ORIGINAL RESEARCH ARTICLE

Perspectives among postpartum women, men, and healthcare providers on barriers to family planning services in rural Nigeria

DOI: 10.29063/ajrh2026/v30i11.4

Love B. Ayamolowo[1,2], Nadine N. Rall[1] and Sindiwe S. James[1]*

Department of Nursing Science, Nelson Mandela University, South Africa[1]; Faulty of Nursing Science, Obafemi Awolowo University, Nigeria[2]

***For Correspondence:** Email: *layamolowo@oauife.edu.ng; s223529710@mandela.ac.za*

Abstract

Low uptake of family planning (FP) particularly during the postpartum period contributes to unintended pregnancies, thus increasing the risk of maternal morbidity and mortality globally. This cross-sectional mixed-methods study explored barriers to FP in rural southwest Nigeria using surveys from 388 men and women and interviews with 14 midwives across three states (June–July 2022). Eligible participants included postpartum women, men, and midwives. Quantitative data were analyzed using SPSS, and qualitative data using Braun and Clarke's thematic analysis in Atlas.ti. The results show that although 62.6% of respondents had good knowledge of FP, only 35.5% reported current use. However, positive attitude (OR=1.689, $p<0.05$), tertiary education (OR=2.331, $p<0.05$), and having multiple partners (OR=1.793, $p<0.05$) were significant predictors. Thematic analysis of provider interviews revealed user-related, provider-related, and health system barriers. The study highlights the need for targeted FP education and structural interventions to improve uptake and overcome both individual and systemic challenges in rural communities. *(Afr J Reprod Health 2026; 30 [11]: 38-50).*

Keywords: Postpartum family planning; Contraceptive acceptance; Rural healthcare delivery; Reproductive-age women

Résumé

La faible utilisation de la planification familiale, en particulier pendant la période post-partum, contribue aux grossesses non désirées, ce qui augmente le risque de morbidité et de mortalité maternelles à l'échelle mondiale. Cette étude transversale à méthodes mixtes a exploré les obstacles à la planification familiale dans les zones rurales du sud-ouest du Nigéria à l'aide d'enquêtes auprès de 388 hommes et femmes, ainsi que d'entretiens avec 14 sages-femmes dans trois États (juin–juillet 2022). Les participantes admissibles comprenaient des femmes en post-partum, des hommes et des sages-femmes. Les données quantitatives ont été analysées à l'aide de SPSS, et les données qualitatives selon l'analyse thématique de Braun et Clarke dans Atlas.ti. Les résultats indiquent que bien que 62,6 % des répondants aient une bonne connaissance de la planification familiale, seulement 35,5 % ont déclaré en faire un usage actuel. Toutefois, une attitude positive (OR=1,689, $p<0,05$), un niveau d'études supérieures (OR=2,331, $p<0,05$) et le fait d'avoir plusieurs partenaires (OR=1,793, $p<0,05$) étaient des prédicteurs significatifs. L'analyse thématique des entretiens avec les prestataires a révélé des obstacles liés aux usagers, aux prestataires et au système de santé. L'étude souligne la nécessité d'une éducation ciblée sur la planification familiale et d'interventions structurelles pour améliorer l'utilisation et surmonter les obstacles individuels et systémiques dans les communautés rurales. *.(Afr J Reprod Health 2026; 30 [11]: 38-50).*

Mots-clés: Planification familiale post-partum ; Acceptation de la contraception ; Prestation de soins de santé en milieu rural ; Femmes en âge de procréer**.**

Introduction

Globally, about 74 million women in low and middle-income countries (LMICs) have unintended pregnancies, leading to 25 million unsafe abortions and 47,000 maternal deaths annually.[1] Nigeria alone accounts for over 1.3 million of these unintended pregnancies[2]. Most unintended pregnancies that usually lead to abortions result from inconsistent or incorrect use of family planning (FP) services and contraceptives.[1,3] Unsafe abortions are a major contributor to maternal deaths.[3] Nigeria is among the countries with the highest burden of maternal deaths, contributing a large share (≈ 25–30 %) of global maternal deaths in 2023 (approximately 75,000 deaths) and had a maternal mortality ratio of

993 per 100,000 live births, the highest in sub-Saharan Africa.[4] These pregnancies perpetuate cycles of high fertility, limited education, employment potentials, and poverty.[1]

Maternal deaths disproportionately occur in rural and poorer communities. Globally, 94% of maternal deaths happen in LMICs,[7] and in Nigeria, rural and low-income women face the greatest risks due to inequitable access to maternal health services.[8] Rural areas in Nigeria, where nearly half of its population resides, face higher maternal mortality rates, such as 828 deaths per 100,000 live births compared to 351 deaths in urban areas.[9-11] Access to modern family planning and contraceptives (FP/C) services is limited in these rural areas, with only 8% of women of reproductive age having access compared to 18% in urban areas. Such a low rate of access to FP/C contributes to higher fertility rates among rural women.[11] Efforts are thus needed to enhance access and utilisation of FP/C services in rural communities of Nigeria.

According to the World Health Organization (WHO), approximately 214 million women of reproductive age in developing regions who want to avoid pregnancy are not using any modern contraceptive method, including many who have recently given birth and still wish to delay or prevent another pregnancy.[7] Thus, postpartum FP was viewed by WHO as one of the important strategies of reducing the unmet needs for FP/C.[12] For this reason, to effectively close the gap in contraceptive coverage among women of reproductive age in Nigeria, integrating postpartum family planning into the continuum of maternal and child healthcare is essential. It is believed that postpartum women are most at risk for unintended pregnancy as they may not anticipate falling pregnant while not yet having resumed menstruation or still breastfeeding.[13] Although exclusive breastfeeding through lactational amenorrhea is regarded as preventing pregnancy during the early postpartum period,[14] it is an anecdote that fertility tends to return shortly after giving birth.[13,15] It is therefore crucial to relay such information to women immediately at the start of the postpartum period and thus encourage the control of their uptake of FP/C s during the first year after delivery.

The postpartum period presents a critical opportunity for midwives to provide FP/C services and counselling during routine healthcare visits, such as infant immunisations.[16,17] However, despite frequent healthcare interactions, postpartum women, particularly those in rural and underserved areas, still experience significant unmet FP needs, increasing the risk of unintended pregnancies.[18,19] Midwives, as primary providers in these settings, have unique insights into these challenges and can highlight health system gaps and community factors affecting family planning use. Existing studies often focus on urban settings, potentially missing factors specific to rural communities. This study was conducted with that theory in mind and meaning to address this gap. This study aims to provide a comprehensive understanding of the barriers to family planning uptake in rural southwest Nigeria by integrating the complementary perspectives. The findings will inform context-specific strategies to improve access and use of postpartum family planning service in underserved settings.

Methods

Study design

This study employed a concurrent nested mixed-methods, descriptive cross-sectional design. The qualitative strand was dominant, exploring midwives' in-depth perspectives on postpartum FP within public maternity units, while the quantitative strand was embedded to assess knowledge, attitudes, and practices regarding postpartum FP among women and men in the same communities.

Study setting

Data collection occurred July to September 2022 in three South-West Nigerian states, Ekiti, Ondo, and Osun, which are predominantly Yoruba-speaking settings with strong cultural traditions. Each state has three senatorial districts (Ekiti: North/Central/South; Ondo: North/Central/South; Osun: East/Central/West).

For this study,using multi-stage sampling technique, three states were randomly selected (Osun, Ondo, Ekiti)in the first stage. From each state, one senatorial district was chosen (Osun West, Ondo Central, Ekiti Central). Within each selected district, local government areas (LGAs) containing primary health centres (PHCs) with moderate to large immunisation clinic attendance were identified. Moderate attendance was defined as

approximately 7–12 clients per week, while large attendance referred to >12 clients per week. Overall, 21 rural PHCs (each with at least one registered midwife) were included.

Study population and sample

The overall study population comprised three groups: Registered midwives employed in public PHCs (maternity, family planning, and infant welfare clinics); women receiving maternal/infant health services (postpartum women); and male partners and other men in the study communities (included because men were less likely to be present in clinic-based settings).Although the qualitative and quantitative strands involved different participant groups, both were implemented within the same geographical sampling framework described above.

Quantitative study

Participants and eligibility

The quantitative strand included: Women aged 18–49 years who had delivered within the past 12 months, and male partners aged 18–49 years with spouses of reproductive age who lived approximately 3–5 km from the selected facilities. Men were included due to limited clinic-based participation.

Sample size determination

Sample size was calculated using Yamane's formula[20]:

$$n = \frac{N}{1 + N(e)^2}$$

where N is the target population and e is the level of precision (5%). After adjusting for a 10% non-response rate, the final sample size was 388 participants.

Sampling and recruitment procedures

Eligible women were identified through ward leaders linked to each selected PHC, while eligible men were identified through community leaders. Participants were recruited by the researcher. At infant welfare clinics, eligible women were approached after completing their appointments, screened using a brief eligibility tool, and invited to participate.

Study instrument (questionnaire)

Quantitative data were collected using a structured questionnaire adapted from previous validated studies,[16-18] refined with input from statisticians and linguists and administered across all study sites. Reliability and validity were assessed using test–retest methods and Cronbach's alpha, yielding $\alpha = 0.8$, indicating strong internal consistency. The tool captured: Sociodemographic characteristics; Reproductive characteristics; Knowledge, attitudes, and practices regarding postpartum family planning/contraception.

Field administration

Gatekeepers facilitated access to facilities, with permission obtained from Directors of Nursing Services. Trained research assistants, fluent in Yoruba and English and matched to participants by gender, administered the questionnaire in private and quiet spaces. Written informed consent was obtained prior to participation, and confidentiality was maintained throughout.

Quantitative data management and statistical analysis

Quantitative data were checked for completeness and entered for analysis. Descriptive statistics summarised participant characteristics and FP knowledge, attitudes, and practices. Inferential analyses included chi-square tests and logistic regression, with statistical significance set at 5% ($p < 0.05$), to identify associations and predictors of FP use.

Qualitative study

Participants and eligibility

The qualitative strand focused on registered midwives providing maternity, family planning, and infant welfare services in selected rural PHCs. The target population comprised 66 registered midwives, excluding community health extension workers. Eligibility required at least one year of professional experience.

Sampling and sample size

Purposive sampling was used to recruit information-rich participants. A total of 25 midwives were approached; 4 were ineligible and 7 declined.

Ultimately, 14 midwives participated, and interviews continued until data saturation was reached.

Data collection method and protocol

Qualitative data were collected using semi-structured, individual in-depth interviews. After being informed about the study, those who agreed signed consent forms. Interviews were audio-recorded and conducted at convenient times (often during lunch breaks) in private locations chosen by participants to avoid disrupting services.

The main interview question was: *"In your view, what are the factors influencing the uptake of family planning during the postpartum period among women in South-west Nigeria?*"

Follow-up probes from an interview schedule were used to deepen exploration. Interviews lasted 40–45 minutes. Field notes captured nonverbal cues and contextual details.

Qualitative data management and analysis

Audio recordings were repeatedly listened to, transcribed verbatim, and checked for accuracy. Data were analysed using Tesch's (1990)[21] eight-step coding method, involving iterative reading, topic identification, categorisation, coding, and recoding to enhance rigour and coherence,while Bran and clarke's framework guided the development and interpretation of themes. To minimise bias, an independent coder participated, and the dataset was thoroughly verified. Atlas.ti version 8 supported data organisation and theme development.

Integration and triangulation

Findings from the quantitative and qualitative strands were integrated during interpretation using a triangulation approach, whereby quantitative patterns (e.g., levels and predictors of FP knowledge/attitudes/practices) were compared with qualitative themes (midwives' explanations of barriers and facilitators) to identify areas of convergence, complementarity, and divergence.

Ethical consideration

Ethical approval was obtained from Nelson Mandela University Human Research Ethics Committee (H22-HEA-NUR-003) and the Health Research Ethics Committee in Nigeria (IPH/OAU/12/1858). Participation was voluntary, and participants could withdraw at any time without penalty. Written informed consent was obtained prior to data collection. Ethical principles of respect, beneficence, and justice were upheld, and confidentiality was maintained throughout.

Results

Quantitative data results

Socio-demographic characteristics of participants

The Majority of participants were aged 25–34 (43.8%) with the mean age of 32.5 ± 7.3 years while 72.9% among the respondents were Christians and 77.3% were self-employed (Table 1).

Only 35.5% of respondents currently used FP, with similar rates among men and women (Figure 1). The figure also indicates that respondents had good knowledge (69.6%) and positive attitude (62.8%) about FP. Figure 2 indicates that the primary reasons for family planning use were child spacing (85.9%) and resumption of sexual intercourse (56.3%). However, reasons for not using FP methods as illustrated in the figure were diverse among men and women respectively, including desires for more children (44.9%, 42.8%), fear of side effects (40.2%, 45.5%), and preference for natural methods (40.9%, 30.9%). Most sociodemographic variables showed no significant association with FP uptake, except educational level ($p<0.05$), partner's occupation ($p<0.05$), and FP attitude ($p<0.05$). However, men with good knowledge had 26% higher odds (OR=1.259, $p>0.05$) of using FP than those with poor knowledge. Adjusting for attitude and sociodemographic factors, the odds changed to 19% higher (OR=1.192, $p>0.05$) and then 16% lower (OR=0.842, $p>0.05$). Men with tertiary education (OR=2.331, $p<0.05$) and multiple partners (OR=1.793, $p<0.05$) showed higher usage. Women with good knowledge had 30% higher odds (OR=1.297, $p>0.05$), which adjusted to 19% (OR=1.191, $p>0.05$) and then 0.3% lower (OR=0.997, $p>0.05$). Positive attitude (OR=1.689, $p<0.05$), age, religion, and education level significantly influenced usage (Table 2). Thus, it

Table 1: Socio-demographic characteristics of respondents (N=388)

Variable	Frequency	Percentage
Age in years (Mean±SD)	32.5 ± 7.3	
< 25 (Early reproductive age)	55	14.2
25 – 34 (Mid reproductive age)	170	43.8
35 & above (Late reproductive age)	163	42.0
Religion		
Christianity	283	72.9
Islam	101	26.0
Traditional	4	1.0
Occupation		
Civil servant	26	6.7
Private employment	34	8.8
Self-employed	300	77.3
Unemployed	28	7.2
Partners occupation		
Civil servant	41	10.6
Private employment	41	10.6
Self-employed	280	72.2
Unemployed	26	6.7
Educational level		
No formal education	20	5.2
Primary	50	12.9
Secondary	210	54.1
Tertiary	108	27.8
Partner's educational status		
No formal education	14	3.6
Primary	47	12.1
Secondary	200	51.5
Tertiary	127	32.7
Family type		
One partner	340	87.6
More than one partner	48	12.4

was concluded that while knowledge alone did not significantly predict family planning uptake, sociodemographic characteristics such as education, partner's occupation, marital behavior, and attitude toward FP were critical determinants of utilization

Profile of participants

Socio-demographic characteristics of midwife participants in Table 3 shows the mean age was 55.33±10.33 years across primary healthcare centers, with an average work experience of 7.27±4.76 years.The qualitative data analysis generated three major themes which indicate that the barriers to FP/C services were user-related, provider-related and health system related. The themes, subthemes, and illustrative quotes are presented in Table 4.

Theme 1: User-related barriers to family Planning(FP)Utilisation

Midwives reported that knowledge gaps, fears, and sociocultural influences strongly shaped FP decisions. Misconceptions about FP methods were widespread, with some women believing contraceptives cause a swollen stomach or create gaps between children. These perceptions limited acceptance and created hesitation. One midwife explained,*"Some women have this myth and misconception; some believe that the person will start having a swollen or big tummy …"* (midwife 14).

Fear of FP side effects

Fear of real and perceived side effects was a major deterrent. Women reported irregular bleeding, while men complained of condom leakage or reduced sexual enjoyment, creating mistrust in FP methods. Onemidwifenoted,"*Another reason is the fear of side effects because those ones that are taking condoms still complained that it doesn't make sex enjoyable*" (midwife 1).

Spousal and family influence

Family and spousal views strongly influenced FP utilisation. Husbands' opposition, often rooted in concerns about promiscuity, discouraged women from using modern contraceptives. As one midwife highlighted,"*Husbands' attitudes also influenced women's FP utilisation, with concerns about promiscuity*" (midwife 9).

Theme2:Provider-related barriers

Challenges related to providers also hindered FP access.

Negative attitudes of Health careworkers

Midwives highlighted the negative attitudes of some nurses, which particularly discouraged adolescents from seeking services. Fear of stigma led young women to avoid clinics and seek contraceptives elsewhere.

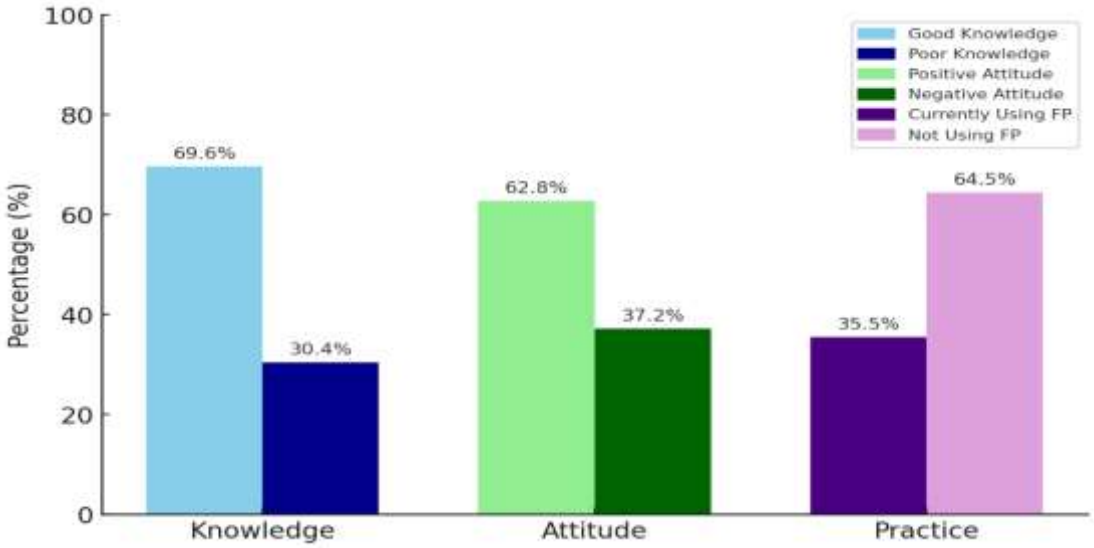

Figure 1: Knowledge, attitude and practice of family planning services among men and women in rural communities in Southwest Nigeria.

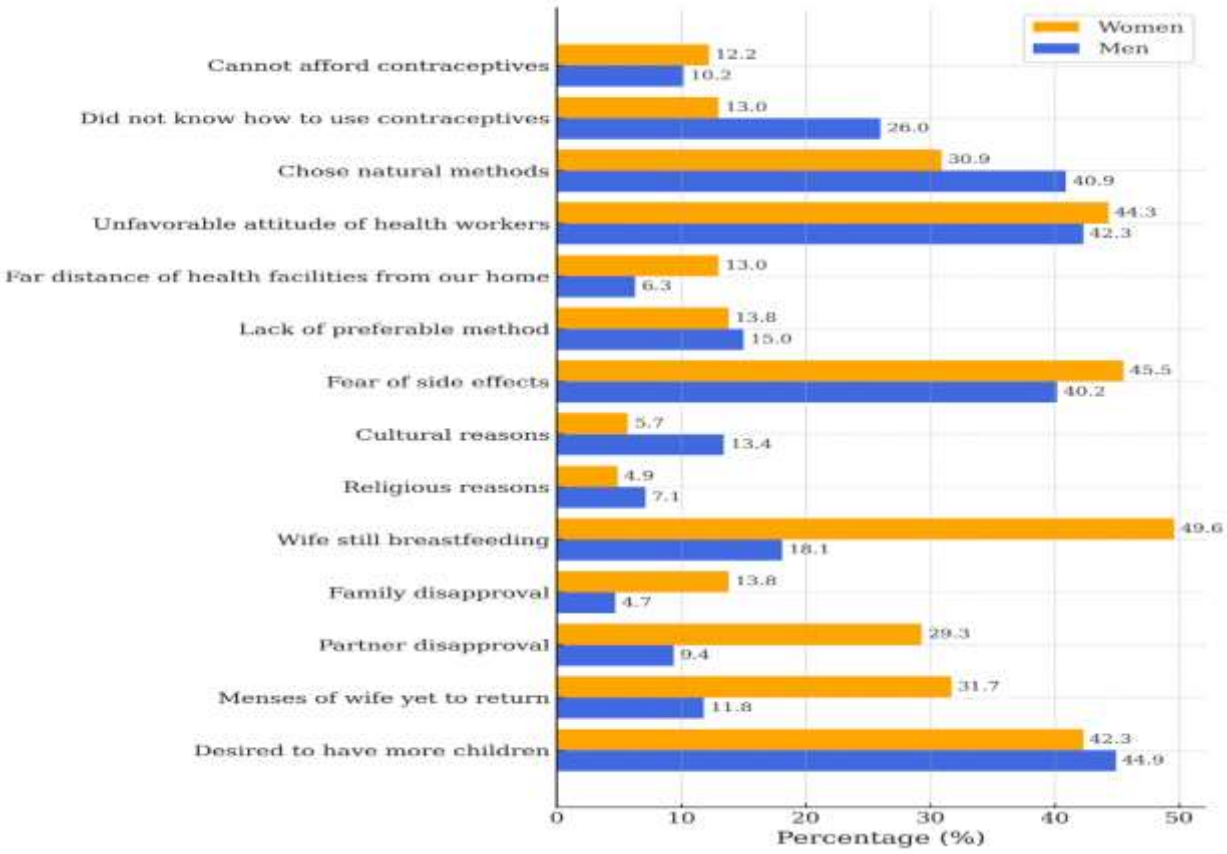

Figure 2: Reasons for not using family planning methods

Table 2: Regression analysis of factors influencing family planning use by sex

Variables	Uptake of family planning					
	Men			**Women**		
	UOR	**AOR 1**	**AOR 2**	**UOR**	**AOR 1**	**AOR 2**
Knowledge regarding use of FP						
Poor (30.4%)	RC	RC	RC	RC	RC	RC
Good (69.6%)	1.259	1.192	0.842	1.297	1.191	0.997
Attitude towards FP use						
Negative (37,2%)		RC	RC		RC	RC
Positive (62.8%)		1.436	1.610		1.689*	2.288*
Age in years						
< 25			RC			RC
25 – 34			0.891			1.057
35 – 49			0.716			2.111
Religion						
Christianity			RC			RC
Islam			0.689			2.120*
Traditional			1.784			------
Occupation						
Civil servant			RC			RC
Private employment			0.847			2.191
Self-employed			0.852			1.619
Unemployed			0.186			1.899
Partners occupation						
Civil servant			RC			RC
Private employment			0.801			1.012
Self-employed			0.852			0.241*
Unemployed			0.186			0.459
Educational level						
No formal education			RC			RC
Primary			1.155			4.284
Secondary			0.902			9.663*
Tertiary			2.331			11.803*
Partner's educational status						
No formal education			RC			RC
Primary			0.726			0.407
Secondary			1.079			0.158
Tertiary			0.495			0.107*
Family type						
One partner			RC			RC
More than one partner			1.793			0.663

*Significant p<0.05 at 95% Confidence Interval, RC= Reference category, UOR=Unadjusted Odds Ratio, AOR 1= Adjusted odds Ratio Model 1, AOR 2= Adjusted odds Ratio Model 2.

Qualitative data results

Table 3: Socio-demographic profile of midwife participants (N = 14)

ID	Age	Marital status	Qualification	Gender	Years of work experience
1.	31-40	Married	RN, RM, RPHN, BNSc	Female	2
2	51-60	Married	RN, RM	Female	9
3	41-50	Married	RN, RM, RPHN, BNSc	Female	8
4.	51-60	Married	RN, RM, FP Certificate	Female	3
5.	51-60	Married	BNSc, RN and RM	Female	2
6.	41-50	Married	RN, RPHN andBNSc. Nursing	Female	9
7.	41-50	Married	BNSc, RN and RM	Female	8
8.	31-40	Married	BNSc, RN and RM	Female	5
9.	41-50	Married	BNSc, RN and RM	Female	8
10	61-70	Married	RN and RM	Female	10
11.	51-60	Married	RN and RM	Female	20
12.	41-50	Married	RN and RM	Female	4
13	31-40	Married	RN, RM, BNSc	Female	2
14	51-60	Married	RN, RM	Female	5

One participant explained,*"Some midwives' negative attitudes, particularly towards adolescents seeking FP, deterred them from accessing services*" (midwife 3).

Few and inexperienced midwives

The shortage of providers and lack of expertise in modern FP methods reduced quality of family planning services. Limited training opportunities meant that some midwives were ill-equipped to deliver comprehensive FP counseling, creating gaps in service delivery. As one midwife observed, *"Midwives lacked expertise in modern FP methods, impacting access and quality of care*" (midwife 6).

Theme3: Health system challenges

System-level barriers presented persistent challenges to FP service uptake.

Inadequate FP commodities

Stock-outs of commodities disrupted services, forcing clients to incur additional costs or go without contraception. As one midwife stated, "*Health facilities lacked essential equipment and supplies for FP services, leading to personal expenses and service disruptions*" (midwife 5).

Time wastage at health care facilities

Long waiting times at health facilities discouraged attendance. Shortages of staff compounded delays, leading men and women to perceive FP visits as a waste of time. One participant noted, "*Long wait times at clinics, compounded by staff shortages, deterred men and women from seeking FP services, viewing it as a waste of time*" (midwife 11).

FP education and monitoring barriers

Low levels of FP education and inadequate monitoring hampered service effectiveness. Women were not always adequately counseled on FP benefits, while poor follow-up limited consistent use. One midwife explained, "*Challenges in educating communities about FP benefits due to low attendance at health facilities impeded effective service delivery*" (midwife 13).

Accessibility of health facilities

Accessibility remained another pressing challenge. Long distances to health facilities forced many women to rely on informal providers such as pharmacies. As one midwife described, "*Far distances to health facilities limited access to FP services, leading some women to patronise alternative sources like pharmacies*" (midwife 14). Integration of the qualitative and quantitative results was achieved through a joint display approach for interpretation, as recommended by Creswell and Creswell[22]. The integrated results for the study were thus, knowledge gaps, provider attitudes, gaps in training, and health system constraints.

Table 4: Themes and sub-themes of the interviews

Themes	Subthemes	Quotes
User-Related Barriers	Knowledge level	*"Some women have this myth and misconception; some believe that the person will start having a swollen or big tummy." "Spacing of their children. Some still want to space, you know, create a gap between their children." (midwife 14)*
	Fear of FP side effects	*"Another reason is the fear of side effects because those ones that are taking condoms still complained that it doesn't make sex enjoyable." (midwife 1) "Another recounted a case where a woman's death was attributed to FP use. (midwife 13)"* *"Women are afraid of irregular bleeding and men fear of condom leakage" (midwife 4)*
	Spousal disposition and family Influence	*"Family and community perceptions linked FP use to promiscuity, while some believed only the family should decide on childbearing." "Husbands' attitudes also influenced women's FP utilisation, with concerns about promiscuity." (midwife 9)*
	Preference for alternative methods	*"Women favored natural or traditional methods over modern contraceptives due to beliefs about their effectiveness or failure rates." "Some distrusted modern FP due to experiencing unplanned pregnancies." (midwife 8)*
	Belief system and religion	*"Community attitudes, norms, and religious beliefs often discouraged FP use, particularly among men." "Some cultures considered FP taboo, associating it with adverse outcomes like death." (midwife 6)*
Providers-Related Barriers	Undesirable attitudes of midwives	*"Some midwives' negative attitudes, particularly towards adolescents seeking FP, deterred them from accessing services." "Adolescents preferred seeking contraceptives from pharmacies to avoid stigmatization." (midwife 3)* *The adolescents don't come at all, … Most of the people that we have are adults, above the age of 30 years. The youths (avoid)… of being stigmatised by nurses that they use it (contraceptives) to become wayward (midwife 8).*
	Few and inexperienced midwives	*"Limited FP providers and insufficient training hindered service delivery." "Midwives lacked expertise in modern FP methods, impacting access and quality of care."*
Health System Challenges	Inadequate FP commodities	*"Health facilities lacked essential equipment and supplies for FP services, leading to personal expenses and service disruptions." (midwife 5)*
	Time wasting at healthcare facilities	*"Long wait times at clinics, compounded by staff shortages, deterred men and women from seeking FP services, viewing it as a waste of time." (midwife 11)*
	FP education and monitoring barriers	*"Challenges in educating communities about FP benefits and monitoring usage due to low attendance at health facilities impeded effective service delivery." (midwife 13)*
	Accessibility of health facilities	*"Far distances to health facilities limited access to FP services, leading some to opt for alternative sources like pharmacies due to convenience." (midwife 14)*

Discussion

This study examined the knowledge, attitudes and practice of family planning and the perspectives on barriers to family planning services among postpartum women, men, and healthcare providers in rural Southwestern States in Nigeria. In this mixed-methods study, integration of findings was done at the interpretation and discussion stage rather than through method-specific comparison. The discussion therefore reflects a synthesised interpretation of evidence generated from both quantitative and qualitative components, focusing on how combined insights advanced understanding of postpartum family planning uptake. The quantitative component contributed to explanatory scope by identifying patterns and relationships, while the qualitative component enhanced interpretive depth by providing contextual and experiential insight. By integrating findings at this level, the study moves beyond parallel reporting to generate a cohesive and policy-relevant understanding that could not be achieved through either approach in isolation.

The results of the study showed that while many participants had good knowledge and a positive attitude towards family planning, the actual practice remained low. The limited uptake was influenced by knowledge and partner-related factors, alongside user, provider, and health system challenges, highlighting the interplay of demand- and supply-side barriers. Education emerged as a critical determinant of FP decisions; higher educational attainment in this study was associated with uptake of FP methods. This finding aligns with previous research indicating that limited education and prevailing societal norms often deter some women from seeking FP information, especially in conservative rural contexts.[16,23]

Knowledge gaps and widespread misconceptions also served as significant barriers to contraceptive use during the postpartum period. Both men and women in this study expressed fear of side effects of the FP methods, thus, some women preferred natural methods despite their lower efficacy and increased risk of unintended pregnancies. A deficient, fragmented information which is often influenced by cultural beliefs and myths has undermined men and women's willingness to adopt or persist with modern contraceptive methods.[24-27]

Midwives also viewed healthcare provider attitudes as a barrier to FP service access. Negative or judgmental behavior from providers discouraged both men and women from seeking contraceptives, supporting findings by Akamike et al.[32] Midwives described experiences where age, marital status, or parity became grounds for discouraging contraceptive use, especially among adolescents, who were often told to abstain from FP utilisation. Adolescents need evidence-based guidance instead of discouragement[28]. Similar studies that were conducted in other African settings had results that revealed about unmarried adolescents faced provider stigma, shaped by community norms around adolescent sexuality.[30-34]

Some provider challenges were attributed to gaps in training, competency and limited familiarity with certain FP methods such as recommended Implanon and other insertion procedures. These gaps indicate how lack of FP training may compound personal bias.[31] Addressing these challenges requires ongoing, comprehensive training on modern contraceptive methods, including their benefits, side effects and appropriate use, an approach supported by existing recommendations.[4,35]

Health system constraints also significantly limit FP service utilisation as noted in previous studies.[36–38] Geographic inaccessibility was a major challenge for FP uptake among women. As Sampson et al. noted that physical distance to health facilities in rural communities reduced FP uptake.[38] Participants reported that long travel distances, poor transportation, and scarce nearby health centers discouraged postpartum women from accessing services. Similar findings in Ghana underscore how travel distance and geographic barriers limit service utilisation.[40] Addressing these issues through the establishment of more clinics and improved transportation infrastructure could help reduce unmet needs for FP in rural regions.

Shortage of human and material resources within rural health facilities constrains service delivery.[41] Midwife participants in this study highlighted understaffing and insufficient equipment, which led to long waiting times, overcrowded conditions, and poor-quality counseling. This observation reflects broader regional concerns, as Afriyie emphasised the impact of Africa's inadequate healthcare workforce on FP availability and accessibility.[42] Unequal distribution

of health professionals, particularly in rural areas, exacerbates these challenges,[43] resulting in overburdened providers, limited patient engagement, and reduced contraceptive access.[44] For example, some facilities relied on a single staff member to serve entire communities, with midwives expressing concern over workload burdens in FP clinics. Strengthening workforce capacity and infrastructure in rural health systems is essential to improving FP services and meeting reproductive health needs.

Community-based education was another key strategy for promoting FP. Outreach programs, often led by health workers, served as the primary source of FP information. However, outreach effectiveness was limited by challenges such as poor male participation and difficulty reaching widely dispersed households.[45] These findings highlight the need for more inclusive, culturally tailored, and accessible reproductive health education initiatives that engage both women and men in rural settings and empower individuals to make informed choices about their reproductive health.

Strength and limitations

This study provides valuable insights into family planning barriers in rural Nigeria, notably incorporating men's perspectives to show their influence on uptake. The findings of this study have important implications for both policy and practice in postpartum family planning. At the policy level, the integrated evidence supports the prioritization of postpartum family planning within maternal and child health programmes, particularly in rural settings. Policies should strengthen health system support for skilled providers, integrate family planning counselling into routine postpartum and infant welfare services, and promote strategies that encourage male involvement in reproductive health decision-making.

The findings highlight the need for provider-focused and client-centred approaches that address contextual and service-related barriers to postpartum family planning uptake. Strengthening counselling quality, improving service organisation, and enhancing community–facility linkages may improve utilisation of postpartum family planning services. Importantly, the use of both quantitative and qualitative methods generated complementary insights, combining population-level patterns with contextual understanding, thereby providing actionable evidence to inform both policy formulation and frontline clinical practice. However, regional variations in healthcare access, cultural norms, and practices limit broader applicability, necessitating cautious interpretation and restricting generalization of the findings.

Conclusion

Family planning uptake is hindered by knowledge gaps, provider attitudes, and system challenges. Context-specific, multi-level interventions are essential to strengthen access and improve utilization across diverse communities.

Conflict of interest

The authors have no competing interest to declare

Acknowledgement

The authors appreciate the students who assisted with data collection and the study participants. We acknowledge the Union for African Population Studies (UAPS) for funding the data collection and the Nelson Mandela University for supporting the article editing services and publication charges. The authors declare no financial or personal conflicts of interest.

Contribution of authors

LBA was responsible for the conceptualisation, data collection, and drafting of the manuscript. SSJ and NNR supervised the project and contributed to the drafting and critical revision of the manuscript. All authors approved the final manuscript.

References

1. World Health Organisation. High rates of unintended pregnancies linked to gaps in family planning services: new WHO study. Geneva: WHO; 2019. Available from: https://www.who.int/news/item/25-10-2019-high-rates-of-unintended-pregnancies-linked-to-gaps-in-family-planning-services-new-who-study. Accessed 27 May 2024.
2. Clinton Health Access Initiative. Global family planning report. 2018. Available from: https://www.clintonhealthaccess.org. Accessed 26 May 2024.

3. Bankole A, Adewole I F, Hussain R, Awolude O, Singh S , Akinyemi J O. The incidence of abortion in Nigeria. Int Perspect Sex Reprod Health. 2015;41(4):170–81.
4. World Health Organization. Trends in maternal mortality 2000 to 2023: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. Geneva: WHO; 2025. Licence: CC BY-NC-SA 3.0 IGO. Available from: https://iris.who.int/bitstream/handle/10665/381012/9789240108462-eng.pdf. Accessed 27 May 2024.
5. World Health Organization Regional Office for Africa. Maternal health. 2021. Available from: https://www.afro.who.int/health-topics/maternal-health. Accessed 26 May 2024.
6. World Health Organization. Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: WHO; 2019. Available from: https://data.unicef.org/resources/trends-maternal-mortality-2000-2017. Accessed 26 May 2024.
7. World Health Organization. Postpartum family planning: essential for ensuring health of women and their babies. Geneva: WHO; 2018. Available from: https://www.who.int/reproductivehealth/topics/family_planning/world-. Accessed 26 May 2024.
8. National Population Commission (NPC) [Nigeria] and ICF. Nigeria Demographic and Health Survey 2018: Key indicators report. Abuja, Nigeria, and Rockville, MD, USA: NPC and ICF; 2018. Available from: https://dhsprogram.com/pubs/pdf/SR264/SR264.pdf. Accessed 26 May 2024.
9. World Bank. Rural population (% of total population) – Nigeria. 2018 revision. Washington, DC: World Bank; 2018. Available from: https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=NG. Accessed 26 May 2024.
10. Okereke E, Ishaku S M, Unumeri G, Mohammed B , Ahonsi B. Reducing maternal and newborn mortality in Nigeria: a qualitative study of stakeholders' perceptions about the performance of community health workers and the introduction of community midwifery at primary healthcare level. Hum Resour Health. 2019;17(1):102.
11. Abimbola S, Okoli U, Olubajo O, Abdullahi M J , Pate M A. The Midwives Service Scheme in Nigeria. PLoS Med. 2012;9(5):e1001211.
12. World Health Organization. Programming strategies for postpartum family planning. Geneva: WHO; 2013. Available from: https://www.who.int/reproductivehealth/publications/family_planning/ppfp_strategies/en. Accessed 26 May 2024.
13. Kaydor V K, Adeoye I A, Olowolafe T A , Adekunle A O. Barriers to acceptance of postpartum family planning among women in Montserrado County, Liberia. Niger Postgrad Med J. 2018;25(3):143–8.
14. Abraha T H, Teferra A S, Gelagay A A, Welesamuel T G, Fisseha G K, Aregawi B G , Belay D S. Knowledge and associated factors of lactational amenorrhea as a contraception method among postpartum women in Aksum town, Tigray Region, Ethiopia. BMC Res Notes. 2018;11:1–6.
15. Ujah O I , Kirby R S. Long-acting reversible contraceptive use by rural–urban residence among women in Nigeria, 2016–2018. Int J Environ Res Public Health. 2022;19(20):13027.
16. Jalang'o R, Thuita F, Barasa S O , Njoroge P. Determinants of contraceptive use among postpartum women in a county hospital in rural Kenya. BMC Public Health. 2017;17:1–8.
17. Owuor H O, Chege P M , Laktabai J. Predictors of postpartum family planning uptake in Webuye Hospital, Western Kenya. Afr J Prim Health Care Fam Med. 2018;10(1):1–6. https://doi.org/10.4102/phcfm.v10i1.1567
18. Anate B C, Balogun M R, Olubodun T , Adejimi A A. Knowledge and utilization of family planning among rural postpartum women in Southwest Nigeria. J Family Med Prim Care. 2021;10(2):730–7.
19. Hazel E, Mohan D, Chirwa E, Phiri M, Kachale F, Msukwa P, Katz J , Marx M A. Disrespectful care in family planning services among youth and adult simulated clients in public sector facilities in Malawi. BMC Health Serv Res. 2021;21:336.
20. Yamane T. Statistics: an introductory analysis. 2nd ed. New York: Harper & Row; 1973.
21. Tesch R. Qualitative research: analysis types and software tools. London: Falmer Press; 1990.
22. Creswell, J. W., Creswell, J. D. (2018). Research design: Qualitative, quantitative and mixed methods approach (5th ed.). Los Angeles: SAGE.
23. Bhatt N, Bhatt B, Neupane B, Karki A, Bhatta T, Thapa J, Basnet L B , Budhathoki S S. Perceptions of family planning services and its key barriers among adolescents and young people in Eastern Nepal: a qualitative study. PLoS One. 2021;16(5):e0252184. https://doi.org/10.1371/journal.pone.0252184
24. Jonas K, Duby Z, Maruping K, Harries J , Mathews C. Rumours, myths, and misperceptions as barriers to contraceptive use among adolescent girls and young women in South Africa. Frontiers in Reproductive Health. 2022;4:960089. doi:10.3389/frph.2022.960089.
25. Kriel Y, Milford C, Cordero J, Suleman F, Beksinska M, Steyn P, Nkole T, Cupp P, Nkosi B, Smit J , Steyn P S. Male partner influence on family planning and contraceptive use: perspectives from community members and healthcare providers in KwaZulu-Natal, South Africa. Reprod Health. 2019;16:89:1–5.
26. Imtishal M , Mohammadnezhad M. Male partners and medical staff's perception on contributing factors of family planning in Fiji. Heliyon. 2021;7(1):e05956.
27. Dral A A, Tolani M R, Smet E , Van Luijn A. Factors influencing male involvement in family planning in Ntchisi District, Malawi: a qualitative study. Afr J Reprod Health. 2018;22(4):35–43.
28. Akamike I C, Okedo-Alex I N, Eze I I, Ezeanosike O B , Uneke C J. Why does uptake of family planning services remain sub-optimal among Nigerian women? A systematic review of challenges and implications for policy. Contracept Reprod Med.

2020;5:1–11. https://doi.org/10.1186/s40834-020-00133-6
29. Hlongwa M, Kalinda C, Peltzer K , Hlongwana K. Factors associated with modern contraceptive use: a comparative analysis between younger and older women in Umlazi Township, KwaZulu-Natal, South Africa. Womens Health (Lond). 2021;17:17455065211060641.
30. Herbert S. Social norms, contraception and family planning. Birmingham: Governance and Social Development Resource Centre; 2015.
31. Sieverding M, Schatzkin E, Shen J , Liu J. Bias in contraceptive provision to young women among private health care providers in Southwest Nigeria. Int Perspect Sex Reprod Health. 2018;44(1):19–29.
32. Schwandt H, Boulware A, Corey J, Herrera A, Hudler E, Imbabazi C, King I, Linus J, Manzi I, Merritt M, Mezier L, Miller A, Morris H, Musemakweli D, Musekura U, Mutuyimana D, Ntakarutimana C, Patel N, Scanteianu A, Shemeza B-E, Sterling-Donaldson G, Umutoni C, Uwera L, Zeiler M , Feinberg S. Family planning providers and contraceptive users in Rwanda employ strategies to prevent discontinuation. BMC Womens Health. 2021;21:361.
33. Speizer I S, Guilkey D K, Winston J , Calhoun L M. Does provider bias affect choice of a facility for family planning services by women in urban Senegal? Stud Fam Plann. 2022;53(1):133–51. https://doi.org/10.1111/sifp.12181
34. Solo J , Festin M. Provider bias in family planning services: a review of its meaning and manifestations. Glob Health Sci Pract. 2019;7(3):371–85.
35. El Weshahi H M, Galal A F , Sultan E A. Providers' perspectives of socio-cultural and health service challenges related to postpartum family planning in Alexandria, Egypt. J Egypt Public Health Assoc. 2021;96:1–9. https://doi.org/10.1186/s42506-020-00066-7
36. Hasselback L, Dicko M, Viadro C, Ndour S, Ndao O , Wesson J. Understanding and addressing contraceptive stockouts to increase family planning access and uptake in Senegal. BMC Health Serv Res. 2017;17:1–8. https://doi.org/10.1186/s12913-017-2316-y
37. Silumbwe A, Nkole T, Munakampe M N, Milford C, Cordero J P, Kriel Y, Zulu J M , Steyn P S. Community and health systems barriers and enablers to family planning and contraceptive services provision and use in Kabwe District, Zambia. BMC Health Serv Res. 2018;18:390.
38. Zuniga C, Wollum A, Grindlay K, Douglas-Durham E, Higgins S, Barr-Walker J , Blanchard K. The impacts of contraceptive stock-outs on users, providers, and facilities: a systematic literature review. Glob Public Health. 2022;17(1):83–99. https://doi.org/10.1080/17441692.2020.1850829
39. Sampson S, Oni F, Ayodeji O, Oluwatola T, Gab-Deedam S, Adenipekun O, Adenipekun A , Atobatele S. Addressing barriers to accessing family planning services using mobile technology intervention among internally displaced persons in Abuja, Nigeria. AJOG Glob Rep. 2023;3(3):100250.
40. Dotse-Gborgbortsi W, Nilsen K, Ofosu A, Matthews Z, Tejedor-Garavito N, Wright J , Tatem A J. Distance is "a big problem": a geographic analysis of reported and modelled proximity to maternal health services in Ghana. BMC Pregnancy Childbirth. 2022;22(1):672.
41. Nwankwo O N O, Ugwu C I, Nwankwo G I, Akpoke M A, Anyigor C, Obi-Nwankwo U, Andrew S Jr, Nwogu K , Spicer N. A qualitative inquiry of rural-urban inequalities in the distribution and retention of healthcare workers in Southern Nigeria. PLoS One. 2022;17(3):e0266159.
42. Afriyie D O, Nyoni J , Ahmat A. The state of strategic plans for the health workforce in Africa. BMJ Glob Health. 2019;4(Suppl 9):e001115.
43. Miseda M H, Were S O, Murianki C A, Mutuku M P , Mutwiwa S N. The implication of the shortage of health workforce specialist on universal health coverage in Kenya. Hum Resour Health. 2017;15:1–7.
44. Williams C R, Britton L E, Bullington B W, Wambua D M, Onyango D O , Tumlinson K. Frequency and impact of long wait times for family planning in public-sector healthcare facilities in Western Kenya. Glob Health Action. 2022;15(1):2128077.
45. Bang K S, Chae S M, Lee I, Yu J , Kim J. Effects of a community outreach program for maternal health and family planning in Tigray, Ethiopia. Asian Nurs Res (Korean Soc Nurs Sci). 2018;12(3):223–30.