



Family Planning Knowledge, Attitudes, and Utilization among Women of Childbearing Age at a Tertiary Health Facility in Owerri, Nigeria

Genevieve A. Olewuezi¹, Faith C. Diorgu¹, Vivian I. Ogbonna²

¹Africa Center of Excellence in Public Health and Toxicological Research, University of Port Harcourt, Rivers State, Nigeria;

²Department of Community Medicine, University of Port Harcourt Teaching Hospital, Rivers State, Nigeria

*Corresponding author: Email: genevieveolewuezi@gmail.com; Tel: +234 8064602588

Article History	Abstract
Received: 28 Jun 2026 Accepted: 30 Jul 2026 Published: 07 Aug 2026	Background: This study assessed knowledge, attitudes, and utilization of family planning (FP) among women of childbearing age attending the Federal University Teaching Hospital (FUTH), Owerri. Methods: A cross-sectional survey was conducted among 120 women of reproductive age. Data were collected using a structured questionnaire distributed via Google Forms. Face and content validity were applied to validate the research instrument while research instrument was considered reliable, with a Cronbach's alpha coefficient of 0.78. Information on socio-demographic characteristics, fertility, FP knowledge, and utilization patterns was obtained. Analysis of data was done using SPSS version 27, and inferential statistics (chi-square test) at a significance level of $p \leq 0.05$. Results: Findings showed that the mean age of respondents was 36.6 ± 8.5 years, with most being married 97 (80.8%), and the majority 108 (90%) having tertiary education. Knowledge of FP was generally good, 70 (58.3%). 54(45%) demonstrated good knowledge of fertility. The majority of respondents, 93(77.5%), had a positive attitude towards FP, 69(57.5%) had used any method, and current use was only 22(18.5%). A considerable number were not using any method, and only 47 (39.2%) had intention to still use FP. Statistically, educational level and employment status were significantly associated with knowledge of FP ($p < 0.05$). A higher proportion of respondents employed 47(68.1) had good knowledge compared to those unemployed 2(33.3%), ($\chi^2 = 9.538$, $p = 0.048$). Marital status and occupation were significantly associated with fertility knowledge, while age and educational level influenced attitude. Age, marital status, and occupation were significantly associated with FP use. Conclusion: Although knowledge and attitude were above average, utilization remained low; thus, there is knowledge-practice gap.
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1. Introduction

Family planning (FP) is among the most powerful tools available to prevent maternal mortality and improve women's well-being. Globally, an estimated 164 million women of reproductive age who wish to delay or avoid pregnancy currently lack access to the contraception they need. Globally, an estimated 164 million women of reproductive age who wish to delay or avoid pregnancy currently lack access to the contraception they need (World Health, 2025).

In sub-Saharan Africa, modern contraceptive prevalence remains low (approximately 22–24%) even as the region bears an unreasonably high burden of unintended pregnancy and maternal mortality (Boadu, 2022). The failure to close the family planning gap is a structural failure with lethal consequences. The inability of women to safely manage their own fertility contributes to adverse health outcomes, including unsafe abortions (Orji et al., 2023). It also creates ripple effects that go from household poverty to childhood stunting and from workforce exclusion to preventable haemorrhage during delivery (Ayamolowo et al., 2024; Egwuaba & Kosiso, 2025; Okeke et al., 2022; Tesema et al., 2025; Utomo et al., 2021).

The practical consequences of this unresolved gap are visible in the health metrics of South-East Nigeria. Imo State, where this study is situated, continues to record rates of unintended pregnancy and maternal morbidity that outpace national targets set under Nigeria's revised National Reproductive Health Policy (Federal Ministry of Health [FMOH], 2017; Agunanne et al., 2026; Okere et al., 2026; Sodik & Nzilibili, 2017). Analysis of three waves of the Nigeria Demographic and Health Survey confirms that unmet need for family planning has remained persistently high over a decade despite a proliferation of FP programmes. Lack of knowledge and misinformation, age-related barriers, religious beliefs, and high fear of side effects were identified as the dominant structural barriers (Baruwa et al., 2026). A WHO analysis spanning 36 countries found that two-thirds of sexually active women who wished to delay or limit childbirth had discontinued contraceptive use specifically due to fears about health problems, which underscores that the barrier is not ignorance of options but deeply held anxieties about bodily harm (Utomo et al., 2021). It is important to consider the reasons for the continued presence of these types of anxieties for women in FUTH Owerri, where there are educated women, services within proximity, and the availability of clinical information.

Also, a substantial body of research has examined why contraceptive uptake remains low despite increasing awareness. Studies across Nigeria and the broader sub-Saharan region consistently document high knowledge

of FP methods, which often exceeds 80–95%, alongside modern contraceptive prevalence rates well below 25%, a phenomenon researchers now describe as the knowledge–practice gap (Amiesimaka & Payam, 2025; Kupoluyi et al., 2023; Orji et al., 2023; Wani et al., 2019a). However, these national and community-based surveys often do not study the attitudes that sit between knowledge and action, such as the fear of the unknown, spousal negotiation, religious resistance, and the lack of trust in clinical methods that prevent utilization among women who are informed and willing. Furthermore, most evidence originates from community or primary care settings (Ezirim et al., 2025), leaving a contextual gap at the level of the tertiary health facility, the very environment where women are most likely to receive specialized reproductive health counselling and where the conditions for uptake should, in theory, be most favourable. Understanding why the gap persists even in this privileged setting is critical to designing interventions that work where they matter most.

Moreover, the literature did not identify any studies that provide empirical data covering all three variables together (knowledge, attitude, and behaviour) concerning family planning among women seeking care at a tertiary health facility located within an under-represented region of Nigeria (South-East Nigeria), while there is an abundance of literature available for both South-West and North-West Nigeria concerning reproductive health.

Therefore, this study aims to fill this gap by answering the following question: What are the components of the phenomenon of the discrepancy between women's knowledge and use of family planning methods? With respect to the target population, Nigerian women of reproductive potential who are users of family planning services at a tertiary health facility (FUTH Owerri) and have high levels of educational achievement, easy access to family planning services, and proximal access to (clinical) FP information—what are the contributing factors to the continuing gap between knowledge and use of family planning methods? The results of the study will have direct implications for how reproductive health counselling should be offered in tertiary health facilities across South-East Nigeria.

Methodology

Study Design and Setting

This study adopted a cross-sectional survey design and was carried out at the Federal University Teaching Hospital (FUTH), Owerri, Imo State, Nigeria. FUTH is a major tertiary referral centre that offers comprehensive reproductive health services including a dedicated family planning clinic, antenatal and postnatal care, and

gynaecological consultations. FUTH Owerri serves women from diverse socio-economic, educational, and cultural backgrounds across Imo State and neighboring south-eastern states, making it an appropriate setting for a facility-based assessment of this kind.

Study Population, Sample, and Eligibility

The target population comprised women of childbearing age (15–49 years) attending FUTH Owerri during the data collection period. A convenience sample of 120 participants was recruited based on the availability of participants and eligibility.

The sample size was determined using Cochran's formula: $n = (Z^2pq) / d^2$

Where: n = minimum sample size

$Z = 1.96$ (95% confidence level)

$p = 91.5\%$ according to a similar study conducted in Ogun State by Okeowo and Olujide (2014).

$q = 1 - p$

$d = 0.05$

Minimum sample size =?

Standard normal deviate at 95% confidence level (1.96)

Estimated proportion of the population with adequate knowledge and positive attitude towards family planning
Margin of error (0.05)

In the absence of a prior study conducted in the study area, a prevalence of 50% (0.5) was assumed, as this maximizes the sample size and increases the reliability of the study.

Thus: $n = (1.96^2 \times 0.915 \times 0.085) / (0.05^2)$

$n = (3.8416 \times 0.077) / 0.0025$

$n \approx 120$

Consequently, a sample size of 120 women of childbearing age attending selected clinics at the Federal University Teaching Hospital (FUTH), Owerri was adopted.

Inclusion criteria: women aged 15–49 years; attendance at FUTH at least once during the data

collection period; who have access to smartphones and internet; and who have the capacity to provide informed consent. **Exclusion criteria:** Women who were critically ill; who did not have access to smartphones and internet, or who were unable to comprehend the questionnaire were excluded.

Study Instrument and Data Collection

A structured self-administered questionnaire was developed and distributed online via Google Forms. The instrument comprised four sections: (i) socio-demographic characteristics; (ii) knowledge of family planning methods, including method types, effectiveness, and perceived impact on fertility; (iii) attitudes toward family planning, assessed on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree); and family planning utilization. Additional items captured current and past utilization patterns, intention to continue, and barriers to uptake.

Data Analysis

Data were exported from Google Forms and analyzed using descriptive statistics via (SPSS) version 25. Frequencies and percentages were computed for categorical variables. Means and standard deviations were calculated for Likert-scale attitudinal items. Results are presented in tables and in narrative form. Inferential analysis was not conducted due to the descriptive nature of the study.

Ethical Considerations

Ethical approval was obtained from the Ethics and Research Committee of the University of Port Harcourt (UNIPORT); with the approval number; UPH/CEREMAD/REC/MM118/116. All participation was voluntary, and written informed consent was obtained before enrolment. Participant anonymity and data confidentiality were maintained throughout.

Results

Table 1 revealed that a majority of the respondents were

Table 1: showing the distribution of respondents according to socio-demographic data (N= 120)

Variables	F	%
Age (in years)		
20 – 29	28	23.3
30 – 39	40	33.3
40 – 49	51	42.5
50 and above	1	0.8
Marital Status		
Married	97	80.8

Single	23	19.2
Educational level		
Primary	3	2.5
Secondary	9	7.5
Tertiary	67	55.8
Post-graduate	41	34.2
Occupation		
Student	13	10.8
Employee	69	57.5
Self-employed	27	22.5
Unemployed	6	5.0
Housewife	5	4.2
Number of Children		
None	2	1.7
One	23	19.2
Two	29	24.2
Three	25	20.8
Four	28	23.3
Five or more	13	10.8
Desired Number of Children		
One	4	3.3
Two	9	7.5
Three	32	26.7
Four	57	47.5
Five or more	18	15.0

Within the age of 30-49 years (91 {75.8%}), with the mean age at 36.6 ± 8.5 years and the median age at 37 years. This is an indication that most participants were in their active age of reproduction, which is appropriate for such a study as family planning. A great number of respondents were married 97 (80.8%), which is not out of place as it signifies that family planning services are often more relevant among married persons.

On the aspect of educational background, the majority of the respondents were well educated; 108(90%) of them had tertiary and post-graduate education. This is suggestive of a high literacy level which can influence health awareness and decision-making positively. As regards to family size, most respondents had 2-4 children, whereas a significant number 57 (47.5%) desired 4 children.

Generally, the study revealed a high level of family planning awareness; 114(95%) knew FP beyond oral contraceptives; 116(96.7%) were aware that FP includes natural and artificial methods; 113(94.2%) recognized different FP methods (Table 2). However, there is a knowledge gap; 30(25%) were not sure if sterilization is a permanent method of contraception; 37(30.8%) were not sure if FP can cause infertility; 38(31.7%) did not know the lactation amenorrhea method.

Overall, 70 (58.3%) had good knowledge of FP, while 50(41.7%) had poor knowledge. Hence, although there is a high awareness level, misconceptions and inadequate knowledge persist, especially as regards side effects and specific methods.

Table 2: Knowledge of FP among women of childbearing age in FUTH Owerri

Variables	Frequency (n=120)	Percent (%)
There is more to FP than use of oral contraceptives		
No	6	5.0
Yes	114	95.0
Family planning can be either natural or artificial		
No	4	3.3
Yes	116	96.7
Barrier, IUCD, Implants are different forms of FP		
No	7	5.8
Yes	113	94.2
Tubal ligation/Vasectomy are permanent methods		

Maybe	30	25.0
No	3	2.5
Yes	87	72.5
Using family planning can cause permanent infertility		
Maybe	37	30.8
No	68	56.7
Yes	15	12.5
Oral contraceptive pills can prevent unwanted pregnancies		
Maybe	22	18.3
Yes	98	81.7
Long-acting reversible contraceptives are IUDs and implants		
No	13	10.8
Yes	107	89.2
Aware of lactational amenorrhea method of family planning		
Maybe	5	4.2
No	38	31.7
Yes	77	64.2
Knowledge Level of FP (3CAT)		
Fair (7-8)	46	38.3
Good (4-6)	70	58.3
Poor (0-3)	4	3.3
Knowledge Level of FP (2CAT)		
Good (7-8)	70	58.3
Poor (0-6)	50	41.7

Table 3: Overall attitude towards FP among women of childbearing age in FUTH Owerri.

Variables	Frequency (n=120)	Percent (%)
Attitude towards family planning		
Negative (0-4)	27	22.5
Positive (5-7)	93	77.5

From Table 3, it was revealed that respondents had a positive attitude (77.5%), while 22.5% had a negative attitude towards family planning. Thus, despite some level of knowledge gap, attitude towards family planning is significantly positive, which is a good foundation to improve utilization is.

not using any method of FP. Among users, some methods like condoms; 10(8.3%), IUD; 11(9.2%) and implants; 7(5.8%) are less common. Overall, there is a gap between knowledge/attitude and actual practice, which is indicative of the fact that awareness does not directly translate into actual usage.

From table 4; 69(57.5%) of respondents have ever used FP; 51(42.5%) have never used FP. The current usage is poor: Only 22(18.3%) are currently using FP. FP intentions: 47(39.2%) intend to use FP; 45(37.5%) do not intend to use FP. Most common pattern: 56(46.7%) were

As shown in Table 5, only levels of education and marital status were significantly associated with marital status. Specifically, a higher proportion of postgraduate students, 26 (63.4%), had good knowledge compared to primary level education, 1 (33.3%) ($\chi^2 = 9.986$, $p =$

Table 4: FP utilization among women of childbearing age in FUTH Owerri:

Variables	Frequency (n=120)	Percent (%)
Ever used family planning		
No	51	42.5
Yes	69	57.5
When last you used		
1-6 months ago	6	5.0
7-12 months ago	4	3.3
currently using	22	18.3

not used at all	52	43.3
over a year ago	36	30.0
Intends to still use family planning		
Maybe	28	23.3
No	45	37.5
Yes	47	39.2
Pattern of use/non-use		
condoms	10	8.3
implants	7	5.8
intrauterine device	11	9.2
none	56	46.7
Not applicable	21	17.5
periodic abstinence	13	10.8
Pills	2	1.7

0.013). Also, a higher proportion of respondents employed, 47 (68.1), had good knowledge compared to those unemployed, 2 (33.3%) ($\chi^2 = 9.538$, $p = 0.048$).

As shown in Table 6, age and level of education were the only factors significantly associated with the attitude towards family planning. Specifically, as age increased, positive attitudes increased ($\chi^2 = 8.329$, $p = 0.037$). Also, positive attitude was more common among respondents with tertiary level of education, 55 (82.1%) ($\chi^2 = 11.29$, $p = 0.015$).

As shown in Table 7, age, marital status, and education were significantly associated with the use of family planning. Specifically, as age increased, the use increased ($\chi^2 = 23.16$, $p = 0.001$). Also, a higher proportion, 63 (64.9%), of those married used family planning ($\chi^2 = 11.49$, $p = 0.001$). Additionally, a higher proportion of those employed, 48 (69.6%), used family planning ($\chi^2 = 11.24$, $p = 0.019$).

Discussion

Summary of main findings

From the study, respondents had good knowledge (70; {64%}) and a positive attitude toward family planning. Meanwhile, actual utilization remains relatively low. Knowledge does not automatically translate into practice. Education and employment play significant roles in shaping knowledge and attitude. Social factors

like age and marital status significantly influence utilization.

Comparison with Previous Research

The finding is consistent with national-level data showing that over 80% of Nigerian women of reproductive age know modern FP methods while only about 20–20% use them (Amiesimaka & Payam, 2025; Kupoluyi et al., 2023). Similarly, it aligns with a multi-country study across sub-Saharan Africa, which reported widespread knowledge but relatively low uptake (Umeobier, 2023; Wani et al., 2019a).

i. Fear, not a Knowledge Deficit

The fear of side effects and infertility were the dominant barriers highlighted in the current study which aligns with the evidence from a scoping review of suburban sub-Saharan African populations; (Alawode et al., 2022; Bongaarts, 2020; Budu et al., 2023) and a WHO analysis across 36 countries where concerns about health risks are among the leading reasons for non-use or discontinuation of contraceptives not basically due to access failures or lack of information (Sensoy et al., 2018; Teshale, 2022). And the continued reliance on traditional methods despite awareness of modern options reflects findings from other Nigerian studies, where cultural familiarity and perceived safety often outweigh clinical effectiveness. Thus, there is a knowledge-practice gap.

Table 5: Factors associated with the knowledge of family planning (FP)

Variables	Knowledge of FP (Freq %) n=120		Total	Chi-square (P-value)
	Good n=70	Poor n=50		
Age (in years)				2.759 (0.420)
20 – 29	13 (46.4)	15 (53.6)	28 (100.0)	
30 – 39	25 (62.5)	15 (37.5)	40 (100.0)	
40 – 49	31 (60.8)	20 (39.2)	51 (100.0)	

50 and above	1(100.0)	0(0.0)	1(100.0)	0.038 (0.845)
Marital Status				
Married	57 (58.8)	40 (41.2)	97 (100.0)	9.986 (0.013)
Single	13 (56.5)	10(43.5)	23 (100.0)	
Educational level				
Primary	1 (33.3)	2 (66.7)	3 (100.0)	
Secondary	1 (11.1)	8 (88.9)	9 (100.0)	
Tertiary	42 (62.7)	25 (37.3)	67 (100.0)	9.538 (0.048)
Postgraduate	26 (63.4)	15(36.6)	41(100.0)	
Employment status				
Employed	47 (68.1)	22 (31.9)	69 (100.0)	
Housewife	3 (60.0)	2 (40.0)	5 (100.0)	
Self-employed	10 (37.0)	17(63.0)	27(100.0)	8.686 (0.122)
Student	8(61.5)	5 (38.5)	13 (100.0)	
Unemployed	2 (33.3)	4 (66.7)	6 (100.0)	
Number of Children				
None	1(50.0)	1(50.0)	2 (100.0)	
One	11 (47.8)	12(52.2)	23(100.0)	2.759 (0.420)
Two	12(41.4)	17(58.6)	29(100.0)	
Three	16(64.0)	9(36.0)	25(100.0)	
Four	20 (71.4)	8(28.8)	28(100.0)	
Five or more	10 (76.9)	3(23.1)	13(100.0)	
Desired Number of Children				
One	3 (75.0)	1(25.0)	4(100.0)	
Two	3(33.3)	6 (66.7)	9(100.0)	
Three	15(46.9)	17(53.1)	32(100.0)	
Four	34 (59.6)	23(40.4)	57(100.0)	
Five or more	15(83.3)	3(16.7)	18(100.0)	

Table 6: Factors associated with the attitude towards family planning

Variables	Attitude towards family planning		Total (n=120)	Chi-square (P-value)
	Negative n=27	Positive n=93		
Age (in years)				8.329 (0.037) γ
20 – 29	11 (39.3)	17 (60.7)	28 (100.0)	0.210 (0.647)
30 – 39	10 (25.0)	30 (75.0)	40 (100.0)	
40 – 49	6 (11.8)	45 (88.2)	51 (100.0)	
50 and above	0(0.0)	1(100.0)	1(100.0)	
Marital Status				11.29 (0.015) γ
Married	21 (21.6)	76 (78.4)	97 (100.0)	
Single	6 (26.1)	17(73.9)	23 (100.0)	
Educational level				
Primary	1 (33.3)	2 (66.7)	3 (100.0)	
Secondary	6 (66.7)	3 (33.3)	9 (100.0)	8.104 (0.084) γ
Tertiary	12 (17.9)	55 (82.1)	67 (100.0)	
Postgraduate	8 (19.5)	33(80.5)	41(100.0)	
Occupation				
Employed	11(15.9)	58 (84.1)	69 (100.0)	
Housewife	2 (40.0)	3 (60.0)	5 (100.0)	7.145 (0.211) γ
Self-employed	10 (37.0)	17(63.0)	27(100.0)	
Student	4(30.8)	9 (69.2)	13 (100.0)	
Unemployed	0 (0.0)	6 (100.0)	6 (100.0)	
Number of Children				
None	0(0.0)	2(100.0)	2 (100.0)	
One	8 (34.8)	15 (65.2)	23(100.0)	
Two	9(31.0)	20 (69.0)	29(100.0)	
Three	2(8.0)	23(92.0)	25(100.0)	
Four	5 (17.9)	23(82.1)	28(100.0)	
Five or more	3 (23.1)	10(76.9)	13(100.0)	

Desired Number of Children				0.802 (0.950) γ
One	1 (25.0)	3 (75.0)	4(100.0)	
Two	1(11.1)	8 (88.9)	9(100.0)	
Three	8 (25.0)	24 (75.0)	32(100.0)	
Four	13 (22.8)	44 (77.2)	57(100.0)	
Five or more	4(22.2)	14 (77.8)	18(100.0)	

Statistically significant ($p \leq 0.05$); χ^2 =Chi-Square; γ =Fisher's Exact p

Table 7: Factors associated with the use of family planning

Variables	Ever Used Family Planning (Freq %) n=120		Total	Chi-square (P-value)
	No n=51	Yes n=69		
Age (in years)				23.16 (0.001) γ
20 – 29	22(78.6)	6 (21.4)	28 (100.0)	
30 – 39	17 (42.5)	23 (57.5)	40 (100.0)	
40 – 49	12 (23.5)	39 (76.5)	51 (100.0)	
50 and above	0(0.0)	1(100.0)	1(100.0)	
Marital Status				11.49 (0.001) *
Married	34 (35.1)	63 (64.9)	97 (100.0)	
Single	17 (73.9)	6 (26.1)	23 (100.0)	
Educational level				5.87 (0.120) γ
Primary	1 (33.3)	2 (66.7)	3 (100.0)	
Secondary	7 (77.8)	2 (22.2)	9 (100.0)	
Tertiary	29 (43.3)	38 (56.7)	67 (100.0)	
Postgraduate	14 (34.1)	27(65.9)	41(100.0)	
Occupation				11.24 (0.019) γ
Employed	21(30.4)	48 (69.6)	69 (100.0)	
Housewife	2 (40.0)	3 (60.0)	5 (100.0)	
Self-employed	15 (55.6)	12 (44.4)	27(100.0)	
Student	9(69.2)	4 (30.8)	13 (100.0)	
Unemployed	4 (66.7)	2 (33.3)	6 (100.0)	
Number of Children				10.59 (0.052) γ
None	1(50.0)	1(50.0)	2 (100.0)	
One	15 (60.9)	8 (39.1)	23 (100.0)	
Two	15(51.7)	14 (48.3)	29 (100.0)	
Three	9 (36.0)	16 (64.0)	25(100.0)	
Four	7 (25.0)	21 (75.0)	28(100.0)	
Five or more	4 (30.8)	9(69.2)	13(100.0)	
Desired Number of Children				3.468 (0.504) γ
One	2 (50.0)	2(50.0)	4(100.0)	
Two	6(66.7)	3 (33.3)	9(100.0)	
Three	15 (46.9)	17(53.1)	32(100.0)	
Four	22 (38.6)	35 (61.4)	57(100.0)	
Five or more	6 (33.3)	12 (66.7)	18(100.0)	

Statistically significant ($p \leq 0.05$); χ^2 =Chi-Square; γ =Fisher's Exact p

ii. Paradox of Traditional Method Dominance

Traditional FP methods, such as abstinence (22.5%), were the most predominantly used among respondents, although classified as a method with substantially lower effectiveness than modern long-acting contraceptives. This paradox is not unique to Owerri. A 2024 analysis of family planning policy in Nigeria similarly noted that the use of traditional methods persists even where modern methods are available and awareness is high. It attributed

this to the embodied trust that abstinence offers, as it requires no clinical mediation and carries no perceived risk of infertility (Amiesimaka & Payam, 2025).

ii. Socio-cultural fertility norms

Despite high educational levels, the preference for four children suggests the persistence of socio-cultural fertility norms. This supports findings by Harcourt et al. (2025) and Mustafa et al. (2015), who reported that education improves awareness but does not

automatically reduce desired family size in sub-Saharan Africa.

Interpretation of Findings

Crucially, this study's population was well-educated and facility-attending, which means the fear is not attributable to ignorance of contraceptive options but is, rather, a failure of counselling; a failure whether FP causes permanent infertility, despite attending a tertiary hospital, quantifies exactly where that counselling failure occurs. Evidence consistently shows that fertility is restored shortly after discontinuation of most modern methods (Achola et al., 2024; GRACE, 2025; Obeagu & Bunu, 2023; Teshale, 2022); the challenge is communicating this convincingly, not just informatively.

The low uptake of IUCDs and implants despite 89.2% awareness of their reversibility suggests that the counselling message about reversibility is not reaching women at the affective level at which decisions are actually made. Knowing that IUCDs are reversible does not automatically outweigh visceral fear that they might not be.

Implications for Clinical Practice and Health Policy

The insights from this study have many implications for family planning implementation practices, family planning programmes, development of policy and further research. Firstly, despite this study demonstrating that knowledge of family planning is relatively high in the population, actual modern contraceptive use is relatively low. This indicates that simply providing information regarding family planning to this population, which has already been demonstrated to have sufficient knowledge of family planning, is not sufficient to convert that information into continued use of modern contraceptives. Counselling should move away from a focus on the provision of information and move towards using behavioural change and anxiety reduction strategies. In addition, providing detailed, individualized information on side effects, managing those side effects, and the reversibility of modern contraceptives should form part of every family planning consultation. Specifically, the identified barriers to modern contraceptive use, and ultimately to achieving appropriate family planning, must be addressed: this includes providing targeted comprehensive health education campaigns to the 43.3% of respondents who are uncertain about or hold incorrect beliefs about whether family planning methods cause infertility;

structured contraceptive pre- and post-counselling provided by health care providers that address the members' concerns about side effects and infertility bias that contribute to the lack of use of modern contraceptives in the study.

Secondly, the study identified that the concerns about side effects and incorrect views about infertility were significant barriers to using contraceptives. This implies a responsibility on the part of healthcare professionals, especially nurse practitioners and reproductive health educators, to enhance their pre- and post-contraceptive counselling. Better education about each method of contraception will increase an individual's confidence, reduce their fear of the side effects of contraception, and increase the likelihood of using contraception properly.

Thirdly, maintaining a consistent supply of preferred types of contraception (IUCDs and implants) will reduce the number of people who indicate the lack of access to preferred types of contraception (10.8%) as their primary barrier to using a method of contraception. All of these interventions are achievable with use of current resources and behavior changes; however, they will require the reallocation of some current clinical resources toward addressing attitudinal and relational barriers identified in the research as the true barrier(s) to use.

Study Limitations

This study has several limitations. The convenience sample and single-facility design limit generalizability. Online data collection via Google Forms may have introduced digital-access bias, excluding women with limited internet literacy. Self-reported data carry inherent risks of social desirability bias, particularly on sensitive reproductive topics. The cross-sectional design precludes causal inference. Future research should employ probability sampling, include qualitative components to explore socio-cultural determinants in depth, and consider multi-facility and community-based comparison. Longitudinal studies are also recommended to assess changes in attitudes and practices over time.

Significance of the study

This research provides an important institutional specificity in demonstrating that there is still a gap between the knowledge of patients and their uptake of counselling services in a tertiary-level institution, where counselling service provision is presumed to be optimal

for educated patients. The importance of this finding is that it challenges the premise that knowledge and access are sufficient to encourage patients to use these services, and that other factors also have an important role to play.

Conclusion

This study reinforces the existence of a gap between what women attending a tertiary health institution in Southeast Nigeria know and what they actually practice regarding family planning. Most of the women are aware of family planning and have very positive attitudes towards it; however, they do not use it for many reasons (e.g., fear of side effects, misconceptions about how effective it is, and how they will be viewed by their family and community). There is also a significant gap between the use of traditional methods and the use of evidence-based long-acting contraceptive methods. Bridging this gap will require changes in the way family planning providers build trust with their clients, the type of information provided, and the way in which culturally sensitive interventions are provided to these women. Addressing this gap will allow for improved reproductive health outcomes for women and contribute toward achieving public health goals in the region.

The research supports the idea that there is a large discrepancy between knowledge and practice of family planning among women who are receiving tertiary healthcare in Southeast Nigeria. Women have a high level of awareness and positive attitudes toward family planning, but the actual involvement remains low due to fears, misconceptions, and socio-cultural factors. Traditional methods are being used more than any of the long-acting supply (like birth control pills) and other evidence-based methods. In order to reduce this gap, it is necessary to change from just giving information to building trust, creating an inclusive counseling environment, and implementing culturally appropriate programs. Bridging this gap will improve reproductive health outcomes and contribute to the overall goals of public health in the region.

Authors Contribution

Conceptualization: Faith C. Diorgu and Vivian I. Ogbonna; **Methodology:** Faith C. Diorgu and Vivian I. Ogbonna; **Supervision:** Faith C. Diorgu and Vivian I. Ogbonna. **Data curation:** Genevieve A. Olewulezi; **Writing - Original Draft:** Genevieve A. Olewulezi; **Review and Editing:** Faith C. Diorgu and Vivian I. Ogbonna

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Conflict of Interest

The authors declare no conflict of Interest

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