



Prevalence, Patterns, and Determinants of Family Planning Uptake Among Women Attending a General Outpatient Clinic in Southern Nigeria: A Hospital-Based Cross-Sectional Study

Prevalencia, patrones y factores determinantes del uso de métodos de planificación familiar entre las mujeres que acuden a una consulta externa general en el sur de Nigeria: un estudio transversal realizado en un hospital

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ABSTRACT

Background: Family planning is among the most effective and cost-effective public health interventions for improving maternal and child health by preventing unintended pregnancies, reducing unsafe abortions, lowering maternal mortality, and promoting healthy birth spacing. Despite ongoing efforts to expand contraceptive services, uptake remains suboptimal in Nigeria because of socioeconomic inequalities, cultural norms, misconceptions, religious beliefs, and limited male involvement. This study assessed the prevalence, patterns, and determinants of family planning uptake among women attending the General Outpatient Clinic of Delta State University Teaching Hospital, Oghara, Southern Nigeria. **Methods:** A hospital-based analytical cross-sectional study was conducted among 370 women aged 15 to 49 years between September 2024 and March 2025. Participants were selected through systematic random sampling. Data were collected using a pretested interviewer-administered questionnaire. Descriptive statistics, Pearson's chi-square test, and multivariable binary logistic regression were applied, with statistical significance set at $p < 0.05$. **Results:** Among the respondents, 204 (55.1%) were current users of family planning. Injectable contraceptives, oral contraceptive pills, and male condoms were the most commonly used methods. Uptake was significantly associated with marital status, ethnicity, monthly income, parity, community influence, and misconceptions regarding contraceptive safety. After adjustment, monthly income and parity remained independent predictors. Women with higher incomes and those with one previous birth were significantly more likely to use contraception. **Conclusions:** Family planning uptake was moderate but below the level needed for optimal reproductive health outcomes. Strengthening community education, promoting male involvement, addressing misconceptions, and ensuring equitable access to affordable contraceptive services are essential to improve contraceptive utilization in Nigeria.

Keywords: Family planning; contraceptive uptake; reproductive health; determinants; women; Nigeria; cross-sectional study.

RESUMEN

Introducción: La planificación familiar constituye una de las intervenciones de salud pública más eficaces y costo-efectivas para mejorar la salud materna e infantil, al prevenir embarazos no intencionados, reducir los abortos inseguros, disminuir la mortalidad materna y favorecer intervalos adecuados entre los nacimientos. A pesar de los esfuerzos por ampliar el acceso a los servicios anticonceptivos, su utilización continúa siendo insuficiente en Nigeria debido a desigualdades socioeconómicas, normas culturales, concepciones erróneas, creencias religiosas y escasa participación masculina. Este estudio evaluó la prevalencia, los patrones y los factores determinantes de la utilización de la planificación familiar entre mujeres atendidas en la Consulta Externa General del Hospital Universitario de la Universidad Estatal del Delta, en Oghara, sur de Nigeria. **Métodos:** Se realizó un estudio analítico transversal de base hospitalaria en 370 mujeres de 15 a 49 años entre septiembre de 2024 y marzo de 2025. Las participantes fueron seleccionadas mediante muestreo aleatorio sistemático. Los datos se obtuvieron mediante un cuestionario estructurado previamente validado. Se aplicaron estadística descriptiva, prueba de chi cuadrado de Pearson y regresión logística binaria multivariable, considerando significativo un valor de $p < 0,05$. **Resultados:** De las participantes, 204 (55,1 %) utilizaban métodos de planificación familiar. Los anticonceptivos inyectables, los anticonceptivos orales y los preservativos masculinos fueron los métodos más frecuentes. El ingreso mensual y la paridad permanecieron como predictores independientes de utilización tras el ajuste. **Conclusiones:** La utilización fue moderada, aunque inferior a la necesaria para optimizar la salud reproductiva. Fortalecer la educación comunitaria, promover la participación masculina, corregir concepciones erróneas y garantizar acceso equitativo a servicios anticonceptivos asequibles contribuirá a mejorar su utilización en Nigeria.

Palabras clave: planificación familiar; utilización de anticonceptivos; salud reproductiva; factores determinantes; mujeres; Nigeria; estudio transversal.

INTRODUCTION

Family planning is a cornerstone of reproductive healthcare and an essential component of universal health coverage. It enables individuals and couples to determine the number, timing, and spacing of their children through the voluntary use of safe and effective contraceptive methods. Beyond preventing unintended pregnancies, family planning contributes substantially to reductions in maternal and neonatal morbidity and mortality, decreases the incidence of unsafe abortions, promotes healthy birth spacing, and improves the overall health and socioeconomic well-being of women, children, families, and communities. It is therefore recognized as one of the most cost-effective public health interventions for achieving sustainable development and improving population health.

Globally, an estimated 1.1 billion women require family planning services, with more than 870 million currently using modern contraceptive methods. Despite remarkable progress over the past two decades, approximately 164 million women worldwide continue to have an unmet need for contraception, particularly in low- and middle-income countries where access to reproductive health services remains inadequate. The consequences of unmet contraceptive need include unintended pregnancies, unsafe abortions, increased maternal mortality, adverse neonatal outcomes, and persistent socioeconomic inequalities.

Sub-Saharan Africa continues to record the lowest contraceptive prevalence and the highest fertility rates globally. Although many countries within the region have expanded family planning programmes, modern contraceptive utilization remains considerably below global targets. Socioeconomic inequalities, inadequate health infrastructure, cultural beliefs, religious influences, gender norms, misinformation regarding contraceptive safety, and limited male involvement continue to impede uptake. These barriers contribute significantly to high maternal mortality ratios, rapid population growth, and poor reproductive health outcomes across the region.

Nigeria bears one of the world's highest burdens of maternal mortality and unmet need for family planning. Although awareness of contraception is generally high, actual utilization remains relatively low compared with many developing countries. Findings from the Nigeria Demographic and Health Survey indicate that contraceptive prevalence varies considerably across regions, reflecting differences in educational attainment, household income, access to healthcare services, cultural practices, and women's autonomy in reproductive decision-making. Addressing these disparities remains fundamental to achieving the reproductive health targets outlined in the Sustainable Development Goals.

Family planning uptake is influenced by a complex interaction of demographic, socioeconomic, cultural, religious, and health system factors. Previous studies have identified maternal age, educational status, employment, household income, parity, partner support, previous contraceptive experience, availability of services, perceived side effects, and quality of counselling as important determinants of contraceptive utilization. However, the magnitude and relative importance of these factors differ considerably across geographical settings and healthcare environments, highlighting the need for locally generated evidence to inform context-specific interventions.

Women attending general outpatient clinics represent a diverse population with varying reproductive intentions and healthcare needs. These facilities provide important opportunities for integrating family planning counselling and services into routine clinical care. However, evidence regarding contraceptive utilization among women attending general outpatient clinics in Southern Nigeria remains limited. Understanding the prevalence, patterns, and determinants of family planning uptake within this population is essential for developing targeted interventions that improve contraceptive utilization and strengthen reproductive healthcare delivery.

This study therefore assessed the prevalence, patterns, and determinants of family planning uptake among women attending the General Outpatient Clinic of Delta State University Teaching Hospital, Oghara, Southern Nigeria. The findings are expected to provide evidence to guide policy formulation, strengthen family planning programmes, and inform strategies aimed at improving contraceptive uptake and reproductive health outcomes in similar healthcare settings.

MATERIALS AND METHODS

Study Area

The study was conducted at the General Outpatient Clinic (GOPC) of Delta State University Teaching Hospital (DELSUTH), Oghara, Delta State, Nigeria. DELSUTH is a tertiary healthcare institution that provides specialized, secondary, and primary healthcare services to residents of Delta State and neighbouring states in the South-South geopolitical zone of Nigeria. The General Outpatient Clinic serves as the first point of contact for adult patients seeking medical care and receives a large number of women of reproductive age with diverse socioeconomic and reproductive backgrounds. The clinic also provides health education, preventive healthcare services, and referral for specialized reproductive health services, including family planning.

Study Design

A hospital-based analytical cross-sectional study was conducted to determine the prevalence, patterns, and determinants of family planning uptake among women attending the General Outpatient Clinic of Delta State University Teaching Hospital.

Study Population

The study population comprised women of reproductive age (15–49 years) who attended the General Outpatient Clinic during the study period.

Inclusion Criteria

Women were eligible if they:
 were aged 15–49 years;
 attended the General Outpatient Clinic during the study period;
 provided written informed consent to participate;
 were mentally and physically capable of responding to the interview.

Exclusion Criteria

Women were excluded if they:
 were critically ill or medically unstable;
 had cognitive impairment that limited effective communication;
 declined participation or withdrew consent at any stage of the study.

Sample Size Determination

The minimum sample size was calculated using the Cochran formula for single population proportion:

$$n = Z^2 P(1 - P) / d^2$$

where:

n = minimum required sample size;

Z = standard normal deviate corresponding to a 95% confidence level (1.96);

P = prevalence of family planning uptake obtained from a previous similar Nigerian study;

d = margin of error of 5% (0.05).

After adjusting for an anticipated non-response rate, a final sample size of 370 participants was obtained and recruited for the study.

Sampling Technique

A systematic random sampling technique was employed.

Based on the average monthly clinic attendance and estimated study duration, the sampling interval (k) was calculated by dividing the estimated number of eligible attendees by the required sample size. The first participant was selected by simple random sampling, after which every k th eligible woman was recruited until the desired sample size was achieved.

Women who declined participation were not replaced unless they were selected through the predetermined sampling interval, thereby minimizing selection bias.

Study Instrument and Data Collection

Data were collected using a pretested interviewer-administered structured questionnaire developed after an extensive review of relevant literature and previously validated instruments.

The questionnaire comprised five sections:

Section A Socio-demographic characteristics including age, marital status, educational level, occupation, ethnicity, religion, and monthly income.

Section B Obstetric and reproductive characteristics including parity, previous pregnancies, desired family size, and reproductive intentions.

Section C Family planning utilization, including awareness, current contraceptive use, type of contraceptive method used, duration of use, source of contraceptive services, reasons for utilization, and reasons for non-utilization.

Section D Socio-cultural determinants, including partner support, family influence, community norms, cultural beliefs, religious beliefs, and women's autonomy in reproductive decision-making.

Section E Clinical and health-system factors, including previous counselling on family planning, accessibility of services, availability of contraceptive commodities, previous adverse effects, and satisfaction with family planning services.

The questionnaire was pretested among women attending a comparable healthcare facility outside the study site. Necessary modifications were made to improve clarity, content validity, and comprehensibility before commencement of the main study.

Data collection was undertaken by trained research assistants under the direct supervision of the principal investigator to ensure uniformity and quality of data.

Definition of Outcome Variable

The primary outcome variable was family planning uptake, defined as the current use of any modern or traditional contraceptive method at the time of the survey.

Participants who reported currently using at least one contraceptive method were classified as current users, whereas those who reported not using any contraceptive method were classified as non-users.

Data Quality Assurance

Several measures were implemented to ensure data quality.

The questionnaire underwent expert review before pretesting. Research assistants received standardized training on interview techniques, questionnaire administration, ethical conduct, and confidentiality.

Completed questionnaires were checked daily for completeness and internal consistency before data entry. Double data entry and routine validation checks were performed to minimize transcription errors.

Data Management and Statistical Analysis

Data were entered into Microsoft Excel, cleaned, coded, and exported into IBM SPSS Statistics version 27.0 (IBM Corp., Armonk, NY, USA) for statistical analysis.

Descriptive statistics were used to summarize participants' characteristics. Continuous variables were presented as means and standard deviations (SD) or medians with interquartile ranges where appropriate, while categorical variables were summarized using frequencies and percentages.

Associations between independent variables and family planning uptake were assessed using the Pearson chi-square test or Fisher's exact test, where appropriate.

Variables with $p < 0.05$ during bivariate analysis and those considered biologically plausible were entered into a multivariable binary logistic regression model to identify independent predictors of family planning uptake.

Adjusted odds ratios (AORs) with 95% confidence intervals (95% CI) were reported, and statistical significance was established at $p < 0.05$.

The fitness of the final logistic regression model was assessed using the Hosmer-Lemeshow goodness-of-fit test, while multicollinearity among explanatory variables was evaluated using the Variance Inflation Factor (VIF). Variables with VIF values less than 5 were considered free of significant multicollinearity.

Ethical Considerations

Ethical approval was obtained from the Health Research Ethics Committee of Delta State University Teaching Hospital, Oghara, before commencement of the study (Approval Number: HREC/PAN/2024/007).

Permission to conduct the study was also obtained from the hospital management and the Head of the General Outpatient Clinic.

Written informed consent was obtained from all participants before enrolment. For participants younger than 18 years, assent and the required parental or guardian consent were obtained in accordance with institutional ethical guidelines.

Participation was entirely voluntary, and respondents were informed of their right to withdraw from the study at any stage without any consequences to their healthcare.

Confidentiality and anonymity were maintained throughout the study by assigning unique identification numbers instead of participants' names. All collected information was securely stored and used solely for research purposes.

RESULTS

Table 1: Sociodemographic characteristics.

	Variables	Frequency (n)	Percent (100%)
Age group	≤ 20 years	05	1.4
	21 – 30 years	136	36.8
	31 – 40 years	169	45.7
	41 – 49 years	60	16.2
	Mean $\bar{X}$ ± SD	32.97 $\bar{X}$ ± 7.39	
Marital Status	Single	92	24.8
	Married	237	64.1
	Cohabiting	35	9.5
	Separated/Divorced	03	0.8
	Widowed	03	0.8
Ethnicity	Urhobo	222	60.0
	Igbo	45	12.2
	Iosco Itsekiri Kwale Ijaw	27 14 21 09	7.3 3.9 5.7 2.4
	**Others	32	8.5
Occupation	Business	134	36.2
	Civil servant	79	21.4
	Student	79	21.4
	Teacher	23	6.2
	Tailor	18	4.9
	Unemployed	12	3.2
	Fashion Designer	11	3.0
	***Others	14	4.0
Family type*	Monogamous	238	64.3
	Polygamous	40	10.8
Level of Education	No formal Education	12	3.2
	Primary	26	7.0
	Secondary	137	37.1
	Tertiary	195	52.7
Religion	Christian	358	96.8
	Islam	09	2.4
	ATR	03	0.8

	Variables	Frequency (n)	Percent (100%)
Income	≤ N30,000	108	29.2
	N31,000-N60,000	125	33.8
	N61,000-N90,000	52	14.1
	≥ N91,000	85	23.0

*Participants who were "Single" (n=92; 24.8%) were excluded from this calculation. ATR – African Traditional Religion . **Others – Hausa/fulani, (11), Bini (9), Benue (6), Esan (6) ***Others – Farmer (8), Doctor (3), Hairdresser (3)..

Table 1 presents the socio-demographic characteristics of the respondents. The mean age of the participants was 32.97 ± 7.39 years, indicating that most respondents were within their active reproductive years. Nearly half (45.7%) were aged 31–40 years, while 64.1% were married. More than half had attained tertiary education (52.7%), and the majority were Christians (96.8%). Urhobo women constituted the largest ethnic group (60.0%), while trading and civil service were the predominant occupations. Approximately one-third (33.8%) earned between ₦31,000 and ₦60,000 monthly.

Figure 1. Family Planning Uptake

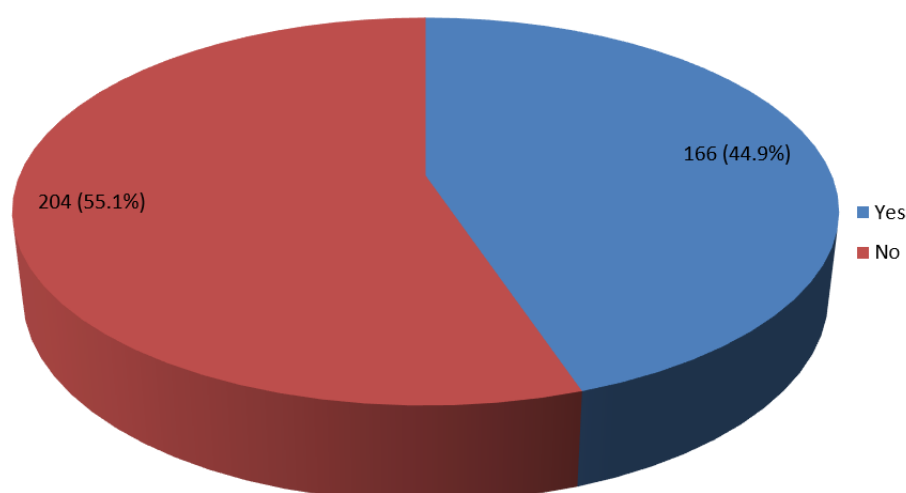


Figure 1 illustrates the prevalence of family planning uptake among the respondents. Overall, 204 (55.1%) respondents were current users of family planning, while 166 (44.9%) were non-users, indicating a moderate level of contraceptive utilization among women attending the General Outpatient Clinic.

Table 2 summarizes the clinical characteristics of the respondents. Nulliparous women constituted the largest proportion (39.2%), followed by multiparous women (34.9%). Hypertension was present in 14.1% of respondents, while 21.9% reported a previous surgical history, with Caesarean section being the most frequently reported procedure. Most respondents had a normal body mass index (57.3%), whereas 26.5% were overweight and 14.6% were obese. The mean systolic and diastolic blood pressures were 113.7 ± 15.7 mmHg and 71.1 ± 11.9 mmHg, respectively.

Table 3 shows the association between respondents' characteristics and family planning uptake. Significant associations were observed between family planning uptake and marital status, ethnicity, monthly income, parity, community influence, misconceptions regarding contraceptive-associated cancer, previous laparotomy for ectopic pregnancy, and previous myomectomy ($p < 0.05$). Conversely, age, educational level, occupation, religion, hypertension, body mass index, and most other clinical variables were not significantly associated with contraceptive uptake ($p > 0.05$). Overall, contraceptive utilization increased with increasing monthly income and parity.

Table 2. Clinical Characteristics of Respondents

	Frequency (n)	Percentage (%)
Parity Nulliparous	145	39.2
Primiparous	44	11.9
Multiparous	129	34.9
Grand multiparous	52	14.1
Hypertensive	52	14.1
Previous surgical history	81	21.9
Summary of the various types of surgery (n=81; 21.9%)		
Caesarean section	42	11.4
Laparotomy for ectopic surgery	09	2.4
Myomectomy	06	1.6
Appendectomy	33	8.9
Ovarian Cystectomy	03	0.8
Postpartum haemorrhage	15	4.1
Body Mass Index		
Underweight	06	1.6
Normal	212	57.3
Overweight	98	26.5
Obese	54	14.6
Systolic Blood Pressure (mmHg)	113.7 $\pm$ 15.7	
Diastolic Blood Pressure (mmHg)	71.1 $\pm$ 11.9	

Table 3. Factors Associated with Family Planning Uptake

	Uptake	No/low Uptake	χ^2	p-value
	n (%)	n (%)		
Parity Nulliparous	47 (32.4)	98 (67.6)	21.715	0.001
Primiparous	16 (36.4)	28 (63.6)		
Multiparous	76 (58.9)	53 (41.1)		
Grand multiparous	27 (51.9)	25 (48.1)		
Hypertensive Yes No	26 (50.0) 140(44.0)	26 (50.0) 178(56.0)	0.645	0.422
Previous surgical history Yes No	31 (38.3) 135 (46.7)	50 (61.7) 154 (53.3)	1.822	0.177
Summary of the various types of surgery				
Caesarean section	16 (38.1)	26 (61.9)	0.878	0.349
Laparotomy for ectopic surgery	9 (100.0)	0 (0.0)	11.336	0.001
Myomectomy	0 (0.0)	6 (100.0)	4.963	0.026
Appendectomy	15 (45.5)	18 (54.5)	0.005	0.943
Ovarian Cystectomy	3 (100.0)	0 (0.0)	3.717	0.054
Postpartum haemorrhage Yes No	09 (60.0) 157(44.4)	6 (40.0) 197 (55.6)	1.424	0.233
Body Mass Index				
Underweight	4 (66.7)	2 (33.3)	2.612	0.455
Normal	89 (42.0)	123 (58.0)		
Overweight	46 (46.9)	52 (53.1)		
Obese	27 (50.0)	27 (50.0)		

Table 4. Multivariable Logistic Regression

	B	p-value	AOR	95% C.I. for OR	
				Lower	Upper
Marital status					
Single Reference group	0.752				
Married	-0.680	0.168	0.507	0.193	1.333
Widowed	-0.461	0.300	0.631	0.264	1.508
Separated	-0.311	0.839	0.733	0.037	14.588
Cohabiting	-20.660	0.999	0.000	0.000	
Ethnicity					
EthnicityReference group	0.397				
Ethnicity (1)	1.303	0.147	3.679	0.632	21.403
Ethnicity (2)	1.497	0.129	4.467	0.648	30.820
Ethnicity (3)	0.538	0.570	1.712	0.268	10.933
Ethnicity (4)	0.639	0.539	1.894	0.246	14.556
Ethnicity (5)	0.978	0.336	2.660	0.363	19.519
Ethnicity (6)	21.752	0.999	2798236074	0.000	
Ethnicity (7)	0.128	0.907	0.880	0.103	7.551
Ethnicity (8)	0.793	0.517	2.209	0.201	24.321
Ethnicity (9)	22.105	0.999	3983514545	0.000	
Income					
≤ N30,000	Reference group	*0.001			
N31,000-N60,000	1.846	*0.001	6.337	3.007	13.352
N61,000-N90,000	1.145	*0.002	3.141	1.543	6.396
≥ N91,000	0.305	0.472	1.357	0.591	3.112
Can cause cancer -0.674	0.265	0.510	0.156	1.665	
Parity					
Nulliparous Reference group	*0.024				
Primiparous	0.793	*0.048	2.211	1.006	4.858
Multiparous	0.685	0.189	1.984	0.714	5.513
Grand multiparous	-0.92	0.815	0.912	0.423	1.968
Laparotomy for ectopic	-20.463	0.999	0.000	0.000	
Myomectomy	-20.725	0.999	0.000	0.000	

Table 4 presents the multivariable logistic regression analysis of factors associated with family planning uptake. After adjusting for potential confounding variables, monthly income and parity remained significant independent predictors of family planning uptake. Women earning ₦31,000–₦60,000 monthly were over six times more likely to utilize family planning than those earning ₦30,000 or less, while women earning ₦61,000–₦90,000 had approximately three-fold higher odds of contraceptive use. Primiparous women were also significantly more likely to use family planning than nulliparous women. Marital status, ethnicity, misconceptions regarding contraceptive-associated cancer, and other variables were not independent predictors after multivariable adjustment.

DISCUSSION

This study assessed the prevalence, patterns, and determinants of family planning uptake among women attending the General Outpatient Clinic of Delta State University Teaching Hospital, Oghara, Southern Nigeria. The study found that 55.1% of respondents were current users of family planning, indicating a moderate level of contraceptive uptake among women attending a tertiary healthcare facility. Family planning uptake was significantly associated with marital status, ethnicity, monthly income, parity, community support, and misconceptions about contraception at bivariate analysis.

However, after adjustment for potential confounders, monthly income and parity remained the only independent predictors of family planning uptake. These findings underscore the influence of socioeconomic empowerment and reproductive experience on contraceptive utilization while highlighting the persistent effects of sociocultural misconceptions on women's reproductive health decisions.

Socio-demographic Characteristics and Their Implications

The study population was predominantly composed of women aged 31–40 years, with a mean age of 32.97 ± 7.39 years. This age distribution reflects women in their peak reproductive years, when the need for fertility regulation and birth spacing is greatest. Similar age distributions have been reported in studies conducted in Nigeria, Ghana, and Ethiopia, where women in their third and fourth decades constitute the largest users of reproductive health services. The predominance of married women in this study is expected because marriage is strongly associated with childbearing intentions and contraceptive demand in many African settings. Married women are more likely to seek contraception for birth spacing or limiting family size than unmarried women.

More than half of the respondents had tertiary education. Although educational attainment generally enhances health literacy and awareness of contraceptive methods, education did not independently predict contraceptive uptake in this study. This finding suggests that access to reproductive health services and counselling within a tertiary healthcare facility may reduce educational disparities in contraceptive use. It also indicates that socioeconomic and cultural factors may have a greater influence on contraceptive behaviour than educational status alone.

Prevalence of Family Planning Uptake

The prevalence of family planning uptake in this study was 55.1%, which is higher than the national contraceptive prevalence reported in the Nigeria Demographic and Health Survey but comparable to findings from other hospital-based studies in Nigeria and Ghana. The relatively higher prevalence may reflect improved access to healthcare providers, availability of contraceptive commodities, and opportunities for routine counselling within a tertiary healthcare setting. Women attending hospitals are more likely to receive reproductive health information and referrals than women in community settings.

Despite this encouraging level of uptake, nearly 45% of respondents were not using any family planning method, indicating that important barriers to contraceptive utilization persist. This finding emphasizes the need to strengthen counselling services, improve community awareness, and address misconceptions that continue to discourage contraceptive use.

Socio-demographic Predictors of Family Planning Uptake

Monthly income emerged as one of the strongest predictors of contraceptive uptake. Women earning between ₦31,000 and ₦60,000 were more than six times as likely to use family planning as women earning ₦30,000 or less, while women earning ₦61,000–₦90,000 were over three times more likely to utilize contraception. This finding suggests that financial empowerment enhances women's ability to access healthcare services, afford transportation and associated costs, and exercise greater autonomy in reproductive decision-making. Similar associations between higher income and contraceptive use have been reported in studies from Nigeria, Ethiopia, Uganda, and other low- and middle-income countries.

Ethnicity was significantly associated with contraceptive uptake at bivariate analysis but did not remain an independent predictor after multivariable adjustment. This suggests that cultural practices linked to ethnicity may influence contraceptive behaviour indirectly through education, income, religious beliefs, and community norms rather than acting as independent determinants.

Marital status was also significantly associated with uptake, with married women demonstrating greater contraceptive utilization than unmarried women. This observation agrees with previous studies showing that contraceptive use in sub-Saharan Africa is closely linked to fertility regulation within marriage.

Sociocultural Determinants

The study demonstrated that sociocultural factors continue to influence contraceptive decision-making. Community support and health education positively influenced family planning uptake, suggesting that community-based interventions remain effective strategies for improving contraceptive acceptance.

In contrast, misconceptions regarding contraceptive safety particularly the belief that contraceptives cause cancer were associated with lower utilization. These misconceptions remain widespread across many African settings and continue to contribute to fear, method discontinuation, and unmet need for family planning.

Male partner involvement also emerged as an important issue. Although many respondents reported joint decision-making regarding family size, inadequate male support remained a barrier to contraceptive uptake. This finding highlights the need for interventions that actively engage men in reproductive health education and promote shared decision-making between partners.

Clinical Factors Associated with Family Planning Uptake

Parity was significantly associated with contraceptive use. Women who had previously given birth were more likely to use family planning than nulliparous women, reflecting increased motivation to space or limit subsequent pregnancies after childbirth. Primiparous women remained significantly more likely to use contraception even after adjustment for other factors, emphasizing the importance of postpartum family planning counselling following the first delivery.

Hypertension and body mass index were not significantly associated with family planning uptake. Although these clinical characteristics may influence the choice of contraceptive method because of medical eligibility considerations, they appeared to have limited influence on whether women adopted contraception in this population.

Independent Predictors of Family Planning Uptake

After adjusting for potential confounders, only monthly income and parity remained significant independent predictors. These findings indicate that economic empowerment and reproductive experience are stronger determinants of contraceptive use than many demographic and clinical characteristics. Financially empowered women are more likely to access reproductive healthcare services, while women with previous childbirth may have greater motivation to prevent unintended pregnancies and achieve optimal birth spacing.

Public Health and Policy Implications

The findings have important implications for reproductive health programmes in Nigeria. Although family planning uptake was moderate, substantial gaps remain. Efforts to improve contraceptive utilization should focus on strengthening community-based health education, dispelling misconceptions through evidence-based communication, promoting male involvement, and improving equitable access to affordable contraceptive services. Integrating comprehensive family planning counselling into routine outpatient care, antenatal services, postnatal clinics, and child welfare programmes would provide additional opportunities to increase contraceptive uptake and reduce unmet need.

Strengths of the Study

This study provides contemporary evidence on family planning uptake among women attending a tertiary healthcare facility in Southern Nigeria. The use of systematic random sampling, a relatively large sample size, standardized data collection procedures, and multivariable logistic regression strengthened the reliability of the findings. In addition, the study explored a broad range of socioeconomic, sociocultural, and clinical determinants, providing a comprehensive understanding of factors influencing contraceptive utilization.

Limitations of the Study

The cross-sectional design limits the ability to establish causal relationships between identified determinants and family planning uptake. The hospital-based nature of the study may also limit generalizability to women in community settings or those receiving care in primary healthcare facilities. Furthermore, contraceptive use was self-reported and may have been influenced by recall or social desirability bias. Nevertheless, the findings provide valuable evidence for improving reproductive health services in similar healthcare settings and can inform future multicentre studies.

RECOMMENDATIONS

1. Strengthen Community-Based Family Planning Education

Government agencies, healthcare institutions, and non-governmental organizations should intensify culturally appropriate community-based health education programmes aimed at improving knowledge of family planning, correcting misconceptions, and promoting informed contraceptive choices among women of reproductive age.

2. Promote Male Partner Involvement

Family planning programmes should incorporate strategies that actively engage men through couple-focused counselling, community dialogue, workplace interventions, and mass media campaigns. Improved male participation will facilitate shared reproductive decision-making and enhance contraceptive acceptance and continuation.

3. Improve Accessibility and Affordability of Family Planning Services

The Federal and State Ministries of Health should strengthen primary healthcare facilities by ensuring continuous availability of contraceptive commodities, expanding access to a broad range of contraceptive methods, and reducing financial barriers to family planning services, particularly for women from low-income households.

4. Integrate Family Planning into Routine Healthcare Services

Comprehensive family planning counselling should be routinely integrated into antenatal, postnatal, immunization, child welfare, infertility, and general outpatient clinics. Every contact with women of reproductive age should be utilized as an opportunity to provide individualized contraceptive counselling.

5. Address Myths and Misconceptions

Healthcare providers should implement evidence-based behavioural change communication strategies to dispel persistent misconceptions regarding contraceptive safety, including fears related to infertility, cancer, excessive bleeding, and reduced fertility. Community leaders, religious organizations, and the media should be engaged to promote accurate reproductive health information.

6. Promote Women's Socioeconomic Empowerment

Government policies that improve female education, employment opportunities, vocational training, and income generation should be strengthened, as financial independence may enhance women's autonomy in reproductive health decision-making and improve contraceptive utilization.

7. Future Research

Future multicentre prospective cohort studies involving both community and healthcare populations across different geopolitical regions of Nigeria are recommended to establish causal relationships and improve the generalizability of findings. Qualitative studies exploring male perspectives, sociocultural beliefs, and barriers to contraceptive uptake would also complement the findings of the present study.

Strengths of the Study

This study has several strengths. It employed a systematic random sampling technique, thereby minimizing selection bias and enhancing the representativeness of the study population. The relatively large sample size improved the statistical power of the study, while the use of a pretested structured questionnaire ensured standardized data collection. Furthermore, the application of multivariable logistic regression enabled adjustment for potential confounding variables and facilitated the identification of independent predictors of family planning uptake. The findings provide valuable contemporary evidence that can guide family planning programmes and reproductive health policies in similar tertiary healthcare settings.

Limitations of the Study

Despite its strengths, this study has some limitations. The cross-sectional design precludes the establishment of causal relationships between the identified determinants and family planning uptake. Being a hospital-based study conducted in a tertiary healthcare facility, the findings may not be fully generalizable to women in the community or those attending primary healthcare centres. In addition, contraceptive use was self-reported and may have been influenced by recall bias or social desirability bias. Nevertheless, the study provides important insights into the determinants of family planning uptake among women attending tertiary healthcare facilities in Southern Nigeria.

CONCLUSION

Family planning uptake among women attending the General Outpatient Clinic of Delta State University Teaching Hospital was moderate, with just over half of the respondents currently utilizing contraceptive methods. Monthly income and parity emerged as the principal independent predictors of contraceptive utilization, underscoring the influence of socioeconomic status and reproductive experience on family planning decisions. Persistent misconceptions regarding contraceptive safety and sociocultural influences continue to constitute barriers to optimal uptake. Strengthening community-based reproductive health education, promoting male partner involvement, improving access to affordable contraceptive services, and integrating family planning counselling into routine healthcare services are essential strategies for increasing contraceptive utilization and improving maternal and reproductive health outcomes in Nigeria.

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