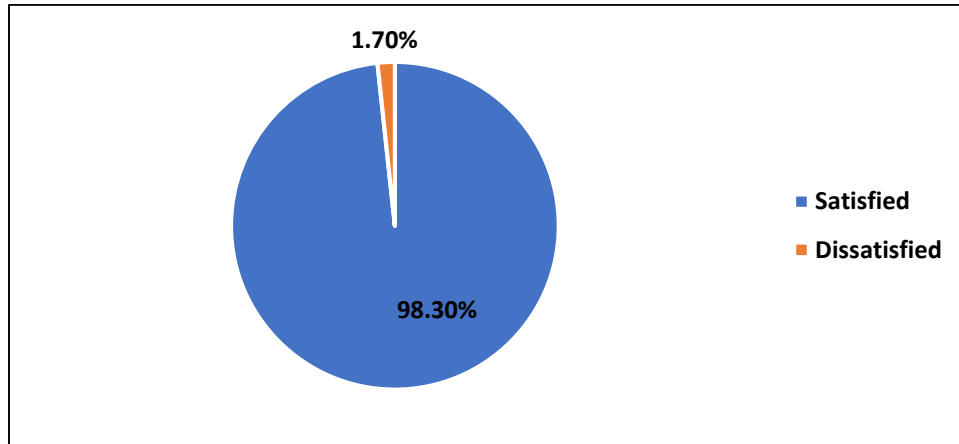


Figure 2:
Overall Level of Satisfaction with Healthcare Received in Health Facilities During ANC among Respondents

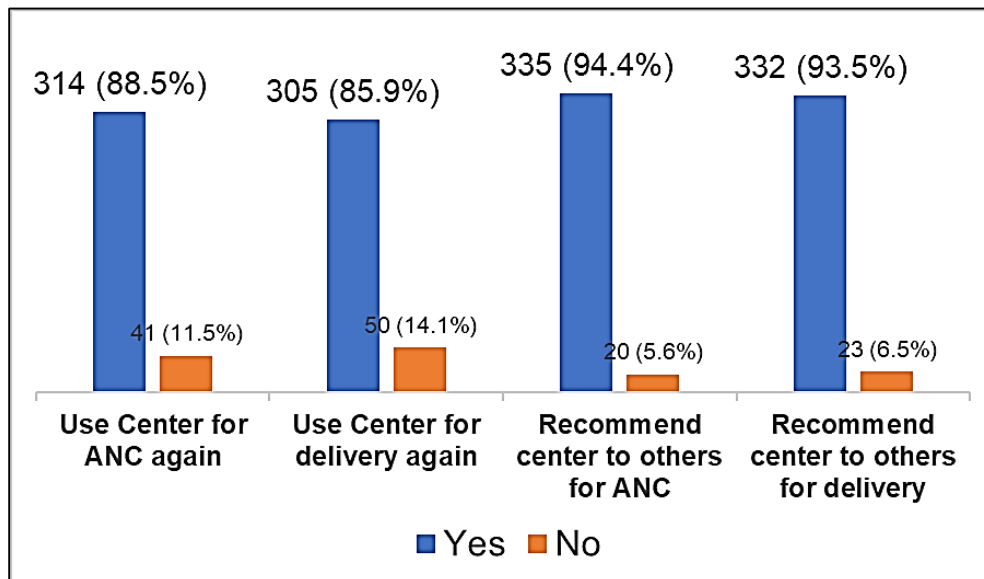


Figure 3:
Respondents Willingness to Use the Same Healthcare Facilities for ANC & Delivery and Recommend to others



Table 4:
Factors Influencing the Choice of Healthcare Facility for ANC and Delivery among Respondents

Variable	Choice of health facility		Total (n=355,100%)	Test of Statistics	
	Public (n=149,42.0%)	Private (n=206,58.0%)		χ^2	p/value
Age group (years)				0.653	0.419
18-30	76 (40.0)	114(60.0)	190(100.0)		
>30	73 (44.2)	92(55.8)	165(100.0)		
Religion				0.010	0.921
Christianity	135 (42.1)	186 (57.9)	321(100.0)		
Islam	14 (41.2)	20 (58.8)	34(100.0)		
Marital Status				2.2548	0.2978
Single	8 (61.5)	5 (38.5)	13(100.0)		
Married	139 (40.9)	201 (59.1)	340(100.0)		
Widowed/Separated/Divorced	1 (50.0)	1 (50.0)	2(100.0)		
Ethnic Group				4.797	0.187
Yoruba	29 (43.3)	38 (56.7)	67(100.0)		
Igbo	91 (38.4)	146 (61.6)	237(100.0)		
Hausa	7 (53.8)	6 (46.2)	13(100.0)		
Others	21 (55.3)	17 (44.7)	38(100.0)		
Level of Education				3.056	0.224
No formal education/Primary	3 (60.0)	2 (40.0)	5(100.0)		
Secondary	61 (46.9)	69 (53.1)	130(100.0)		
Post-secondary	85 (38.6)	135(61.4)	220(100.0)		
Family Type				3.109	0.078
Monogamous	128 (40.0)	192 (60.0)	320(100.0)		
Polygamous	12 (60.0)	8 (40.0)	20(100.0)		
Employment status				8.569	0.128
Housewife/Unemployed	20 (35.1)	37 (62.9)	57(100.0)		
Student	7 (53.8)	6 (46.2)	13(100.0)		
Unskilled worker	59 (48.4)	63 (51.6)	122(100.0)		
Skilled worker	38 (42.2)	52 (57.8)	90(100.0)		
Professional	24 (32.9)	49 (67.1)	73(100.0)		
Monthly income (Naira)				19.851	<0.001
<30,000	60 (50.8)	58 (49.2)	118(100.0)		
30,000-100,000	54 (50.9)	52 (49.1)	106(100.0)		
>100,000	3 (25.0)	9 (75.0)	12(100.0)		
Not disclosed	32 (26.9)	87 (73.1)	119(100.0)		
Spouse's level of education				8.680	0.007
Primary	1 (100.0)	0 (0.0)	1(100.0)		
Secondary	64 (49.6)	65 (50.4)	129(100.0)		
Post-secondary	77(35.6)	139 (64.4)	216(100.0)		
Spouse Income(Naira)				15.941	0.001
<30,000	6 (100.0)	0 (0.0)	6(100.0)		
30,000-100,000	45 (58.4)	32 (41.6)	77(100.0)		
>100,000	25 (41.7)	35 (58.3)	60(100.0)		
Not Disclosed	73 (36.0)	130 (64.0)	203(100.0)		
Health Insurance				8.317	0.004
Yes	12 (23.5)	39 (76.5)	51(100.0)		
No	136 (44.7)	168 (55.3)	304(100.0)		



The major reasons cited for the choice of health facilities in this study were good quality of service, availability of skilled staff, and a clean environment. Other studies have reported that women preferred private hospitals majorly because of quick service delivery, courteous hospital staff, and the quality of care received in private hospitals.^{26,27} Another probable reason for this could be that women who earn higher wages are more likely to seek more comfortable care which is most likely obtainable in private hospitals, compared with public hospitals in Nigeria, as this study found a significant association between higher income earned by respondents and spouses and the use of private hospitals. Similarly, women with higher incomes are also more likely to have health insurance (either through their jobs or being more likely to afford them), which is usually associated with private hospital use, as reported in this study. More so, utilisation of private hospitals could be due to reduced waiting time, and the presence of specialists compared with some public facilities like primary healthcare centres.

Less than half of the respondents registered for ANC during the first and second trimesters respectively. This finding is similar to the result obtained in a study which identified the determinants of women's perceived satisfaction with ANC in urban Ghana, where less than half of the respondents first accessed ANC in their first trimester and a lesser percentage in their second trimester.²⁸ However, this finding differs from the United States vital statistics report and a study carried out in Sarawak, Malaysia which showed that the majority of women who gave birth registered for ANC in the first trimester.^{12,29} This is probably because these are more advanced countries with better healthcare systems compared to developing countries like Nigeria. A study in a Southern Benin rural setting, found less than a quarter of the women attended ANC services in the first trimester of pregnancy,³⁰ while, studies in the Hadiya zone of southern

Ethiopia and another in Assosa District, West Ethiopia reported found most of the respondents registered for ANC in the second trimester and very few in the first trimester.^{31,32}

The majority of the respondents in this study attended nine or more ANC visits. This is in keeping with the 2016 World Health Organisation ANC model which recommends at least eight ANC contacts in pregnancy.¹ Also, similar to a study in Sarawak, Malaysia where the majority of the respondents had more than nine ANC visits.¹² However, this differs from the results of a cross-sectional study in Assosa District, West Ethiopia, where less than half of the respondents in the rural areas had four or more ANC visits during pregnancy.³² These differences observed may be due to differences in study settings.

The majority of the respondents in this study were satisfied with the care received during ANC and delivery. This finding is similar to that of studies in Maiduguri, Ethiopia, Ibadan, and Cameroon where the majority of the respondents respectively were satisfied with the delivery care they received in hospitals.^{10,11,33-35} This result, is however higher than that obtained from findings of studies in Sudan, Nepal, Ethiopia, Kaduna, Nigeria, and Malaysia, where few respondents respectively were satisfied with the care received.^{12,20, 36-39}

Respondents 'and spouses' monthly incomes were significant factors influencing the choice of health facility used for ANC and delivery in this study. This finding is consistent with those of studies in Nepal.⁴⁰ Southern Ethiopia,³¹ and Kenya.⁴¹ However, the study conducted in Ibadan, Nigeria, found no association between the income of the respondents and the choice of facilities for ANC utilisation¹⁵. Health insurance enrolment was a significant factor which influenced the choice of healthcare facility for ANC and delivery among the respondents in this study.



Despite the low number of respondents enrolled in health insurance, and the majority were on fee payment for health care services, they were satisfied with the services received at the different healthcare facilities of their choice. This finding corroborates that of a study in Lagos, Nigeria which reported perceived cost as a determining factor for utilisation of health services. Despite few respondents having health insurance, there was a statistically significant association between having health insurance and the choice of healthcare facility for ANC and delivery.⁴²

Limitations/ Strengths of the study

The data were collected from a local government area in Lagos State, and though representative of an urban LGA, generalization to the entire state cannot be made. However, this study adds to the body of evidence on maternal health.

Conclusion

Private hospitals were the most utilised for ANC and child delivery among the respondents in this study, and the major reason for utilisation was that the quality of service received was perceived as good, with the availability of skilled staff, and a better staff attitude, compared to public health facilities. However, less than half of the respondents registered for ANC in the first trimester of pregnancy. Overall, respondents were mostly satisfied with the care received during ANC and child delivery at their choice of health facilities. The majority were willing to use the same health facilities for ANC and delivery in subsequent pregnancies, as well as recommend the same facilities to others. Respondents' and spouses' monthly income, spousal's level of education, and enrolment in health insurance schemes were significant factors influencing the choice of healthcare facility for ANC and delivery. Continuous health educational programs are recommended for women of reproductive age and

their spouses on the benefits and importance of antenatal care in pregnancy. Also, improved funding of government hospitals may help improve users' trust in public health facilities with improved utilisation.

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