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Determinants of Maternal Home Delivery in Nigeria: Evidence for Targeted Health Policy Interventions

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Abstract

Maternal mortality remains a critical public health concern globally, with Nigeria bearing the highest burden of avoidable maternal deaths despite a global decline in the maternal mortality ratio. A significant proportion of these deaths occur during childbirth, often linked to home deliveries. Although several maternal health policies and programs have been introduced to promote facility-based deliveries, a large number of Nigerian women continue to give birth at home. This study investigates the determinants of home delivery among Nigerian women to inform health policy aimed at reducing maternal mortality. Utilizing data from the 2018 Nigeria Demographic and Health Survey (NDHS), a filtered sample of 41,821 women aged 15–49 was analyzed using SPSS version 27. Descriptive and bivariate statistical techniques were employed to identify key influencing factors. The findings reveal that home delivery is most prevalent among teenage mothers (63.1%), uneducated women (82.4%), the poorest socioeconomic group (75.7%), rural residents (63.8%), and women in the northwest region (83.4%). Language barriers also emerged as a significant determinant of home delivery. The study recommends the development of state-specific policies to train Traditional Birth Attendants (TBAs) at no cost, particularly in rural and underserved communities, to

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improve maternal health outcomes and reduce reliance on unsafe home deliveries.

Keywords: Maternal Mortality; Place of Delivery; Home Delivery; Language Barrier; Nigeria

INTRODUCTION

Maternal mortality remains a pressing public health challenge globally(WHO, 2019). Despite the global drop in maternal mortality ratio (MMR) by 40 percent between 2000 and 2015, an estimated 287,000 women died from causes related to pregnancy and childbirth in 2020, which is equivalent to 800 deaths daily (WHO, 2024; WHO & UNICEF, 2017). The global MMR of 223 deaths per 100,000 live births in 2020 poses a great threat to achieving Sustainable Development Goal 3 (SDG) of having below 70 deaths per 100,000 live births in 2030 (WHO, 2023, 2024), which is the next four years. The low and middle-income countries experienced more than 90% of the maternal deaths that occurred in the year 2023, while sub-Saharan Africa (SSA) alone accounted for 70% (Dahie et al., 2025; Fentie et al., 2025; WHO, 2024). Among all the regions globally, the Africa Region is the only region which has maintained the highest MMR throughout the last two decades (WHO, 2023; WHO & UNICEF, 2017). Nigeria contributes the highest burden of global estimated MMR, with 28.3% while about 8,200 maternal deaths and 1,047 deaths per 100,000 live births occurred in the country (Dogbanya, 2025; UNICEF, 2025; WHO, 2023).

Majority of these deaths occurred at the time of delivery (Adewuyi et al., 2019; Hassan et al., 2021; Tekeba et al., 2025), caused by obstructed labour, sepsis, haemorrhage, and hypertensive disorders (Asirifi et al., 2025; WHO & UNICEF, 2017). However, most of these maternal deaths are avoidable if timely and skilled delivery services are provided to pregnant women (Dahie et al., 2025; Tekeba et al., 2025). Besides, the availability of appropriate and accessible care in case of complications, and effective postnatal care within the first twenty-four hours of delivery are strategies in reducing high maternal deaths (Ajayi et al., 2023; Udenigwe et al., 2021; Zegeye et al., 2025). Conversely, a significant number of women in developing countries do not have the opportunity to give birth with skilled assistance and at healthcare facilities (Adde et al., 2020; Asirifi et al., 2025; Dickson et al., 2016; Hassan et al., 2021). Utilisation of healthcare facilities by women is influenced by

several factors such as availability of healthcare services, cost of services, transportation fare, quality of service provided and received, socioeconomic factors, religious and personal or family health beliefs (Dahie et al., 2025; Dickson et al., 2016).

Studies have examined significant association between place of delivery and a range of sociodemographic factors such as rural-urban residence, educational levels of women and husbands, maternal religion, region of residence, wealth index, maternal age and birth order, as the determinants of use or non-use of healthcare facility for childbirth in Nigeria (Abubakar et al., 2017; Adewuyi et al., 2019; Asirifi et al., 2025; Dauda, 2023; Hassan et al., 2021; Izugbara & Wekesah, 2018; Johnson et al., 2020; Ntoimo et al., 2022; Okeke et al., 2025; Oladele et al., 2024; Oyedele, 2023; Sabo et al., 2024; Samuel & Okpe, 2024; UNICEF, 2025). The available studies have focused on factors associated with institutional delivery among reproductive women aged 15–49 years and young mothers aged 15–24 years. Thus, no available study in Nigeria explicitly connects home delivery to targeted policy maternal intervention in the country.

Several health policy frameworks and programs like Universal Health Coverage (UHC), National Health Insurance Scheme (NHIS), and Primary Healthcare Centres (PHCs) have been implemented in Nigeria. Over the years in the country, some of these policies of improving the delivery of maternal healthcare were implemented through PHCs (Udenigwe et al., 2021) since they are the closest to people in the communities. Between 1975 and 1983, the Basic Health Service Scheme was implemented to increase the quality of healthcare for the entire population with emphasis on improving the delivery of maternal and child health services(Aregbeshola & Khan, 2017). The Alma-Ata Declaration principles were implemented from 1985 to 1992, as a national health delivery system, and the country witnessed the greatest boost to maternal healthcare delivery services (Omuta et al., 2014). In 2009, Nigeria implemented the National Midwifery Service Scheme, which was designed to improve the coverage of skilled birth attendants in rural areas and to reduce maternal, new born and child mortality (Omuta et al., 2014). Between 2009 and 2015, free maternal healthcare services were implemented in many Nigerian states (Ajayi et al., 2023). Despite these efforts in strengthening the delivery of maternal healthcare services through PHCs in Nigeria, facility-based deliveries remain low, with nearly 60% of births still occurring outside health facilities in Nigeria (Ajayi & Akpan, 2020; Esan et al., 2023; NPC & ICF, 2019).

Understanding the complexity of determinants of home delivery in Nigeria is essential for designing effective and context-specific health policy interventions that promote institutional deliveries, reduce inequalities in access to maternal healthcare, and ultimately lower maternal mortality rates. This study seeks to explore the multifaceted factors influencing women's choice of home delivery in Nigeria, with the goal of informing policy, enhancing health system responsiveness, and ultimately drastically reducing maternal and neonatal morbidity and mortality.

METHODS

Data Source and Design

The data for this study were sourced from the Nigeria Demographic and Health Survey (NDHS) dataset, which was conducted in Nigeria from 14th August to 29th December 2018. The survey was sponsored by the United States Agency for International Development (USAID) through The Demographic and Health Survey (DHS) programme with its successful implementation through the support of the Global Fund, the Bill and Melinda Gates Foundation (BMGF), the United Nations Population Fund (UNFPA), and the World Health Organization (WHO) (NPC & ICF, 2019).

The sampling frame was based on the 2006 Population and Housing Census of the Federal Republic of Nigeria (NPHC) conducted in 2006 by the National Population Commission. Nigeria has 1 Federal Capital Territory (FCT), 36 states and 774 local government areas (LGAs), and each LGA is divided into political wards. The survey utilised a cross-sectional design, providing nationally representative data on a wide range of demographic, health, and socioeconomic indicators through household interviews of respondents. It employed a two-stage cluster sampling method to select respondents and data collection was carried out using a standardised structured questionnaire. The main objective of the survey was to provide up-to-date estimates of basic demographic and health indicators in the country. The information contained in the survey is intended to assist policymakers and programme managers in evaluating and designing programmes and strategies to improve the health status of Nigerians. The survey also provides indicators relevant to the Sustainable Development Goals (SDGs) for the country. More information about the survey design is available at the National Population Commission (NPC) [Nigeria] and ICF. 2019 (NPC & ICF, 2019).

The survey protocol was reviewed and approved by the National Health Research Ethics Committee of Nigeria (NHREC) and the ICF Institutional Review Board. After all questionnaires were finalised in English, they were translated into Hausa, Yoruba, and Igbo. The 2018 NDHS used computer-assisted personal interviewing (CAPI) for data collection.

The statistical software used for this study is International Business Machine (IBM) Statistical Package for the Social Sciences (SPSS) version 27. Descriptive and bivariate analytical techniques were used for the analysis. The analysis included a total of 106,586 respondents, spread across households (40,427), women aged 15-49years (41,821), subsample households (13,893) and men aged 15-59 (13,311). To filter the data relevant to this study from the total sample in the NDHS dataset, only information about women (15-49 years) was extracted. The dataset used for this study is accessible at https://dhsprogram.com/data/dataset/Nigeria_Standard-DHS_2018.cfm?flag=0.

Dependent variable

The primary outcome variable of interest was women's place of delivery, defined as respondents' home, other home, government hospitals, government health centres, government health posts, other public sector, private hospitals/clinics, other private sector and other.

Explanatory variables

The explanatory variables used to analyse the findings were sociodemographic information: age, education, marital status, employment status, wealth index, and place of residence (urban/rural). The number of antenatal care (ANC) visits was also part of the explanatory variables.

Handling of data

The ANC visits variable was recoded. The No visit and Don't know variables were maintained while other variables were recoded as four or fewer visits, five to eight visits, and above eight visits.

RESULTS

Demographic Information of Respondents

Table 1 presents some sociodemographic information of the selected respondents used for the survey. One-fifth (20.1.%) of all the respondents were between 15-19 years; 17.2% were within 25-29 years, while the least (9.3%) belonged to 45-49 years. The majority (34.4%) of the respondents could not attain any formal education; only 10.7% completed primary school education; 22.6% completed secondary school, while only 10.4% could go beyond secondary school. One quarter (24.2%) of the respondents were from the Northwest region, 18.3% of respondents were from the Northeast, while the least 12.1% were from the South-south region. The category of wealth index showed that 18.6% of respondents were the poorest, 20.0% were middle income, while 21.7% the richest.

Table 1: Demographic information of Respondents (N=41,821)

Demographic Information		Frequency	Percent
Age group	15-19	8423	20.1
	20-24	6844	16.4
	25-29	7203	17.2
	30-34	5997	14.3
	35-39	5406	12.9
	40-44	4057	9.7
	45-49	3891	9.3
Educational attainment	No education	14398	34.4
	Incomplete primary	1908	4.6
	Complete primary	4475	10.7
	Incomplete secondary	7246	17.3
	Complete secondary	9452	22.6
	Higher	4342	10.4
Region	North Central	7772	18.6
	North East	7639	18.3
	North West	10129	24.2
	South East	5571	13.3
	South South	5080	12.1
	South West	5630	13.5
Residence	Urban	16984	40.6
	Rural	24837	59.4
Wealth Index	Poorest	7771	18.6
	Poorer	8061	19.3
	Middle	8352	20.0
	Richer	8551	20.4
	Richest	9086	21.7

ANC Visits and Place of Delivery

The antenatal (ANC) visits by the respondents showed that 24.6% did not go for any ANC visit, 30.2% of respondents had five to eight visits, 13.8% had more than eight ANC visits, while 1.5% did not know. For the place of delivery, half (51.7%) of the respondents delivered their babies at home, and 13.6% delivered at government hospitals. Also, 15.3% delivered at government health centres/posts, 12.1% used private hospitals, while 1.6% chose other locations as the place of delivery.

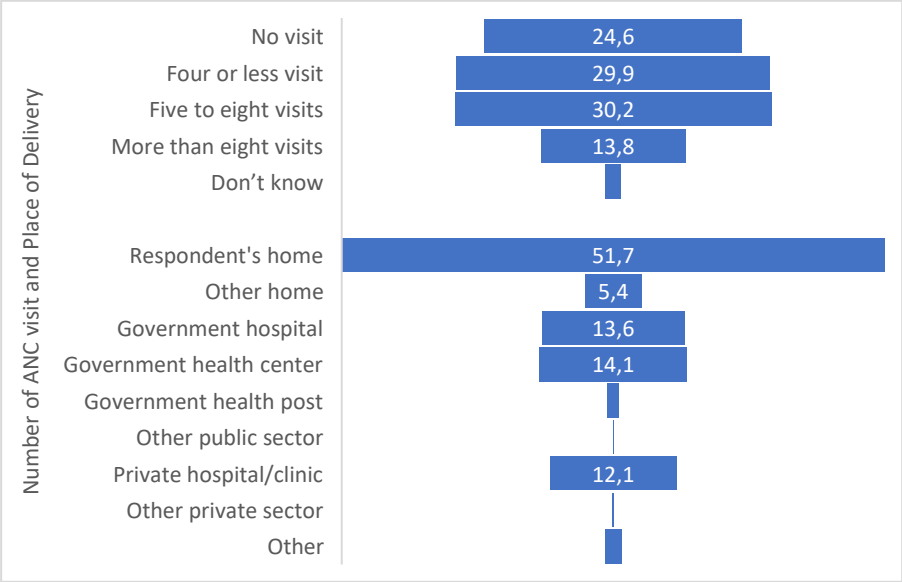

Figure 1. Number of ANC Visits and Place of Delivery (N = 21,792)

Age, Number of antenatal visits and Place of delivery

There is a significant relationship between the place of delivery and age groups. However, the largest percentage (63.1%) of women who gave birth at home were between 15 and 19 years, followed by 58.3% who were between 45 and 49 years, while the least (47.0%) were between 30 and 34 years. The age group of 15-19 years led women who gave birth at other home, next by 20-24 years with 5.9% and the lowest (3.7%) was among 45-49 years. The leading percentage (15.5%) of women who delivered their babies at government hospitals belonged to the 30-34 years age group, followed by 14.4% of women aged 35-39 years, while the least (10.5%) were women between 15-19 years. Women aged 35-39 years were the highest (14.8%) of those who gave birth at private hospitals/clinics, followed by 14.4% women aged 30-34; 13.0% of women from 40-44 years, while the least (6.6%) were

15-19 years. Almost all (87.1%) of the respondents who delivered at home showed that they never used ANC, while the lowest (9.7%) had more than eight ANC visits. The majority (25.1.%) of respondents who delivered at government hospitals could not recall the number of visits to ANC, while the least (1.4%) were those who did not attend ANC. The highest percentage (33.4%) of respondents who gave at private hospitals/clinics were those who had more than eight ANC visits, while the least (1.8%) did not visit ANC.

Table 2: Age, Number of antenatal visits and Place of delivery

	Place of delivery							
	Respondent's home	Other home	Govt hospital	Govt health centre	Govt health post	Private hospital /clinic	Other private sector	Total
15-19 years	753	76	125	133	18	79	9	1193
(%)	63.1	6.4	10.5	11.1	1.5	6.6	0.8	100.0
20-24 years	2377	250	519	569	46	367	78	4206
(%)	56.5	5.9	12.3	13.5	1.1	8.7	1.8	100.0
25-29 years	2865	322	739	830	64	698	99	5617
(%)	51.0	5.7	13.2	14.8	1.1	12.4	1.8	100.0
30-34 years	2194	249	725	676	54	673	99	4670
(%)	47.0	5.3	15.5	14.5	1.2	14.4	2.1	100.0
35-39 years	1720	181	523	547	37	537	77	3622
(%)	47.5	5.0	14.4	15.1	1.0	14.8	2.1	100.0
40-44 years	944	70	241	233	17	231	38	1774
(%)	53.2	3.9	13.6	13.1	1.0	13.0	2.2	100.0
45-49 years	414	26	100	93	7	62	70	710
(%)	58.3	3.7	14.1	13.1	1.0	8.7	9.8	100.0
No visit	4674	314	73	125	16	98	65	5365
(%)	87.1	5.9	1.4	2.3	0.3	1.8	1.3	100.0
Four or fewer visits (%)	4013 61.7	262 4.0	839 12.9	788 12.1	104 1.6	421 6.5	82 1.2	6509 100.0
Five to eight visits (%)	2248 34.2	328 5.0	1384 21.1	1336 20.3	100 1.5	1035 15.7	132 2.1	6573 100.0
More than eight visits (%)	292 9.7	215 7.1	594 19.7	785 26.0	21 0.7	1007 33.4	104 3.4	3018 100.0
Don't know	40	55	82	47	2	86	15	327
(%)	12.2	16.8	25.1	14.4	0.6	26.3	4.6	100.0
Pearson Chi-Square	303.357a	48	000					

Educational attainment, Wealth index for urban/rural and Place of delivery

The Pearson chi-square shows a significant relationship between educational attainment and place of delivery. Besides, the highest (82.4%) percentage of women who gave birth at home had no formal education, followed by 59.2% of respondents who could

not complete primary education, while the least (7.9%) had more than secondary education. Among women who gave birth at other home, the highest (10.2%) was incomplete secondary education, 8.7% who had completed secondary school, while 2.0% did not have an education. Government hospitals as the place of delivery showed that respondents with higher secondary education were the highest (35.6%), 20.2% completed secondary school, while the lowest (6.1%) were without education. Among the respondents who gave birth at the government health centre, 19.6% had incomplete secondary, while 12.7% could not complete primary school. Those who gave birth at the private hospital/clinics showed 33.9% had higher educational status, 11.5% of the respondents completed primary school, while 1.8% had no formal educational attainment. The majority (75.7%) of respondents who gave birth at home were the poorest, while 20.0% of the richest gave birth at home. One-tenth (10.0%) of the poorer and 17.5% of the richer category gave birth at government hospitals. About one-tenth (9.9%) of the middle class, 7.9% of the poorer and 14.6% of the richer categories gave birth at private hospitals/clinics.

Table 3: Educational attainment, Wealth index for urban/rural and Place of delivery

	Place of Delivery							
	Respondent's home	Other home	Govt hospital	Govt health centre	Govt health post	Private hosp. /clinic	Other	Total
No education	7846	193	580	625	82	167	36	9527
(%)	82.4	2.0	6.1	6.6	0.9	1.8	0.3	100.0
Incomplete	620	75	109	133	17	80	13	1047
primary (%)	59.2	7.2	10.4	12.7	1.6	7.6	1.3	100.0
Complete	989	190	355	445	29	271	84	2363
primary (%)	41.9	8.0	15.0	18.8	1.2	11.5	3.6	100.0
Incomplete	837	262	380	503	47	447	89	2565
secondary (%)	32.6	10.2	14.8	19.6	1.8	17.4	3.5	100.0
Complete	834	390	911	1071	59	1075	159	4499
secondary (%)	18.5	8.7	20.2	23.8	1.3	23.9	3.6	100.0
Higher	141	64	637	304	9	607	29	1791
(%)	7.9	3.6	35.6	17.0	0.5	33.9	1.6	100.0
Poorest	3521	182	270	386	45	213	35	4652
(%)	75.7	3.9	5.8	8.3	1.0	4.6	0.7	100.0
Poorer	2952	186	462	517	63	366	67	4613
(%)	64.0	4.0	10.0	11.2	1.4	7.9	1.4	100.0
Middle	2389	236	595	662	60	440	80	4462
(%)	53.5	5.3	13.3	14.8	1.3	9.9	1.7	100.0
Richer	1647	299	762	748	60	624	129	4269
(%)	38.6	7.0	17.8	17.5	1.4	14.6	3.0	100.0
Richest	758	271	883	768	15	1004	97	3796
(%)	20.0	7.1	23.3	20.2	0.4	26.4	2.6	100.0

Region, Residence Location and Place of Delivery

There is a significant relationship between region and place of delivery. However, almost all (83.4%) of the respondents from the Northwest, 44.8% from the Northcentral and one-quarter (24.7%) from the Southsouth gave birth at home. One-fifth (22.8%) and 9.5% of the respondents from the Northcentral and the Northwest, respectively, gave birth at the government hospitals. About one-third (29.4%), 11.2% and 4.3% of respondents from the Southeast, Northeast and Northwest, respectively, gave birth at the government health centres. The majority (39.9%) of respondents from the Southeast region, 13.4% from the Southsouth and 1.7% from the Northeast used private hospitals/clinics as a place of delivery. The majority (63.8%) of rural dwellers and one-third (29.7%) of urban dwellers gave birth at home.

Table 4: Region, Residence Location and Place of delivery

Region	Place of delivery							Total
	Respondent home	Other home	Govt hospital	Govt health centre	Govt health post	Private hospital /clinic	Other	
North	1737	104	882	505	30	567	50	3875
Central (%)	44.8	2.7	22.8	13.0	0.8	14.6	1.4	100.0
North East	3228	101	422	505	166	76	8	4506
(%)	71.6	2.2	9.4	11.2	3.7	1.7	0.2	100.0
North West	5259	59	602	272	15	97	5	6309
(%)	83.4	0.9	9.5	4.3	0.2	1.5	0.0	100.0
South East	273	178	226	695	13	943	37	2365
(%)	11.5	7.5	9.6	29.4	0.5	39.9	1.5	100.0
South	538	514	336	366	1	291	128	2174
South (%)	24.7	23.6	15.5	16.8	0.0	13.4	5.8	100.0
South West	232	218	504	738	18	673	170	2563
(%)	9.1	8.5	19.7	28.8	0.7	26.3	7.0	100.0
Urban	2288	487	1695	1311	59	1660	210	7710
(%)	29.7	6.3	22.0	17.0	0.8	21.5	2.7	100.0
Rural	8979	687	1277	1770	184	987	198	14082
(%)	63.8	4.9	9.1	12.6	1.3	7.0	1.4	100.0
Pearson Chi-Square		2746.403a		8		.000		

DISCUSSION

This study reveals key sociodemographic variables that significantly influence the place of delivery among women in Nigeria. It shows that women who gave birth in their teens (15–19 years) have a higher percentage of home delivery. Studies have shown that

many teenagers who gave birth were unintentional due to unplanned pregnancy, school dropout, poverty and lack of sexual education (Onyema & Isokon, 2024; Salami et al., 2014). The stigma society attributed to teenage pregnancy, the wrong attitude of healthcare professionals and poverty detached many pregnant adolescents from choosing hospitals to give birth (Onyema & Isokon, 2024; Salami & Ayegboyin, 2014). Thus, these adolescents often lack autonomy, economic power, and awareness of the risks associated with home delivery(Adewuyi et al., 2019; Oladele et al., 2024; Solanke et al., 2019). In contrast, women aged 30–34 years had the lowest proportion (47.0%) of home births, suggesting that women in this age group may have greater decision-making capacity and possibly more exposure to health education. Additionally, older women (35–39 years) showed the highest usage of private hospitals/clinics likely reflecting greater financial stability and experience with previous births that may influence their preferences. The significantly lower use of health facilities among adolescents reinforces the need for targeted youth-friendly reproductive health services and educational interventions to promote safe delivery practices.

A critical determinant evident in the data is education, which showed a strong and significant association with the place of delivery. A majority (82.4%) of women who gave birth at home had no formal education. This shows evidence of language barriers since women with no formal education will find it difficult to express themselves clearly with healthcare professionals. This may propel such women to patronise traditional birth attendants (TBAs) and give birth at home. These findings are consistent with other studies that highlight the positive impact of female education on health-seeking behaviour (Abubakar et al., 2017; Esan et al., 2023; Ntoimo et al., 2022). Educated women are more likely to understand the benefits of skilled birth attendance, navigate healthcare systems, and challenge cultural or familial norms that favour home delivery. Furthermore, they are more likely to be economically empowered, enhancing their ability to afford facility-based services(Babalola & Fatusi, 2009; Jiwani et al., 2025).

The Antenatal Care (ANC) utilisation strongly correlated with the place of delivery. Almost all 87.1% of women who delivered at home did not attend ANC. This pattern demonstrates the synergistic relationship between ANC attendance and institutional delivery, where frequent contact with health professionals during pregnancy may reinforce the importance of delivering in a health facility (Babalola & Fatusi, 2009; Onyema & Isokon, 2024). The absence of ANC visits among a large proportion of women who

delivered at home signals missed opportunities for risk screening, birth preparedness, and health education. It also suggests that barriers to facility-based ANC, such as distance, cost, and sociocultural resistance may continue into the delivery period.

The association between economic status and place of delivery was also significant. About 75.7% of women in the poorest wealth quintile gave birth at home, compared to 20.0% of the richest. Conversely, private hospitals were primarily used by those in the richer categories. These patterns are consistent with national and international findings (Ajayi & Akpan, 2020; Tekeba et al., 2025; WHO, 2024), which assert that economic empowerment enhances access to health facilities by enabling transportation, affording facility charges, or overcoming indirect costs such as lost labour. The persistent reliance on home delivery by the poor underscores the need for pro-poor health financing strategies like conditional cash transfers or community-based health insurance schemes.

The significant regional variation in the place of delivery was observed. For example, 83.4% of respondents in the Northwest delivered at home, compared to 24.7% in the Southeast, where private hospital utilisation was also higher (39.9%). These disparities reflect Nigeria's regional imbalances in health infrastructure, education, cultural practices, and poverty levels (Eze & Chukwuma, 2024; Olowolafe et al., 2023). The northern regions, particularly the Northwest and Northeast, are traditionally associated with low levels of female education, early marriage, and gender norms that limit women's autonomy in health decisions (Ntoimo et al., 2019; Yaya et al., 2019). On the other hand, the South benefits from better infrastructure, literacy levels, and higher exposure to maternal health campaigns. Addressing these disparities requires context-specific policy interventions that consider cultural, religious, and socioeconomic realities in each region.

Place of residence remains a potent determinant of delivery location. A large majority (63.8%) of rural dwellers delivered at home, compared to 29.7% in urban areas, where access to private hospitals (21.5%) was significantly higher. This urban–rural divide is not surprising given the disparities in healthcare infrastructure, availability of skilled personnel, and transportation networks (NPC & ICF, 2019; Tekeba et al., 2025). Rural women often live far from facilities, face challenges in emergency transport, and may be influenced by traditional norms that favour home births or the use of traditional birth attendants. Expanding rural access to quality maternal care through mobile clinics, community health extension workers, and facility upgrades is crucial to bridging this gap.

Based on these findings, the following policy actions and interventions are recommended to address the structural barriers to institutional deliveries through targeted health policies. There should be public health campaigns, sensitisation and policies that are tailored to specific regions, languages, and cultural contexts, especially the northern parts of the country where the teenage pregnancy rate is very high. Policies and programmes such as total free antenatal care and delivery services with or without assisted and caesarean sections mainly channel pregnant adolescents, attracting them to choose health centres over home delivery. Involving traditional and religious leaders in promoting institutional delivery can help shift long-standing norms that favour home births.

Evidence of a language barrier emerged as a strong determinant of home delivery. There should be an effective state-by-state policy of training the majority of the TBAs freely, especially at the community level and in rural areas on maternal health delivery. This is imperative since the majority of women with no formal education patronise them. Integrate birth preparedness counselling into ANC visits and enforce minimum ANC visit targets as the WHO recommends eight contacts. Community health workers should be trained to follow up with pregnant women, especially in rural areas, to ensure consistent ANC attendance and timely referrals. Governments and development partners should increase the number and capacity of maternal health facilities in rural and underserved regions. National and state-level maternal health task forces should be empowered to integrate these sectors into holistic reproductive health strategies. This study is limited by using descriptive, crosstabulation and chi-square statistical tools. However, the statistical tools only examined the relationship between the selected variables without looking at the causation of such variables and the direction of their relationship.

CONCLUSION

The study affirms that age, education, wealth, ANC attendance, region, and place of residence are significant determinants of where Nigerian women give birth. The high rates of home delivery, particularly among adolescent mothers, the uneducated, the poor, and rural women, highlight the persistence of inequities in accessing maternal healthcare services. Effective policy must go beyond infrastructure to address the social determinants of health and tailor health interventions to region-specific cultural contexts. Strengthening ANC uptake, improving health literacy, expanding insurance coverage, and engaging

community leaders are crucial strategies to increase the rate of facility-based deliveries and reduce maternal and neonatal mortality in Nigeria. Addressing these inequalities with an inclusive approach to maternal healthcare is essential to meet Sustainable Development Goal 3 on reducing maternal mortality and ensuring access to trained TBAs and skilled birth care. Qualitative studies on the exploration of cultural norms and barriers, and longitudinal studies in a deeper understanding of choosing home delivery over health facilities, should be conducted in the country especially at the Northwest region.

REFERENCES

Abubakar, S., Adamu, D., Hamza, R., & Galadima, J. B. (2017). Determinants of Home Delivery among Women attending Antenatal Care in Bagwai Town, Kano Nigeria. *Afr J Reprod Health*, *21*(4), 73-79. https://doi.org/10.29063/ajrh2017/v21i4.8

Adde, K. S., Dickson, K. S., & Amu, H. (2020). Prevalence and determinants of the place of delivery among reproductive age women in sub-Saharan Africa. *PLoS One*, *15*(12), e0244875. https://doi.org/10.1371/journal.pone.0244875

Adewuyi, E. O., Khanal, V., Zhao, Y., David, L., Bamidele, O. D., & Auta, A. (2019). Home childbirth among young mothers aged 15-24 years in Nigeria: a national population-based cross-sectional study. *BMJ Open*, *9*(9), e025494. https://doi.org/10.1136/bmjopen-2018-025494

Ajayi, A. I., Ahinkorah, B. O., & Seidu, A. A. (2023). "I don't like to be seen by a male provider": health workers' strike, economic, and sociocultural reasons for home birth in settings with free maternal healthcare in Nigeria. *Int Health*, *15*(4), 435-444. https://doi.org/10.1093/inthealth/ihac064

Ajayi, A. I., & Akpan, W. (2020). Maternal health care services utilisation in the context of 'Abiye' (safe motherhood) programme in Ondo State, Nigeria. *BMC Public Health*, *20*(1), 362. https://doi.org/10.1186/s12889-020-08512-z

Aregbeshola, B. S., & Khan, S. M. (2017). Primary Health Care in Nigeria: 24 Years after Olikoye Ransome-Kuti's Leadership. *Front Public Health*, *5*, 48. https://doi.org/10.3389/fpubh.2017.00048

Asirifi, S. K. A., Kolbilla, D. Z., Boateng, K.-H. T., Prince, N., Dammigu, K. E., & Yumann, K. J. (2025). Factors Influencing the Choice of Delivery Places by Pregnant Women in Selected Health Facilities in the Sagnarigu Municipality. *Asian Journal of Pregnancy and Childbirth*, *8*(1), 133-149. https://doi.org/10.9734/ajpcb/2025/v8i1154

Babalola, S., & Fatusi, A. (2009). Determinants of use of maternal health services in Nigeria--looking beyond individual and household factors. *BMC Pregnancy Childbirth*, *9*, 43. https://doi.org/10.1186/1471-2393-9-43

Dahie, H. A., Osman, M. A., Jimale, Y. A., Mohamud, F. I., Hussein, H. A., Alasow, M. O., Osman, A. A., Abdirahman Mohamed, A., Dakane, M. M., & Hussein, D. A. (2025). Determinants of institutional delivery service utilization among internally displaced vulnerable populations in Benadir region, Somalia: A community based

cross-sectional study. *J Migr Health*, *11*, 100319. https://doi.org/10.1016/j.jmh.2025.100319

Dauda, R. (2023). Maternal Mortality in Nigeria: What is Known and What Needs to be Done.

Dickson, K. S., Adde, K. S., & Amu, H. (2016). What Influences Where They Give Birth? Determinants of Place of Delivery among Women in Rural Ghana. *Int J Reprod Med*, *2016*, 7203980. https://doi.org/10.1155/2016/7203980

Dogbanya, G. (2025). Maternal Mortality in Nigeria: Holding the Line in Uncertain Times. *Ann Glob Health*, *91*(1), 16. https://doi.org/10.5334/aogh.4710

Esan, D. T., Ayenioye, O. H., Ajayi, P. O., & Sokan-Adeaga, A. A. (2023). Traditional birth attendants' knowledge, preventive and management practices for postpartum haemorrhage in Osun State, Southwestern Nigeria. *Sci Rep*, *13*(1), 12314. https://doi.org/10.1038/s41598-023-39296-y

Eze, O. I., & Chukwuma, I. F. (2024). Does expanding health insurance in rural Nigeria result in improved health outcomes and poverty reduction? *Journal of Global Health Economics and Policy*, *4*. https://doi.org/10.52872/001c.125491

Fentie, T. A., Solomon, A. A., Enyew, M. M., Beyene, M. M., Melese, A. K., Belay, A. E., & Alemu, G. G. (2025). Respectful maternity care and associated factors among mothers who gave birth at public health institutions in Debre Tabor town, Northwest Ethiopia: a mixed-methods study. *Front Glob Womens Health*, *6*, 1513906. https://doi.org/10.3389/fgwh.2025.1513906

Hassan, I., Philip, E., Michael, A., Joshua, A., & al., e. (2021). Factors Determining the Choice of Place of Delivery among Antenatal Attendees in Primary Health Care Centres in Lafia Nigeria. *Texila International Journal of Public Health*, *9*(3). https://doi.org/10.21522/TIJPH.2013.09.03.Art0015

Izugbara, C. O., & Wekesah, F. (2018). What does quality maternity care mean in a context of medical pluralism? Perspectives of women in Nigeria. *Health Policy Plan*, *33*(1), 1-8. https://doi.org/10.1093/heapol/czx131

Jiwani, S. S., Cisse, K., Mutua, M., & al, e. (2025). Levels and Determinants of Person-Centered Maternity Care Among Women Living in Urban Informal Settlements: Evidence from Client Exit Surveys in Nairobi, Lusaka and Ouagadougou. https://doi.org/10.1101/2025.01.09.25320278

Johnson, O. E., Obidike, P. C., Eroh, M. U., Okpon, A. A., Bassey, E. I., Patrick, P. C., Ebong, P. E., & Ojumah, E. (2020). Choices and determinants of delivery location among mothers attending a primary health facility in Southern Nigeria. *Niger Postgrad Med J*, *27*(1), 42-48. https://doi.org/10.4103/npmj.npmj_150_19

NPC, & ICF. (2019). *Nigeria Demographic and Health Survey 2018*.

Ntoimo, L. F. C., Okonofua, F. E., Ekwo, C., Solanke, T. O., Igboin, B., Imongan, W., & Yaya, S. (2022). Why women utilize traditional rather than skilled birth attendants for maternity care in rural Nigeria: Implications for policies and programs. *Midwifery*, *104*, 103158. https://doi.org/10.1016/j.midw.2021.103158

Ntoimo, L. F. C., Okonofua, F. E., Igboin, B., Ekwo, C., Imongan, W., & Yaya, S. (2019). Why rural women do not use primary health centres for pregnancy care: evidence

from a qualitative study in Nigeria. *BMC Pregnancy Childbirth*, *19*(1), 277. https://doi.org/10.1186/s12884-019-2433-1

Okeke, C. I., Ochie, C., Mbachu, C., & Onwasigwe, C. (2025). Examining demand and supply factors associated with women's preferences for where to deliver their babies in rural and urban communities of Enugu State, Nigeria. *Discover Public Health*, *22*(1). https://doi.org/10.1186/s12982-025-00462-4

Oladele, R., Ojo, E., Okoduwa, G. E., Olajide, O. A., Olufadewa, I., & Adesina, M. (2024). Utilization of antenatal care by young mothers and adolescents in Nigeria. *Discover Public Health*, *21*(1). https://doi.org/10.1186/s12982-024-00335-2

Olowolafe, T. A., Adebowale, A. S., Fagbamigbe, A. F., Bolarinwa, O. A., & Akinyemi, J. O. (2023). Shifts in age pattern, timing of childbearing and trend in fertility level across six regions of Nigeria: Nigeria Demographic and Health Surveys from 2003-2018. *PLoS One*, *18*(1), e0279365. https://doi.org/10.1371/journal.pone.0279365

Omuta, G., Onokerhoraye, A., Okonofua, F., Obanovwe, G., Isah, E., Okoro, J., Onojeta, F., Omoraka, F., Eregare, J., & kpomera, E. (2014). PERSPECTIVES ON PRIMARY HEALTH CARE IN NIGERIA: PAST, PRESENT AND FUTURE. In *CPED Monograph Series 10*.

Onyema, A., & Isokon, B. (2024). Teenage pregnancy and socio-economic implications for adolescents in southern senatorial district of cross river state, Nigeria. *International Journal of Intellectual Discourse (IJID)*, *7*(1), 12.

Oyedele, O. K. (2023). Disparities and barriers of health facility delivery following optimal and suboptimal pregnancy care in Nigeria: evidence of home births from cross-sectional surveys. *BMC Womens Health*, *23*(1), 194. https://doi.org/10.1186/s12905-023-02364-6

Sabo, A., Alzoubi, M. M., Saidu, A. Y., Usman, U. S., Saulawa, I. M., Al-Mugheed, K., Farghaly Abdelaliem, S. M., & Saeed Alabdullah, A. A. (2024). Determinants of Utilization of Antenatal Care Services Among Women of Childbearing Age in Jigawa State, Nigeria. *Int J Public Health*, *69*, 1607385. https://doi.org/10.3389/ijph.2024.1607385

Salami, K. K., & Ayegboyin, M. (2014). Intergenerational Life Courses of Teenage Pregnancy in Ogbomosho South-Western Nigeria. *Children & Society*, *29*(5), 451-461. https://doi.org/10.1111/chso.12078

Salami, K. K., Ayegboyin, M., & Adedeji, I. A. (2014). Unmet social needs and teenage pregnancy in Ogbomosho, South-western Nigeria. *Afr Health Sci*, *14*(4), 959-966. https://doi.org/10.4314/ahs.v14i4.27

Samuel, G. K., & Okpe, O. (2024). Socio-demographic Determinants of Healthcare Utilization among Adults in Rural Communities of Benue State, Nigeria. *Asian Journal of Medicine and Health*, *22*(8), 147-157. https://doi.org/10.9734/ajmah/2024/v22i81080

Solanke, B. L., Salau, O. R., Popoola, O. E., Adebiyi, M. O., & Ajao, O. O. (2019). Socio-demographic factors associated with delayed childbearing in Nigeria. *BMC Res Notes*, *12*(1), 374. https://doi.org/10.1186/s13104-019-4414-x

Tekeba, B., Zegeye, A. F., Gebrehana, D. A., & Tamir, T. T. (2025). Prevalence and Determinants of Home Delivery among Women with Easy Access to Health

Facilities in Sub-Saharan African Countries: A Multi-level Mixed Effect Analysis. *Ann Glob Health*, *91*(1), 5. https://doi.org/10.5334/aogh.4615

Udenigwe, O., Okonofua, F. E., Ntoimo, L. F. C., Imongan, W., Igboin, B., & Yaya, S. (2021). "We have either obsolete knowledge, obsolete equipment or obsolete skills": policy-makers and clinical managers' views on maternal health delivery in rural Nigeria. *Fam Med Community Health*, *9*(3). https://doi.org/10.1136/fmch-2021-000994

UNICEF. (2025). The State of Nigeria's Children: Summary of the 2024 Situation Analysis of Children and Adolescents in Nigeria, second edition. *Federal Government of Nigeria and United Nations Children's Fund Nigeria*.

WHO. (2019). Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.

WHO. (2023). Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. *World Health Organization*.

WHO. (2024). World health statistics 2024: monitoring health for the SDGs, Sustainable Development Goals.

WHO, & UNICEF. (2017). World Health Organization (WHO)/United Nations Children's Fund (UNICEF) discussion paper: the extension of the 2025 maternal, infant and young child nutrition targets to 2030.

Yaya, S., Bishwajit, G., & Gunawardena, N. (2019). Socioeconomic factors associated with choice of delivery place among mothers: a population-based cross-sectional study in Guinea-Bissau. *BMJ Glob Health*, *4*(2), e001341. https://doi.org/10.1136/bmjgh-2018-001341

Zegeye, A. T., Tilahun, B. C., Fekadie, M., Addisu, E., Wassie, B., Alelign, B., Sharew, M., Baykemagn, N. D., Kebede, A., & Yehuala, T. Z. (2025). Predicting home delivery and identifying its determinants among women aged 15-49 years in sub-Saharan African countries using a Demographic and Health Surveys 2016-2023: a machine learning algorithm. *BMC Public Health*, *25*(1), 302. https://doi.org/10.1186/s12889-025-21334-1