

Perception and Knowledge In Selecting Preventive Reproductive Health Services Among Women In Lapai Local Government Area Of Niger State

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Abstract: *This study examined the relationship between socio-demographic characteristics and reproductive health (RH) knowledge and perception among women residing in Lapai Local Government Area of Niger State, Nigeria. Key variables considered included age, educational attainment, monthly income, marital status, employment status, religion, and ethnicity. A multistage sampling technique was adopted to recruit participants, yielding a final sample size of 328 women of reproductive age. The study was guided by two research questions and corresponding hypotheses, which were tested at the 0.05 level of significance. Data were collected using a structured questionnaire administered through face-to-face interviews to ensure clarity and inclusiveness. The responses were analyzed using frequency distributions, charts, means, and standard deviations, while the relationships between variables were assessed using the chi-square statistical test. Data analysis was conducted with the aid of SPSS version 25.0. Findings revealed that the majority of respondents (75%) had attained tertiary-level education, while 45.1% reported earning less than ₦20,000 per month. A substantial proportion of participants were single (59.8%), and most practiced Islam (68.6%), with the Nupe ethnic group being the most represented (45.1%). The results indicated no statistically significant relationship between respondents' knowledge of preventive reproductive measures ($\alpha = 3.355$; $p = 0.449$). However, variables such as educational attainment, income level ($\alpha = 12.04$; $p = 0.055$), and marital status ($p = 0.053$) were found to have significant associations with women's knowledge and perceptions regarding reproductive health services. Based on these findings, the study recommends the expansion of affordable and accessible reproductive health services in low-income and rural communities through mechanisms such as government-funded programs and sliding-scale payment systems. Additionally, it advocates for the integration of comprehensive reproductive health education into workplace wellness programs and community outreach initiatives to improve awareness, encourage positive health-seeking behaviors, and reduce disparities in reproductive health outcomes among women in Niger State and similar settings.*

Keywords: Reproductive Health, Health Services, Knowledge, Perception, Socio-Demographic Factors

Introduction

In Nigeria, issues surrounding reproductive health (RH) continue to pose significant challenges, particularly for women who often face barriers in accessing essential healthcare services such as family planning, antenatal, and postnatal care. Reproductive health knowledge (RHK) refers to an individual's awareness and comprehension of key aspects of sexual and reproductive well-being, including the anatomy and functioning of the reproductive system, family planning options, safe pregnancy and childbirth practices, prevention of sexually transmitted infections (STIs), and understanding of reproductive rights (Moronkola *et al.*, 2006). Possessing adequate RHK is critical for women to safeguard their health, exercise autonomy over reproductive decisions, and obtain appropriate healthcare at the right time (Ivanova *et al.*, 2018). However, RHK remains inadequate in settings where education levels are low or awareness campaigns are insufficient, such as in humanitarian emergencies, refugee settlements, and internally displaced persons (IDP) camps. Women in these vulnerable contexts often have limited access to information and services, leaving their reproductive health needs unmet (Adedini *et al.*, 2018; Ivanova *et al.*, 2018).

Reproductive health services comprise a broad spectrum of programs designed to enhance overall reproductive well-being. These include the provision of family planning education and contraceptive services, antenatal and postnatal healthcare, safe abortion care and post-abortion management, prevention and treatment of reproductive tract infections, HIV/AIDS awareness and control, infertility management, as well as screening and preventive care for cervical and breast cancers. Additionally, reproductive health initiatives seek to discourage harmful traditional practices such as female genital mutilation (FGM). Despite global recognition of reproductive health as a fundamental component of public health, many countries still grapple with inadequate service provision, poor infrastructure, and limited access to education on sexual and reproductive health. In Nigeria and other developing nations,

reproductive health challenges such as cervical cancer, breast cancer, HIV/AIDS, and unsafe abortions continue to impose a heavy burden. Timely diagnosis and effective management of these conditions are crucial in reducing preventable morbidity and mortality among women of reproductive age. The disproportionate burden observed in developing regions, particularly in sub-Saharan Africa, underscores the urgent need for targeted interventions to address reproductive ill-health and strengthen healthcare systems.

Reproductive knowledge and perception are pivotal to improving reproductive health outcomes, as they shape individuals' decisions and behaviors regarding sexual health, contraception, and maternal care. Knowledge involves awareness of contraceptive methods, sexually transmitted diseases, and maternal health practices, enabling individuals to make informed and responsible choices. Perception, on the other hand, reflects the cultural, social, and personal attitudes that influence reproductive decision-making and healthcare utilization (Makinde and Adebayo, 2020). Despite notable advances in medical research and the expansion of health education, substantial gaps in reproductive knowledge persist across low- and middle-income countries. These gaps are often perpetuated by socio-cultural norms, limited educational opportunities, gender inequality, and economic constraints, which collectively contribute to adverse reproductive outcomes such as unintended pregnancies and elevated maternal mortality rates. The interaction of these determinants is complex, involving multiple layers of influence that affect both knowledge and perception. Positive engagement with healthcare providers, access to quality reproductive services, and effective communication play key roles in bridging these gaps. Moreover, exposure to mass media and the digital sphere facilitates information dissemination and influences public attitudes. Individual psychological factors, including personal beliefs, perceived risks, and health motivation, further shape how reproductive information is interpreted and acted upon (Okoli *et al.*, 2022; Sidamo *et al.*, 2021).

Socio-demographic characteristics also serve as critical determinants of reproductive health behavior and outcomes. Variables such as age, marital status, education, income level, occupation, and place of residence significantly influence fertility choices, contraceptive use, and access to maternal health services. Empirical evidence demonstrates that urbanization and higher educational attainment are correlated with lower fertility rates, as educated and economically empowered women are more likely to delay marriage, postpone childbirth, or opt for smaller family sizes (Abdulai *et al.*, 2020). Consequently, enhancing women's education and economic status serves as a strategic avenue for improving reproductive health indicators and achieving sustainable population management. Despite national and international initiatives aimed at improving reproductive health education and service delivery, challenges persist in both knowledge acquisition and service utilization. In many low- and middle-income contexts, misinformation, stigma, and cultural taboos continue to hinder understanding and acceptance of reproductive health interventions (Makinde and Adebayo, 2020). Furthermore, entrenched social perceptions, often shaped by religion and patriarchy, inhibit open discussions about contraception and sexuality. Economic hardships, poor infrastructure, and limited access to high-quality healthcare services exacerbate underutilization of reproductive healthcare (Sedgh *et al.*, 2016).

A range of determinants shape the adoption and consistent use of contraceptives among women. Key enablers include a woman's educational attainment, occupational status, and the quality of dialogue and mutual understanding between spouses. In contrast, factors such as opposition from male partners, deeply rooted cultural norms surrounding fertility, and false beliefs about potential side effects of contraceptive methods continue to discourage their utilization (Brunelli *et al.*, 2022). Overcoming these obstacles demands the implementation of inclusive, community-oriented interventions that involve both genders, disseminate accurate reproductive health information, and enhance the efficiency and responsiveness of healthcare delivery systems. Similarly, infertility, which remains one of the most under-addressed reproductive health concerns, requires urgent attention. Its management depends on the formulation of standardized clinical protocols, provision of comprehensive counseling services, and the elimination of financial and institutional impediments that restrict access to effective care (Dyer *et al.*, 2002). Given the diversity and complexity of these challenges, it is essential to examine reproductive health knowledge and perceptions within specific local settings to identify context-driven patterns and gaps. Insights from this investigation are expected to deepen understanding of the socio-cultural, economic, and educational influences that shape reproductive health behaviors and to inform evidence-based, context-sensitive interventions designed to enhance women's reproductive well-being and health outcomes.

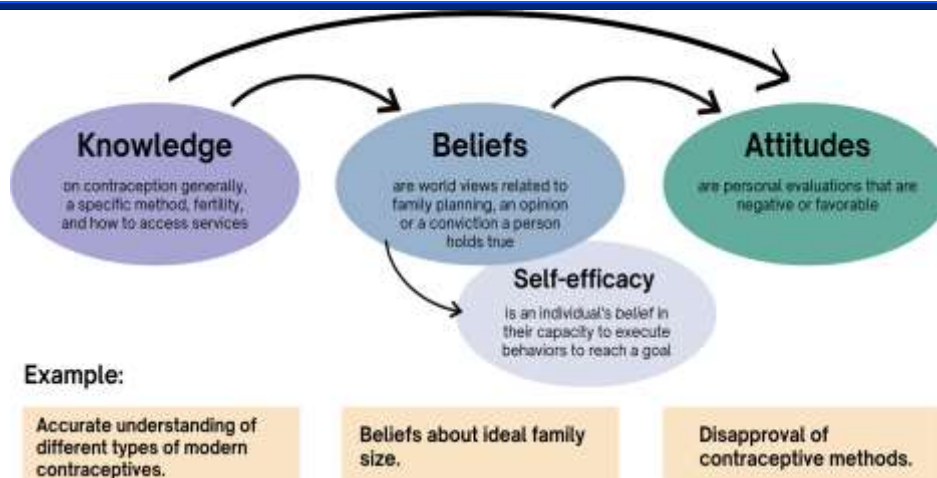


Figure 1: The Inter-relationship of Between the Study Construct

Source: <https://www.fphighimpactpractices.org/briefs/knowledge-attitudes-and-beliefs>

Statement of the Problem

Despite ongoing national and international initiatives aimed at improving reproductive health outcomes, many Nigerian women continue to face significant obstacles in accessing essential reproductive health services. These services, which include Pap smears, self-breast examinations, mammography, HIV testing and counseling, STI screening, contraceptive provision, and HPV vaccination, are critical in reducing reproductive morbidity and mortality. However, their uptake remains suboptimal, particularly in low-resource and rural settings where awareness, education, and access to quality care are limited (Moronkola *et al.*, 2006; Abdulai *et al.*, 2020). The situation is compounded by socio-cultural barriers, entrenched gender norms, and misinformation, which collectively shape women's perceptions and behaviors toward reproductive health services (Ahinkorah *et al.*, 2021; Obasohan, 2015).

In Nigeria, and specifically in rural regions such as Lapai Local Government Area of Niger State, the challenge of limited reproductive health knowledge has become increasingly pronounced. Many women lack accurate information regarding preventive health practices, including family planning, prenatal care, and STI screening. Misconceptions about contraception and fear of social stigma often discourage women from utilizing these services. This knowledge and perception gap has led to persistently low rates of reproductive health service utilization, resulting in adverse reproductive outcomes such as high maternal mortality, unsafe

abortions, and teenage pregnancies (Al-Mujtaba *et al.*, 2016; Akanbi *et al.*, 2021). Such outcomes are not only detrimental to women's health and well-being but also pose broader public health concerns, including increased healthcare costs and intergenerational cycles of poverty and poor health.

Structural and systemic barriers further aggravate the situation. Geographic isolation, poor transportation networks, and financial constraints continue to impede women's access to healthcare facilities, especially in rural and hard-to-reach communities. Many primary health centers are inadequately staffed, lack skilled healthcare professionals, and are often under-equipped to provide comprehensive reproductive services. In addition, restrictive legal frameworks and the persistent stigma surrounding abortion care have forced many women to resort to unsafe methods, resulting in severe health complications and even death (Alade *et al.*, 2014). These challenges underscore the persistent inequities in the provision and utilization of reproductive health services across different socio-demographic contexts in Nigeria. The consequences of these barriers are far-reaching. Limited access to accurate reproductive health information and services contributes to the high prevalence of unintended pregnancies, untreated sexually transmitted infections, and preventable maternal deaths. Infants born to mothers who do not receive proper antenatal and postnatal care face elevated risks of morbidity and mortality, perpetuating a cycle of poor reproductive health outcomes. The continuing high maternal mortality rates and low utilization of reproductive health services suggest that current interventions have not sufficiently addressed the underlying knowledge, perception, and accessibility gaps among women, particularly in rural and underserved areas (Akanbi *et al.*, 2021).

Given these persistent challenges, there is a pressing need to examine the level of reproductive health knowledge and perception among women in Lapai Local Government Area of Niger State. Understanding the factors that influence women's awareness, attitudes, and utilization of reproductive health services is essential for designing targeted interventions that can enhance access, promote positive health-seeking behaviors, and ultimately improve reproductive health outcomes. This study, therefore, seeks to address this gap by assessing the extent of knowledge and perception related to preventive reproductive health services among women in this locality, with the goal of informing evidence-based strategies for improved service delivery and utilization.

Objectives of the Study

The purpose of this study is to determine the level of Knowledge and perception of preventive reproductive health services among women in the Lapai Local Government Area. Therefore, it seeks to determine:

1. To determine the perceptions and attitudes of women towards preventive reproductive health services in Lapai Local Government Area, including cultural, religious, and socio-economic factors influencing their perception of these services.
2. To provide recommendations based on the findings to improve the delivery and uptake of preventive reproductive health services in Lapai Local Government Area, aiming to address identified barriers and enhance accessibility, acceptability, and Utilisation of these services among women of reproductive age.

Research Questions

The following research questions guided the study.

1. What are the perceptions and attitudes of women towards preventive reproductive health services in Lapai Local Government Area, including cultural, religious, and socio-economic factors influencing their perception of these services?
2. What are the recommendations based on the findings to improve the delivery and uptake of preventive reproductive health services in Lapai Local Government Area, aiming to address identified barriers and enhance accessibility, acceptability, and Utilisation of these services among women of reproductive age?

Hypotheses

The following hypotheses guided the study and was tested at 0.05 level of significance.

1. There is no significant difference in the perceptions and attitudes of women towards preventive reproductive health services in Lapai Local Government Area, including cultural, religious, and socio-economic factors influencing their perception of these services.
2. There is no significant difference in the recommendations based on the findings to improve the delivery and uptake of preventive reproductive health services in Lapai Local Government Area, aiming to address identified barriers and enhance accessibility, acceptability, and Utilisation of these services among women of reproductive age.

Methodology

This research utilized a descriptive survey approach to assess women's understanding and perceptions of reproductive health within the Lapai Local Government Area of Niger State. The investigation concentrated on females aged 15 to 49 years, representing the population segment most susceptible to reproductive health challenges and outcomes. To account for possible participant attrition or incomplete responses, the computed sample size was increased by 10 percent, resulting in a final sample of 330 respondents. This adjustment ensured adequate representation and statistical reliability. A multistage sampling technique was utilized to systematically identify and recruit participants from the study area. In the first stage, several clusters within the local government were randomly selected to represent different geographical and social contexts. Subsequently, systematic random sampling was employed to choose

households from each selected cluster, after which eligible women meeting the inclusion criteria were identified and invited to participate in the study.

Information for the study was collected through a well-structured questionnaire developed to obtain data on respondents' socio-demographic profiles, knowledge of reproductive health, and engagement with preventive reproductive health services. The instrument was administered via in-person interviews, which allowed the researcher to provide explanations where necessary and ensure accurate and complete responses. To guarantee the credibility and dependability of the instrument, specialists in the field reviewed it to establish face and content validity, ensuring that the items appropriately reflected the study's objectives. Before commencing full-scale data collection, a pilot study was carried out with a small subset of individuals who shared similar characteristics with the actual participants. This preliminary exercise was useful in detecting unclear or confusing statements and refining the questionnaire for clarity and precision. The reliability of the instrument was then verified using the Cronbach's alpha coefficient, which measured the consistency of responses across related items and confirmed that the instrument was sufficiently reliable for the main investigation.

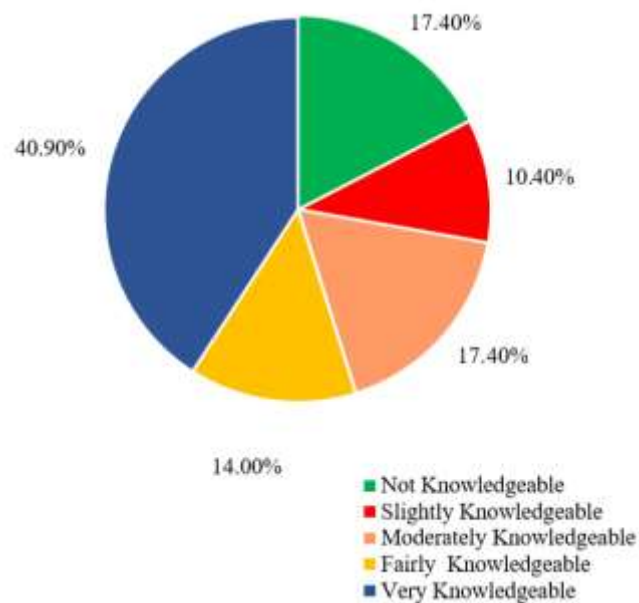
Result

Table 4.1 Respondent's socio-demographic characteristics (n=328) in Lapai community

Age	Frequency (n)	Percent (%)
Less than 18	49	14.9
18-24years	138	42.1
25-34years	78	23.8
35-44years	28	8.5
45-49years	35	10.7
Total	328	100
Education Level		
No formal education	10	3.0
Primary education	10	3.0
Secondary education	62	18.9
Tertiary education	246	75.0
Total	328	100
Income Level (Monthly):		
Below #20,000	148	45.1
#20,000 - #50,000	112	34.1
#50,001 - #100,000	41	12.5
Above #100,000	27	8.2
Total	328	100
Marital Status		
Single	196	59.8
Married	118	36.0
Divorced	9	2.7
Widowed	5	1.5
Total	328	100
Employment Status		
Employed	76	23.2
Self-employed	56	17.1
Unemployed	23	7
Student	159	48.5
Farming	14	4.3
Total	328	100
Religion		
Christianity	102	31.1

Islam	225	68.6
Other (Please specify)	1	0.3
Total	328	100
Ethnicity		
Nupe	148	45.1
Hausa	58	17.7
Yoruba	47	14.3
Igbo	23	7.0
Other (Please specify)	52	15.9
Total	328	100.0

Figure 1: Respondents' perception on the knowledge of preventing reproductive health diseases.



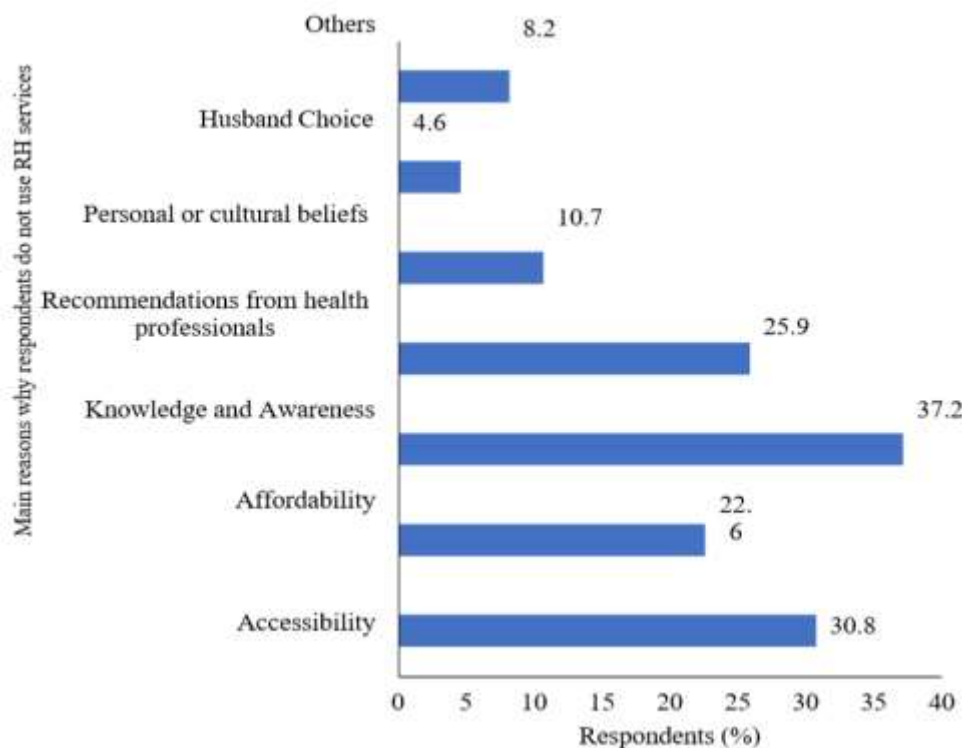


Figure 2: Reasons why respondents do not use reproductive health care services

Figure 1 illustrates that a portion of the respondents demonstrated awareness of all major reproductive health (RH) conditions. Among the various RH diseases assessed, HIV/AIDS emerged as the most well-known, with respondents showing a comparatively higher level of knowledge about it than about other reproductive health conditions. The findings also revealed that school-based health education served as the primary and most influential source of information on RH diseases for the participants. Despite these indications of awareness, the overall level of knowledge among respondents was moderate, with 40.9% exhibiting an average understanding of reproductive health diseases, while 17.4% were found to have little or no knowledge on the subject.

In terms of awareness of preventive reproductive health services available within Lapai Local Government Area of Niger State, Table 1 reveals that a substantial proportion of respondents remained unaware of the range of services offered. Only a small percentage demonstrated familiarity with specific services such as Pap smear testing (16.5%), mammography (12.5%), contraceptive services (22.0%), HPV vaccination (22.3%), and STI screening (30.5%). In contrast, a relatively higher proportion of respondents reported awareness of breast self-examination (44.8%) and HIV testing and counseling (70.1%), reflecting the impact of public health campaigns and educational programs that prioritize these areas. Consistent with earlier findings, school health education once again emerged as the dominant channel through which respondents acquired knowledge regarding reproductive health services, underscoring the importance of formal education as a critical determinant of health awareness in the community.

The findings in Table 2 revealed that there was no statistically significant relationship between income level and general knowledge of reproductive health diseases ($\alpha = 13.132$; $p = 0.00$). However, there were notable associations between income level and both knowledge of preventive reproductive measures ($\alpha = 5.879$; $p = 0.055$) as well as attitudes toward the use of reproductive health services ($\alpha = 16.606$; $p = 0.00$). These results suggest that economic standing influences how women perceive and engage with preventive care, particularly regarding access and decision-making autonomy. Further analysis revealed that the most frequently cited reason for non-utilization of RH services was limited knowledge and awareness (37.2%), followed by other barriers such as financial constraints and cultural influences. Conversely, spousal disapproval or husband's decision was identified as the least influential factor (4.6%), indicating that women's reproductive health behaviors in this locality are more strongly shaped by informational and systemic challenges than by direct household restrictions.

Conclusion

The results of this study reveal an intricate linkage between socio-demographic variables and women's awareness, perceptions, and

use of reproductive health services in Lapai Local Government Area of Niger State. Findings demonstrate that higher levels of education and stable employment considerably improve women's understanding of reproductive health matters and their ability to access preventive healthcare. Conversely, women with limited education, unstable income, or no formal occupation encounter more significant challenges in obtaining such services, largely because of economic hardship and limited availability of healthcare resources within their communities. Cultural and ethnic backgrounds were also found to influence women's reproductive health behaviors, shaping their attitudes and practices through traditional beliefs, social expectations, and language barriers.

Persistent barriers such as economic hardship, social stigma, limited healthcare infrastructure, and fear of discrimination or judgment from healthcare providers continue to hinder optimal utilization of reproductive health services. To address these challenges, community-centered educational initiatives should be implemented to improve reproductive health literacy, particularly among women in rural settings. Furthermore, policy interventions that promote affordable healthcare, expand access to preventive services, and foster inclusive, culturally sensitive reproductive health programs are essential.

Recommendations

The following recommendations are made:

1. Enhance access to affordable or free reproductive health services in underserved areas by implementing sliding scale fees, government support, and increasing the number of low-cost clinics to remove financial barriers to preventive care.
2. Promote the inclusion of comprehensive reproductive health education and services in workplace wellness programs. This could involve on-site clinics, health fairs, and collaborations with local healthcare providers to improve awareness and access for employees.

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