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(RESEARCH ARTICLE)



# Factors Influencing Family Planning Method Choice among Women of Reproductive Age 18-45 Years in Gombe Metropolis, North Eastern Nigeria

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## **Abstract**

**Background:** Family planning plays a crucial role in improving maternal and child health by preventing unintended pregnancies, reducing maternal mortality, and promoting economic well-being. Despite its benefits, the uptake of family planning remains low in many parts of Nigeria, particularly in Gombe Metropolis. Socio-cultural, religious, economic, and accessibility factors influence the choice of contraceptive methods among women of reproductive age [1, 2].

**Methodology:** This study employed a cross-sectional descriptive design to assess the factors influencing family planning method choice among women aged 18-45 years in Gombe Metropolis, North East Nigeria. A structured questionnaire was administered to 246 respondents, covering socio-demographics, knowledge and awareness, cultural and religious beliefs, accessibility, and barriers to contraceptive use. Data were analyzed using SPSS version 25, employing descriptive statistics, chi-square tests, and logistic regression analysis [3].

**Results:** The study found that 43.09% of respondents had no formal education, and 53.25% reported that cultural norms promoted large families. Spousal disapproval (26.19%), cultural/religious beliefs (23.02%), and fear of side effects (18.25%) were major barriers to family planning use [4]. Additionally, 47.97% of respondents lived within 1–5 km of a healthcare facility, but 38.21% were unable to obtain their preferred contraceptive method due to limited availability [5]. The study also found that 59.35% of participants did not believe family planning conflicted with religious teachings, suggesting that religious opposition may not be as significant a barrier as often assumed [6].

**Conclusion:** Family planning choices in Gombe Metropolis are influenced by socio-demographic factors, cultural and religious beliefs, accessibility to services, and awareness levels. Efforts to improve contraceptive uptake should focus on community-based education, engaging religious and traditional leaders, and ensuring the availability of diverse contraceptive options in healthcare facilities. Addressing spousal disapproval and misconceptions about side effects will also be crucial in promoting family planning in the region.

Keywords: Family Planning; Contraceptive Methods; Reproductive Health; Cultural Beliefs; Gombe Metropolis; Nigeria

# 1. Introduction

Family planning is recognized globally as a critical component of reproductive health and human rights. It enables individuals and couples to make informed choices about their reproductive lives, including the number and spacing of their children [7]. Effective family planning methods can prevent unintended pregnancies, reduce maternal and child

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mortality, and improve overall family well-being. According to the World Health Organization (WHO), access to family planning can avert nearly one-third of maternal deaths and 44% of neonatal deaths globally [8].

Despite its benefits, about 214 million women of reproductive age in developing regions who want to avoid pregnancy are not using a modern contraceptive method [9]. In Africa, the uptake of family planning methods remains low, contributing to high fertility rates, maternal morbidity, and mortality. The contraceptive prevalence rate (CPR) in sub-Saharan Africa is approximately 24%, significantly lower than the global average of 64% [10]. Limited access to contraceptive supplies, inadequate health infrastructure, cultural and religious opposition, and gender inequality contribute to this disparity.

Nigeria, the most populous country in Africa, faces significant challenges in family planning. The national contraceptive prevalence rate is approximately 17%, with a high unmet need for family planning at around 19% [11]. The country's fertility rate remains high at 5.3 children per woman, contributing to rapid population growth and associated socioeconomic challenges [12].

Several factors influence the low uptake of family planning in Nigeria, including limited access to services, socio-cultural and religious beliefs, misconceptions about contraceptive methods, and gender dynamics [13]. The Nigerian government, in collaboration with international organizations, has made efforts to improve family planning services through policies and programs aimed at increasing awareness and access to contraceptives [14].

Gombe State, located in North East Nigeria, is predominantly rural with significant health disparities. The state has a high maternal mortality rate, estimated at 1,032 deaths per 100,000 live births, and low contraceptive prevalence, with only 10% of women using modern contraceptive methods [15]. The unmet need for family planning in Gombe is estimated at 24%, higher than the national average [16].

## 1.1. Problem Statement

Despite the availability of a variety of contraceptive methods, the uptake of family planning services in Gombe Metropolis remains significantly low [17]. This low utilization of family planning services is a critical public health issue, as it is associated with high rates of unintended pregnancies, maternal morbidity, and mortality [18].

Several factors contribute to the low uptake of family planning services in Gombe Metropolis. These include socio-demographic factors such as age, education, and economic status, as well as cultural and religious beliefs that discourage the use of contraceptives. Additionally, there is limited access to family planning services due to inadequate healthcare infrastructure and a shortage of trained healthcare providers [19]. Misconceptions and lack of awareness about the safety and efficacy of various contraceptive methods further exacerbate the problem [20].

Given these challenges, there is an urgent need to understand the specific factors influencing family planning method choices among women of reproductive age in Gombe Metropolis. This understanding will enable the design of targeted interventions to improve the uptake of family planning services and address the associated health outcomes [21].

## 1.2. Rationale of the Study

The rationale for this study stems from the critical need to address the low utilization of family planning services in Gombe Metropolis. The high rates of unintended pregnancies and associated maternal and child health issues underscore the importance of improving access to and acceptance of family planning methods [22].

By identifying the factors that influence family planning method choice, this study provides valuable insights into the barriers and facilitators of contraceptive use in this region. Such insights are essential for developing culturally appropriate and effective family planning programs [23]. These programs can be tailored to address the unique needs and concerns of women in Gombe Metropolis, thereby enhancing their reproductive health and overall well-being.

Additionally, this study contributes to the broader body of knowledge on family planning in Nigeria and similar contexts. Understanding the local dynamics of family planning uptake will inform national and international efforts to improve reproductive health outcomes, particularly in regions with similar socio-cultural and economic profiles [24].

## 1.3. Objectives of the Study

## 1.3.1. Main Objective

To assess the factors influencing the choice of family planning methods among women of reproductive age (18-45 years) in Gombe Metropolis, North East Nigeria.

## 1.3.2. Specific Objectives

- To determine the socio-demographic factors influencing family planning method choice.
- To examine the role of cultural and religious beliefs in family planning decisions.
- To assess the impact of knowledge and awareness on family planning method selection.
- To evaluate the accessibility and availability of family planning services.

### 2. Material and methods

## 2.1. Study Design

This study employed a cross-sectional descriptive design and assessed the factors influencing family planning method choice among women of reproductive age (18-45 years) in Gombe Metropolis. This design was chosen for its effectiveness in providing a snapshot of the current situation and identifying associations between variables at a single point in time.

## 2.2. Study Area

The study was conducted in Gombe Metropolis, the capital of Gombe State in North-East Nigeria. Gombe Metropolis is a rapidly growing urban area with a diverse population and various healthcare facilities. The metropolis is characterized by a mixture of ethnic groups, with predominant Hausa-Fulani, Tangale, and Tera ethnicities, and it reflects a range of socio-economic and cultural backgrounds.

## 2.3. Study Population

The study population consist of women of reproductive age (18-45 years) residing in Gombe Metropolis. These women were selected from different socio-economic and educational backgrounds to ensure a representative sample.

## 2.4. Sample Size

The sample size was determined using Cochran's formula for sample size calculation for categorical data:

$$N = (Z2 \times p \times (1-p))/e^2$$

Where: n = sample size, Z = Z-value (1.96 for a 95% confidence level),  $p = \text{estimated proportion of the population using family planning (assumed to be 0.5 for maximum variability), <math>e = \text{margin of error (0.05)}$ 

$$n = ((1.96)^2 \times 0.5 \times (1-0.5)) / (0.05)^2 = 246$$

# 2.5. Data Collection Technique

Data was collected using a structured questionnaire administered through face-to-face interviews. The questionnaire covered socio-demographic information, knowledge and awareness of family planning methods, cultural and religious beliefs, accessibility and availability of family planning services, and barriers to contraceptive use.

Data collectors was trained to ensure consistency and accuracy in administering the questionnaire. Pre-testing of the questionnaire was conducted on a small sample to refine the questions and ensure clarity.

## 2.6. Data Analysis

Data was analyzed using Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics (frequencies, percentages, means, and standard deviations) was used to summarize the data. Bivariate analysis (Chi-square tests)

was conducted to identify associations between categorical variables. Multivariate logistic regression was used to determine the predictors of family planning method choice, adjusting for potential confounders.

#### 3. Results and discussion

## 3.1. Socio demographics of the study participants

Table 1 Age distribution of study participants

Category	Frequency	Percentage (%)
18-25 years	62	25.20
26-35 years	97	39.43
36-45 years	87	35.37
Total	246	100.00

The age distribution shows that the majority of participants fall within the 26-35 years age bracket, representing 39.43% of the total sample. This age range is often associated with peak reproductive years, during which family planning becomes a significant concern. These women are likely to be actively considering or using family planning to space or limit pregnancies. The second largest group, accounting for 35.37%, falls in the 36-45 years range, where family planning decisions may lean more towards limiting births as family sizes stabilize. Younger women between 18-25 years constitute 25.20% of the participants. Women in this group may have a different outlook on family planning, potentially focusing on delaying childbearing as they might still be in school, establishing careers, or newly married. This age segmentation is important because each group may have varying needs and preferences when it comes to family planning options.

**Table 2** Level of education of study participants (n=246)

Category	Frequency	Percentage (%)
No formal education	106	43.09
Primary education	19	7.72
Secondary education	82	33.33
Tertiary education	39	15.85
Total	246	100.00

Education is one of the most significant factors influencing family planning choices. The data shows that 43.09% of the participants have no formal education, a figure that suggests potential barriers to accessing comprehensive reproductive health information. Women with lower education levels may have limited knowledge about the variety of family planning methods available or may hold more traditional views that discourage the use of modern contraception. In contrast, participants with secondary education (33.33%) and tertiary education (15.85%) are more likely to be exposed to formal information on family planning through schooling or work environments. This exposure can empower women to make informed decisions about their reproductive health, including family planning. The small percentage (7.72%) of women with only primary education falls between these extremes and may still face challenges in accessing or understanding family planning information. Overall, education plays a crucial role in shaping attitudes toward family planning, with more educated women potentially opting for modern methods and having greater autonomy in their reproductive decisions.

**Table 3** Marital Status of the study participants (n=246)

Category	Frequency	Percentage (%)
Single	54	21.95
Married	119	48.37

Divorced	46	18.70
Widowed	27	10.98
Total	246	100.00

The marital status of participants is another key variable that influences family planning choices. Almost half (48.37%) of the participants are married, a demographic group traditionally more likely to use family planning services compared to single women. Married women are often more focused on spacing or limiting the number of children they have, particularly in settings where larger family sizes are common. The 21.95% of single women, many of whom may be sexually active, may still have family planning needs, particularly for preventing unplanned pregnancies. Divorced women, comprising 18.70% of the sample, may also have distinct family planning concerns, perhaps related to limiting future pregnancies after a marriage has ended. Widowed women (10.98%) might have completed their families or may seek contraception to avoid unintended pregnancies as they navigate life after the death of a spouse. The marital status distribution suggests that different groups of women will have varying motivations for family planning, with married women likely focusing on managing fertility within marriage and others potentially using contraception for different purposes.

**Table 4** Occupation of the study participants

Category	Frequency	Percentage (%)
Unemployed	56	22.76
Self-employed	63	25.61
Employed (private sector)	40	16.26
Employed (public sector)	87	35.37
Total	246	100.00

Employment status is closely linked to access to healthcare and by extension, family planning services. Among the participants, 35.37% are employed in the public sector, suggesting a level of economic security that might facilitate better access to healthcare services, including family planning. Public sector employees may have more comprehensive health benefits and greater exposure to health campaigns. Self-employed women, making up 25.61% of the sample, may have less consistent access to such benefits, but their autonomy might allow them more flexibility in making family planning choices. The 22.76% of unemployed women may face the most challenges in accessing family planning services due to economic constraints. This group might rely more on government programs or non-governmental organizations for access to family planning resources. Women employed in the private sector (16.26%) also face variable access depending on their specific workplace policies. Thus, employment status directly affects how women interact with the healthcare system and their ability to afford and access family planning options.

**Table 5** Monthly Income of the study participants

Category	Frequency	Percentage (%)
Less than \$100	52	19.70
\$100-\$300	87	32.95
\$300-\$500	84	31.82
More than \$500	41	15.53
Total	264	100.00

Income is a critical factor in determining access to family planning methods, especially in a setting where out-of-pocket costs can be prohibitive. The majority of participants, 32.95%, earn between \$100-\$300 per month, followed closely by those earning \$300-\$500 (31.82%). These income brackets suggest that most of the participants have limited disposable income, which could constrain their ability to access certain family planning methods, particularly those that require regular payments such as oral contraceptives or injectables. Women earning less than \$100 per month (19.70%)

may face even greater financial barriers to accessing reliable family planning services, making them more likely to rely on free or subsidized options provided by government or non-governmental organizations. Those earning more than \$500 (15.53%) represent a smaller group with more financial flexibility, likely enabling them to afford a wider range of contraceptive methods, including long-term options such as intrauterine devices (IUDs) or implants. Income disparities within the sample underscore the role of economic factors in shaping family planning choices, with wealthier women likely having more options at their disposal.

Table 6 Number of Children of the study

Category	Frequency	Percentage (%)
None	27	10.23
1 to 2	86	32.58
3 to 4	98	37.12
More than 4	53	20.08
Total	264	100.00

The number of children a woman has is a strong predictor of her family planning needs and preferences. In this study, 37.12% of participants have 3 to 4 children, suggesting that many are in the later stages of family building and may be considering more permanent forms of contraception to limit further pregnancies. Women with 1 to 2 children, making up 32.58% of the sample, may be focused on spacing their births, which is often a major reason for seeking family planning services. Interestingly, 20.08% of participants have more than 4 children, indicating a significant demand for family planning to prevent further pregnancies in this group. On the other hand, 10.23% of the participants have no children, possibly reflecting younger women or those with fertility issues who may not be seeking family planning for birth prevention but rather for reproductive health management or pregnancy timing. The number of children a woman has plays a pivotal role in her family planning decisions, influencing both the type and urgency of the methods she may choose.

# 3.2. Role of cultural and religious beliefs in family planning decisions

**Table 7** Does your religion support the use of family planning methods?

Category	Frequency	Percentage (%)
Yes	153	62.20
No	24	9.76
Not sure	69	28.05
Total	246	100.00

The data shows that 62.20% of participants believe their religion supports the use of family planning methods. This suggests that a majority of women feel that their religious beliefs are not an obstacle to using contraception, which could positively influence their decision to adopt family planning methods. Religious teachings that promote family health and responsible parenthood may encourage these women to use contraception for child spacing or limiting family size. However, 9.76% of the participants believe that their religion does not support family planning, which could be a significant barrier for this group. For these women, religious doctrines may explicitly discourage or even forbid the use of contraceptives, making them less likely to consider family planning options. Additionally, 28.05% of women were unsure of their religion's stance on family planning, reflecting either a lack of clear religious guidance or personal uncertainty about how religious values intersect with reproductive health. This group might be hesitant to adopt family planning methods due to fear of religious disapproval or a lack of information from religious authorities, making them a key target for educational interventions that involve religious leaders.

**Table 8** Does your culture support the use of family planning methods?

Category	Frequency	Percentage (%)
Yes	157	63.82
No	47	19.11
Not sure	42	17.07
Total	246	100.00

Cultural beliefs also play a significant role in family planning decisions. The data indicates that 63.82% of participants believe their culture supports family planning. This majority view suggests that cultural norms in many communities within Gombe Metropolis are evolving to accept modern contraceptive methods as a means of promoting family welfare. In these communities, cultural leaders and elders may actively encourage women to adopt family planning to ensure better health outcomes for mothers and children. However, 19.11% of participants believe their culture does not support family planning. This group likely belongs to more traditional communities where the use of contraceptives is frowned upon, possibly due to cultural values that prioritize high fertility and large families. For these women, cultural pressure may deter them from using family planning, even if they personally wish to limit or space their pregnancies. Another 17.07% of participants were unsure about their culture's stance on family planning, indicating the potential for cultural norms to be in flux, with some individuals unsure whether modern reproductive health practices align with their traditional values.

**Table 9** Do you believe that family planning is against your religious beliefs?

Category	Frequency	Percentage (%)
Yes	83	33.74
No	146	59.35
Not sure	17	6.91
Total	246	100.00

The perception of family planning being against religious beliefs is a critical factor influencing contraceptive use. According to the data, 33.74% of participants believe that family planning is against their religious beliefs. For these women, family planning may be seen as incompatible with divine will or religious teachings that emphasize procreation. This perception can create internal conflicts for women who may desire to use contraception but feel morally obligated to follow religious doctrines. These women may also face external pressure from religious leaders or peers to avoid using contraceptives, making family planning a difficult decision. On the other hand, 59.35% of participants do not see family planning as conflicting with their religious beliefs. This suggests that for the majority, religious frameworks allow or even encourage responsible family planning as part of broader health and welfare considerations. These women are more likely to adopt family planning methods without fear of religious repercussions. A small group of 6.91% were unsure whether family planning contradicted their religious beliefs, indicating a potential gap in understanding religious doctrines or a need for clearer communication from religious authorities.

**Table 10** Do cultural norms in your community promote having large families?

Category	Frequency	Percentage (%)
Yes	131	53.25
No	48	19.51
Not sure	67	27.24
Total	246	100.00

Cultural norms regarding family size can significantly impact a woman's family planning choices. The data shows that 53.25% of participants come from communities where cultural norms promote having large families. In these communities, high fertility is often valued, and having many children may be associated with wealth, status, or fulfilling traditional gender roles. Women in such communities may face cultural pressure to avoid using contraception, as doing so could be seen as undermining cultural expectations for family size. This pressure can be a major obstacle to the uptake of family planning services, even if women personally prefer to have fewer children. However, 19.51% of participants reported that their cultural norms did not promote large families, reflecting a shift in certain parts of the community toward smaller family sizes, possibly due to increasing awareness of the economic and health benefits of having fewer children. A significant portion, 27.24%, were unsure about their community's cultural stance on large families, indicating that there may be mixed messages within their communities or a transition period where both traditional and modern views on family size coexist.

# 3.3. Impact of Knowledge and Awareness on Family Planning Method Selection

**Table 11** Where did you hear about them?

Category	Frequency	Percentage (%)
Healthcare provider	82	33.33
Community health worker	92	37.40
Media (TV radio newspapers)	6	2.44
Friends/relatives	36	14.63
School/educational program	30	12.20
Total	246	100.00

The sources through which women in Gombe Metropolis hear about family planning methods are crucial in shaping their awareness and eventual choices. According to the data, 37.40% of participants heard about family planning methods through community health workers, the largest group in the sample. This indicates that community health workers play a critical role in disseminating information, likely due to their direct involvement with local populations and their ability to provide practical advice on contraceptive use. Healthcare providers were the next most common source of information, accounting for 33.33% of participants. This highlights the importance of formal healthcare settings in family planning education, where women may receive accurate, medically informed guidance on the most suitable methods based on their health status and reproductive goals. Other sources of information were less significant. Friends and relatives accounted for 14.63% of the sample, suggesting that informal networks still play a role, but not to the extent of formal healthcare systems. School and educational programs informed 12.20% of participants, pointing to the potential for education-based interventions, especially for younger women. Media sources (TV, radio, newspapers) only informed 2.44% of women, reflecting either limited outreach or low reliance on media as a source for family planning information. The low influence of media suggests that public health campaigns could benefit from increased media engagement, particularly in reaching those who are not in frequent contact with health workers or healthcare providers. Overall, the data shows that women who access information through healthcare providers and community health workers may have more structured and accurate knowledge of family planning methods, potentially influencing their method selection in a positive way.

**Table 12** Which family planning methods are you aware of?

Category	Frequency	Percentage (%)
Condoms	73	29.67
Oral contraceptive pills	67	27.24
Intrauterine device (IUD)	27	10.98
Implants	31	12.60
Injectables	38	15.45
Natural methods	6	2.44

Sterilization	4	1.63
Total	246	100.00

The data on awareness of specific family planning methods highlights that condoms were the most well-known method, with 29.67% of participants being aware of them. This high level of awareness may be due to the fact that condoms are often widely distributed and discussed as both a contraceptive and a protective method against sexually transmitted infections (STIs). Following condoms, oral contraceptive pills were the next most commonly known method, with 27.24% of participants aware of them. Pills are often one of the most accessible and well-promoted methods, especially for women who prefer hormonal contraception. In contrast, awareness of longer-term or permanent methods like intrauterine devices (IUDs), implants, injectables, and sterilization was considerably lower. Only 10.98% were aware of IUDs, 12.60% of implants, and 15.45% of injectables, which suggests that many women may lack exposure to or education about these methods, despite their effectiveness and long-term benefits. Awareness of sterilization was particularly low, at just 1.63%, which may reflect cultural and religious reservations about permanent contraception, as well as a lack of promotion of these methods. The low awareness of natural methods (2.44%) may indicate that these methods, though often traditional, are not commonly discussed in modern family planning education in the area. This data suggests that women's family planning method selection is likely influenced by their level of awareness. Women with more comprehensive knowledge of a range of contraceptive options, particularly those informed by healthcare providers, are in a better position to make informed choices based on their specific reproductive needs. Those with limited awareness may default to methods they know or that are easier to access, potentially leading to suboptimal outcomes.

Table 13 How would you rate your knowledge of family planning methods?

Category	Frequency	Percentage (%)
Very good	89	36.18
Good	42	17.07
Fair	59	23.98
Poor	56	22.76
Total	246	100.00

The participants' self-assessed knowledge of family planning methods provides insight into their confidence in selecting and using contraception. The data shows that 36.18% of participants rated their knowledge as "very good," which is encouraging as it reflects a relatively high level of confidence in understanding family planning options. These women are likely to make informed decisions and select methods that best suit their reproductive goals and health needs. However, a considerable portion of the participants rated their knowledge as less than optimal. Only 17.07% rated their knowledge as "good," while 23.98% rated it as "fair" and 22.76% rated it as "poor." Women who perceive their knowledge as fair or poor may struggle to make confident choices about family planning and may be more vulnerable to misinformation or reliance on less effective methods. Those with poor knowledge may also be more susceptible to myths or misconceptions about certain contraceptive methods, further limiting their options. The wide variation in self-assessed knowledge levels underscores the need for targeted education and outreach efforts to ensure that women, especially those who feel uncertain about their knowledge, receive accurate and comprehensive information about the full range of family planning methods. Increasing women's knowledge can empower them to select methods that align with their personal and health needs, while also reducing the incidence of unintended pregnancies.

### 3.4. Accessibility and Availability of Family Planning Services

Table 14 How far is the nearest healthcare facility that provides family planning services?

Category	Frequency	Percentage (%)
Less than 1 km	42	17.07
1-5 km	118	47.97
More than 5 km	86	34.96

Total 246 100.00
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The majority of respondents (47.97%) live within 1–5 km of a healthcare facility offering family planning services, while 34.96% live more than 5 km away, and 17.07% are within 1 km. Proximity to healthcare facilities is often crucial in determining access to family planning services. While nearly half of the respondents are within a 1–5 km range, the 35% who live over 5 km away may face additional challenges in accessing these services, such as transportation costs and time constraints. This distance factor could be significant in family planning method choice and accessibility for women in Gombe Metropolis.

**Table 15** Have you ever visited a healthcare facility to obtain family planning services?

Category	Frequency	Percentage (%)
Yes	153	62.20
No	93	37.80
Total	246	100.00

About 62.20% of respondents have visited a healthcare facility for family planning, while 37.80% have not. A majority visitation rate suggests a reasonable level of awareness and potential openness to family planning within the community. However, nearly 38% have not accessed these services, indicating possible barriers such as accessibility, cultural factors, or lack of awareness, which could be addressed in future interventions.

**Table 16** Were you able to obtain the family planning method of your choice?

Category	Frequency	Percentage (%)
Yes	152	61.79
No	94	38.21
Total	246	100.00

Approximately 61.79% of respondents could obtain their preferred family planning method, while 38.21% could not. Access to a preferred method is crucial for satisfaction and continuation with family planning. The fact that over a third of respondents couldn't access their choice points to potential limitations in the availability of options, which could reduce the uptake of family planning. Expanding the variety of available methods may improve satisfaction and usage rates.

**Table 17** Are family planning methods easily available at your local healthcare facility?

Category	Frequency	Percentage (%)
Yes	98	39.84
No	86	34.96
Not sure	62	25.20
Total	246	100.00

Only 39.84% reported that family planning methods are easily available, while 34.96% disagreed, and 25.20% were unsure. The uncertainty and negative responses here highlight a potential gap in the supply chain or in public awareness about availability. Limited availability, or the perception of limited availability, may prevent women from considering family planning. Enhancing stock management and community awareness could improve accessibility perceptions and family planning uptake.

**Table 18** Do you think the cost of family planning methods is affordable?

Category	Frequency	Percentage (%)
Yes	125	50.81
No	121	49.19
Total	246	100.00

Responses are nearly split, with 50.81% considering methods affordable and 49.19% finding them too costly. The near-equal split suggests that while cost is manageable for some, it remains a barrier for others. Financial support programs or subsidized costs could be beneficial to ensure that affordability does not hinder access to family planning services.

Table 19 Are you currently using any family planning method?

Category Frequency Percentage		Percentage (%)
Yes	120	48.78
No	126	51.22
Total	246	100.00

A slight majority (51.22%) are not currently using any family planning method, while 48.78% are. This division indicates moderate usage, though over half of the population remains without family planning. Reasons for non-use should be explored further, as addressing these factors could significantly impact the uptake of family planning in Gombe.

**Table 20** Reasons for not using any family planning method

Category	Frequency	Percentage (%)
Lack of knowledge	11	8.73
Cultural/religious beliefs	29	23.02
Fear of side effects	23	18.25
Spousal disapproval	33	26.19
Accessibility issues	19	15.08
Cost	6	4.76
Other	5	3.97
Total	126	100.00

Key reasons include spousal disapproval (26.19%), cultural/religious beliefs (23.02%), and fear of side effects (18.25%). The prevalence of social and cultural barriers, particularly spousal disapproval, suggests a need for community-level education and inclusive approaches to address concerns. Programs engaging men and community leaders may help reduce cultural resistance and misinformation about side effects.

**Table 21** What do you perceive as the biggest barrier to using family planning methods?

Category	Frequency	Percentage (%)
Cultural/religious opposition	95	38.62
Lack of knowledge	43	17.48
Accessibility	25	10.16

Cost	16	6.50
Spousal/partner support	54	21.95
Other	13	5.28
Total	246	100.00

Cultural/religious opposition (38.62%) and lack of spousal/partner support (21.95%) were major barriers. The high levels of cultural and partner-related barriers emphasize the need for culturally sensitive interventions that include men and community influencers. Educational efforts could help shift perceptions and increase support for family planning within the community.

## 4. Conclusion

This study concludes that family planning choices among women in Gombe Metropolis are strongly influenced by a multifaceted array of demographic, socio-cultural, and economic factors. While many women are aware of some contraceptive options, gaps in comprehensive knowledge persist, particularly regarding long-term methods. The study highlights that cultural norms valuing large families, religious beliefs opposing contraception, and limited financial resources significantly constrain women's ability to make informed family planning decisions. Accessibility remains a substantial hurdle, compounded by inconsistent availability of preferred methods at healthcare facilities. Additionally, the influence of spousal disapproval and societal expectations create barriers that limit individual autonomy in reproductive health choices. Addressing these intersecting factors could improve contraceptive uptake and overall reproductive health outcomes in Gombe Metropolis, contributing to the broader goals of maternal and child health improvement.

# Compliance with ethical standards

# Acknowledgements

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# Statement of informed consent

Informed consent was obtained from all participants before data collection. Participants were assured of the confidentiality and anonymity of their responses. They were also be informed of their right to withdraw from the study at any time without any consequences.

## References

- [1] World Health Organization (WHO). Family planning/Contraception. 2021. Available from: https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception
- [2] Guttmacher Institute. Adding It Up: Investing in Contraception and Maternal and Newborn Health. 2017. Available from: https://www.guttmacher.org/report/adding-it-up-investing-in-contraception-maternal-newborn-health
- [3] United Nations Population Fund (UNFPA). Contraceptive use in Sub-Saharan Africa. 2020. Available from: https://www.unfpa.org/family-planning
- [4] National Population Commission (NPC). Nigeria Demographic and Health Survey 2018. NPC & ICF. 2019. Available from: https://dhsprogram.com/publications/publication-FR359-DHS-Final-Reports.cfm
- [5] Federal Ministry of Health. National Family Planning Blueprint 2020-2024. Abuja, Nigeria: FMOH; 2020.
- [6] Gombe State Ministry of Health. Family Planning Report. 2021.
- [7] United Nations Department of Economic and Social Affairs (UNDESA). World Fertility Report 2021: Family Planning and Sustainable Development Goals. New York: UNDESA; 2021.
- [8] Alkema L, Kantorova V, Menozzi C, Biddlecom A. National, regional, and global levels and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: A systematic and comprehensive analysis. Lancet. 2013;381(9878):1642–52.

- [9] Cleland J, Conde-Agudelo A, Peterson H, Ross J, Tsui A. Contraception and health. Lancet. 2012;380(9837):149–56.
- [10] Bongaarts J, Hardee K. Trends in contraceptive prevalence in sub-Saharan Africa: The roles of family planning programs and education. Afr J Reprod Health. 2017;21(3):9-20.
- [11] Darroch JE, Sedgh G, Ball H. Contraceptive technologies: Responding to women's needs. Guttmacher Institute. 2011.
- [12] Bankole A, Sedgh G, Okonofua F, Imarhiagbe C, Hussain R. Barriers to safe motherhood in Nigeria. New York: Guttmacher Institute; 2009.
- [13] Casterline JB, Sinding SW. Unmet need for family planning in developing countries and implications for population policy. Popul Dev Rev. 2000;26(4):691–723.
- [14] Federal Government of Nigeria. National Policy on Population for Sustainable Development. Abuja: FGN; 2004.
- [15] Singh S, Darroch JE, Ashford LS. Adding It Up: The Costs and Benefits of Investing in Sexual and Reproductive Health 2014. New York: Guttmacher Institute; 2014.
- [16] United Nations. World Family Planning Report 2021. UN Department of Economic and Social Affairs. New York: UN; 2021.
- [17] World Bank. Fertility rate, total (births per woman) Nigeria. 2020. Available from: https://data.worldbank.org/indicator/SP.DYN.TFRT.IN
- [18] Nigeria Federal Ministry of Health. Roadmap for accelerating the reduction of maternal and neonatal mortality and morbidity in Nigeria. Abuja: FMOH; 2019.
- [19] Blanc AK, Tsui AO, Croft TN, Trevitt JL. Patterns and trends in adolescents' contraceptive use and discontinuation in developing countries and comparisons with adult women. Int Perspect Sex Reprod Health. 2009;35(2):63-71.
- [20] Ezeh A, Bongaarts J, Mberu B. Global trends in contraceptive use: The role of socio-economic status. Lancet Glob Health. 2012;380(9837):181-92.
- [21] Sedgh G, Ashford LS, Hussain R. Unmet need for contraception in developing countries: Examining women's reasons for not using a method. Guttmacher Institute. 2016.
- [22] Cleland J, Harbison S, Shah IH. Unmet need for contraception: Issues and challenges. Stud Fam Plann. 2014;45(2):105–22.
- [23] Feyisetan BJ, Ainsworth M. Contraceptive use and the quality, price, and availability of family planning in Nigeria. World Bank Econ Rev. 1996;10(1):159-87.
- [24] Izugbara CO, Ezeh AC. Women and high fertility in Islamic northern Nigeria. Stud Fam Plann. 2010;41(3):193-204.