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Original Article

Prevalence and Factors Contributing to Unmet Need for Family Planning Among Women Aged 15 to 49 Years Attending Kibogora Hospital, Nyamasheke District, Rwanda

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Abstract

Background: Unmet need for family planning (FP) remains a major public health concern in low- and middle-income countries, where socio-cultural, economic, and health system barriers impede access to modern contraceptives. In Rwanda, addressing this issue is crucial for achieving national reproductive health goals.

Objective: The study aimed to determine the prevalence and contributing factors of unmet need for FP among women aged 15–49 years attending Kibogora Hospital in Nyamasheke District, Rwanda. It also examined the role of male involvement in FP decision-making.

Methods: A descriptive cross-sectional design was used, employing structured questionnaires and interviews over a six-month period. Data were analyzed using descriptive statistics, chi-square tests, and bivariate analysis to assess associations between unmet need and various demographic and behavioral factors.

Results: The findings showed that 25% of participants had an unmet need for FP. Key barriers included financial limitations, fear of side effects, partner disapproval, and poor service access. Marital status, education level, and number of children were significantly associated with unmet need. Younger women and those with more children were more affected. Cultural and religious beliefs also negatively influenced FP uptake. Statistically significant associations were found between unmet need and satisfaction with FP services ($p = 0.001$), decision-making autonomy ($p = 0.001$), and awareness of FP methods ($p = 0.05$).

Conclusion: Unmet need for FP in Nyamasheke District is shaped by financial, social, cultural, and service delivery factors. Improving contraceptive access, client satisfaction, male involvement, and culturally sensitive community education are essential to reducing unmet need and advancing women's reproductive health.

Keywords (MeSH): Prevalence, Unmet Need, Family Planning, Women of Childbearing Age, Reproductive Health, Rwanda

Introduction

Globally, the unmet need for family planning (FP) remains a major public health concern, especially in low- and middle-income countries. As of 2022, approximately 218 million women of reproductive age lacked access to modern contraceptive methods, contributing to increased rates of unintended pregnancies, unsafe abortions, and adverse maternal health outcomes (Guttmacher Institute, 2022; WHO, 2023). The persistence of these challenges is attributed to factors such as weak healthcare systems, socio-economic disparities, limited male involvement, and pervasive myths surrounding contraceptive safety (Cleland et al., 2020; UN DESA, 2022). Additionally, the absence of culturally responsive reproductive health education continues to hinder contraceptive uptake (WHO, 2021).

Sub-Saharan Africa (SSA) reports the highest rate of unmet FP needs, affecting roughly 23% of married women aged 15–49 (UNFPA, 2022). Structural and sociocultural constraints—such as entrenched gender norms, lack of decision-making autonomy, and community stigma—disproportionately affect rural and adolescent populations (Eliason et al., 2021; Chandra-Mouli et al., 2019). Adolescents, in particular, face overlapping barriers including judgmental attitudes from healthcare providers, lack of youth-friendly services, and inadequate sexual education. These challenges result in low contraceptive utilization and elevated teenage pregnancy rates (Solo & Festin, 2020; Banke-Thomas et al., 2021).

Despite substantial progress in expanding FP access across the East African Community (EAC), disparities persist. Rwanda, for example, has achieved a national modern contraceptive prevalence rate of 58%. However, the unmet need for FP remains at 17% among married women, with rural areas continuing to lag behind (RDHS, 2019–2020). Rural districts such as Nyamasheke demonstrate a lower contraceptive prevalence of 53%, indicating ongoing barriers to access including geographic remoteness, limited service availability, and deep-rooted sociocultural resistance to contraception (Rwanda Ministry of Health, 2021; FMCH, 2023). Adolescents in these rural settings are especially marginalized due to provider bias, inadequate outreach, and the absence of integrated youth-friendly services (Mukamurigo et al., 2020; Habimana et al., 2022).

Kibogora Hospital, located in Nyamasheke District, serves a predominantly rural population confronted with significant access barriers to FP services. Despite Rwanda's notable progress, localized challenges in areas like Kibogora highlight a persistent gap in coverage and reproductive autonomy. However, there is limited localized evidence on the specific sociocultural, health system, and individual factors influencing unmet FP need in this context. This study aims to assess the prevalence and contributing factors to unmet need for family planning among women aged 15–49 years attending Kibogora Hospital. By identifying context-specific barriers, the

findings are intended to inform targeted, evidence-based interventions to improve contraceptive access and equity, in line with Sustainable Development Goal 3 on universal access to sexual and reproductive healthcare services.

Methods

Study Design

This study employed a cross-sectional mixed-methods design, combining both quantitative and qualitative approaches to assess the prevalence of unmet need for family planning (FP) and to explore contextual barriers influencing access. This design enabled the integration of numerical data with in-depth insights, thereby offering a comprehensive understanding of both the magnitude and underlying factors associated with unmet FP needs among women attending Kibogora Hospital.

Study Area

The study was conducted at Kibogora Hospital, located in Nyamasheke District in Rwanda's Western Province. The hospital serves a large and predominantly rural population and provides a wide range of maternal and child health services, including family planning. Its central role in the district's reproductive health service delivery made it an appropriate and strategic site for this study.

Study Population

The study targeted women of reproductive age (15–49 years) who were attending reproductive health services at Kibogora Hospital during the data collection period. This group included women with varying demographic characteristics, such as age, marital status, educational level, and socioeconomic background, to ensure a comprehensive assessment of unmet FP needs.

Sample Size and Sampling Techniques

The sample size for the quantitative component was determined using Cochran's formula for estimating a single population proportion in a cross-sectional study. The calculation assumed a 50% anticipated prevalence of unmet need for FP (to maximize sample size), a 95% confidence interval, and a 5% margin of error. This yielded a final sample size of 427 women. Systematic random sampling was used to select participants for the quantitative survey. Every third woman attending the reproductive health clinic during the data collection period was approached for inclusion, with the starting point randomly selected on the first day of data collection to reduce selection bias. For the qualitative component, purposive sampling was used to recruit 10 key informants, selected based on their professional roles, experience in FP service delivery, and availability. The sample included midwives, community health workers, reproductive health supervisors, and district FP officers, each with at least three years of relevant professional experience in the field.

Data Collection Methods

Quantitative data were collected using a structured questionnaire administered through face-to-face interviews. The tool included questions on socio-demographic characteristics, reproductive history, contraceptive use, knowledge of FP methods, and perceived barriers to accessing services. The questionnaire was pre-tested in a comparable setting to ensure clarity, cultural appropriateness, and reliability. Qualitative data were collected through semi-structured interviews using an interview guide designed to explore participants' perspectives on FP access, service delivery challenges, and suggestions for improvement. Interviews were conducted in Kinyarwanda, audio-recorded with informed consent, and later transcribed and translated into English for analysis.

Data Analysis

Quantitative data were entered, cleaned, and analyzed using SPSS version 25. Descriptive statistics (frequencies, percentages, means, and standard deviations) were used to summarize demographic data and FP usage patterns. Inferential statistics included Chi-square tests to explore associations between categorical variables, and binary logistic regression was performed to identify factors significantly associated with unmet FP needs. Both crude and adjusted odds ratios were calculated, with statistical significance set at $p < 0.05$. Qualitative data were analyzed thematically using NVivo 12 software. An inductive approach was used to identify emerging themes directly from the data. Two independent coders reviewed the transcripts to improve credibility and reduce bias. Codes were compared, and differences were resolved through discussion, achieving intercoder agreement before finalizing thematic categories. This process allowed for triangulation with quantitative findings, enriching the interpretation of results.

Ethical Considerations

Ethical approval was obtained from the Mount Kenya University Institutional Review Board. Written permission to conduct the study at Kibogora Hospital was granted by the hospital administration. The study was conducted in full accordance with ethical principles guiding human subject research, including respect for autonomy, beneficence, and confidentiality. All participants provided informed consent after receiving a clear explanation of the study's objectives, procedures, and potential risks and benefits. For participants under 18 years old, additional parental or guardian consent was obtained. Participation was voluntary, and participants were assured of their right to withdraw at any time without repercussions. To protect privacy, data collection was conducted in private spaces within the hospital. Personal identifiers were excluded from analysis, and all records were securely stored and accessible only to the research team. Confidentiality and participant dignity were prioritized throughout the study process.

Results

Demographic characteristics of respondents

The study analyzed socio-demographic characteristics of 370 women of reproductive age attending Kibogora Hospital to assess factors influencing unmet need for family planning (FP). Most respondents' partners had low education levels: 162 (43.8%) had completed primary education, 119 (32.2%) secondary, 61 (16.5%) had no formal education, and only 28 (7.6%) had tertiary education. This suggests limited male support and awareness regarding FP in many households. Religious affiliation showed that 214 (57.8%) were Protestant/other Christian, 104 (28.1%) Catholic, 22 (5.9%) Muslim, and 30 (8.1%) followed traditional or other beliefs. Religious norms may influence FP attitudes and choices. Age distribution revealed that 82 women (22.2%) were aged 25–29, 80 (21.6%) were 30–34, another 80 (21.6%) were 40+, 73 (19.7%) were 35–39, 44 (11.9%) were 20–24, and 11 (3.0%) were 15–19 years. This indicates a mature reproductive population with varying FP needs.

Marital status showed 253 (68.4%) were married, 106 (28.6%) single, 7 (1.9%) widowed, and 4 (1.1%) divorced. Married women are typically at higher risk of unintended pregnancies, while single women may face unmet need due to stigma. Regarding parity, 233 (63.0%) had 2–4 children, 90 (24.3%) had 0–1 child, and 47 (12.7%) had 5 or more. Educationally, 173 (46.8%) had completed primary school, 104 (28.1%) secondary, 73 (19.7%) had no formal education, and only 20 (5.4%) had tertiary education. Education is key to FP awareness and decision-making. Employment status showed 134 (36.2%) were self-employed, 111 (30.0%) formally employed, 100 (27.0%) unemployed, 20 (5.4%) students, and 5 (1.4%) homemakers. Employment can influence both access to and autonomy in FP use.

Table 1: Description of Socio-Demographic Characteristics

Variable	Category	Frequency	Percent
Partner's Education Level	No formal education	61	16.5%
	Primary education	162	43.8%
	Secondary education	119	32.2%
	Tertiary education	28	7.6%
Religion	Catholics	104	28.1%
	Protestants/Other Christians	214	57.8%
	Muslims	22	5.9%

	Traditional and Others	30	8.1%
Age Category	15–19 years	11	3.0%
	20–24 years	44	11.9%
	25–29 years	82	22.2%
	30–34 years	80	21.6%
	35–39 years	73	19.7%
	40 years and above	80	21.6%
Marital Status	Single	106	28.6%
	Married	253	68.4%
	Divorced	4	1.1%
	Widowed	7	1.9%
Number of Children	0–1 children	90	24.3%
	2–4 children	233	63.0%
	5 children and more	47	12.7%
Respondent's Education Level	No formal education	73	19.7%
	Primary education	173	46.8%
	Secondary education	104	28.1%
	Tertiary education	20	5.4%
Employment Status	Employed	111	30.0%
	Self-employed	134	36.2%
	Unemployed	100	27.0%
	Student	20	5.4%

	Homemaker	5	1.4%

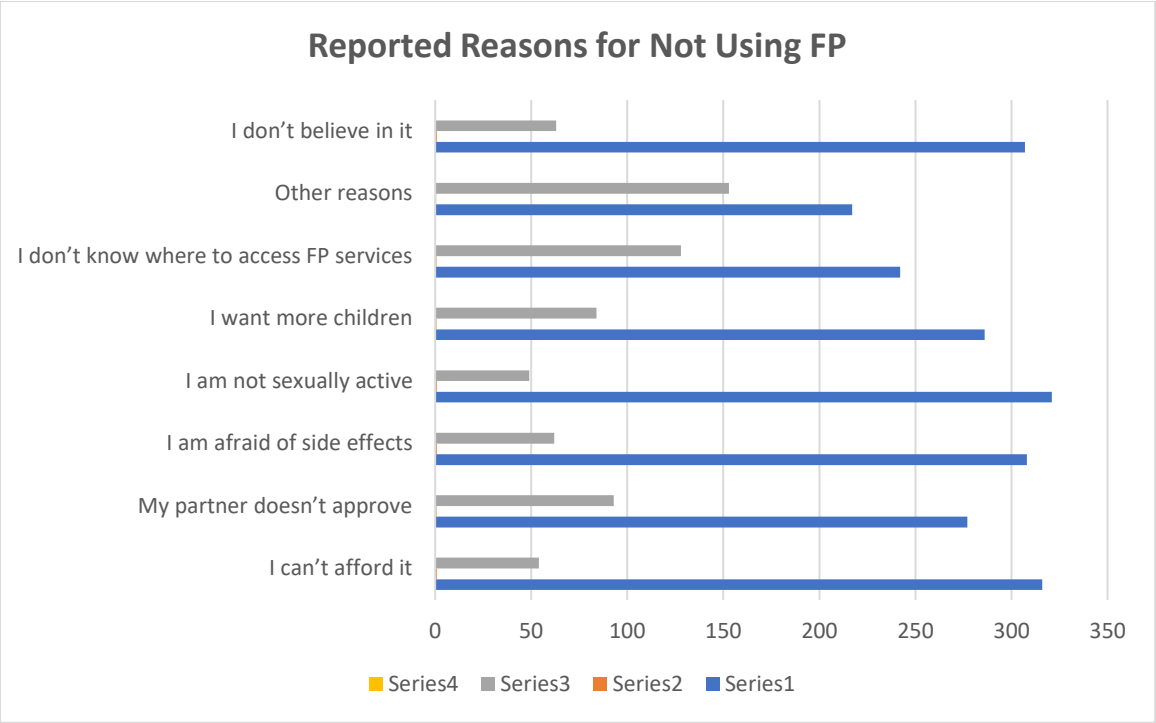
Source: Primary Data (2025)

Prevalence of Unmet Need for Family Planning Among Women Aged 15 to 49 Years

The results of the study revealed that out of the total 370 women of reproductive age (15 to 49 years) who participated, 91 women (25%) were identified as having an unmet need for family planning. This unmet need was categorized into two components: 16% of the women (approximately 59 participants) had an unmet need for spacing births, indicating they wished to delay their next pregnancy but were not using any contraceptive method at the time of the survey. Additionally, 9% of the respondents (about 33 women) expressed an unmet need for limiting births, meaning they desired no more children but had not adopted any form of contraception. In contrast, 279 women (75%) were found to be without an unmet need for family planning. These women were either current users of contraceptive methods or were not in need of contraception due to being infecund, menopausal, or not sexually active. The observed 25% prevalence of unmet need for family planning in this population is considerable and points to gaps in reproductive health service delivery, education, or access in the Nyamasheke District. This level of unmet need underscores the critical need for strengthened family planning programs and services tailored to women's reproductive intentions. Addressing both spacing and limiting needs through improved counseling, community outreach, and availability of a wide range of contraceptive options is essential to reducing unplanned pregnancies and promoting maternal and child health in this setting.

Figure1: Reported Reasons for Not Using Family Planning Among Women Aged 15–49 Years (N = 370)

Source: Primary Data (2025)



The study identified a range of socio-economic, cultural, and individual barriers contributing to the non-utilization of family planning (FP) methods among women. The most cited obstacle was the inability to afford FP services (85.4%), indicating financial constraints as a major deterrent. Additionally, 86.8% of women reported not being sexually active, suggesting that abstinence, whether by choice or circumstance, reduced perceived need for contraception. Fear of side effects (83.2%) was another major concern, highlighting gaps in education and counseling.

Partner disapproval (74.9%) underscored the influence of gender dynamics on FP decisions, while 77.3% of participants expressed a desire for more children, showing that reproductive goals also shape FP uptake. Not knowing where to access services (65.4%) pointed to informational and logistical gaps in service delivery. Moreover, 58.6% cited various other personal or contextual reasons, indicating complexity beyond standard categories. Lastly, distrust or disbelief in FP methods (83.0%) revealed the powerful role of cultural or religious attitudes. These findings emphasize the need for multifaceted interventions such as financial support, community education, male involvement, and culturally sensitive health communication to effectively address the unmet need for family planning.

Bivariate Analysis of Socioeconomic and Demographic Factors Associated with Unmet Need for Family Planning Among Women Aged 15 to 49 Years

The bivariate analysis explored socio-economic and demographic factors associated with unmet need for family planning (FP) among women aged 15 to 49 years attending Kibogora Hospital in Nyamasheke District. Age was not significantly linked to unmet need (p = 0.971), despite women aged 25–29 and 30–34 showing the highest unmet need numbers. Marital status, however, showed a strong significant association (p = 0.001), with married women comprising the majority of those with unmet need (n = 53), alongside a notable proportion of single women (n = 29), and all widowed women falling into the unmet need group. This highlights how marital dynamics influence FP behavior and access. The number of children also significantly influenced unmet need (p = 0.003). Women with fewer children (0–1) had higher unmet need (n = 34), suggesting greater demand for spacing or delaying births, while those with five or more children had the lowest unmet need. Education level of the women was significantly related to unmet need (p = 0.001), with women lacking formal education showing higher unmet need (31 of 73), whereas only one woman with tertiary education had unmet need, underscoring the role of education in FP knowledge and autonomy. Conversely, partner's education did not affect unmet need (p = 0.997), and employment status was also not significant (p = 0.445), indicating that these factors alone may not strongly influence FP uptake. Religion showed a significant association (p = 0.038), with Protestant and other Christian women representing the largest proportion of unmet need cases, followed by Catholics, traditionalists, and Muslims. This suggests that cultural or religious beliefs within faith communities may shape attitudes and acceptance of family planning methods.

Table 2: Bivariate Analysis of Socioeconomic and Demographic Factors Associated with Unmet Need for Family Planning Among Women Aged 15 to 49 Years

Variable	Category	Without unmet need (n=279)	With Unmet need (n=91)	P-Value
Age Category	15–19 years	8	3	0.971
	20–24 years	33	11	
	25–29 years	62	20	
	30–34 years	58	22	
	35–39 years	55	18	

	40 years and above	63	17	
Marital Status	Single	77	29	**0.001**
	Married	200	53	
	Divorced	2	2	
	Widowed	0	7	
Number of Children	0–1 children	56	34	**0.003**
	2–4 children	184	49	
	5 children and more	39	8	
Respondent's Education Level	No formal education	42	31	**0.001**
	Primary education	131	42	
	Secondary education	87	17	
	Tertiary education	19	1	
Partner's Education Level	No formal education	46	15	0.997
	Primary education	123	39	
	Secondary education	89	30	
	Tertiary education	21	7	
Employment Status	Employed	89	22	0.445
	Self-employed	101	33	
	Unemployed	69	31	
	Student	16	4	

	Homemaker	4	1	
Religion	Catholics	92	16	**0.038**
	Protestants/Other Christians	150	63	
	Muslims	15	5	
	Traditional and Others	22	7	

Source: Primary Data (2025)

Bivariate Analysis of Socio-Economic Factors Associated with Unmet Need for Family Planning Among Women Aged 15 to 49 Years

The analysis investigated the relationship between socioeconomic and access-related factors and the unmet need for family planning among women attending Kibogora Hospital. Affordability of family planning (FP) methods did not show a statistically significant association with unmet need (p = 0.701), as both women with and without unmet need reported similar affordability perceptions. Likewise, transportation challenges were common but not significantly associated with unmet need (p = 0.601). Cost concerns also showed no meaningful relationship (p = 0.995), with roughly equal proportions of women in both groups citing cost as a barrier. Additionally, experiencing FP supply shortages in the community did not significantly influence unmet need (p = 0.726). Overall, none of the examined factors affordability, transport difficulties, cost barriers, or stock-outs were statistically linked to unmet need in this context. These findings suggest that structural or economic obstacles may not be the primary drivers of unmet family planning needs in this population. Instead, the results point toward other influencing factors, such as cultural beliefs, misinformation, individual autonomy, and levels of awareness, which may play a more critical role and should be the focus of future interventions to reduce unmet FP need.

Table 3: Bivariate Analysis of Socio-Economic Factors Associated with Unmet Need for Family Planning Among Women Aged 15 to 49 Years

Variable	Category	Without unmet need (n=279)	With Unmet need (n=91)	P-Value
Do you find FP methods affordable?	Yes	190	60	0.701

	No	89	31	
Do you face any challenges in reaching FP services due to transport?	Yes	188	64	0.601
	No	91	27	
Is cost of FP a barrier to access?	Yes	98	32	0.995
	No	181	59	
Have you ever experienced a shortage of FP supplies in your community?	Yes	82	25	0.726
	No	197	66	

Source: Primary Data (2025)

Bivariate Analysis of Awareness and Socio-Cultural Factors Associated with Unmet Need for Family Planning Among Women Aged 15 to 49 Years

The bivariate analysis examined various awareness and socio-cultural factors related to unmet need for family planning (FP) among women aged 15–49 in Rwanda. While access to FP services was higher among women without unmet need (222 vs. 68), the association was not statistically significant (p = 0.331), suggesting that physical access alone does not guarantee FP uptake. Similarly, although more women without unmet need had received FP counseling (221 vs. 68), this difference was also not significant (p = 0.369), indicating that counseling may be insufficient without addressing other barriers such as beliefs or partner involvement. A strong, statistically significant association was observed between satisfaction with FP services and unmet need (p = 0.001). Women who were "very satisfied" had the lowest unmet need (n = 13), while dissatisfaction was higher among those with unmet need. This underscores the importance of quality, respectful, and client-centered services in enhancing FP utilization.

Cultural beliefs, although commonly cited, did not show a statistically significant link with unmet need (p = 0.339). Many women who felt their community discouraged FP still managed to meet their FP needs, suggesting that individual agency or other influences may override community norms. Decision-making autonomy, however, showed a highly significant association (p = 0.001). Women involved in joint FP decisions with their partners had markedly lower unmet need, while those relying on partner-only decisions were more likely to have unmet need,

highlighting the importance of shared or autonomous decision-making. Community support for FP and religious influence showed mixed results. While unmet need was higher in communities discouraging FP, this was not statistically significant (p = 0.452). Religion appeared to influence some women's decisions, but lack of p-values limits interpretation. Lastly, awareness of FP showed a borderline significant association (p = 0.05), with higher awareness correlating with lower unmet need emphasizing the value of targeted education and outreach.

Table4: Bivariate Analysis of Awareness and Socio-Cultural Factors Associated with Unmet Need for Family Planning Among Women Aged 15 to 49 Years

Variable	Category	Without unmet need (n=279)	With Unmet need (n=91)	P-value
Access to FP services	Yes	222	68	
	No	57	23	0.331
FP Counseling Received	Yes	221	68	0.369
	No	58	23	
Satisfaction with FP Services	Very satisfied	107	13	
	Satisfied	113	34	**0.001**
	Neutral	45	27	
	Dissatisfied	13	12	
	Very dissatisfied	1	5	
Cultural Beliefs Discourage FP	Yes	113	44	0.339
	No	80	20	
	Not sure	86	27	
Decision-Making on FP	I decide myself	80	41	
	My partner and I	175	33	**0.001**
	My partner	9	10	

	My family	7	3	
	I don't know	6	2	
Community Opinion on FP	Encouraged	51	13	0.452
	Discouraged	95	28	
	Not openly discussed	133	50	
Religion's Role in FP	Yes	192	62	
	No	87	29	
FP Awareness level	Low awareness	218	76	**0.05**
	Moderate awareness	24	11	
	High awareness	37	4	

Source: Primary Data (2025)

Multivariate Logistic Analysis of Factors Associated with Unmet Need for Family Planning Among Women Aged 15 to 49 Years

This study examined demographic and socio-cultural factors predicting unmet need for family planning (FP) among women of reproductive age. Although most participants were married in both unmet and met need groups, marital status showed no statistically significant association with unmet need ($p = 0.997$). The extremely low adjusted odds ratios (AORs) and undefined confidence intervals, especially for the widowed category, suggest sparse data, preventing definitive conclusions about marital status effects. A significant relationship was found between the number of children and unmet need. Women with 0–1 child were over five times more likely to have unmet need compared to those with five or more children (AOR = 5.602, 95% CI: 1.546–20.296, $p = 0.010$). Women with 2–4 children also showed increased odds, but this was not statistically significant ($p = 0.369$). This suggests unmet need is more prevalent among women early in their reproductive years, possibly due to less motivation or social pressure to use contraception during initial family building.

Education followed an expected pattern where women without formal education had higher unmet need, but this was not statistically significant ($p = 0.998$) due to small subgroup sizes causing unstable estimates. Similarly, religion did not significantly predict unmet need ($p = 0.722$), although Protestant women had slightly higher odds compared to Catholics (AOR = 1.583), with non-significant trends also seen among Muslims and traditional believers. Client satisfaction with FP services was a significant factor. Women "very satisfied" with services had

much lower unmet need (AOR = 0.037, 95% CI: 0.003–0.407, p = 0.007), highlighting service quality's crucial role in FP uptake. Women who were merely "satisfied" also showed reduced unmet need but with marginal significance (p = 0.055). Dissatisfied clients had higher unmet need prevalence.

Decision-making autonomy showed a non-significant trend (p = 0.082), with higher unmet need among women making FP decisions alone or whose partners decided independently, compared to joint decision-making. Lastly, FP awareness was a strong, statistically significant predictor: women with low or moderate awareness had markedly higher odds of unmet need (AOR = 9.415 and 14.156, respectively, p = 0.002), emphasizing the vital role of education and information dissemination in closing FP gaps.

Table 5: Multivariate Logistic Analysis of Factors Associated with Unmet Need for Family Planning Among Women Aged 15 to 49 Years

Variable	Category	Without Unmet Need	With Unmet Need	AOR	95% CI	P-value
Marital Status	Single	77	29	0.000	0.000–.	0.997
	Married	200	53	0.000	0.000–.	0.997
	Divorced	2	2	0.000	0.000–.	0.997
	Widowed	0	7	-	-	-
Number of Children	0–1 child	56	34	5.602	1.546–20.296	0.009
	2–4 children	184	49	1.626	0.563–4.697	0.369
	5+ children	39	8	-	-	-
Education Level	No formal education	42	31	4.85E+08	0.000–.	0.998
	Primary education	131	42	3.31E+08	0.000–.	0.998
	Secondary education	87	17	2.08E+08	0.000–.	0.998
	Tertiary education	19	1	-	-	-
Religion	Catholics	92	16	1.129	0.343–3.719	0.842
	Protestants/Other Christians	150	63	1.583	0.531–4.720	0.410

	Muslims	15	5	1.396	0.302–6.445	0.669
	Traditional/Others	22	7	-	-	-
Satisfaction with FP Services	Very satisfied	107	13	0.037	0.003–0.407	0.007
	Satisfied	113	34	0.106	0.011–1.053	0.055
	Neutral	45	27	0.221	0.021–2.360	0.212
	Dissatisfied	13	12	0.259	0.022–3.049	0.283
	Very dissatisfied	1	5	-	-	-
Decision-Making on FP	I decide myself	80	41	1.073	0.155–7.421	0.943
	My partner and I	175	33	0.499	0.067–3.707	0.497
	My partner	9	10	2.652	0.294–23.943	0.385
	My family	7	3	0.813	0.052–12.691	0.882
	I don't know	6	2	-	-	-
FP Awareness Level	Low awareness	218	76	9.415	2.343–37.822	0.002
	Moderate awareness	24	11	14.156	2.645–75.770	0.002
	High awareness	37	4	-	-	-

Source: Primary Data (2025)

Discussion

This study explored the barriers contributing to the unmet need for family planning (FP) among women of reproductive age (15–49 years) in Rwanda. Despite a high level of awareness of contraceptive methods, 25% of participants reported an unmet need for FP. This figure exceeds the 16% reported in the 2020 Rwanda Demographic and Health Survey (RDHS) (National Institute of Statistics of Rwanda [NISR] et al., 2021). The higher rate in this study may be explained by differences in population characteristics, as this study focused on women in a rural clinical setting, where access challenges are often more pronounced. Additionally, methodological variations and differences in data collection timelines may also account for this discrepancy (Sedgh et al., 2019). Economic hardship emerged as the most prevalent barrier, with 85.4% of women identifying financial challenges as a deterrent to accessing FP services. Though FP services are officially free in Rwanda, hidden costs such as transportation, lost income, and informal facility fees create substantial access barriers,

particularly for women in rural or impoverished communities (Kohler et al., 2021; Muhoza et al., 2021). These findings are consistent with literature from other Sub-Saharan African contexts, where economic constraints critically hinder contraceptive uptake (Shiferaw et al., 2020).

Partner disapproval was another major deterrent, reported by nearly 75% of participants. In many Rwandan communities, male partners exert significant influence over reproductive decisions, often limiting women's autonomy (Bawah et al., 2019). This study supports the RDHS (2021) findings, which identified male opposition as a leading cause of unmet FP needs. Addressing such gender-based power imbalances requires targeted male engagement strategies and efforts to promote equitable reproductive decision-making (Kibira et al., 2020).

Fear of side effects also emerged as a significant concern, cited by over 80% of women. Misinformation about potential adverse effects, such as weight changes, headaches, and menstrual irregularities, often deters women from initiating or continuing FP use (Wambui et al., 2022). These fears reflect the inadequate dissemination of accurate information and limited access to professional counseling. Prior research emphasizes the importance of comprehensive, evidence-based counseling to counteract these misconceptions (Kassa et al., 2020).

Additionally, 86.8% of women indicated that non-use of FP was due to not being sexually active, which points to the prevailing belief that contraception is only necessary during periods of sexual activity. However, FP has broader health benefits, including the regulation of menstruation and the prevention of sexually transmitted infections (Shiferaw et al., 2020). This misconception underscores the need to improve awareness of the full scope of FP benefits. Cultural expectations regarding family size also play a significant role, with 77.3% of women reporting a desire for more children. In many rural areas of Rwanda, large families are seen as a source of social status and economic security (Sedgh et al., 2019). Such norms hinder the uptake of FP methods. Therefore, culturally sensitive messages emphasizing the advantages of birth spacing and manageable family sizes are crucial (Abuya et al., 2019).

Moreover, 65.4% of women lacked knowledge about where to access FP services, and 58.6% cited religious or cultural barriers. Despite the government's efforts to increase FP availability, these findings suggest gaps in information dissemination and community-level engagement (Muhoza et al., 2021; Kohler et al., 2021). Engaging trusted figures such as religious and community leaders can help correct misinformation and shift community attitudes toward FP (Barden-O'Fallon et al., 2019).

Finally, 83% of women reported disbelief in FP, which reflects entrenched myths and traditional beliefs. The involvement of faith-based and local institutions in promoting FP education is essential to dispel these deep-rooted misconceptions (Kassa et al., 2020).

Conclusion

The study highlights a substantial unmet need for family planning among rural Rwandan women, primarily driven by financial constraints, partner opposition, misinformation about side effects, and sociocultural factors. Addressing these challenges requires a multifaceted approach involving improved service access, male partner involvement, culturally appropriate education, and integration of FP services within existing healthcare frameworks. The findings provide important insights that can inform national reproductive health policies aimed at achieving universal contraceptive coverage and advancing Rwanda's maternal and child health goals.

Recommendations

To reduce the unmet need for family planning, the study recommends subsidizing FP services for low-income households and increasing public awareness through campaigns that dispel cost and safety misconceptions. Engaging male partners, religious, and community leaders is crucial to promoting shared decision-making. Improving access through mobile clinics, better transportation, and trained healthcare providers, especially in rural areas, is also advised. Education campaigns using media and cultural influencers should enhance FP acceptance. Further research should explore male involvement, cultural and religious influences, adolescent FP needs, and the impact of community-based and digital interventions.

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Conflict of Interest

The author declares no conflict of interest in the development and completion of this study.

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