

Assessment of Perception and Utilization of Maternal and Child Healthcare Services Among Women of Reproductive Age in Selected Health Facilities, Lagos State, Nigeria

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Abstract: Maternal and child health remains a central concern in global health policy given its direct linkage to Sustainable Development Goal 3. Maternal and child healthcare services are essential for promoting the health and well-being of women and children and for reducing preventable maternal and child morbidity and mortality. Despite the availability of these services, variations in utilization persist among women of reproductive age. The study determined the perception and utilization of maternal and child healthcare services in selected health facilities in Lagos State, Nigeria. A descriptive cross-sectional research design was adopted for the study which was among women of reproductive age attending selected health facilities in Lagos State. A total of 400 questionnaires were administered to eligible respondents, of which 396 were successfully retrieved. Data were collected using structured and validated instrument. Data were analyzed using descriptive and inferential statistics, and Chi Square test was used to analyse the hypotheses at a significance level of 0.05. The findings from the analysed data revealed a mean age of 32.1±1. The perception of the respondents on maternal and child healthcare services revealed that it is effective in promoting the health of mothers and children 218 (55.1%) and high competence on the part of healthcare workers 191 (48.2%). Antenatal care services 214 (54.0%) and child immunization services 220 (55.6%) were the highest services utilized. There was a significant association between marital status and perception on maternal and child healthcare services ($X^2=13.487$; $p=0.009$) while there was no significant association between age and level of utilization of maternal and child healthcare services ($X^2=7.238$; $p=0.299$) among the respondents. In conclusion, there is high perception and utilization of maternal and child healthcare services. It is recommended that health education and family support should be strengthened for more improvements.

Keywords: Maternal and Child Healthcare Services, Perception, Women of Reproductive Age, Utilization.

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I. INTRODUCTION

Maternal and child health issues are a global public health problem which has been affecting the mortality and morbidity of mother and child¹⁵. Globally, despite several decades of intervention and investment, maternal mortality persists as a major public health challenge¹⁵. The latest global estimates show that hundreds of thousands of women continue to die annually from largely preventable causes related to pregnancy and childbirth, with just under a half-million women estimated to die yearly from maternal causes¹⁵. These deaths represent deep inequities in access to quality healthcare, education, and socioeconomic support systems that are unevenly distributed across regions, with the poorest populations and most underserved communities suffering disproportionately.

A major factor influencing maternal and child health outcomes is utilization of essential healthcare services, including ante-natal care (ANC), skilled birth attendance, immunization, postnatal care, and child welfare check-ups¹⁰. Research demonstrates that when women engage in comprehensive maternal and child health services throughout the continuum of care from pregnancy to postpartum, maternal and child morbidity and mortality rates decline significantly¹⁰. However, global health systems still struggle to ensure equitable access and utilization of these services across different socioeconomic groups. Financial constraints, education level, geographic barriers, and sociocultural norms continue to drive inequities in healthcare engagement among women of reproductive age across low- and middle-income countries¹⁰.

Moreover, perception on quality of care also plays a critical role in healthcare engagement. Women's perceptions of service delivery including the attitudes of healthcare providers, the perceived relevance and quality of care, waiting times, and user-friendliness of facilities shape decisions about whether to seek formal healthcare services or rely on traditional care options¹. Negative perceptions, such as concerns about rude staff, long waiting times, or lack of essential drugs, have been associated with decreased service utilization even when services are available¹. Thus, understanding women's perceptions of maternal and child healthcare services remains indispensable for improving service uptake and achieving broader health outcomes. Sub-Saharan Africa continues to present some of the most challenging maternal and child health profiles in the world. Despite accounting for a smaller share of the global population, the region bears a disproportionately high burden of maternal and under-five child mortality. According to recent evidence, sub-Saharan Africa remains the epicenter of under-five mortality, with preventable conditions constituting a significant portion of deaths¹⁰.

In developed countries, such as the United States, United Kingdom, and Canada, high coverage of antenatal care (ANC), skilled birth attendance, and child immunization has resulted in relatively low maternal mortality ratios (MMR) and under-five mortality rates⁶. For example, in 2023, the United States reported an MMR of 20

per 100,000 live births, with over 90% of women attending four or more ANC visits⁴. Similarly, the United Kingdom reported over 95% coverage for routine childhood immunizations and skilled birth attendance¹¹. In sub-Saharan Africa, MCH service utilization remains below global targets, with considerable inter- and intra-country variability¹³. For example, in Kenya, only 58% of women completed at least four ANC visits in 2022, with lower rates in rural counties such as Turkana and Garissa⁸. Similarly, in Ghana, national facility-based delivery rates were 74% in 2021, but in the Northern and Upper East regions, coverage dropped to 50–55%, reflecting regional disparities⁵. In Ethiopia, antenatal and postnatal care utilization remains uneven; while urban centers like Addis Ababa reported over 80% ANC attendance, rural areas in the Somali and Afar regions recorded coverage below 40%¹⁴.

Nigeria, as the most populous country in Africa, contributes significantly to regional maternal and child health trends. Over the past decade, the Nigerian government has implemented several policy frameworks and interventions aimed at increasing maternal and child health service coverage, including the National Health Act (2014), the Midwives Service Scheme, and the National Strategic Health Development Plan. These policies sought to expand access to ANC, skilled birth attendance, PNC, and child immunization services⁷. Historical data indicate incremental improvements: ANC coverage rose from 58% in 2015 to 67% in 2023, and immunization coverage improved marginally; however, facility-based delivery and PNC uptake remain uneven and below national targets¹.

Utilization of maternal and child healthcare services varies considerably across regions: in the northern states such as Sokoto and Zamfara, only 35–40% of women delivered in health facilities, whereas in Lagos and Abuja, coverage ranges between 60–75%¹¹. Child health services exhibit similar disparities; for instance, full immunization coverage in 2022 was 58% nationally, but fell below 45% in rural northern states while exceeding 70% in Lagos and Ogun States¹¹. These disparities are influenced not only by structural and economic factors but also by women's perception of healthcare services. Studies in Nigeria indicate that negative experiences such as poor staff attitude, long waiting times, inadequate drugs, and unsanitary conditions deter women from utilizing maternal and child health services^{1,13}. Cultural beliefs, misinformation, and previous negative experiences also contribute to reluctance in seeking formal care, particularly for facility-based deliveries and postnatal follow-up. Consequently, some women initiate antenatal care late, fail to complete recommended visits, or opt for home deliveries attended by traditional birth attendants. This pattern increases the risk of preventable complications such as maternal hemorrhage, sepsis, neonatal infections, and vaccine-preventable childhood illnesses¹⁴.

In Lagos State, although healthcare infrastructure is relatively better compared to other Nigerian states, disparities in maternal and child health service utilization persist. Studies in low-income areas of Lagos revealed that while antenatal care attendance is generally high (>70%),

less than half of women deliver in health facilities, and up to 30% of births occur at home or with traditional birth attendants¹². Factors such as maternal education, household income, and satisfaction with facility services significantly influence utilization. These gaps underscore the importance of assessing not only service availability but also women's perception of care, which directly affects utilization patterns.

The following hypotheses were tested for the study:

- H01: There is no significant association between marital status and perception on maternal and child healthcare services among women of reproductive age in selected health facilities in Lagos State, Nigeria.
- H02: There is no significant association between gender and level of utilization of maternal and child healthcare services among women of reproductive age in selected health services, Lagos State, Nigeria.

II. METHODOLOGY

A descriptive cross-sectional research design was adopted for the study which involved women of reproductive

age between the ages of 15–49 years, on their perception and utilization of maternal and child healthcare services in selected health facilities in Lagos State, Nigeria. The sample size of 400 was arrived at using the Taro Yamane formula and a multistage sampling technique was used for selection of the respondents. The instrument for data collection was validated and ensured by experts in the field, and this was followed by collection of institutional ethical approval. Data analysis was presented using descriptive and inferential statistics and the level of significance was set at 0.05.

III. RESULTS

A total of 400 questionnaires were administered to eligible respondents across the selected health facilities, out of which 396 questionnaires were successfully retrieved, representing a 99.0% response rate.

The mean age of the respondents was 32.1±1. majority of the respondents were married 285 (72.0%), 173 (43.7%) had secondary education and 118 (29.8%) were traders (Table 1).

Table 1 Socio-Demographic Characteristics of Respondents

Variable	Frequency (f)	Percentage (%)
Age		
15–19 years	28	7.1
20–24 years	67	16.9
25–29 years	101	25.5
30–34 years	89	22.5
35–39 years	61	15.4
40–44 years	34	8.6
45–49 years	16	4.0
Marital Status		
Single	72	18.2
Married	285	72.0
Divorced	14	3.5
Separated	11	2.8
Widowed	14	3.5
Religion		
Christianity	184	46.5
Islam	202	51.0
Traditional Religion	6	1.5
Others	4	1.0
Highest Educational Qualification		
No formal education	18	4.5
Primary education	49	12.4
Secondary education	173	43.7
Tertiary education	156	39.4
Occupation		
Civil servant	64	16.2
Trader	118	29.8
Artisan	38	9.6
Self-employed	91	23.0
Unemployed	36	9.1
Student	32	8.1
Others	17	4.3

Table 2 on perception on maternal and child healthcare services in selected health facilities in Lagos State, Nigeria

revealed effectiveness of maternal and child healthcare services as 218 (55.1%) of the respondents strongly agreed to

this. Almost half of the respondents 191 (48.2%) attested to the competence of the health workers in rendering good healthcare services and 181 (45.7%) strongly agreed that

health education given to them has immensely helped in the utilization of the health facilities.

Table 2 Perception of Maternal and Child Healthcare Services Among Respondents

Statement	SA	A	N	D	SD
Maternal and child healthcare services are effective in promoting the health of mothers and children.	218 (55.1%)	128 (32.3%)	24 (6.1%)	17 (4.3%)	9 (2.3%)
Healthcare workers providing maternal and child healthcare services are competent.	191 (48.2%)	139 (35.1%)	30 (7.6%)	25 (6.3%)	11 (2.8%)
Healthcare workers show respect and courtesy to women receiving maternal and child healthcare services.	176 (44.4%)	147 (37.1%)	31 (7.8%)	29 (7.3%)	13 (3.3%)
Maternal and child healthcare services are easily accessible to women of reproductive age.	169 (42.7%)	145 (36.6%)	34 (8.6%)	34 (8.6%)	14 (3.5%)
Waiting time before receiving maternal and child healthcare services is reasonable.	137 (34.6%)	139 (35.1%)	43 (10.9%)	55 (13.9%)	22 (5.6%)
Essential drugs and medical supplies for maternal and child healthcare are usually available in health facilities.	149 (37.6%)	142 (35.9%)	38 (9.6%)	48 (12.1%)	19 (4.8%)
Health education provided during maternal and child healthcare visits is adequate and understandable.	181 (45.7%)	146 (36.9%)	32 (8.1%)	27 (6.8%)	10 (2.5%)

On utilization of maternal and child healthcare services, the analysed data revealed that antenatal care 214 (54.0%) and immunization services 220 (55.6%) are the most utilized services in the selected health facilities. The

respondents equally agreed that maternal and child healthcare services are utilized whenever a health need arises 203 (51.3%) – Table 3.

Table 3 Level of Utilization of Maternal and Child Healthcare Services Among Respondents

Statement	Always	Often	Sometimes	Never
Antenatal care services are utilized during pregnancy.	214 (54.0%)	112 (28.3%)	48 (12.1%)	22 (5.6%)
Antenatal care is initiated during the first trimester of pregnancy.	176 (44.4%)	107 (27.0%)	72 (18.2%)	41 (10.4%)
The recommended antenatal care visits are completed during pregnancy.	181 (45.7%)	115 (29.0%)	67 (16.9%)	33 (8.3%)
Delivery services are utilized in a health facility under the care of skilled health professionals.	205 (51.8%)	103 (26.0%)	54 (13.6%)	34 (8.6%)
Postnatal care services are utilized after childbirth.	165 (41.7%)	108 (27.3%)	78 (19.7%)	45 (11.4%)
Child immunization services are utilized according to the national immunization schedule.	220 (55.6%)	105 (26.5%)	49 (12.4%)	22 (5.6%)
Growth monitoring and child welfare services are utilized regularly.	173 (43.7%)	111 (28.0%)	70 (17.7%)	42 (10.6%)
Family planning services are utilized when required.	128 (32.3%)	96 (24.2%)	92 (23.2%)	80 (20.2%)
Health education sessions provided during maternal and child healthcare visits are attended.	198 (50.0%)	119 (30.1%)	56 (14.1%)	23 (5.8%)
Maternal and child healthcare services are utilized whenever a health need arises.	203 (51.3%)	116 (29.3%)	54 (13.6%)	23 (5.8%)

The first hypothesis tested was the association between marital status and perception of maternal and child healthcare services. This revealed that 85.9% of the respondents had a positive perception of maternal and child healthcare services, while 14.1% had a negative perception. Married respondents constituted the largest proportion of

respondents with a positive perception (52.5%), followed by single respondents (13.6%) and widowed respondents (12.1%). The Chi-square test yielded a χ^2 value of 13.487 with degree of freedom of 4 and a p-value of 0.009. Therefore, the null hypothesis is rejected. (Table 4).

Table 4 Chi-Square Test of Association Between Marital Status and Perception of Maternal and Child Healthcare Services

MARITAL STATUS	NEGATIVE PERCEPTION	POSITIVE PERCEPTION	χ^2	df	P=value
Single	20 (5.1%)	54 (13.6%)	13.487	4	0.009
Married	24 (6.1%)	208 (52.5%)			

Divorced	3 (0.8%)	12 (3.0%)			
Separated	4 (1.0%)	18 (4.5%)			
Widowed	5 (1.3%)	48 (12.1%)			
Total	56 (14.1%)	340 (85.9%)			

The second hypothesis revealed that there is no statistically significant association between age and level of utilization of maternal and child healthcare services among women of reproductive age in the selected health facilities ($X^2=7.238$; $p=0.299$). Table 5 shows that 73.2% of the

respondents had a high level of utilization of maternal and child healthcare services, while 26.8% had a low level of utilization. Respondents aged 30–34 years recorded the highest proportion of high utilization (18.7%), followed by those aged 25–29 years (16.4%) and 35–39 years (15.4%).

Table 5 Chi-Square Test of Association Between Age and Level of Utilization of Maternal and Child Healthcare Services

AGE GROUP	LOW UTILIZATION	HIGH UTILIZATION	X^2	df	P value
15–19 years	6 (1.5%)	6 (1.5%)	7.238	6	0.299
20–24 years	14 (3.5%)	26 (6.6%)			
25–29 years	25 (6.3%)	65 (16.4%)			
30–34 years	20 (5.1%)	74 (18.7%)			
35–39 years	19 (4.8%)	61 (15.4%)			
40–44 years	14 (3.5%)	37 (9.3%)			
45–49 years	8 (2.0%)	21 (5.3%)			
Total	106 (26.8%)	290 (73.2%)			

IV. DISCUSSION

The finding of a favourable perception is consistent with the evidence presented in the empirical review that women's perceptions of maternal healthcare are closely associated with the quality and experience of care they receive. Afulani et al. (2020)² found that women's perceptions of dignity, respect, communication, and autonomy during maternity care are important components of their assessment of healthcare services. Women who experienced more respectful and responsive care were more likely to return to health facilities for subsequent services. This supports the present study, where respondents reported favourable perceptions of the competence and interpersonal conduct of healthcare workers. The similarity suggests that women tend to develop positive perceptions when healthcare services are viewed as effective and when providers demonstrate professional and respectful behaviour. The present finding is also in agreement with⁹ who emphasized in the empirical review that perceived quality of care is an important determinant of health outcomes and health-seeking behaviour. The study argued that women may lose confidence in formal healthcare systems when their experiences are poor, even where services are physically available. The favourable perception observed among respondents in the present study may therefore reflect a relatively positive level of confidence in the selected health facilities.

The present study also found that respondents generally perceived healthcare workers as respectful and courteous, with a mean score of 4.12. This finding agrees with² whose study across African settings found that perceived disrespect, lack of empathy, and poor communication from healthcare providers were strongly associated with lower satisfaction and reduced utilization. The implication is that respectful interpersonal relationships between women and healthcare providers are not merely

matters of courtesy but important elements of women's experience of care and their perception of the health facility.

The findings of the study revealed that the respondents demonstrated a generally high level of utilization of maternal and child healthcare services in the selected health facilities in Lagos State. The overall pattern indicates that most respondents reported regular engagement with the available services, although utilization was not equally consistent across all components of the maternal and child healthcare continuum. The relatively high level of utilization observed in this study is understandable within the context of the study setting. This observation is consistent with the findings of³ whose large cross-country analysis using data from 91 national surveys showed that initial contact with antenatal care was relatively high across many low-and middle-income countries, but considerably fewer women received all essential components of care.

V. CONCLUSION

Based on the findings of the study, it is concluded that women of reproductive age attending the selected health facilities in Lagos State generally have favourable perceptions towards maternal and child healthcare services, and this is reflected in a generally high level of utilization of the available services. The study established that respondents recognize the importance of maternal and child healthcare services, particularly antenatal care, skilled birth attendance, postnatal care, childhood immunization, growth monitoring, and health education. Their favourable perception of the effectiveness and quality of healthcare services suggests that the selected health facilities are generally regarded as important and useful sources of maternal and child healthcare. However, the findings also demonstrate that positive perception does not completely eliminate barriers to utilization. Affordability, waiting time,

availability of drugs and medical supplies, distance, household income, and other socioeconomic and health-system factors continue to influence women's healthcare decisions. The study further demonstrated that maternal and child healthcare utilization is a multidimensional phenomenon influenced by individual perceptions and attitudes as well as socioeconomic, cultural, family, geographical, and health-system factors. Addressing these factors comprehensively will contribute to improved utilization of maternal and child healthcare services and ultimately support better maternal and child health outcomes among women and children in Lagos State.

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- Conflict of Interest: None declared.
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