

**MALE INVOLVEMENT IN FAMILY PLANNING ACTIVITIES IN
OVIA NORTH EAST LOCAL GOVERNMENT AREA, EDO STATE,
NIGERIA**

BY

PERFECTION CHUKWUEBUKA CHIMA MED1807381

STEPHNORA OMONIGHO EDEBHAGBA MED1810357

**DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE
SCHOOL OF MEDICINE
COLLEGE OF MEDICAL SCIENCES
UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA**

SUPERVISOR

PROF V.Y. ADAM

MAY, 2026.

**MALE INVOLVEMENT IN FAMILY PLANNING ACTIVITIES IN
OVIA NORTH EAST LOCAL GOVERNMENT AREA, EDO STATE,
NIGERIA**

BY

**PERFECTION CHUKWUEBUKA CHIMA MED1807381
STEPHNORA OMONIGHO EDEBHAGBA MED1810357**

**DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE
COLLEGE OF MEDICAL SCIENCES
UNIVERSITY OF BENIN**

**BEING A ONE YEAR PROJECT PRESENTED TO THE
DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE,
SCHOOL OF MEDICINE, COLLEGE OF MEDICAL SCIENCES,
UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
AWARD OF BACHELOR OF MEDICINE AND BACHELOR OF
SURGERY (MBBS) DEGREE**

MAY, 2026

DECLARATION

We hereby declare that this project work titled “**MALE INVOLVEMENT IN FAMILY PLANNING ACTIVITIES IN OVIA NORTH EAST LOCAL GOVERNMENT AREA, EDO STATE, NIGERIA**”, was conducted under supervision and has neither been presented nor published anywhere else in part or in full for any other purpose.

PERFECTION CHUKWUEBUKA CHIMA

MED1807381

07039609388

perfectionchima@gmail.com

Date: _____

STEPHNORA OMONIGHO EDEBHAGBA

MED1810357

09073029016

stephnoraomo@gmail.com

Date: _____

CERTIFICATION

This is to certify that this research study titled “**MALE INVOLVEMENT IN FAMILY PLANNING ACTIVITIES IN OVIA NORTH EAST LOCAL GOVERNMENT AREA, EDO STATE, NIGERIA**” was conducted by **CHIMA PERFECTION CHUKWUEBUKA** with matriculation number **MED1807381** and **EDEBHAGBA STEPHNORA OMONIGHO** with matriculation number **MED1810357** under the supervision of **PROF. V.Y. ADAM** in the Department of Public Health and Community Medicine, College of Medical Sciences, University of Benin as part of the requirements for the award of Bachelor of Medicine, Bachelor of Surgery (MBBS) degree.

PROF. V. Y ADAM
PROJECT SUPERVISOR
MBBS, MPH, FWACP, FMCPH

Professor
Department of Public Health
and Community Medicine,
School of Medicine,
College of Medical Sciences,
University Of Benin,
Benin City, Edo State, Nigeria.

DR. O.E OBARISIAGBON
HEAD OF DEPARTMENT
MBBS, MPH, FMCPH

Associate Professor
Department of Public Health
and Community Medicine,
School of Medicine,
College of Medical Sciences,
University of Benin,
Benin City, Edo State, Nigeria.

DEDICATION

This work is humbly dedicated to God Almighty, the source of wisdom, strength, and inspiration, whose grace made the successful completion of this project possible.

We also dedicate this work to our parents, whose unwavering support, sacrifices, encouragement and prayers have been the foundation of our achievements. Their guidance and belief in us continue to inspire us to strive for excellence.

ACKNOWLEDGEMENT

First and foremost, we give thanks to God Almighty for his boundless grace, unfailing mercy, and undeserved love. We are deeply grateful for the gift of life, good health, and the strength He has provided throughout the course of this study and our entire academic journey.

We sincerely appreciate our supervisor, Prof. V. Y. Adam, for his patience, insightful guidance, and unwavering support throughout the course of this study. Your thoughtful corrections and professional input greatly improved the quality of this work and contributed immensely to its success.

Our heartfelt gratitude goes to the Head of Department of Public Health and Community Medicine, Dr O.E Obarisiagbon and all lecturers in the department for providing a conducive academic environment, as well as the knowledge and resources that made this research possible.

I would like to express my deepest and most heartfelt gratitude to my beloved and ever-supportive parents, Prof. P.R.O.C Adobamen and Mrs Theresa Chima whose incessant love, sacrifices, and constant support have been instrumental in my academic success and in the successful completion of this project work. Your prayers, wise counsel and enduring commitment to my education have shaped the person I am today. I am eternally grateful for your immeasurable love and for always standing by me, even when the path seemed difficult.

I also extend my sincere appreciation to my wonderful siblings (Barr Branham-Paul, Coleman, Mount-Zion, Christly and Eternity) for their love, encouragement and motivation, which have contributed greatly to the successful completion of this project and my overall success in medical school.

To my amazing colleagues, though too numerous to mention individually, I appreciate each and every one of you. The shared experiences, challenges, and memorable moments we have built together will always remain dear to me.

To all who contributed, whether in ways both seen and unseen, your kindness has not gone unnoticed. May God reward you abundantly.

-PERFECTION CHUKWUEBUKA CHIMA

I owe a special and profound debt of gratitude to my mother, Madam Kate O. Ebhomielen. Your love, sacrifices, and unwavering commitment to my success have been extraordinary. You have been my greatest pillar of support emotionally, financially, and spiritually. Your constant prayers, encouragement, and belief in me have carried me through the most challenging moments. I am deeply thankful, and I dedicate this achievement to you.

I am equally grateful to my father, Mr. Solomon Edebhagba, for his support, guidance, and encouragement over the years. Your contributions to my upbringing and education are sincerely appreciated

I also extend my appreciation to my friends and colleagues for their encouragement, understanding, and support throughout this process. Your presence made the journey less stressful and more meaningful.

Lastly, I acknowledge all the individuals who participated in this research. Your time, cooperation, and willingness to contribute provided the foundation upon which this study was built.

-STEPHNORA OMONIGHO EDEBHAGBA

TABLE OF CONTENTS

DECLARATION	iii
CERTIFICATION	iv
DEDICATION	v
ACKNOWLEDGEMENT	vi
TABLE OF CONTENTS	viii
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi
OPERATIONAL DEFINITION OF TERMS	xii
ABSTRACT	xiv
CHAPTER ONE	1
1.1 BACKGROUND	1
1.2 STATEMENT OF PROBLEM	3
1.3 JUSTIFICATION OF STUDY	5
1.4 RESEARCH QUESTIONS	7
1.5 AIM AND OBJECTIVES	8
1.5.1 GENERAL OBJECTIVE	8
1.5.2 SPECIFIC OBJECTIVES	8
CHAPTER TWO	9
2.0 INTRODUCTION	9
2.1 CONCEPTUAL REVIEW OF MALE INVOLVEMENT IN FAMILY PLANNING	9
2.2 THEORETICAL FRAMEWORK	10
2.3 CONCEPTUAL FRAMEWORK	10
2.4 EMPIRICAL REVIEW	12
2.4.1 ASSESSMENT OF THE KNOWLEDGE OF MEN ABOUT FAMILY PLANNING SERVICES	12
2.4.2 ATTITUDE OF MEN TOWARDS FAMILY PLANNING SERVICES	15
2.4.3 UPTAKE AND PRACTICES OF MEN WITH RESPECT TO FAMILY PLANNING ACTIVITIES	17
2.4.4 FACTORS ASSOCIATED WITH THE UPTAKE OF FAMILY PLANNING BY MEN	21
2.4.5 LEVEL OF MALE INVOLVEMENT IN FAMILY PLANNING ACTIVITIES	24
CHAPTER THREE	27
3.1 STUDY AREA	27

3.2 STUDY DESIGN	28
3.3 STUDY DURATION	28
3.4 STUDY POPULATION	28
3.5 SELECTION CRITERIA	28
3.5.1 INCLUSION CRITERIA	28
3.5.2 EXCLUSION CRITERIA	29
3.6 SCOPE OF STUDY	29
3.7 SAMPLE SIZE DETERMINATION	29
3.8 SAMPLING TECHNIQUE	31
3.9 DATA MANAGEMENT	32
3.9.1 TOOLS FOR DATA COLLECTION	32
3.9.2 METHOD OF DATA COLLECTION	33
3.9.3 PRETESTING	34
3.9.4 DATA ANALYSIS	34
3.9.5 DATA PRESENTATION	39
3.10 ETHICAL CONSIDERATION	39
3.11 LIMITATIONS OF THE STUDY	39
CHAPTER FOUR	40
CHAPTER FIVE	80
DISCUSSION	80
CONCLUSION	99
RECOMMENDATIONS	100
CONTRIBUTION TO KNOWLEDGE	103
POLICY IMPLICATION	104
REFERENCES	106
APPENDIX I	113
APPENDIX II	116
APPENDIX III	123
APPENDIX IV	124

LIST OF TABLES

Table 1: Socio-demographic characteristics of respondents	42
Table 2: Socio-economic characteristics of respondents	44
Table 3a: Knowledge of family planning among respondents	46
Table 4: Socio-demographic variables and knowledge of family planning (n = 363)	49
Table 5: Predictors of good knowledge of family planning among respondents	51
Table 6: Attitude of respondents towards family planning (n = 408)	53
Table 7: Level of attitude towards family planning among respondents	54
Table 8a: Socio-demographic variables and attitude towards family planning	55
Table 9: Predictors of positive attitude towards family planning among respondents	57
Table 10: Family planning practices among respondents	60
Table 11: Family planning methods utilisation and responses among respondents	61
Table 12a: Socio-demographic variables and current use of family planning among respondents	62
Table 13: Predictors of current use of family planning among respondents (n = 408)	64
Table 14: Factors associated with family planning uptake among respondents	67
Table 15: Factors associated with family planning uptake and current use among respondents	69
Table 16: Male involvement indicators among respondents	72
Table 17: Level of male involvement in family planning among respondents	73
Table 18a: Socio-demographic variables and level of male involvement in family planning	74
Table 19: Relationship between knowledge, attitude and level of male involvement in family planning	77
Table 20a: Predictors of high male involvement in family planning among respondents	78

LIST OF ABBREVIATIONS

CPR:	Contraceptive Prevalence Rate
DHS:	Demographic and Health Survey
EDHS:	Ethiopian Demographic and Health Survey
FGD:	Focus Group Discussion
FP:	Family Planning
HIV:	Human Immunodeficiency Virus
ICF:	International Classification of Functioning, Disability, and Health
ICPD:	International Conference on Population and Development
LGA:	Local Government Area
MDG:	Millennium Development Goals
MOH:	Ministry of Health
NDHS:	Nigeria Demographic and Health Survey
SDGs:	Sustainable Development Goals
SPSS:	Statistical Package for the Social Sciences
UN:	United Nations
UNFPA:	United Nations Population Fund
WHO:	World Health Organization

OPERATIONAL DEFINITION OF TERMS

COHABITATION: the act of two individuals living together in an intimate relationship without being legally married.

CONTRACEPTION: any method, device or medication used to prevent pregnancy, enabling individuals to make informed choices about their sexual and reproductive health.

CONTRACEPTIVE PREVALENCE RATE: the percentage of women of reproductive age (15-49 years) who are currently using, or whose partner is using, any method of contraception (modern or traditional) at a given point in time.

FAMILY PLANNING: the ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing of their births, achieved through contraceptive methods and the treatment of involuntary infertility.

INVOLVEMENT: act or process of taking part in an activity or event, or having a role in something.

MALE INVOLVEMENT: the engagement of men through their presence, support, decision-making, and contribution to outcomes in social, economic, health, or community-related contexts.

PREGNANCY: physiological condition in which a female carries a developing embryo or foetus within the uterus, beginning from implantation of a fertilized ovum and lasting until childbirth.

REPRODUCTIVE HEALTH: a state of complete physical, mental and social well-being, encompassing all matters relating to the reproductive system and its functions and processes,

including the ability to have a safe and satisfying sex life, the capability to reproduce and the freedom to decide if, when, and how often to do so.

VASECTOMY: a permanent male contraceptive surgical procedure in which the vas deferens (sperm ducts) are cut, tied, or sealed to prevent sperm from entering the semen during ejaculation.

ABSTRACT

Background: Family planning is a critical component of reproductive health, yet male involvement in family planning activities remains limited in many low- and middle-income settings. In Nigeria, the contraceptive prevalence rate among married women is only 20%, and men continue to be underrepresented in reproductive health programmes despite their significant influence as household decision-makers. Ovia North East Local Government Area of Edo State reflects these broader national challenges, with inadequate knowledge, socio-cultural barriers, and low male participation identified as key drivers of poor family planning outcomes. Few studies have specifically assessed male involvement using a composite multi-indicator approach in this setting.

Objectives: To assess male involvement in family planning activities in Ovia North East LGA, Edo State.

Methodology: A descriptive cross-sectional study design was used. Four hundred and eight (408) adult men in stable sexual relationships or marriages were selected from communities across Ovia North East LGA using a multi-stage sampling technique. Data were collected using a structured, self-administered questionnaire and analysed with IBM SPSS version 27. Descriptive statistics, chi-square tests, and binary logistic regression were performed. A composite ten-indicator score was used to classify male involvement as high (score ≥ 7 out of 10) or low. The level of significance was set at $p < 0.05$.

Results: A total of 408 men participated with a response rate of 100%. The mean age (SD) was 42.7 ± 11.4 years. Most respondents were married 308 (75.5%), predominantly Christian 384 (94.1%), with tertiary education accounting for 203 (49.7%) and the majority belonging to the middle socioeconomic class 312 (76.5%). Of the 408 respondents, 363 (89.0%) had heard of family planning; health workers 195 (53.7%), radio or television 193 (53.2%), and friends or relatives 191 (52.6%) were the most common sources. Overall, 262 (72.2%) of those who had heard of family planning had good knowledge, while 101 (27.8%) had poor knowledge. Being married was the only independent predictor of poor knowledge (OR = 0.466, 95% CI: 0.232–0.934, $p = 0.031$). Nearly all respondents 391 (95.8%) had a positive attitude towards family planning. Christianity was the strongest independent predictor of positive attitude (OR = 9.086, 95% CI: 2.066–39.953, $p = 0.003$), followed by nuclear family type (OR = 6.530, 95% CI: 1.400–30.467, $p = 0.017$). Slightly more than half 226 (55.4%)

had discussed family planning with their partner, and most 325 (79.7%) approved of their partner using a method, but only 112 (27.5%) had accompanied their partner to a health facility. Less than half 176 (43.1%) were currently using any family planning method, with condoms 111 (63.1%) and withdrawal 83 (47.2%) being the most common methods; vasectomy remained virtually unused 1 (0.6%). Nuclear family type was the only independent predictor of current family planning use (OR = 1.878, 95% CI: 1.007–3.500, $p = 0.047$). Knowledge of service location ($\chi^2 = 30.702$, $p < 0.001$) and perceived affordability ($\chi^2 = 28.824$, $p < 0.001$) were the most strongly associated factors with current use, while cultural or religious beliefs were a significant barrier ($\chi^2 = 6.111$, $p = 0.013$). Regarding male involvement, 160 (39.2%) were classified as having high involvement and 248 (60.8%) low involvement. The most commonly met indicator was considering family planning a joint responsibility 376 (92.2%), while community participation in health talks was the least met 107 (26.2%). Education ($\chi^2 = 42.035$, $p < 0.001$), occupation ($\chi^2 = 32.673$, $p < 0.001$), socioeconomic status ($\chi^2 = 38.636$, $p < 0.001$), marriage type ($p = 0.014$), and family type ($p = 0.020$) were significantly associated with male involvement. Health worker discussion of family planning was the strongest independent predictor of high involvement (OR = 5.768, 95% CI: 3.366–9.885, $p < 0.001$), followed by good knowledge (OR = 2.028, 95% CI: 1.137–3.619, $p = 0.017$) and upper class socioeconomic status (OR = 27.794, 95% CI: 2.358–327.618, $p = 0.008$).

Conclusion: Nearly three-quarters of men in Ovia North East LGA had good knowledge of family planning and almost all demonstrated a positive attitude. However, slightly less than two-fifths had high overall involvement, and less than half were currently using any family planning method. Health worker engagement emerged as the most powerful modifiable predictor of high involvement. Health authorities should institutionalise routine male family planning counselling at all primary health centres, expand male-targeted community outreach, and engage religious and traditional leaders to create an enabling environment for active male participation in family planning.

Keywords: Family Planning, Male Involvement, Contraception, Ovia North East LGA, Edo State, Nigeria.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

The pursuit of sustainable development and human well-being depends on addressing critical health challenges, a key component of which is family planning that plays a vital role in achieving the United Nations Sustainable Development Goals (Goal 3 Target 3.1, Goal 5 Target 5.6) particularly in reducing maternal deaths, ensuring access to reproductive healthcare, and upholding reproductive rights, thereby contributing to improved global health and human rights outcomes.¹

Family planning involves making deliberate decisions about the number of children to have and the timing of having them. It helps control population growth and reduces unplanned pregnancies, leading to improved health outcomes, including lower rates of illness and death among mothers, increased educational and employment opportunities for women, decreased use of unsafe abortion methods, reduced risk of HIV transmission to unborn children, and lowered neonatal, infant, and child mortality.^{2,3}

Family planning can be achieved with the use of contraceptives and these methods of contraception include oral contraceptive pills, implants, injectables, patches, vaginal rings, intra uterine devices, condoms, male and female sterilization, lactational amenorrhea methods, withdrawal and fertility awareness-based methods. These methods have different mechanisms of action and effectiveness in preventing unintended pregnancy.⁴

Despite its benefits, it was reported in 2018 by the United Nations Population Fund (UNFPA) that globally, around 225 million women who want to prevent pregnancy lack access to reliable family planning methods due to barriers such as limited healthcare access and lack of partner support.⁵ In low- and middle-income countries, about 214 million women of reproductive age who wish to avoid pregnancy are not using modern contraception and Sub-Saharan Africa has the highest proportion of women with unmet needs for modern contraception at 21%.⁶ In Nigeria, maternal health outcomes remain a major concern. The 2018 Nigeria Demographic and Health Survey (NDHS) reported a Maternal Mortality Ratio (MMR) of 512 deaths per 100,000 live births significantly higher than in developed nations and the 2023-2024 Nigeria Demographic and Health Survey (NDHS) reported that the

contraceptive prevalence rate (CPR) among married women was only 20%, reflecting low family planning uptake. This low uptake of family planning services contribute to poor maternal health outcomes and addressing this issue requires a comprehensive approach.^{7,8}

Globally, there's increasing acknowledgment that involving men in family planning can lead to more positive reproductive health choices. Traditionally, family planning programs have focused on women, assuming they have the greatest stake in their reproductive health. However, research is increasingly challenging this approach, highlighting the significant influence of male partners on women's reproductive health and advocating for greater involvement of men in family planning to promote gender equity and improve health outcomes.⁹

Male involvement in family planning means engaging men in efforts to increase the use and acceptance of family planning methods among both men and women. This includes using male contraceptive methods, supporting and encouraging their partners to use contraception, actively participating in decision-making, and approving the use of family planning.¹⁰

In sub-Saharan Africa, men significantly influence decision-making, particularly in patriarchal societies where they often control women's health-related choices. As primary decision-makers, men's support is crucial for the success of family planning programs, and their involvement is recommended by global health authorities like the WHO to improve reproductive health outcomes for women.^{6,11} Furthermore, studies in low-income countries confirm that men's approval often determines whether women use contraceptives. Additionally, cultural factors play a role, as men in many African societies prefer large families, and family planning is sometimes viewed as a Western ideology.¹²⁻¹⁴ Conversely, research from high- and middle-income countries has demonstrated that male involvement is significantly linked to increased adoption and use of contraceptives.^{15,16} Factors associated with male involvement include access to media (TV, radio), the employment status of the spouse, and household income.^{17,18}

In many developing countries, research has primarily focused on women's utilization of family planning methods, leaving the role of men under-researched and underutilized. For example, programs in Kenya aimed at promoting male involvement in reproductive health have been limited in scope.^{15,19,20} Therefore, there is a need to strengthen efforts to involve men in family planning activities, especially in low-resource settings like Nigeria, to enhance uptake, reduce unintended pregnancies, and improve maternal and child health outcomes.

Hence, this study aims to explore the level of male involvement in family planning activities and the knowledge and attitude of men towards family planning activities in Ovia North East Local Government Area in Edo State.

1.2 STATEMENT OF PROBLEM

Family planning is a crucial aspect of reproductive health, contributing to maternal and child well-being, economic stability, and sustainable population growth. However, male involvement in family planning remains limited despite its recognized benefits. In many societies, including Nigeria, family planning is often perceived as a woman's responsibility, leading to minimal male participation in discussions, decision-making, and utilization of contraceptive methods.

The lack of male involvement in FP is influenced by various factors, including inadequate knowledge about contraception, misconceptions regarding its side effects, cultural and religious beliefs, and an unfriendly healthcare environment. Studies have shown that when men are involved in FP, there is an increase in contraceptive use, better birth spacing, and improved maternal and child health outcomes. However, many men remain uninformed about their role in FP, and some hold negative attitudes towards contraceptive use due to myths, societal norms, and limited access to male-friendly FP services.²¹

Historically, family planning programmes have primarily targeted women, often overlooking the attitudes, perceptions, and roles of men in contraceptive decision-making. This has resulted in an imbalance where men may either be passive participants or, in some cases, barriers to effective contraceptive use. The attitudes of men toward family planning services are shaped by various socio-cultural, economic, and educational factors, which influence their willingness to adopt male-dependent contraceptive methods such as condoms and vasectomy, or to support their partners in using female contraceptive methods.

In 2019, male contraceptive prevalence is alarmingly low at just 6.8% in Nigeria, compared to higher rates in other regions, such as 35.1% in Congo and 41.5% in Armenia.²² This indicates a critical gap in male-focused family planning awareness and services. Some men hold misconceptions about contraceptives, such as their association with promiscuity or negative health effects, which further limits their willingness to support their partners in using FP methods. However, their reluctance to engage in family planning conversations and visit FP clinics leads to an increased unmet need for contraception among women.²¹ Research

indicates that misconceptions about FP methods, fear of side effects, and societal norms that view contraception as a woman's responsibility significantly deter men from actively engaging in FP activities. Additionally, the lack of tailored FP services for men and an unwelcoming healthcare environment further contribute to low male uptake of contraception.²¹

However, men significantly influence reproductive health outcomes as they are often the primary decision-makers in many households. Their lack of participation can contribute to misconceptions about contraceptive methods, increased rates of unintended pregnancies, and higher maternal and child mortality.²³

In Ethiopia, while the contraceptive prevalence rate (CPR) has improved over the years, a significant unmet need for family planning remains. According to the Ethiopian Demographic and Health Survey, modern contraceptive use among married women increased from 6% in 2000 to 41% in 2019, yet male involvement continues to lag behind.²⁴

Traditional norms and socio-cultural beliefs often relegate contraceptive use to women, with men either being passive participants or outright opponents.²⁵ Studies suggest that men often lack access to FP information tailored specifically for them, and misconceptions about male contraceptive methods persist. The traditional focus of FP programs on women has resulted in a limited understanding among men, further reinforcing gender-based decision-making dynamics that undermine women's reproductive autonomy.²⁶

A study done in Akure South Local Government, Nigeria, found that although 90.5% of men were aware of contraceptives, only 28.7% actively supported their partners in family planning. A significant portion of respondents held the belief that contraception is exclusively a woman's responsibility.²⁷ Over the years, Family planning has been a major concern in controlling birth rates, particularly in developing countries where high fertility rates contribute to economic and health challenges. Family planning has been identified as a significant factor in reducing poverty, hunger, and maternal and childhood mortality. Effective family planning programs can avert 32% of maternal deaths and nearly 10% of childhood deaths globally. Despite these benefits, the rate of contraceptive use remains low, particularly in rural areas of Nigeria, where cultural and socio-religious beliefs play a major role in influencing family planning decisions.^{28,29}

Insufficient knowledge among men about family planning methods, benefits, and available services can contribute to unintended pregnancies, high fertility rates, and poor maternal and child health outcomes. Additionally, deeply rooted gender norms and cultural beliefs may hinder open discussions and decision-making on contraceptive use within relationships.³⁰ In addition, limited awareness, entrenched gender norms, and inadequate policies contribute to low male participation in contraception use, counseling, and advocacy. Many men remain uninformed about family planning options or perceive them as solely a woman's responsibility, leading to reduced contraceptive uptake and reinforcing gender imbalances in reproductive health decisions. Additionally, existing family planning services often fail to provide male-friendly environments, further discouraging their involvement.³⁰

In the context of family planning, peer influence can significantly shape men's perceptions and decisions regarding contraceptive use. Studies have shown that men often look to their peers for validation and support in their choices, including family planning.³⁰ When peers endorse or normalize family planning practices, it can lead to more positive attitudes and increased utilization of contraceptive methods among men. Conversely, negative peer perceptions can create barriers to engagement with family planning services.³¹ Some men believe that family planning methods may lead to long-term health issues or reduced sexual satisfaction for their partners, which contributes to their reluctance.³²

1.3 JUSTIFICATION OF STUDY

Traditionally, family planning initiatives have focused primarily on women, while neglecting to engage men actively and overlooking their roles in reproductive health decision-making.⁹ This narrow view excludes men from active participation, leaving a significant gap in understanding the role men can play in ensuring effective family planning. Therefore, this study is essential in addressing the underrepresentation of men in family planning efforts, particularly in communities where cultural and societal barriers inhibit male participation

Male participation in family planning has been shown to lead not only to contraceptive uptake but also its effective use and continuation of use and also in promoting gender equity in family planning decisions.^{15,16} This study aims to shed light on the potential benefits of shared responsibility in reproductive decision-making, which could enhance the quality of family planning services and outcomes. In many communities, cultural norms, misinformation and lack of education hinder male involvement in family planning.¹²⁻¹⁴

This research will help identify barriers preventing men from participating in family planning activities. Male involvement in family planning activities can accelerate progress towards achieving the Sustainable Development Goals (SDGs) for reduction of maternal mortality and HIV.^{2,3} Making this research valuable in supporting global efforts.

1.4 RESEARCH QUESTIONS

1. What is the level of knowledge among men about family planning services in Ovia North East LGA?
2. What are the attitudes of men towards family planning services in Ovia North East LGA?
3. What are the levels of uptake and common practices of men regarding family planning activities in Ovia North East LGA?
4. What factors are associated with the uptake of family planning by men in Ovia North East LGA?
5. What is the level of male involvement in family planning and women's reproductive health in Ovia North East LGA?

1.5 AIM AND OBJECTIVES

1.5.1 GENERAL OBJECTIVE

To assess male involvement in family planning activities in Ovia North East LGA, Edo State.

1.5.2 SPECIFIC OBJECTIVES

1. To assess the knowledge of men about family planning services in Ovia North East LGA.
2. To ascertain the attitude of men towards family planning services available in Ovia North East LGA.
3. To determine the uptake and practices of men with respect to family planning activities in Ovia North East LGA.
4. To identify factors associated with the uptake of family planning by men in Ovia North East LGA.
5. To determine the level of male involvement in family planning and women reproductive health in Ovia North East LGA.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter reviews relevant literature on male involvement in family planning specifically within the context of Ovia North East Local Government Area of Edo State. It examines men's knowledge, attitudes, and practices regarding family planning services, as well as the extent of their participation in family planning. The chapter also discusses factors influencing male involvement in family planning and relevant theoretical and conceptual frameworks guiding health-seeking behaviour are reviewed.

2.1 CONCEPTUAL REVIEW OF MALE INVOLVEMENT IN FAMILY PLANNING

Maternal mortality in Nigeria remains alarmingly high, even though there have been notable improvements in recent years. One of the key strategies for tackling this crisis is the promotion of effective family planning. Family planning plays a vital role in improving reproductive, maternal, and child health. It helps prevent maternal deaths, lowers the risk of preterm births and low birth weight babies, and reduces neonatal and infant mortality, all of which can be achieved through the use of contraceptives.³³ Studies have shown that involving men in family planning leads to increased adoption and use of contraceptives overall leading to more positive reproductive health outcomes.^{9,15,16}

However, male involvement in family planning remains limited despite its recognized benefits. In many societies, including Nigeria, family planning is often perceived as a woman's responsibility, leading to minimal male participation in discussions, decision-making, and utilization of contraceptive methods. This limitation is influenced by various factors, including inadequate knowledge about contraception, misconceptions regarding its side effects, cultural and religious beliefs, and an unfriendly healthcare environment.²¹

2.2 THEORETICAL FRAMEWORK

This study is anchored on the Health Belief Model (HBM), which explains health-related behaviours based on individuals' perceptions, beliefs, and modifying factors.³⁴ The model posits that utilization of health services is influenced by perceived susceptibility to illness, perceived severity, perceived benefits of action, perceived barriers, cues to action, and self-efficacy.

The key components of the HBM include:

- Perceived Susceptibility: Men's perception of the risk of unintended pregnancies and reproductive health problems.
- Perceived Severity: Beliefs about the seriousness of the consequences of poor family planning, such as maternal mortality, economic strain, and poor child health outcomes.
- Perceived Benefits: Beliefs about the advantages of family planning, including improved family wellbeing, economic stability, and maternal health.
- Perceived Barriers: Factors that hinder male involvement, such as fear of side effects, cultural resistance, religious beliefs, and misinformation.
- Cues to Action: Triggers that motivate men to engage in family planning, such as health education, media campaigns, and advice from health workers.
- Self-Efficacy: Confidence in men's ability to participate in family planning decision-making and practices.

The Health Belief Model is relevant to this study as it explains how men's perceptions and beliefs influence their knowledge, attitudes, and practices regarding family planning.

2.3 CONCEPTUAL FRAMEWORK

The conceptual framework for this study illustrates the relationship between independent variables, the dependent variable, and intervening factors.

- Independent Variable: Knowledge of family planning, attitude towards family planning, socio demographic factors, socio cultural factors, availability and accessibility of family planning services
- Intervening variables: Spousal communication, exposure to family planning information, access to health facilities, peer influence
- Dependent variable: Male involvement in family planning activities

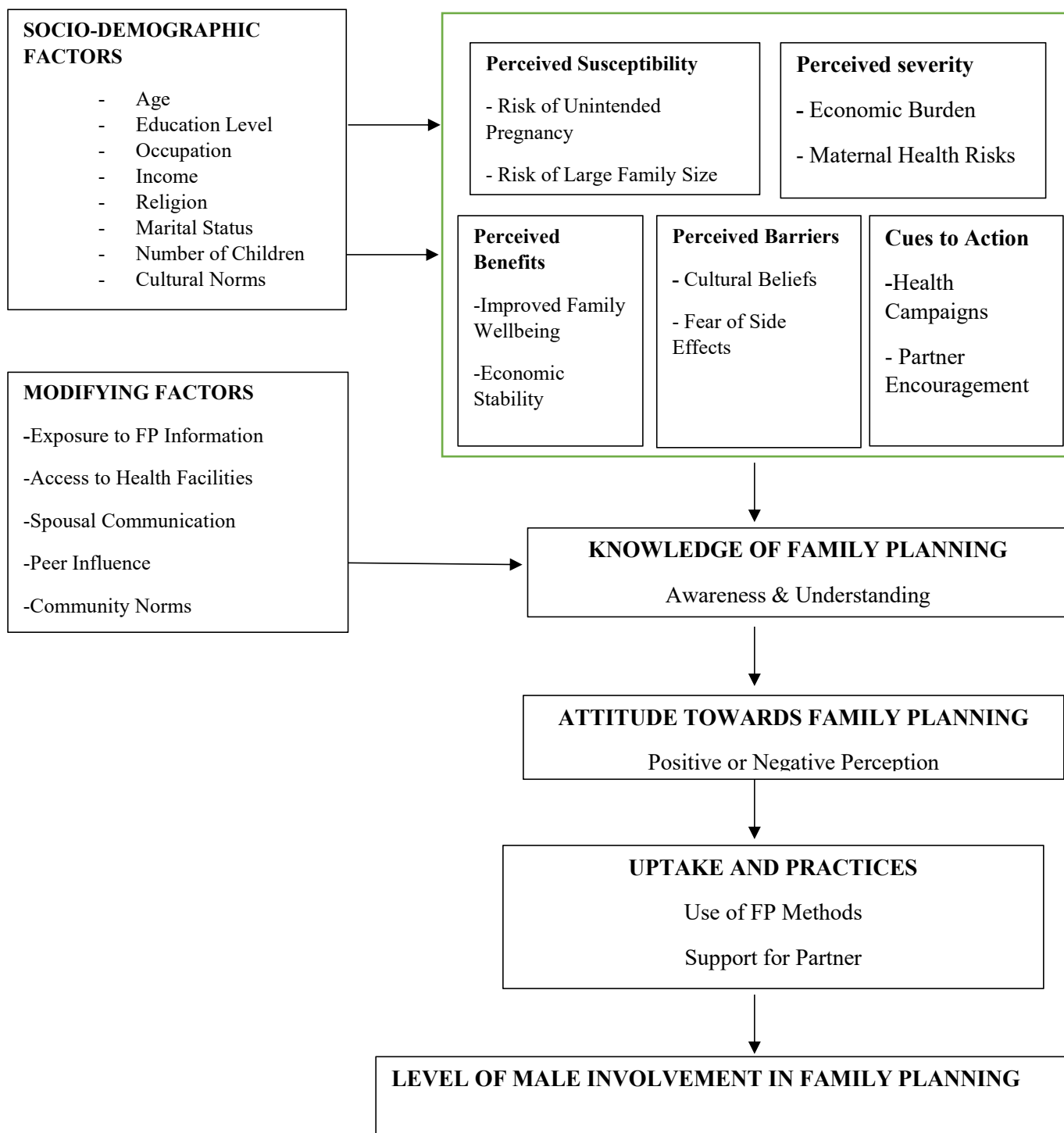


Fig 1: Conceptual Framework showing male involvement in family planning³⁴

2.4 EMPIRICAL REVIEW

2.4.1 ASSESSMENT OF THE KNOWLEDGE OF MEN ABOUT FAMILY PLANNING SERVICES

In 2022, a descriptive cross-sectional study was carried out in India with data collection among 200 men who had been married for at least 5 years. The study aimed to understand the awareness of males about family planning methods, including their knowledge, attitude, and practices. The study revealed that 170 men (85%) were aware of the withdrawal method, making it the most well-known traditional method, Male sterilization was the most common permanent method known among 144 men (72%), and oral contraceptive pills were the most common temporary method known among 160 men (80%), 148 men (74%) cited mass media as their primary source of information, while 112 participants (56%) reported receiving information from health workers. The strength of this study was that it comprehensively examined knowledge, attitude, and practices as well as influencing factors, providing valuable data for public health interventions. Limitations include its relatively small sample size, possible response bias as the study relied on self-reported knowledge assessment.³⁵

An analytical cross-sectional study was conducted in Nepal in 2025, utilizing data from the Nepal Demographic and Health Survey 2022. The study included a total weighted sample of 2,649 married men aged 15-49 years. The study aimed to examine the association of men's contraceptive knowledge, attitudes, and behaviours (KAB) with the use of modern contraceptives. Findings revealed that men with good knowledge of family planning were 1.94 times more likely to use modern contraceptives and all 2,649 men (100%) knew at least one type of modern contraceptive. This study utilized data from a nationally representative survey (Nepal Demographic and Health Survey 2022), which enhances the generalizability of the findings and the study comprehensively examined the association of men's knowledge, attitudes, and behaviours, along with socio-demographic factors, with modern contraceptive use. Limitations included that the data relied on self-reported information, which may be subject to recall bias or social desirability bias.³⁶

A descriptive cross-sectional study carried out over an 18-month period (August 2018 to March 2020) explored the awareness of both male and female contraceptive methods among

young men in sub-Saharan Africa, specifically in Abidjan (Côte d'Ivoire), Nairobi (Kenya), and Lagos (Nigeria) among 2,425 unmarried young men between the ages 15 to 24 years. The findings revealed that although a high proportion of respondents 2061 men (85%) were aware of male condoms, awareness of other modern contraceptive methods was significantly lower. Specifically, only 1,140 men (47%) knew about short-acting reversible contraceptives (such as pills and injectables), 849 men (35%) had heard of emergency contraception, 776 men (32%) were aware of long-acting reversible contraceptives (including implants and intrauterine devices), and just 437 men (18%) knew about withdrawal as a method. Importantly, sexually active males were significantly more likely to be aware of most contraceptive methods than those who were not sexually active. This suggests that sexual behaviour may influence exposure to or interest in family planning information. The study also explored the sources from which young men obtained their information on contraception, 1,091 respondents (45%) reported obtaining information from friends, while 897 participants (37%) cited teachers as their primary source, mothers were mentioned by 534 respondents (22%), and 509 participants (21%) identified doctors or nurses as their main source of information. Notably, sexually active males were more likely to receive information from informal and media-based sources such as social media and the internet. In terms of knowledge about where to obtain contraceptives, awareness was generally low. Only 1091 respondents (45%) knew that contraceptives could be accessed from public healthcare facilities, Similarly 1,067 participants (44%) were aware that they could be obtained from pharmacies and 631 men (26%) knew that private hospitals were a possible source of contraceptives. The strength of the study include large, multi-city sample size across three different countries, while limitations include possible response bias as the study relied on self-reported knowledge assessment, also, the study was limited to urban unmarried males, so findings may not be generalizable to rural or married men.³⁷

Another descriptive cross-sectional study was carried out in 2020, in Tourourou village, Gogui Rural Commune, Nioro Circle, Kayes Region of Mali. The study included 200 men residing in Tourourou, aged between 14 and 99 years. The study aimed to assess men's knowledge, attitudes, and perceptions regarding family planning. 124 men (62%) spontaneously cited at least one modern contraceptive method, Radio and friends were identified as the most frequent sources of information on family planning. The strength of

this study was that it comprehensively examined knowledge, attitude, and perception as well as influencing factors, providing valuable data for public health interventions. The limitations include its relatively small sample size, findings were specific to a settlement, which may limit generalizability to other regions or broader populations.³⁸

In addition, a descriptive cross-sectional study was carried out in Gambari village, a rural settlement in Oyo State, South-West Nigeria in May 2021. The study involved 464 married men ranging from 20 to 85 years with the average age of respondents being 42 years and explored the knowledge, attitude, and use of modern contraceptive methods by married men and their spouses, and to identify factors influencing the adoption of family planning methods by men, findings revealed that 375 men (80.8%) had poor knowledge of contraceptive methods, while only 89 men (19.2%) had good knowledge. 441 respondents (95%) had heard about modern contraception. The most commonly known methods were injectables, recognized by 290 men (62.5%), followed by male condoms, known by 208 participants (44.8%), and oral contraceptive pills known by 188 men (40.5%). The strength of the study was based on the fact that it comprehensively examined knowledge, attitude, and practice, as well as influencing factors, providing valuable data for public health interventions, limitations include, the relatively small sample size, possible response bias as the study relied on self-reported knowledge assessment also, findings were specific to one rural settlement in Oyo State, Nigeria, which may limit generalizability to other regions or broader populations.³⁹

A descriptive cross-sectional study was carried out in among 389 married men currently residing in Ogbogu Community in Rivers State between September 2022 and October 2022 to evaluate the knowledge, attitude and practices of modern family planning methods among men in the community. Findings from the study revealed that of the 389 participants, 14 (36.2%) responded that they had detailed knowledge of pills, 162 (41.6%) responded that they had knowledge of condoms, 63 (16.2%) had knowledge of injection, 16(4.1%) had knowledge of IUD, 6(1.5%) had knowledge of withdrawal method, while only 1(0.3%) had knowledge of sterilization method, in summary, the result of this study showed that there is high awareness of family planning of (97%) among the married couples used for the study. The strength of this study was that it comprehensively examined knowledge, attitude, and

practice of modern family planning methods this providing valuable data for public health interventions, limitations include the relatively small sample size and there may be self-response bias.⁴⁰

2.4.2 ATTITUDE OF MEN TOWARDS FAMILY PLANNING SERVICES

A community based descriptive cross-sectional study was done in 2021 among 165 currently married male, who had at least one child, living in Singur district of West Bengal, India. The study explored the Knowledge, Attitude and Level of Involvement of Married Males in Family Planning. Findings from the study revealed that among the total 165 participants, only 86 of the participants (52.1%) had favourable attitude on family planning, 36 of the participants (21.8%) had negative attitude that family planning is only the woman's responsibility and 102 of the participants (61.8%) believed that condom use reduces sexual pleasure. 88 (53.3%) of the participants had negative attitude and believed that oral contraceptive should be avoided as it causes permanent infertility, 59 (35.5%) of the participants had a negative attitude and believed that male sterilization should be avoided as it causes impotence. The strength of this study was that it comprehensively examined knowledge, attitude, and level of involvement as well as influencing factors, providing valuable data for public health interventions. Limitations include the relatively small sample size, self-reported bias and limited generalizability due to its focus on a particular district.⁴¹

In India, a descriptive cross-sectional study was carried out in 2022 among 200 married men who had been married for at least 5 years. The study aimed to understand the awareness of males about family planning methods, including their knowledge, attitude, and practices. Findings revealed that only 132 (66%) of men had a positive attitude about family planning. The strength of this study was that it comprehensively examined knowledge, attitude, and practices as well as influencing factors, providing valuable data for public health interventions. Limitations include its relatively small sample size, possible response bias as the study relied on self-reported knowledge assessment.³⁶

Also, a descriptive cross-sectional study was done in Bamako, Mali in 2020 among 785 men to assess the Perception and involvement of men in the family planning of their spouses in the

communes of Bamako, Mali. Findings from the study revealed that 597 (76%) of the 785 men displayed a positive attitude, 542 (69%) men displayed positive attitudes for decision-making with their partners and their partner's good perception was observed with 440 (56 %) of men. The strength of this study lies in the fact that it covered all the municipalities of the city of Bamako. Limitations include that the results of the study could not be extrapolated to rural areas, or the reality could be different.⁴²

Another descriptive cross-sectional study was carried out in Tourourou Village, Gogui Rural Commune, Niolo Circle, Kayes Region of Mali among 200 men residing in Tourourou, aged between 14 and 99 years. The study aimed to assess men's knowledge, attitudes, and perceptions regarding family planning. Findings revealed that only 101 (50.5%) out of 200 men supported the practice of family planning. The strength of this study was that it comprehensively examined knowledge, attitude, and perception as well as influencing factors, providing valuable data for public health interventions. The limitations include its relatively small sample size, findings were specific to a settlement, which may limit generalizability to other regions or broader populations.³⁸

In addition, a descriptive cross-sectional study was carried out in Gambari village, a rural settlement in Oyo State, South-West Nigeria in May 2021. The study involved 464 married men ranging from 20 to 85 years with the average age of respondents being 42 years and explored the knowledge, attitude, and use of modern contraceptive methods by married men and their spouses, and to identify factors influencing the adoption of family planning methods by men. Findings revealed that 256 (55.2%) men had a positive attitude towards family planning, 342 (73.7%) approved of attending family planning clinics with their wives, 274 (59%) men agreed that family planning is not exclusively a woman's affair, and 220 (47.4%) men believed a man should take up family planning if his spouse fails to. The strength of the study was based on the fact that it comprehensively examined knowledge, attitude, and practice, as well as influencing factors, providing valuable data for public health interventions, limitations include, the relatively small sample size, possible response bias as the study relied on self-reported knowledge assessment also, findings were specific to one rural settlement in Oyo State, Nigeria, which may limit generalizability to other regions or broader populations.³⁹

Furthermore, descriptive a cross-sectional study was carried out among 389 married men currently residing in Ogbogu Community in Rivers State 2022 to evaluate the knowledge, attitude and practices of modern family planning methods among men in the community. Findings from the study revealed that of the 389 participants, 202(51.9%) responded that they had a favourable attitude toward family planning, while 187 (48.1%) responded that they had an unfavourable attitude toward family planning. The strength of this study was that it comprehensively examined knowledge, attitude, and practice of modern family planning methods this providing valuable data for public health interventions, limitations include the relatively small sample size and there may be self-response bias.⁴⁰

2.4.3 UPTAKE AND PRACTICES OF MEN WITH RESPECT TO FAMILY PLANNING ACTIVITIES

A descriptive cross-sectional study was carried out in 2019 among 419 married men living in an urban squatter area of Karachi, Pakistan. Participants were chosen using non-probability convenience sampling, and data were gathered through a structured questionnaire and analyzed with SPSS version 23. The average age of respondents was 29.74 years, with a standard deviation of 4.66 years. Nearly 398 participants (95%) were aware of the concept of family planning (FP), but only 187 participants (44.6%) reported that either they or their spouses were currently using any FP method. 95 participants (50.8%) used condoms, making it the most commonly used method. Financial constraints were the primary reason for using family planning, mentioned by 87 participants (46.5%). While religious beliefs were the main reason for non-use 210 (50%) participants. More than 335 participants (80%) believed that the husband should make FP decisions, and around 268 participants (64%) felt the wife should be the one using FP methods. Among FP users, over 75 participants (40%) were aged between 31 and 35 years. Additionally, about 251 (60%) of those surveyed were Urdu-speaking. Men and their spouses with primary or secondary education were significantly more likely to use FP ($p < 0.01$). Private sector employees had the highest rate of FP usage (128 participants (68.4%), $p < 0.012$) compared to 15 participants (8%) in government jobs, 14 participants (7.5%) were labourers, and 14 participants were shopkeepers (7.5%).⁴³

An analytical cross-sectional survey was conducted in the United States between May and June 2018 to assess men's knowledge of vasectomy and their willingness to consider the procedure if it were offered for free or at a low cost. The study included 564 men aged 25 to 55 years, with participants recruited through GfK's (Growth from Knowledge) Knowledge Panel, which uses a probability-based sampling method based on U.S. Postal Service address records. The results showed that 288 men (51%) of the men demonstrated a high level of knowledge about vasectomy. Those who personally knew someone who had undergone a vasectomy were significantly more likely to have higher knowledge (Prevalence Ratio [PR]: 1.50; 95% Confidence Interval [CI]: 1.22–1.85). About 197 (35%) of participants expressed that they would consider getting a vasectomy. Men with high vasectomy knowledge were more likely to be open to the procedure compared to those with moderate or low knowledge (PR: 1.36; 95% CI: 1.04–1.77). In terms of current contraceptive use, the most reported methods with a main sexual partner were female sterilization (22%, n = 120) and condoms or withdrawal (35%, n = 194), while 16% (n = 94) reported not using any method. Factors such as race/ethnicity, income level, and receiving an informational paragraph did not significantly influence interest in vasectomy. The study concluded that increased knowledge about vasectomy positively influences men's willingness to consider the procedure. Since many men in the U.S. lack accurate information about vasectomy, there is a clear need for educational efforts to correct misconceptions and improve awareness, helping men make informed decisions about their reproductive health.⁴⁴

A descriptive cross-sectional study conducted in 2022 explored contraceptive use and associated socio-economic factors among 572 men aged 18 to 60 years across urban, peri-urban, and rural communities in Meru County, Kenya. The findings revealed that 325 participants (56.8%) were using contraceptives, while 247 participants (43.2%) were not. Among the 325 contraceptive users, 105 participants (32.5%) reported consistent condom use, whereas 220 participants (67.5%) relied on natural family planning methods. Notably, no participant reported undergoing a vasectomy (0.0%). This indicates that fewer than one-third of the total respondents actively used contraceptives. Additionally, contraceptive use was highest among 131 urban men (40.3%), followed by 115 peri-urban men (35.4%) and 79 participants (24.3%) in rural areas. The study concluded that factors such as place of

residence, age, marital status, preferred family size, education level, and income significantly influenced contraceptive use among men.⁴⁵

In 2019, a descriptive cross-sectional study was conducted among 384 men aged 18 to 45 years in the Suame Magazine light industrial area of the Ashanti Region, Ghana. The study aimed to assess the uptake of family planning (FP) services among male partners. Participants were selected using cluster sampling, and data were analyzed descriptively using SPSS version 16. The findings revealed that 346 men (90%) had heard about family planning. Over half of the participants 216 men (56.2%) either supported or were actively involved in male participation in family planning. Despite this, only 149 men (38.9%) were currently using at least one contraceptive method, while a larger group of 235 men (61.9%) had never used any form of contraception with their partners. Men cited several barriers to contraceptive use, including limited family planning options available for men, distrust in the effectiveness of condoms, and discomfort with vasectomy—the only other male method they were aware of apart from condoms. Knowledge about family planning varied: 280 men (72.9%) of men understood it as a method for birth spacing, while 104 men (27.1%) viewed it simply as the use of contraceptives. While 257 men (66.9%) acknowledged that family planning is important in principle, 178 men (46.3%) had never visited a family planning center, either to receive services themselves or to support a partner. In the two years prior to the study, 169 men (44%) had visited a family planning center. When asked who should practice family planning, 178 participants (46.3%) believed it should be a joint responsibility between both partners. Meanwhile, 136 men (35.4%) thought it was mainly for married women, and a small minority—15 men (3.9%)—felt that unmarried youth should be involved. The most commonly used contraceptive method by couples was condoms, mentioned by 101 men (26.3%), followed by periodic abstinence at 66 men (17.3%). Notably, none of the participants reported using vasectomy as a method of contraception.⁴⁶

In 2022, a community-based analytical cross-sectional study was carried out in Jere Local Government Area of Borno State, targeting all men aged over 18 years. A total of 150 respondents were selected using a combination of multi-stage and systematic sampling methods. The goal of the study was to assess men's knowledge, attitudes, and practices regarding family planning. Findings revealed that while 138 participants (92%) had heard of

family planning, only 39 participants (26%) actually practiced it. Many men held negative views about family planning, with 60 respondents (40%) believing it promotes promiscuity and 69 respondents (46%) feeling that it conflicts with their moral, cultural, or religious values. Key factors influencing the practice of family planning included level of education, employment status, number of children, and marital status. The study showed that men over the age of 25 had a more negative perception of family planning compared to those aged 18–25 ($\chi^2 = 13.253$, $p < 0.010$). Similarly, married men were significantly more likely to hold negative views with 143 respondents (95%) expressing negative attitudes compared to 7 respondents (5%) among single men ($\chi^2 = 13.276$, $p < 0.010$). A strong association was also found between marital status and attitude toward family planning ($\chi^2 = 87.780$, $p < 0.0001$), with younger, unmarried men displaying more positive attitudes. Most respondents were aware of family planning, less than half practiced it, and a majority had never participated actively in it. These low participation rates may be due to widespread negative perceptions and mistrust of family planning and the healthcare system. The study emphasizes the need for comprehensive educational programs targeted at men, providing accurate and culturally sensitive information to dispel myths and address religious and sociocultural barriers to family planning.⁴⁷

Furthermore, a community-based descriptive cross-sectional study was carried out in 2022 among 166 married men in Fadan Kamatan community, Kaduna State, Nigeria. Participants were selected using a multi-stage sampling method. The study revealed a high level of awareness of family planning (FP), with 157 men (94.6%) reporting that they had heard of FP. The most commonly known methods included injectables (137 respondents, 87.3%), condoms (135 respondents, 86.0%), and contraceptive pills (135 respondents, 86.0%). Key sources of FP information were health workers (120 respondents, 76.4%), friends and relatives (89 respondents, 56.7%), mass media (77 respondents, 49%), and social media (20 respondents, 12.7%). Regarding involvement, 122 men (77.7%) had given their wives permission to attend FP clinics, while 60 men (38.2%) had ever accompanied their wives to such clinics. Also, 122 participants (77.7%) had initiated discussions about FP with their spouses at some point, 14 participants (8.9%) did so all the time, 29 participants (18.5%) did most of the time, and 79 participants (50.3%) did occasionally. The most commonly used FP methods among their spouses were implants (28 users, 35%), injectables (26 users, 32.5%),

and pills (14 users, 17.5%). Notably, 44 spouses (55%) had been using family planning methods for less than a year.⁴⁸

2.4.4 FACTORS ASSOCIATED WITH THE UPTAKE OF FAMILY PLANNING BY MEN

A population-based analytical cross-sectional study involving 3,691 ever-married men was conducted in 2020 across eight regions in Pakistan to explore the factors linked to the use of modern contraceptive methods. The study was carried out by the National Institute of Population Studies (NIPS) using systematic random sampling. The findings revealed that men with no formal education were significantly less likely to use modern contraceptives compared to those with at least a primary education or higher [aOR] = 0.746; 95% [CI]: 0.568–0.980). Similarly, men in the poorest wealth category had significantly lower odds of using modern contraceptives (aOR = 0.569; 95% CI: 0.382–0.846) compared to those in higher wealth groups. Men who expressed no desire to have more children had significantly greater odds of using modern contraceptive methods (aOR = 2.821; 95% CI: 2.305–3.451). Additionally, those who had not discussed family planning with a healthcare provider were less likely to use modern contraception (aOR = 0.715; 95% CI: 0.559–0.914). Furthermore, men who believed that contraception is solely a woman's responsibility were also significantly less likely to use modern methods (aOR = 0.670; 95% CI: 0.526–0.853). Interestingly, men who were sterilized, infertile, or did not currently have a partner showed much higher odds of using modern contraception (aOR = 11.224; 95% CI: 6.706–18.784) compared to those who still desired more children.⁴⁹

An analytical cross-sectional study was conducted in 2021 among 544 married women attending clinics operated by the Marie Stopes Institute in Herat city, Afghanistan. The aim was to assess male involvement in family planning and the factors influencing their participation. Data were collected using a structured, validated, and reliable questionnaire. The average age of the women surveyed was 28 years (± 10), and nearly half 264 women (48.5%) were illiterate. Most of the participants were housewives (83.6%), and a significant portion of their husbands were employed in non-professional jobs 217 men (39.9%). Men participated in family planning in various ways: by selecting the type of contraceptive

method 159 men (29.2%), providing contraceptives 161 men (29.6%), and supporting their wives in using them 268 men (49.3%). The study found statistically significant associations between both the woman's and her husband's level of education, the husband's employment status, and their mode of participation in family planning. Key motivators for male involvement included prioritizing children's education and needs, as well as ensuring the health and well-being of their wives. However, barriers such as cultural preferences for larger families, the desire for male offspring, fear of contraceptive side effects, and religious beliefs were found to discourage men from supporting or using family planning methods.⁵⁰

A qualitative study was carried out in 2024 among sexually active men living in a slum area within Nakawa Division, Kampala, Uganda. Using purposive sampling, researchers selected 40 men to participate in Focus Group Discussions (FGDs) and interviewed 2 key informants to gain deeper insights. Most participants were aged between 26 and 30 years, accounting for 11 men (27.5%), 30 men (75%) were married, and 34 men (85%) were in monogamous relationships. Nearly half of the participants, 18 men (45%) and 11 female partners (27.5%) had attained secondary education. The majority identified as Christians 30 men (75.5%) and 19 men (47.5%) were urban residents. Data collection was done using semi-structured guides for both the FGDs and key informant interviews. The study identified multiple factors influencing men's involvement in family planning (FP) and contraceptive use. These included limited knowledge about FP and contraceptive methods, uncertainty about the role of men in FP, an unwelcoming healthcare environment, and negative community perceptions surrounding male involvement in FP. Participants in the FGDs shared that societal and cultural norms discouraged male participation in FP. Even among those who were actively engaged, many felt unsupported by their communities. In some neighborhoods, it was seen as completely inappropriate for men to accompany their wives to FP clinics.²¹

In 2022, a descriptive cross-sectional study was conducted among 200 participants in rural areas of northern Ghana to examine male involvement in family planning (FP) and the factors that either support or hinder the use of FP services among couples. Participants were selected using random cluster sampling. Of the total respondents, 107 were men (53.5%) and 93 were women (46.5%). The age range for men was 15 to 54 years, while for women it was 15 to 49 years. The study revealed that 153 respondents (76.5%) had received some level of education

(from primary to tertiary), while 47 respondents (23.5%) had no formal education. Among the male participants, 56 men (52.2%) stated that they or their partners were currently using some form of contraception to delay or prevent pregnancy. In comparison, only 34 women (36.4%) of the women reported current contraceptive use with their partners. A large proportion of men, 78 respondents (72.8%) supported their partners' use of FP, and 70 women (75%) of female respondents confirmed that their partners approved of their FP use. The data also showed that men were more likely than women to report use of family planning methods ($\chi^2 = 4.5534$, $p = 0.033$). Among couples who did not approve of family planning, reasons included sociocultural beliefs (31% $n \approx 62$ participants), concerns about side effects (30.8%, $n \approx 62$ participants) such as missed or delayed menstruation and difficulty conceiving after discontinuation and other unspecified factors (38.5%, $n \approx 77$ participants). Overall, about 51 men (48%) of the men were actively involved in the use of FP services. The study found that men's involvement was positively associated with their level of knowledge about FP and the number of living children they had.⁵¹

A community-based analytical cross-sectional study was conducted in 2024 among 452 married men selected through a multistage sampling technique across randomly chosen local government areas in Oyo State, Nigeria. The study aimed to assess men's knowledge, perceptions, support, and the factors influencing the use or non-use of family planning (FP) methods. The results showed that 444 men (98.2%) were aware of male condoms, injectables (440 men, 97.4%), and implants (416 men, 92.0%). A large majority 389 men (86.1%) expressed support for FP, and 371 men (82.1%) accepted its use. However, several reasons were given for discontinuing or not supporting FP, including personal preference (226 men, 50%), fear of side effects (85 men, 18.9%), and concerns about infidelity (24 men, 5.3%). Despite general awareness, 89 men (19.7%) of the respondents had a negative perception of FP, 197 men (43.6%) had negative views about men's roles in FP, and 140 men (31.0%) showed low levels of support. Significant associations were found between level of education and perception ($\chi^2 = 8.144$, $p = 0.017$), religion and perceived roles ($\chi^2 = 12.089$, $p = 0.002$), education level and support ($\chi^2 = 7.623$, $p = 0.022$), and between use of FP and level of support ($\chi^2 = 62.281$, $p = 0.000$). Overall, the study highlighted gaps in awareness, approval, support, and use of modern family planning methods among the participants.⁵²

In addition, an analytical cross-sectional study was conducted in Abeokuta South Local Government Area of Ogun State, Nigeria in 2020, involving 350 married men selected through multistage sampling, examined factors influencing male involvement in the uptake of family planning. The study revealed that 342 respondents (97.7%) had adequate knowledge of family planning, and there was a statistically significant positive relationship between knowledge and male involvement ($r = 0.307$, $p < 0.05$; $\beta = 0.263$, $t = 4.825$, $p < 0.05$). Similarly, motivational beliefs, comprising attitudinal and subjective norm components, showed a stronger influence on involvement, with a significant correlation ($r = 0.407$, $p < 0.05$) and predictive strength ($\beta = 0.341$, $t = 5.669$, $p < 0.05$). Conversely, sex of children negatively influenced uptake, where preference for a specific gender (typically sons) reduced the likelihood of male participation ($\beta = -1.225$, $t = -2.716$, $p < 0.05$). In addition, family influence was also a significant negative factor ($\beta = -3.545$, $t = -3.418$, $p < 0.05$), suggesting that social and familial expectations discouraged male engagement. Other socio-demographic factors such as age, education, religion, marital status, number of wives or children, income, employment status, and wife's education or employment showed no statistically significant influence on uptake ($p > 0.05$). The study concluded that although awareness and motivation were generally high, cultural and familial barriers remain key obstacles to male involvement in family planning.⁵³

2.4.5 LEVEL OF MALE INVOLVEMENT IN FAMILY PLANNING ACTIVITIES

A community based descriptive cross-sectional study was done in 2021 among 165 currently married male, who had at least one child, living in Singur district of West Bengal, India. The study explored the Knowledge, Attitude and Level of Involvement of Married Males in Family Planning. Findings from the study revealed that among the total 165 participants, 60 of the participants (36.4%) were directly involved in family planning either by using a male condom or by withdrawal methods, but 108 of the participants (65.5%) were indirectly involved in family planning through spousal communication either by approving contraceptive use to their spouse or by decision making regarding family planning. The strength of this study was that it comprehensively examined knowledge, attitude, and level of involvement as well as influencing factors, providing valuable data for public health interventions. Limitations include the relatively small sample size, self-reported bias and limited generalizability due to its focus on a particular district.⁵⁴

In Abhanpur, Chhattisgar, India, a descriptive cross-sectional study was conducted in 2021 among 365 married males to assess male involvement in family planning among married males in a rural area. Findings from the study revealed that only 48 (13.1%) participants were active users of family planning methods at the time of the study. Among them, only 7 (1.9%) were using vasectomy, and the rest 41 (11.23%) were using condoms. Good involvement of males in family planning was found to be (10.9%) in the study. Those who were above the poverty line and educated (graduation and above) had good involvement in family planning. The chief reason cited for not opting for male sterilization by participants was fear of physical weakness followed by family opposition. The strength of the study includes its focus on married men which provides specific insights into this demographic involvement in family planning. Limitations include, its relatively small sample size, its focus on a particular rural area in India limits generalizability and there may be self-reported bias.⁵⁵

In addition, a community-based analytical cross-sectional survey was conducted among 577 married men in the rural districts of Eastern Ethiopia in 2020. The study aimed to assess the level of male involvement in family planning use and associated factors. Findings from the study revealed that 342 men (59.3%) were involved in the FP use and concerning decision-making of FP method use, 400 of the participants (69.4%) replied that they made decisions jointly while 139 of the participants (24.1%) replied that spouses made decisions by themselves alone. The strength of the study includes its focus on married men which provides specific insights into this demographic involvement in family planning, limitations include, its relatively small sample size, its focus on a particular district in Eastern Ethiopia limits generalizability and there may be self-reported bias.²³

Also, a cross-sectional descriptive study was conducted in Tumu, Sissala East District, Upper West Region of Ghana, between mid-2020 and early 2021, involving 200 adult respondents (107 men and 93 women). The study aimed to assess male involvement in family planning (FP) service utilization and identify associated factors in a rural setting. Findings showed that 51 men (48%) were sufficiently involved in FP use. Key factors positively associated with involvement included having living children (aOR = 1.71) and knowledge of FP (aOR =

6.14). Barriers to involvement included socio-cultural beliefs, fear of side effects, and the perception that FP is mainly a woman's responsibility. The study's strength lies in capturing both male and female perspectives, but its small sample size and limited geographic coverage reduce generalizability.⁵⁰

In 2019, a community-based analytical cross-sectional study was conducted in 12 communities of Abia State, Nigeria, among 588 married men aged 15–59 years who had resided in the area for at least 6 months. The study aimed to determine the level and predictors of male involvement in family planning services. Male involvement was assessed using a composite score based on six indicators such as discussions with spouse, awareness and use of family planning (FP) methods, attendance at FP clinics, and peer communication. Of the 588 married men studied, 324 (55.1%) were actively involved in family planning services. Among the key predictors of male involvement, 401 men (68.2%) had access to television, while 370 men (62.9%) reported that their spouses were employed. Joint decision-making on family planning issues was practiced by 462 men (78.6%), and a notable proportion also accompanied their spouses to the family planning. The strength of this study lies in its structured measurement of involvement using validated indicators, however, limitations include the relatively small sample size and the possibility of social desirability bias due to self-reported responses.¹⁸

A community based descriptive cross-sectional study conducted among 166 married men in Zangon Kataf Local Government Area of Kaduna State in 2020 to assess the Level and Determinants of Male Involvement in Family Planning Decision making. Findings from the study revealed that 129 of the men (77.7%) gave consent for their wives to attend the FP clinics, 63 men (38.2%) ever followed their wives to the FP clinics, 129 of the men (77.7%) ever initiated FP discussion with their spouse. About 94 men (56.7%) predominantly took FP decisions, while 67 men (40.1%) took FP decisions with their wives. About 127 of the participants (76.4%) believed that men should be involved in FP decisions. Only 97 men (58.4%) had overall good scores for male involvement in FP decision making. The strength of the study includes its focus on married men which provides specific insights into this demographic involvement in family planning, however, limitations include the relatively small sample size and the possibility of social desirability bias due to self-reported responses.⁵⁶

CHAPTER THREE

METHODOLOGY

3.1 STUDY AREA

This study was carried out in Ovia North East Local Government Area (LGA) of Edo State, Nigeria. Ovia North East LGA is located in the South-South geopolitical zone and falls within the Edo South Senatorial District. It is one of the eighteen (18) Local Government Areas in Edo State, with its administrative headquarters situated in Okada.⁵⁷

Ovia North East LGA covers an estimated land area of approximately 2,301 km² and has a population of about 255,231, according to the 2025 local government census.⁵⁸ The population is ethnically diverse, comprising mainly the Bini (Edo) and Ijaw ethnic groups, with Bini and Edo languages commonly spoken alongside English.⁵⁷

Administratively, the LGA is divided into thirteen (13) wards, namely: Okada West, Okada East, Uhen, Adolor, Ofunmwegbe, Oluku, Uhiere, Isiuwa, Okokhuo, Oghede, Oduna, Iguoshodin, and Utoka. The distribution of Primary Health Care (PHC) facilities across these wards is uneven, with some wards such as Uhiere and Oduna having relatively more PHC centers than others. This clustered distribution contributes to disparities in access to health services, including family planning services, particularly in less-served wards.⁵⁹

Ovia North East LGA is classified as semi-urban with peri-urban characteristics, comprising residential, commercial, and institutional areas. It includes communities such as Okada, Uhen, Utese, Okokhuo, Uhiere, Isiuwa, Oluku, Iguoshodin, Utoka, Oghede, Egbeta, Ora, and Ogbese. The area hosts several health facilities, including primary health centers, private hospitals, and faith-based clinics, and is notable for housing Igbinedion University, Okada, alongside other educational institutions.⁵⁹

Geographically, the LGA lies approximately between longitude 5°14'20"E and 5°54'42.10"E and latitude 5°50'34.80"N and 6°46'58.80"N. It is bordered to the west by Ondo State, to the north by Kogi State, and shares boundaries with Ovia South West, Egor, Oredo, and Uhunmwonde LGAs.⁶⁰

The area falls within the tropical rainforest zone of southern Nigeria, characterized by distinct wet and dry seasons and predominantly flat, fertile land. Economic activities are largely

driven by agriculture, trading, small-scale industries, and professional services, particularly in urban settlements such as Okada.⁶¹

The combination of a large population, mixed rural-urban characteristics, varying access to health services, and the presence of educational institutions makes Ovia North East LGA an appropriate and suitable setting for assessing male involvement in family-planning activities.

3.2 STUDY DESIGN

An analytical cross-sectional study design was used for this study.

3.3 STUDY DURATION

The study was conducted between April 2025 and April 2026.

3.4 STUDY POPULATION

The study population consisted of adult males residing in Ovia North East Local Government Area (LGA) of Edo State, Nigeria. This included men of reproductive age who were either married, in stable sexual relationships, or cohabiting, and who were considered to be in a position to make or influence decisions regarding family planning and reproductive health matters.

The population was selected to explore the level, patterns, and determinants of male involvement in family planning activities, including knowledge, attitudes, and participation in contraceptive use and decision-making.

3.5 SELECTION CRITERIA

3.5.1 INCLUSION CRITERIA

1. Males aged 18 and above residing in Ovia North East LGA.
2. Married, cohabiting, or in stable sexual relationships.
3. Willing to give informed consent to participate in the study.

4. Capable of communicating in English or any local language understood by the interviewer.

3.5.2 EXCLUSION CRITERIA

1. Males below 18 years
2. Unmarried men not in any form of sexual relationship.
3. Visitors or temporary residents
4. Individuals unwilling to provide informed consent.
5. Men with cognitive or communication impairments that would affect their ability to respond accurately to the questionnaire.

3.6 SCOPE OF STUDY

The study assessed the knowledge of men about family planning, the attitude of men towards family planning, the uptake and practices of men with respect to family planning, factors associated with the uptake of family planning by men and the level of male involvement in family planning and women reproductive health.

3.7 SAMPLE SIZE DETERMINATION

The sample size was calculated using Cochran's formula, factoring in a design effect to account for the multistage sampling technique employed in the study.⁶²

$$n = \frac{Z^2 pq}{d^2}$$

Where:

n = desired sample size

Z = standard normal deviate at 95% confidence level (1.96)

P = Prevalence of the characteristic of interest

P = 86.1% being the proportion of men who had a positive attitude towards family planning and supported its practice in a study carried out in Oyo State, Nigeria in 2024.⁵²

$$= 0.861$$

$$q = 1-p$$

$$q = 1- 0.861 = 0.139$$

d = degree of precision desired set at 0.05

Hence,

$$\frac{(1.96)^2 \times 0.861 \times (1 - 0.861)}{(0.05)^2}$$

$$\frac{3.8416 \times 0.861 \times 0.139}{0.0025}$$

$$n = 183.90 \approx 184$$

Therefore, the minimum sample size for this study is 184 respondents.

To account for potential non response, a 10% non-response rate was factored in using the formula for non-response rate

$$ns = \frac{n}{1r}$$

Where;

ns = Adjusted sample size

n = Calculated sample size

nr = Non-response rate = 10% = 0.1

$$ns = \frac{184}{1-0.1}$$

$$= 204.44 \approx 204$$

Design effect

Using a design effect of 2 [the study utilized multistage sampling method]

$$204 \times 2$$

= 408

Thus, a sample size of 408 was used.

3.8 SAMPLING TECHNIQUE

A multistage sampling technique was employed to ensure that participants are representative of the population and to minimize selection bias. The sampling was carried out in the following stages:

Stage 1: Selection of Communities

A list of all communities within Ovia North East Local Government Area was obtained from official administrative records. Five communities were randomly selected using simple random sampling (balloting). Each community name was written on a slip of paper, placed in a container, thoroughly mixed, and five slips were drawn without replacement to determine the selected communities.

Stage 2: Selection of Enumeration Areas

For each selected community, a list of enumeration areas (EAs) and their respective population sizes was obtained from census or local government records. The number of EAs to be selected from each community was proportional to its population size, ensuring that larger communities contributed more EAs. The required EAs were selected using simple random sampling.

Stage 3: Selection of Households

In each selected EA, the total number of households was obtained from local records or through field listing. A sampling interval (k) was calculated using the formula:

$$k = \frac{\text{Total number of households in the EA}}{\text{Number of households required from the EA}}$$

A random starting household between 1 and k was selected, and k was selected, and every k th household thereafter was included until the required number of households was reached (systematic sampling).

Stage 4: Selection of Respondents

In each selected household, all eligible males were identified. If more than one eligible male was present, one respondent was selected using simple random sampling, such as drawing lots or using a random number table.

Rationale for Multistage Sampling:

This multistage sampling method ensured that the study participants were representative of men across different communities in Ovia North East LGA, and helped to reduce selection bias. It also provided a structured and manageable approach to sampling in a geographically and socially diverse population.

3.9 DATA MANAGEMENT

3.9.1 TOOLS FOR DATA COLLECTION

Data for this study was collected using a structured, interviewer-administered questionnaire, designed specifically to obtain information related to the study objectives on male involvement in family planning activities in Ovia North East Local Government Area (LGA). The questionnaire was adapted from the DHS-8 Men's Questionnaire developed by the DHS Program (ICF, 2023).⁶³ It included mostly closed-ended questions (yes/no, Likert scales, and multiple choice), with a few open-ended items to allow quantitative analysis while capturing qualitative insights.

The questionnaire consist of six sections corresponding to the specific objectives of the study:

Section A- Socio-demographic characteristics: This section captured information about the respondents' age, marital status, level of education, occupation, income, religion, number of children, and household composition. This information was essential for describing the study population and for analyzing factors that influenced male involvement in family planning.

Section B- Knowledge of family planning services: This section assessed men's awareness and understanding of family planning methods and services available in Ovia North East LGA. Questions focused on knowledge of contraceptive types (e.g., condoms, injectables, implants, vasectomy), sources of information, and understanding of family planning concepts. This section was assessed using eight closed-ended questions.

Section C- Attitudes towards family planning: This section explored the perceptions, beliefs and opinions of respondents concerning male involvement in family planning. Likert-scales questions (e.g., agree to disagree) were used to quantify attitudes, including cultural and religious beliefs about family planning, perceived benefits, and willingness to support partners. Attitudes were assessed using 10 closed-ended questions.

Section D- Uptake and Practices of family planning: This section captured information on men's actual participation in family planning activities. Questions included provision of contraceptives to partners, personal use of male contraceptives methods, and frequency of participation in family planning-related decisions.

Section E- Factors influencing FP uptake: This section identified potential barriers and motivators for male participation. Questions explored socio-cultural norms, religious beliefs, spousal communication, access to health services, and personal or partner preferences. These factors were assessed using 8 closed-ended questions.

Section F- Level of Male Involvement in Family Planning: This section measured the overall involvement of men in family planning. Questions assessed participation in family planning discussions, attendance at health facilities with partners, and support for reproductive health decisions. This section was assessed using six closed-ended questions.

3.9.2 METHOD OF DATA COLLECTION

Data for this study were collected using a structured, interviewer-administered questionnaire designed to capture information on male involvement in family planning (FP) and associated factors. Face-to-face interviews were conducted using the structured questionnaire. The questionnaire was developed after a thorough review of relevant literature and guidelines on family planning and male reproductive health. Each section of the questionnaire was explained to the respondents and opportunities were provided for them to ask questions and seek clarifications.

3.9.3 PRETESTING

The questionnaires were pretested with 10% of the initial sample size of 408 which is 41. This was carried out in Egor LGA, Benin City, Edo State. Observed errors were corrected before the questionnaires were utilized in the study. Pretesting helped to assess clarity, relevance, comprehensibility, and reliability of the questions.

3.9.4 DATA ANALYSIS

Completed questionnaires were collated, screened for completeness, and entered into IBM SPSS version 27 for analysis. Data coding and cleaning were carried out. Univariate analysis was conducted to show the frequency distribution of variables, and the results were presented in detailed frequency tables to show the prevalence of each variable. Bivariate analysis examined associations between socio-demographic factors and knowledge, attitude, uptake and level of male involvement in family planning. Statistical significance was set at $p < 0.05$ with a 95% confidence interval.

SCORING SYSTEM

Socio-demographics

Age was grouped into several intervals, based on the distribution obtained from the questionnaires. Other variables such as sex, ethnic group, occupation, religion and marital status were properly grouped as well.

Knowledge of family planning

Knowledge of family planning was assessed using eight questions in Section B of the questionnaire. A composite scoring system was developed and adapted from a similar study conducted among married males in India.⁴¹

Points were given as follows:

- Definition (4 points): 1 point for knowing what family planning is and up to 3 points for correctly identifying its definition (e.g., child spacing and preventing unwanted pregnancy).

- Benefits (4 points): 1 point for each correct benefit chosen, such as improving health or family finances, up to a maximum of 4 points.
- Methods (5 points): 1 point for each family planning method the respondent recognized (such as condoms, pills, or vasectomy), up to a maximum of 5 points.
- Access (3 point): 1 point for correctly identifying where family planning can be accessed, up to a maximum of 3 points
- Male Participation (1 point): 1 point for correctly agreeing that men can take part in family planning.

Categorization of Knowledge

After calculating the total score for each person, the level of knowledge was grouped into two categories based on a 50% pass mark:

Good Knowledge: A total score of 9 to 17 points (> 50%).

Poor Knowledge: A total score of 0 to 8 points (< 50%).

Attitude towards family planning

Attitude of family planning was assessed using ten questions in Section C of the questionnaire. A composite scoring system was developed and adapted from a similar study conducted among married males in India ⁴¹

Attitude was measured using a 3-point Likert scale: Agree (A), Neutral (N), and Disagree (D). To get an accurate score, "Positive" statements and "Negative" statements are scored differently.

1. For Positive Statements:

Question 22: Family planning is beneficial

Questions 23: Men should attend family planning clinics with their partners

Question 24: Family planning helps to reduce financial burden

Question 26: Family planning helps improve maternal and child health

Question 27: Men should discuss family planning options with their partner

Question 29: I would support my partner to use a contraceptive method

Question 31: Men should use male family planning methods when their partner is not willing to

These are statements that support family planning.

Agree = 2 points

Neutral = 1 point

Disagree = 0 points

2. For Negative Statements:

Questions 25: Family planning is a woman only affair

Question 28: Family planning is unacceptable to me

Question 30: Women should have as many children as possible

These are statements that are against or limit family planning. The points are reserved so a "good" attitude still gets a high score:

Disagree = 2 points

Neutral = 1 point

Agree = 0 points

Categorization of Attitude

The maximum possible score for this section is 20 points (10 questions × 2 points). The scores are grouped into two levels:

Positive Attitude: A total score of 10 to 20 points (> 50%).

Negative Attitude: A total score of 0 to 9 points (< 50%).

Family planning practices and uptake

Family planning uptake was assessed using current use of any family planning method as the primary outcome variable. Respondents who reported currently using a method were classified as “currently using (Yes)”, while those who were not were classified as “not currently using (No)”. Descriptive statistics such as frequencies and percentages were used to describe family planning practices among respondents, including discussion with partners, approval of partner use, accompaniment to health facilities, financial support, and method types used.

To determine factors associated with current use of family planning, a bivariate analysis using the Chi-square test was performed to assess the relationship between socio-demographic characteristics (such as age, educational level, marital status, occupation, income group, marriage type, family type, and socioeconomic status) and current family planning use. Variables that showed statistical significance at the bivariate level were further entered into a multivariate binary logistic regression analysis to identify independent predictors of current use. Results were reported using adjusted odds ratios (AOR), 95% confidence intervals (CI), and p-values. Statistical significance was set at $p < 0.05$.

Factors associated with family planning uptake

To assess factors influencing the uptake of family planning, relevant variables related to access, affordability, and barriers were analyzed. These included knowledge of where to access family planning services, perceived affordability of services, prior discussion with a health worker, cultural or religious beliefs discouraging use, embarrassment in requesting services, peer or family influence, and concerns about side effects.

Descriptive statistics (frequencies and percentages) were used to summarize responses to these variables. A bivariate analysis using the Chi-square test was then performed to assess the association between each of these factors and current use of family planning.

Male involvement in family planning

The level of male involvement was determined by scoring 10 key activities from Section D and Section F of the questionnaire. Respondents were given 1 point for every "Yes" or positive action and 0 points for "No".

Points are given for the following 10 actions:

Communication: Discussing family planning with a partner (Q17).

Approval: Approving of the partner using a method (Q19).

Physical Support: Accompanying the partner to the health facility (Q20).

Financial Support: Providing money for family planning services (Q21).

Personal Use: Currently using or having ever used a male method (Q22 or Q24).

Responsibility: Considering family planning a joint responsibility (Q35).

Information Seeking: Taking the initiative to look for FP information (Q36).

Encouragement: Encouraging a partner to start or continue a method (Q37).

Decision Making: Suggesting a specific method to the partner (Q38).

Community Participation: Attending health talks or outreach programs (Q39).

Categorization of Involvement:

The total involvement score (out of 10) was used to group respondents into two levels based on a 70% cut-off point:

High Involvement: A total score of 7 to 10 points (> 70%).

Low Involvement: A total score of 0 to 6 points (< 70%).

Chi-square tests (χ^2) was used to assess associations between categorical variables, such as education level, marital status, and male involvement in family planning.

T-tests was applied to compare mean scores of knowledge, attitude, or involvement across different subgroups where applicable.

Multivariate analysis, such as logistic regression, was conducted to identify predictors of male involvement while controlling for potential confounders.

3.9.5 DATA PRESENTATION

Findings were presented in prose and frequency distribution tables.

3.10 ETHICAL CONSIDERATION

Ethical approval was obtained from the Health Research and Ethics Committee of UBTH before the commencement of the study, with protocol number **ADM/E 22/A/VOL.VII/14865491272111**. Informed consent was obtained from all participants after they had been provided with detailed information about the study's objectives, procedures and benefits. Participation was voluntary, and respondents will have the right to withdraw at any stage without consequences. Confidentiality and anonymity were maintained by ensuring that no personally identifiable information was collected.

3.11 LIMITATIONS OF THE STUDY

1. The study depended on self-reported information supplied by the respondents which might not have been accurate.
2. Recall bias may have influenced the information supplied by the respondents. A defined time-frame was used to aid recall during the administration of the questionnaire.
3. Cultural sensitivity and disclosure: Topics related to reproductive health and family planning were sensitive in the local cultural context. Some respondents may have felt uncomfortable discussing personal or marital practices, potentially leading to under-reporting of involvement or attitudes.
4. Geographic limitation: The study was conducted in Ovia North East LGA, Benin City, and the findings may not have been generalizable to other regions with different socio-cultural, religious, or economic contexts.

CHAPTER FOUR

RESULTS

A total of 408 questionnaires were administered and all completely filled, yielding a response rate of 100.0%. The results are presented under the following sections:

Section A: Socio-demographic characteristics of respondents

Section B: Knowledge of family planning among respondents

Section C: Attitude towards family planning among respondents

Section D: Family planning practices among respondents

Section E: Factors associated with family planning uptake

Section F: Level of male involvement in family planning activities

SECTION A

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency (n = 408)	Percent (%)
Age group (years)		
≤ 24	14	3.4
25–29	50	12.2
30–34	43	10.5
35–39	59	14.5
40–44	59	14.5
45–49	64	15.7
≥ 50	119	29.2
Mean ± SD: 42.7 ± 11.4 years		
Marital status		
Married	308	75.5
Single	48	11.7
Cohabiting	44	10.8
Separated/Divorced	8	2.0
Religion		
Christianity	384	94.1
Islam	21	5.2
African Traditional Religion	3	0.7
Marriage type (n = 308)		
Monogamy	289	93.8
Polygamy	19	6.2
Family type (n = 308)		
Nuclear	270	87.7
Extended	38	12.3
Number of children		
None	71	17.4
1–2	99	24.3
3–4	148	36.3
≥ 5	90	22.0
Ethnic group		
Benin	136	33.3
Esan	69	16.9
Urhobo/Itsekiri/Ijaw/Isoko	55	13.5
Igbo	48	11.8
Afemai	43	10.6
Yoruba	23	5.6
Others*	34	8.3

*Others include Hausa, Ibibio, Efik, Idoma, Igala, Ika, Ogoja, and Ukwuani.

A total of 408 men participated in this study. The mean age was 42.7 ± 11.4 years. The most common age group was ≥ 50 years 119 (29.2%), followed by 45–49 years 64 (15.7%), 35–39

and 40–44 years 59 (14.5%) each, 25–29 years 50 (12.2%), 30–34 years 43 (10.5%), and ≤ 24 years 14 (3.4%). Most respondents were married 308 (75.5%), with 48 (11.7%) single, 44 (10.8%) cohabiting, and 8 (2.0%) separated or divorced. Christianity was the predominant religion 384 (94.1%). Among the 308 married respondents, 289 (93.8%) were in monogamous marriages and 270 (87.7%) lived in nuclear family settings. Most respondents had 3–4 children 148 (36.3%), with a mean of 3.0 ± 2.2 . Ethnically, Benin were the most represented 136 (33.3%), followed by Esan 69 (16.9%), Urhobo/Itsekiri/Ijaw/Isoko 55 (13.5%), Igbo 48 (11.8%), and Afemai 43 (10.6%).

Table 2: Socio-economic characteristics of respondents

Variable	Frequency (n = 408)	Percent (%)
Level of education (respondent)		
Primary	35	8.6
Secondary	170	41.7
Tertiary	203	49.7
Occupation (respondent)		
Civil servant/Professional	101	24.8
Artisan/Skilled worker	91	22.3
Trader/Businessman	84	20.6
Driver/Transporter	27	6.6
Farmer	20	4.9
Others*	85	20.8
Monthly income (respondent) (₦)		
< 70,000	45	11.0
≥ 70,000	363	89.0
Level of education (partner, n = 308)		
Primary	38	12.3
Secondary	150	48.7
Tertiary	120	39.0
Socio-economic status		
Upper class	12	2.9
Middle class	312	76.5
Lower class	84	20.6

*Others include self-employed workers, students, pensioners, and the unemployed.

Regarding education, 203 (49.7%) had tertiary, 170 (41.7%) secondary, and 35 (8.6%) primary education. Civil servants and professionals were the largest occupational group 101 (24.8%), followed by artisans/skilled workers 91 (22.3%) and traders/businessmen 84 (20.6%). The large majority 363 (89.0%) earned ≥ ₦70,000 monthly. The majority belonged to the middle socioeconomic class 312 (76.5%), with 84 (20.6%) in the lower class and 12 (2.9%) in the upper class.

SECTION B
KNOWLEDGE OF FAMILY PLANNING AMONG RESPONDENTS

Table 3a: Knowledge of family planning among respondents

Variable	Frequency (n = 408)	Percent (%)
Ever heard of family planning (n = 408)		
Yes	363	89.0
No	45	11.0
Source of information (n = 363, MRQ)		
Health workers	195	53.7
Radio/Television	193	53.2
Friends/Relatives	191	52.6
Social media	170	46.8
School	4	1.1
Definition of family planning (n = 363, MRQ)		
Method to plan/decide number and spacing of children	294	81.0
Method to prevent unwanted or unplanned pregnancy	234	64.5
Practice to improve maternal and child health	99	27.3
A way to stop childbirth permanently (WRONG)	27	7.4
A way to select the gender of a baby (WRONG)	11	3.0
Benefits of family planning (n = 363, MRQ)		
Helps space births	292	80.4
Prevents unwanted pregnancies	268	73.8
Improves economic stability of families	121	33.3
Reduces maternal and child mortality	110	30.3
Leads to permanent infertility in women (WRONG)	2	0.6

Table 3b: Knowledge of family planning among respondents

Variable	Frequency (n=408)	Percent (%)
Family planning methods known (n = 363, MRQ)		
Condoms	306	84.3
Oral contraceptive pills	237	65.3
Withdrawal method	193	53.2
Injectables	168	46.3
Implants	161	44.4
Safe period/Calendar	145	39.9
Vasectomy	98	27.0
Intrauterine device (IUD)	96	26.4
Where family planning can be accessed (n = 363, MRQ)		
Government hospitals/health centres	345	95.0
Private hospitals/clinics	204	56.2
Pharmacies/chemists	72	19.8
Online platforms	15	4.1
Traditional healers	10	2.8
A man can use or participate in family planning (n = 363)		
Yes	319	87.9
No	24	6.6
Not sure	20	5.5
Level of knowledge of family planning among respondents (n = 363)		
Good knowledge	262	72.2
Poor knowledge	101	27.8

MRQ = Multiple Response Question; percentages for MRQ items may exceed 100%.

Of the 408 respondents, 363 (89.0%) had previously heard of family planning. Health workers were the most frequently cited source 195 (53.7%), followed by radio/television 193 (53.2%) and friends/relatives 191 (52.6%). The most commonly identified correct definition

was a method to plan the number and spacing of children 294 (81.0%). Condoms were the most widely known method 306 (84.3%), and government hospitals were the most recognised access point 345 (95.0%). Most 319 (87.9%) agreed a man can participate in family planning. Overall, 262 (72.2%) had good knowledge and 101 (27.8%) poor knowledge.

Table 4: Socio-demographic variables and knowledge of family planning (n = 363)

Variables	Knowledge of Family Planning		Test statistics (χ^2)	p-value
	Good Knowledge n = 262 n(%)	Poor Knowledge n = 101 n(%)		
Age group (years)				
< 40	129 (81.1)	30 (18.9)	11.301	0.004
40–49	69 (65.1)	37 (34.9)		
≥ 50	64 (65.3)	34 (34.7)		
Marital status				
Married	184 (68.1)	86 (31.9)	8.516*	0.014
Single/Cohabiting	73 (83.9)	14 (16.1)		
Separated/Divorced	5 (83.3)	1 (16.7)		
Religion				
Christianity	251 (73.2)	92 (26.8)	2.270*	0.132
Islam/ATR	11 (55.0)	9 (45.0)		
Level of education				
Primary	7 (46.7)	8 (53.3)	5.181*	0.075
Secondary	110 (72.4)	42 (27.6)		
Tertiary	145 (74.0)	51 (26.0)		
Monthly income (₦)				
< 70,000	29 (69.0)	13 (31.0)	0.089*	0.766
≥ 70,000	233 (72.6)	88 (27.4)		
Marriage type (n = 308)				
Monogamy	178 (69.0)	80 (31.0)	10.575*	0.005
Polygamy	6 (50.0)	6 (50.0)		
Socioeconomic status				
Upper/Middle class	219 (72.0)	85 (28.0)	0.001	>0.999
Lower class	43 (72.9)	16 (27.1)		
Ethnic group				
Edo indigenes	160 (71.7)	63 (28.3)	0.012	0.913
Non-Edo indigenes	102 (72.9)	38 (27.1)		

*Fisher–Freeman–Halton Exact Test. Bold = p < 0.05.

Age group was significantly associated with knowledge ($\chi^2=11.301$, $p=0.004$); younger respondents aged < 40 had a markedly higher proportion of good knowledge 129 (81.1%) compared with those aged 40–49 69 (65.1%) and ≥ 50 64 (65.3%). Marital status was significantly associated ($\chi^2=8.516^*$, $p=0.014$); married respondents had lower good knowledge 184 (68.1%) versus single/cohabiting 73 (83.9%). Marriage type among the 308 married respondents was significant ($\chi^2=10.575$, $p=0.005$); monogamous respondents had good knowledge in 178 (69.0%) versus 6 (50.0%) polygamous. Religion ($p=0.132$), education ($p=0.075$), income ($p=0.766$), SES ($p=1.000$), and ethnic group ($p=0.913$) were not significantly associated.

Table 5: Predictors of good knowledge of family planning among respondents

Variables	β (regression coefficient)	Odds Ratio	95% CI for OR		p-value
			Lower	Upper	
Age	-0.014	0.986	0.963	1.011	0.268
Ethnic group					
Edo indigenes	-0.026	0.974	0.592	1.603	0.917
Non-Edo indigenes*		1			
Level of education					
Tertiary	0.312	1.366	0.750	2.487	0.308
Below tertiary*		1			
Occupation					
Civil servant/Professional	0.086	1.090	0.570	2.084	0.794
Non-professional*		1			
Marital status					
Married	-0.764	0.466	0.232	0.934	0.031
Not married*		1			
Religion					
Christian	0.659	1.932	0.756	4.941	0.169
Non-Christian*		1			
Monthly income (₦)					
≥ 70,000	0.523	1.687	0.792	3.597	0.175
< 70,000*		1			
Socioeconomic status					
Upper class	-1.135	0.322	0.075	1.382	0.127
Middle class	-0.375	0.687	0.333	1.420	0.311
Lower class*		1			

β : regression coefficient; OR: Odds ratio; CI: Confidence interval; *Reference category; Bold = $p < 0.05$.

In the logistic regression, being married was the only statistically significant predictor of good knowledge (OR=0.466, 95% CI: 0.232–0.934, $p=0.031$). All other variables including age ($p=0.268$), education ($p=0.308$), occupation ($p=0.794$), religion ($p=0.169$), income ($p=0.175$), and SES ($p>0.05$) were not significant independent predictors.

SECTION C

ATTITUDE TOWARDS FAMILY PLANNING AMONG RESPONDENTS

Table 6: Attitude of respondents towards family planning (n = 408)

Statement	Agree n (%)	Neutral n (%)	Disagree n (%)
Family planning is beneficial for families	373 (91.4)	26 (6.4)	9 (2.2)
Men should discuss family planning with their partner	279 (68.4)	107 (26.2)	22 (5.4)
Men should attend family planning clinics with their partner	241 (59.1)	128 (31.4)	39 (9.5)
Family planning helps reduce the financial burden of families	237 (58.1)	148 (36.3)	23 (5.6)
Family planning improves maternal and child health	222 (54.4)	150 (36.8)	36 (8.8)
I would support my partner to use a contraceptive method	191 (46.8)	168 (41.2)	49 (12.0)
Men should use male methods if partner is unwilling	188 (46.1)	156 (38.2)	64 (15.7)
Family planning is unacceptable to me	39 (9.6)	144 (35.3)	225 (55.1)
Women should have as many children as possible	69 (16.9)	148 (36.3)	191 (46.8)
Family planning is a woman-only affair	56 (13.7)	131 (32.1)	221 (54.2)

The highest agreement among positive statements was for family planning being beneficial 373 (91.4%), followed by men should discuss family planning with their partner 279 (68.4%). For negative statements, the majority disagreed that family planning is unacceptable 225 (55.1%) and that it is a woman-only affair 221 (54.2%).

Table 7: Level of attitude towards family planning among respondents

Variable	Frequency (n = 408)	Percent (%)
Attitude category		
Positive attitude	391	95.8
Negative attitude	17	4.2

Overall, 391 (95.8%) had a positive attitude and 17 (4.2%) a negative attitude.

Table 8a: Socio-demographic variables and attitude towards family planning

Variables	Attitude towards Family Planning		Test statistics (χ^2)	p-value
	Positive Attitude n = 391 n (%)	Negative Attitude n = 17 n (%)		
Age group (years)				
< 40	162 (97.6)	4 (2.4)	7.552	0.023
40–49	120 (97.6)	3 (2.4)		
≥ 50	109 (91.6)	10 (8.4)		
Marital status				
Married	294 (95.5)	14 (4.5)	2.417*	0.299
Single/Cohabiting	90 (97.8)	2 (2.2)		
Separated/Divorced	7 (87.5)	1 (12.5)		
Religion				
Christianity	375 (97.7)	9 (2.3)	46.842*	<0.001
Islam/ATR	16 (66.7)	8 (33.3)		
Level of education				
Primary	30 (85.7)	5 (14.3)	9.894	0.007
Secondary	164 (96.5)	6 (3.5)		
Tertiary	197 (97.0)	6 (3.0)		
Marriage type (n = 308)				
Monogamy	282 (97.6)	7 (2.4)	53.347*	<0.001
Polygamy	12 (63.2)	7 (36.8)		
Family type (n = 308)				
Nuclear	263 (97.4)	7 (2.6)	36.603*	<0.001
Extended	29 (76.3)	9 (23.7)		

Table 8b: Socio-demographic variables and attitude towards family planning

Variables	Attitude towards Family Planning		Test statistics (χ^2)	p-value
	Positive Attitude n = 391 n (%)	Negative Attitude n = 17 n (%)		
Occupation				
Civil servant/Professional	98 (97.0)	3 (3.0)	6.239*	0.182
Artisan/Skilled	88 (96.7)	3 (3.3)		
Trader/Businessman	80 (95.2)	4 (4.8)		
Driver/Transporter/Farmer	42 (89.4)	5 (10.6)		
Other	83 (97.6)	2 (2.4)		
Socioeconomic status				
Upper/Middle class	315 (97.2)	9 (2.8)	6.007*	0.011
Lower class	76 (90.5)	8 (9.5)		
Monthly income (₦)				
< 70,000	42 (93.3)	3 (6.7)	0.244*	0.417
≥ 70,000	349 (96.1)	14 (3.9)		
Ethnic group				
Edo indigenes	240 (96.8)	8 (3.2)	0.865	0.352
Non-Edo indigenes	151 (94.4)	9 (5.6)		

*Fisher–Freeman–Halton Exact Test. Bold = $p < 0.05$. Marriage type and family type restricted to married respondents ($n = 308$).

Religion was significantly associated with attitude ($\chi^2=46.842^*$, $p<0.001$); Christians had 375 (97.7%) positive attitude compared with 16 (66.7%) for other religions. Age group was significant ($\chi^2=7.552$, $p=0.023$), with respondents aged ≥ 50 showing the lowest positivity 109 (91.6%). Education ($\chi^2=9.894$, $p=0.007$), marriage type ($\chi^2=53.347^*$, $p<0.001$), family type ($\chi^2=36.603^*$, $p<0.001$), and SES ($\chi^2=6.007^*$, $p=0.011$) were also significant. Marital status ($p=0.299$), occupation ($p=0.182$), income ($p=0.417$), and ethnic group ($p=0.352$) were not significantly associated.

Table 9: Predictors of positive attitude towards family planning among respondents

Variables	β (regression coefficient)	Odds Ratio	95% CI for OR		p-value
			Lower	Upper	
Age	-0.030	0.970	0.919	1.024	0.271
Ethnic group					
Edo indigenes	0.320	1.377	0.428	4.428	0.591
Non-Edo indigenes*		1			
Level of education					
Tertiary	-0.452	0.636	0.158	2.566	0.525
Below tertiary*		1			
Marital status					
Married	-0.575	0.563	0.065	4.905	0.603
Not married*		1			
Religion					
Christian	2.207	9.086	2.066	39.953	0.003
Non-Christian*		1			
Marriage type					
Monogamy	0.164	1.179	0.163	8.539	0.871
Non-monogamy*		1			
Family type					
Nuclear family	1.876	6.530	1.400	30.467	0.017
Non-nuclear*		1			
Socioeconomic status					
Upper/Middle class	0.773	2.167	0.505	9.298	0.298
Lower class*		1			

β : regression coefficient; OR: Odds ratio; CI: Confidence interval; *Reference category; Bold = $p < 0.05$. Upper class excluded due to perfect separation.

Christianity was the strongest independent predictor of positive attitude as Christians were 9.086 times more likely to have a positive attitude towards family planning when compared to non-Christians, and this was statistically significant (OR=9.086, 95% CI: 2.066–39.953,

p=0.003). Nuclear family type was also a significant predictor (OR=6.530, 95% CI: 1.400–30.467, p=0.017). All other variables were not significant independent predictors.

SECTION D

FAMILY PLANNING PRACTICES AMONG RESPONDENTS

Table 10: Family planning practices among respondents

Variable	Frequency (n = 408)	Percent (%)
Ever discussed family planning with spouse/partner		
Yes	226	55.4
No	182	44.6
Frequency of discussion (n = 226)		
Sometimes	120	53.1
Rarely	43	19.0
Occasionally	40	17.7
Often	23	10.2
Approves of partner using family planning		
Yes	325	79.7
No	83	20.3
Accompanied partner to a health facility for family planning		
Yes	112	27.5
No	296	72.5
Provided financial support for family planning		
Yes	209	51.2
No	199	48.8

Over half of respondents 226 (55.4%) had discussed family planning with their partner; discussions were held sometimes by 120 (53.1%). Most 325 (79.7%) approved of their partner using a method, but only 112 (27.5%) had accompanied their partner to a facility, and only 209 (51.2%) have provide financial support to their partner for family planning.

Table 11: Family planning methods utilisation and responses among respondents

Variable	Frequency (n = 408)	Percent (%)
Ever used a method to delay/prevent pregnancy		
Yes	297	72.8
No	111	27.2
Methods ever used (n = 297, MRQ)		
Condoms	221	74.4
Withdrawal method	186	62.6
Partner uses oral/injectable method	79	26.6
Vasectomy	2	0.7
Currently using any family planning method		
Yes	176	43.1
No	232	56.9
Current method (n = 176, MRQ)		
Condoms	111	63.1
Withdrawal method	83	47.2
Partner uses a method	62	35.2
Vasectomy	1	0.6
Reasons not currently using (n = 232, MRQ)		
No need at this time	139	59.9
Lack of knowledge	31	13.4
Against religion or culture	27	11.6
Trying to conceive	26	11.2
Fear of side effects	24	10.3
Not accessible in area	24	10.3
Partner refuses	6	2.6

MRQ = Multiple Response Question; percentages for MRQ items may exceed 100%.

Most 297 (72.8%) had ever used a method; condoms were the most common 221 (74.4%), followed by withdrawal 186 (62.6%). At survey time, 176 (43.1%) were currently using a method. Of 232 (56.9%) not using, no need at this time was the most cited reason 139 (59.9%), followed by lack of knowledge 31 (13.4%) and religious or cultural reasons 27 (11.6%).

Table 12a: Socio-demographic variables and current use of family planning among respondents

Variables	Current Use of Family Planning		Test statistics	p-value
	Currently Using n=176 n (%)	Not Currently Using n=232 n (%)		
Age group (years)				
< 40	84 (50.6)	82 (49.4)	8.983	0.011
40–49	53 (43.1)	70 (56.9)		
≥ 50	39 (32.8)	80 (67.2)		
Marital status				
Married	123 (39.9)	185 (60.1)	11.068*	0.004
Single/Cohabiting	52 (56.5)	40 (43.5)		
Separated/Divorced	1 (12.5)	7 (87.5)		
Religion				
Christianity	171 (44.5)	213 (55.5)	4.251*	0.039
Islam/ATR	5 (20.8)	19 (79.2)		
Level of education				
Primary	2 (5.7)	33 (94.3)	21.862	<0.001
Secondary	79 (46.5)	91 (53.5)		
Tertiary	95 (46.8)	108 (53.2)		
Occupation				
Civil servant/Professional	49 (48.5)	52 (51.5)	5.726	0.221
Artisan/Skilled	35 (38.5)	56 (61.5)		
Trader/Businessman	32 (38.1)	52 (61.9)		
Driver/Transporter/Farmer	17 (36.2)	30 (63.8)		
Other	43 (50.6)	42 (49.4)		
Monthly income (₦)				
< 70,000	17 (37.8)	28 (62.2)	0.372	0.542
≥ 70,000	159 (43.8)	204 (56.2)		

Table 12b: Socio-demographic variables and current use of family planning among respondents

Variables	Current Use of Family Planning		Test statistics	p-value
	Currently Using n = 176 n (%)	Not Currently Using n = 232 n (%)		
Marriage type (n = 308)				
Monogamy	120 (41.5)	169 (58.5)	3.907	0.048
Polygamy	3 (15.8)	16 (84.2)		
Family type (n = 308)				
Nuclear	113 (41.9)	157 (58.1)	2.736	0.098
Extended	10 (26.3)	28 (73.7)		
Socio-economic status				
Upper class	4 (33.3)	8 (66.7)	3.935	0.140
Middle class	143 (45.8)	169 (54.2)		
Lower class	29 (34.5)	55 (65.5)		
Ethnic group				
Edo indigenes	100 (40.3)	148 (59.7)	1.760	0.185
Non-Edo indigenes	76 (47.5)	84 (52.5)		

*Fisher–Freeman–Halton Exact Test. Bold = $p < 0.05$. Marriage type and family type restricted to married respondents (n = 308).

Age was significantly associated with current use ($\chi^2=8.983$, $p=0.011$); younger respondents aged < 40 had the highest current use 84 (50.6%) compared with ≥ 50 years 39 (32.8%). Marital status was significant ($\chi^2=11.068^*$, $p=0.004$); single/cohabiting respondents had the highest use 52 (56.5%) while separated/divorced had the lowest 1 (12.5%). Religion ($\chi^2=4.251$, $p=0.039$) and education ($\chi^2=21.862$, $p<0.001$) were also significantly associated; respondents with only primary education had the lowest current use 2 (5.7%). Marriage type was significant ($\chi^2=3.907$, $p=0.048$); polygamous respondents had lower use 3 (15.8%) compared with monogamous 120 (41.5%). Occupation ($p=0.221$), income ($p=0.542$), family type ($p=0.098$), SES ($p=0.140$), and ethnicity ($p=0.185$) were not significantly associated.

Table 13: Predictors of current use of family planning among respondents (n = 408)

Variables	β (regression coefficient)	Odds Ratio	95% CI for OR		p-value
			Lower	Upper	
Age	-0.018	0.982	0.961	1.003	0.097
Ethnic group					
Edo indigenes	-0.312	0.732	0.478	1.120	0.151
Non-Edo indigenes*		1			
Level of education					
Tertiary	+0.075	1.077	0.639	1.816	0.779
Below tertiary*		1			
Occupation					
Civil servant/Professional	+0.327	1.387	0.789	2.440	0.256
Non-professional*		1			
Marital status					
Married	-1.077	0.341	0.078	1.480	0.151
Not married*		1			
Religion					
Christian	+0.737	2.090	0.700	6.239	0.186
Non-Christian*		1			
Monthly income (₦)					
≥ 70,000	+0.348	1.416	0.716	2.802	0.317
< 70,000*		1			
Socio-economic status					
Upper class	-0.668	0.513	0.122	2.146	0.360
Middle class	+0.134	1.143	0.623	2.097	0.666
Lower class*		1			
Marriage type					
Monogamy	+0.481	1.618	0.391	6.689	0.506
Non-monogamy*		1			
Family type					
Nuclear family	+0.630	1.878	1.007	3.500	0.047
Non-nuclear*		1			

β : regression coefficient; OR: Odds ratio; CI: Confidence interval; *Reference category; Bold = $p < 0.05$.

Nuclear family type was the only statistically significant independent predictor of current use of family planning (OR=1.878, 95% CI: 1.007–3.500, $p=0.047$). Respondents from nuclear families had approximately 1.9 times higher odds of currently using a family planning

method compared with those from non-nuclear families, after adjusting for all other variables. Age ($p=0.097$), education ($p=0.779$), marital status ($p=0.151$), religion ($p=0.186$), income ($p=0.317$), SES ($p>0.05$), occupation ($p=0.256$), marriage type ($p=0.506$), and ethnicity ($p=0.151$) were not significant independent predictors.

SECTION E

FACTORS ASSOCIATED WITH FAMILY PLANNING UPTAKE

Table 14: Factors associated with family planning uptake among respondents

Variable	Frequency (n = 408)	Percent (%)
Knows where to obtain family planning in community		
Yes	319	78.2
No	89	21.8
Distance to nearest facility (n = 319)		
Less than 30 minutes	150	47.0
30–59 minutes	105	32.9
1 hour or more	59	18.5
Do not know	5	1.6
Perceived cost of family planning services		
Affordable	218	53.4
Do not know	136	33.3
Expensive	54	13.3
Health worker ever discussed family planning with respondent		
Yes	218	53.4
No	190	46.6
Cultural or religious beliefs discouraged use		
Yes	100	24.5
No	308	75.5
Feels embarrassed requesting family planning services		
Yes	70	17.2
No	338	82.8
Influence of friends or family on family planning decision		
No influence	269	65.9
Yes, positively	88	21.6
Yes, negatively	51	12.5
Had concerns about side effects of family planning		
Yes	122	29.9
No	286	70.1

Most 319 (78.2%) knew where to obtain family planning; of these, 150 (47.0%) were within 30 minutes of the nearest facility. Over half 218 (53.4%) considered services affordable, and the same proportion had previously discussed family planning with a health worker. A

quarter 100 (24.5%) reported cultural or religious beliefs as a discouraging factor, 70 (17.2%) felt embarrassed requesting services, and 122 (29.9%) had concerns about side effects.

Table 15: Factors associated with family planning uptake and current use among respondents

Variables	Current Use of Family Planning		Test statistics (χ^2)	p-value
	Currently Using n = 176 n (%)	Not Currently Using n = 232 n (%)		
Knows where to obtain FP in community				
Yes	161 (50.5)	158 (49.5)	30.702	<0.001
No	15 (16.9)	74 (83.1)		
Perceived cost of FP services				
Affordable	120 (55.0)	98 (45.0)	28.824	<0.001
Do not know	36 (26.5)	100 (73.5)		
Expensive	20 (37.0)	34 (63.0)		
Health worker discussed FP with respondent				
Yes	102 (46.8)	116 (53.2)	2.235	0.135
No	74 (38.9)	116 (61.1)		
Cultural/religious beliefs discouraged use				
Yes	32 (32.0)	68 (68.0)	6.111	0.013
No	144 (46.8)	164 (53.2)		
Feels embarrassed requesting FP services				
Yes	31 (44.3)	39 (55.7)	0.006	0.936
No	145 (42.9)	193 (57.1)		
Peer/family influence on FP decision				
No influence	115 (42.8)	154 (57.2)	2.472	0.291
Yes, positively	43 (48.9)	45 (51.1)		
Yes, negatively	18 (35.3)	33 (64.7)		
Concerns about side effects				
Yes	56 (45.9)	66 (54.1)	0.393	0.531
No	120 (42.0)	166 (58.0)		

Bold = $p < 0.05$.

Knowing where to obtain family planning ($\chi^2=30.702$, $p<0.001$) and perceived affordability ($\chi^2=28.824$, $p<0.001$) were strongly associated with current use. Cultural/religious barriers were also significantly associated ($\chi^2=6.111$, $p=0.013$); respondents who reported such

barriers had lower current use 32 (32.0%) compared with those without barriers 144 (46.8%). Health worker discussion ($p=0.135$), embarrassment ($p=0.936$), peer influence ($p=0.291$), and side effect concerns ($p=0.531$) were not significantly associated with current use of family planning amongst respondents.

SECTION F

LEVEL OF MALE INVOLVEMENT IN FAMILY PLANNING ACTIVITIES

Table 16: Male involvement indicators among respondents

Indicator	Yes n (%)	No n (%)
Discussed family planning with spouse/partner	226 (55.4)	182 (44.6)
Approved partner using a family planning method	325 (79.7)	83 (20.3)
Accompanied partner to health facility for family planning	112 (27.5)	296 (72.5)
Provided financial support for partner's family planning	209 (51.2)	199 (48.8)
Ever or currently using a family planning method personally	304 (74.5)	104 (25.5)
Considers family planning a joint responsibility	376 (92.2)	32 (7.8)
Sought family planning information on own initiative	211 (51.7)	197 (48.3)
Encouraged partner to start or continue using family planning	210 (51.5)	198 (48.5)
Suggested a specific family planning method to partner	169 (41.4)	239 (58.6)
Participated in community family planning health talks or outreach	107 (26.2)	301 (73.8)

The most commonly met indicator was considering family planning a joint responsibility 376 (92.2%), followed by approving of partner using a method 325 (79.7%) and personal use 304 (74.5%). Community participation in health talks and outreach was the least common 107 (26.2%).

Table 17: Level of male involvement in family planning among respondents

Variable	Frequency (n = 408)	Percent (%)
Involvement category		
High involvement (composite score ≥ 7 out of 10)	160	39.2
Low involvement (composite score < 7 out of 10)	248	60.8

Overall, 160 (39.2%) had high involvement and 248 (60.8%) low involvement.

Table 18a: Socio-demographic variables and level of male involvement in family planning

Variables	Level of Male Involvement		Test statistics (χ^2)	p-value
	High Involvement n = 160 n (%)	Low Involvement n = 248 n (%)		
Age group (years)				
< 40	60 (36.1)	106 (63.9)	1.109	0.574
40–49	51 (41.5)	72 (58.5)		
≥ 50	49 (41.2)	70 (58.8)		
Marital status				
Married	128 (41.6)	180 (58.4)	3.004*	0.223
Single/Cohabiting	29 (31.5)	63 (68.5)		
Separated/Divorced	3 (37.5)	5 (62.5)		
Religion				
Christianity	153 (39.8)	231 (60.2)	0.679	0.410
Islam/ATR	7 (29.2)	17 (70.8)		
Level of education				
Primary	2 (5.7)	33 (94.3)	42.035	<0.001
Secondary	49 (28.8)	121 (71.2)		
Tertiary	109 (53.7)	94 (46.3)		
Monthly income (₦)				
< 70,000	14 (31.1)	31 (68.9)	1.038	0.308
≥ 70,000	146 (40.2)	217 (59.8)		
Marriage type (n = 308)				
Monogamy	125 (43.3)	164 (56.7)	8.534	0.014
Polygamy	3 (15.8)	16 (84.2)		

Table 18b: Socio-demographic variables and level of male involvement in family planning

Variables	Level of Male Involvement		Test statistics (χ^2)	p-value
	High Involvement n = 160 n (%)	Low Involvement n = 248 n (%)		
Family type (n = 308)				
Nuclear	123 (45.6)	147 (54.4)	7.794	0.020
Extended	5 (13.2)	33 (86.8)		
Socioeconomic status				
Upper class	11 (91.7)	1 (8.3)	38.636*	<0.001
Middle class	137 (43.9)	175 (56.1)		
Lower class	12 (14.3)	72 (85.7)		
Occupation				
Civil servant/Professional	61 (60.4)	40 (39.6)	32.673	<0.001
Other	35 (41.2)	50 (58.8)		
Trader/Businessman	30 (35.7)	54 (64.3)		
Driver/Transporter/Farmer	14 (29.8)	33 (70.2)		
Artisan/Skilled	20 (22.0)	71 (78.0)		
Ethnic group				
Edo indigenes	94 (37.9)	154 (62.1)	0.327	0.567
Non-Edo indigenes	66 (41.2)	94 (58.8)		

*Fisher–Freeman–Halton Exact Test. Bold = $p < 0.05$. Marriage type and family type restricted to married respondents (n = 308).

Education was significantly associated with male involvement ($\chi^2=42.035$, $p<0.001$); 109 (53.7%) of tertiary educated respondents had high involvement versus only 2 (5.7%) with primary education. Occupation was significantly associated ($\chi^2=32.673$, $p<0.001$); civil servants and professionals had the highest proportion 61 (60.4%) and artisans the lowest 20 (22.0%). SES was significantly associated ($\chi^2=38.636$, $p<0.001$); 11 (91.7%) of upper class respondents had high involvement versus 12 (14.3%) of lower class. Marriage type ($p=0.014$) and family type ($p=0.020$) were also significant. Age ($p=0.574$), marital status ($p=0.223$),

religion ($p=0.410$), income ($p=0.308$), and ethnic group ($p=0.567$) were not significantly associated.

Table 19: Relationship between knowledge, attitude and level of male involvement in family planning

Variables	Level of Male Involvement		Test statistics (χ^2)	p-value
	High Involvement n = 160 n (%)	Low Involvement n = 248 n (%)		
Knowledge of family planning				
(n = 363)				
Good knowledge	119 (45.4)	143 (54.6)	1.502	0.220
Poor knowledge	38 (37.6)	63 (62.4)		
Attitude towards family planning (n = 408)				
Positive attitude	157 (40.2)	234 (59.8)	2.582	0.108
Negative attitude	3 (17.6)	14 (82.4)		

Bold = $p < 0.05$.

Respondents with good knowledge had a higher proportion of high involvement 119 (45.4%) compared with those with poor knowledge 38 (37.6%), though this did not reach statistical significance ($\chi^2=1.502$, $p=0.220$). Similarly, those with a positive attitude had higher high involvement 157 (40.2%) versus 3 (17.6%) with negative attitude, also not statistically significant ($\chi^2=2.582$, $p=0.108$).

Table 20a: Predictors of high male involvement in family planning among respondents

Variables	β (regression coefficient)	Odds Ratio	95% CI for OR		p- value
			Lower	Upper	
Age (per 1-year increase)					
Age	-0.009	0.991	0.966	1.017	0.488
Ethnic group					
Edo indigenes	-0.221	0.802	0.475	1.353	0.408
Non-Edo indigenes*		1			
Level of education					
Tertiary	0.440	1.552	0.849	2.837	0.153
Below tertiary*		1			
Occupation					
Civil servant/Professional	0.157	1.170	0.619	2.210	0.630
Non-professional*		1			
Monthly income (₦)					
≥ 70,000	0.129	1.137	0.500	2.585	0.759
< 70,000*		1			
Marriage type					
Monogamy	0.451	1.570	0.726	3.397	0.252
Non-monogamy*		1			
Family type					
Nuclear family	0.484	1.623	0.753	3.498	0.217
Non-nuclear*		1			
Socioeconomic status					
Upper class	3.325	27.794	2.358	327.618	0.008
Middle class	0.678	1.970	0.843	4.604	0.117
Lower class*		1			
Knowledge					
Good knowledge	0.707	2.028	1.137	3.619	0.017
Poor knowledge*		1			

Table 20b: Predictors of high male involvement in family planning among respondents

Variables	β (regression coefficient)	Odds Ratio	95% CI for OR		p-value
			Lower	Upper	
Attitude					
Positive attitude	-0.154	0.857	0.122	6.041	0.877
Negative attitude*		1			
Knows where to obtain FP					
Yes	0.767	2.154	0.986	4.704	0.054
No*		1			
Health worker discussed FP with respondent					
Yes	1.752	5.768	3.366	9.885	<0.001
No*		1			
Cultural/religious barrier					
Yes	0.023	1.023	0.541	1.935	0.943
No*		1			
Concerns about side effects					
Yes	+0.406	1.501	0.883	2.553	0.134
No*		1			

β : regression coefficient; OR: Odds ratio; CI: Confidence interval; *Reference category; Bold = $p < 0.05$.

Health worker discussion of family planning with the respondent was the strongest predictor of high male involvement (OR=5.768, 95% CI: 3.366–9.885, $p < 0.001$). Good knowledge was also a significant independent predictor (OR=2.028, 95% CI: 1.137–3.619, $p = 0.017$). Upper class SES was significant (OR=27.794, 95% CI: 2.358–327.618, $p = 0.008$). Knowing the location of FP services approached significance (OR=2.154, $p = 0.054$). All other variables were not significant independent predictors after adjustment.

CHAPTER FIVE

DISCUSSION

This study assessed male involvement in family planning activities in Ovia North East Local Government Area of Edo State, Nigeria, involving 408 men drawn from communities across the LGA. The findings are discussed below in line with the specific objectives of the study.

Most of the respondents had previously heard of family planning, with health workers, radio or television, and friends or relatives emerging as the most commonly cited sources of information in roughly equal proportions. The predominance of health workers as an information source is an encouraging finding that reflects the reach of primary health care services in Ovia North East LGA, where a network of primary health centres is distributed across the thirteen wards of the area. The near-equal role of radio and television alongside health workers suggests that mass media continues to play a meaningful role in reproductive health communication in this semi-urban setting. Social media was cited by nearly half of respondents, reflecting the growing penetration of smartphones and internet access even in peri-urban communities, a trend with significant implications for how health information reaches younger and more educated men. This finding is consistent with that of a descriptive cross-sectional study conducted among 200 men in Tourourou Village, Kayes Region of Mali, where radio and friends were the most frequent sources of family planning information, with radio cited by more than half of respondents.³⁸ A similar pattern was reported in a community-based descriptive cross-sectional study conducted among 166 married men in Fadan Kamatan community, Kaduna State, Nigeria, where health workers were cited by about three-quarters of respondents and mass media by about half as the dominant sources of family planning information.⁴⁸ The public health significance of this finding lies in the fact that exposure to multiple sources of family planning information, particularly through health workers and mass media, has been shown to improve knowledge and increase the likelihood of contraceptive use, as men who are better informed are more likely to support and participate in family planning activities.³⁶ The Ovia North East LGA Primary Health Care Department should ensure that family planning counselling is routinely integrated into all primary health centre consultations, and that community health extension workers are adequately equipped and incentivised to discuss family planning with male community members during outreach activities. In addition, sustained investment in radio, television, and social media campaigns should be prioritised to reach men across different age groups.

Among the specific knowledge items, the most widely recognised correct definition of family planning was its role in planning the number and spacing of children, while fewer respondents identified its role in improving maternal and child health, suggesting that men in this study largely understand family planning in demographic terms rather than in terms of its health benefits. Condoms were by far the most widely known method, followed by oral contraceptive pills and withdrawal, while vasectomy and intrauterine devices were the least known. The probable reasons for this knowledge gap regarding specific methods are multi-layered. First, condoms and oral contraceptive pills have been the primary focus of Nigeria's national family planning campaigns for decades, including the National Family Planning Communication Campaign which used over 8,000 radio and television broadcasts across 17 radio and 18 television stations nationwide, the Nigerian Urban Reproductive Health Initiative launched targeting four major cities, and the National Family Planning Blueprint 2020–2024, meaning that awareness of these methods is deeply embedded in public consciousness through years of sustained promotion.^{64,65} Second, male permanent methods such as vasectomy remain culturally stigmatised in many Nigerian communities, where masculinity is often equated with fertility and the ability to father children, making vasectomy an uncomfortable topic that is rarely discussed openly by men, health workers, or community leaders.⁴⁴ Third, long-acting reversible methods such as IUDs and implants are predominantly discussed in the context of female reproductive health, and men are rarely the target audience for information about these methods, further contributing to lower awareness among male respondents. This pattern is consistent with findings from a descriptive cross-sectional study conducted among 2,425 unmarried young men in Abidjan, Nairobi, and Lagos, where awareness of condoms was near-universal among more than four-fifths of respondents, but awareness of long-acting reversible contraceptives was substantially lower, reported by only about a third.³⁷ A similar finding was reported in a descriptive cross-sectional study conducted among 200 married men in a rural area of West Bengal, India, where more than four-fifths knew condoms as the most widely recognised method, while male sterilisation remained poorly known among fewer than a quarter.⁴¹ The public health implication is that men with limited knowledge of the full range of contraceptive options are poorly equipped to support their partners in choosing the most appropriate and effective method for their circumstances, potentially contributing to suboptimal contraceptive choices and higher rates of unintended pregnancy.² The Edo State Ministry of Health should develop male-targeted

family planning education programmes that specifically address the full range of contraceptive methods including vasectomy, presented within a culturally sensitive framework that decouples vasectomy from notions of impotence and emasculation, using testimonials from male community leaders and religious figures to normalise its discussion.

Overall, nearly three-quarters of respondents who had heard of family planning were classified as having good knowledge, while about a quarter had poor knowledge. This relatively high proportion with good knowledge is likely attributable to the relatively high educational attainment of the study population, with about half having tertiary education and a further two-fifths having secondary education, the semi-urban character of Ovia North East LGA which facilitates access to health information through diverse channels, and the presence of higher educational institutions including Igbinedion University in the study area which creates an environment of greater health information circulation. This finding is broadly consistent with a community-based analytical cross-sectional study conducted among 452 married men across randomly selected local government areas in Oyo State, Nigeria, which similarly reported that almost all respondents, nearly ninety-nine in one hundred, had awareness of family planning, and more than four-fifths expressed support for its use.⁵² A comparable level of good knowledge was reported in a descriptive cross-sectional study conducted among 389 married men in Ogbogu Community in Rivers State, Nigeria, where high awareness of family planning was documented at nearly all respondents, though awareness of specific methods such as condoms was reported by about two-fifths and knowledge of sterilisation remained the lowest.⁴⁰ This finding is significant because good knowledge of family planning is a prerequisite for its adoption, and populations with adequate knowledge are better positioned to make informed reproductive health decisions and to support their partners in accessing and continuing contraceptive use.³⁰ Family planning programmes in Ovia North East LGA should build on this existing knowledge base by shifting messaging from general awareness to specific benefits, effectiveness, and accessibility of a broader range of methods, particularly those that are male-centred or long-acting.

Age group was significantly associated with knowledge ($\chi^2 = 11.301$, $p = 0.004$), with younger respondents under 40 years showing a markedly higher proportion of good

knowledge compared with those aged 40 to 49 years and those aged 50 years and above. Marital status was also significantly associated ($\chi^2 = 8.516$, $p = 0.014$), with married respondents showing lower proportions of good knowledge compared to single or cohabiting respondents. Marriage type was significant among married respondents ($\chi^2 = 10.575$, $p = 0.005$), with polygamous respondents having lower good knowledge compared to those in monogamous unions. The probable reasons for the age gradient in knowledge are rooted in both generational and contextual factors. Younger men have grown up in an era of greater media saturation and digital connectivity, with access to platforms such as WhatsApp, Instagram, YouTube, and TikTok from adolescence, as well as greater exposure to school-based health education including the National School Health Programme, making them more likely to have encountered family planning information through multiple channels from an earlier age. Older men, particularly those above 50 years, were educated and socialised in a period when family planning was less openly discussed and when larger family sizes were more normatively acceptable and even desirable in many Edo communities. The lower knowledge among married men compared to single or cohabiting men may reflect a paradox common in reproductive health research, where married men, particularly older ones, perceive themselves as already knowledgeable about family planning from lived experience and therefore are less receptive to new information or less likely to actively seek it. Results from a community-based analytical cross-sectional study conducted among 452 married men in Oyo State, Nigeria, similarly found that educational level was significantly associated with knowledge of family planning, with lower education linked to poorer knowledge, and that respondents with negative perceptions were more likely to belong to the less educated group.⁵² A descriptive cross-sectional study conducted among 200 men in Tourourou Village, Kayes Region of Mali, similarly reported that age and marital context were associated with the depth of family planning knowledge, with older and more traditionally-oriented men demonstrating less comprehensive understanding.³⁸ Low and unequal knowledge among key male subgroups may contribute to poor contraceptive uptake, persistent unmet need for family planning, and increased risk of unintended pregnancies, thereby negatively affecting maternal and child health outcomes in the community.⁴ These associations identify older married men and those in polygamous unions as priority subgroups for knowledge enhancement interventions. Such interventions should include targeted community dialogues facilitated by trained community health workers, male-focused radio drama campaigns on local radio stations, simplified pictorial booklets designed for lower literacy audiences, and

dedicated male-only family planning information sessions held at motor parks, markets, barbing salons, and places of religious worship. Community Health Extension Workers deployed across Ovia North East LGA should receive specialised training in engaging older and polygamous men in family planning discussions during home visits and community meetings, using simple, culturally appropriate messages that resonate with their lived experiences.

At the multivariate level, being married was the only statistically significant independent predictor of good knowledge after adjustment for all other variables, with married men having significantly lower odds of good knowledge compared to their unmarried counterparts (OR = 0.466, 95% CI: 0.232–0.934, $p = 0.031$). This finding suggests that after accounting for education, income, religion, age, and other confounders, marital status itself carries an independent negative association with knowledge, which may reflect the tendency of married men to rely on existing beliefs and experience rather than actively updating their knowledge of family planning options. It is also possible that married men are less likely to be targeted by family planning information campaigns, which in Nigeria have historically been directed primarily at women attending antenatal and postnatal clinics rather than at their male partners.²⁵ A community-based analytical cross-sectional study conducted among 577 married men in rural districts of Eastern Ethiopia found that joint decision-making in family planning was associated with better outcomes, with about seven in ten respondents reporting joint decision-making and this being significantly associated with higher involvement.²³ An analytical cross-sectional study conducted among 350 married men in Abeokuta South Local Government Area of Ogun State, Nigeria, similarly found a statistically significant positive relationship between knowledge and male involvement, confirming that knowledge and active engagement in family planning are mutually reinforcing.⁵³

Inadequate knowledge among married men, who often play a key role in household reproductive decision-making, may contribute to low contraceptive uptake, increased unmet need for family planning, and higher risk of unintended pregnancies, with downstream consequences for maternal and child health outcomes at the population level.⁴ Beyond health facilities, the most effective reach for married men may be through the spaces where they naturally congregate and relax, such as sports and recreational facilities, motor parks, town halls, and social media platforms. The Ovia North East LGA Primary Health Care

Department should introduce dedicated male family planning consultation sessions at all primary health centres, and should simultaneously expand outreach to these informal male spaces.

Almost all respondents demonstrated a positive attitude towards family planning, making the attitudinal profile of this study population one of the most favourable reported in recent Nigerian literature. Among the specific attitudinal items, the highest agreement was recorded for the statement that family planning is beneficial for families, followed by the view that men should discuss family planning with their partners. For the negative items, the majority disagreed that family planning is unacceptable and that it is a woman-only affair, indicating that most men in this study reject the traditional notion that contraception is solely a female responsibility. However, it is notable that agreement on the more active forms of male engagement, such as supporting a partner to use a contraceptive method and using male methods when the partner is unwilling, attracted lower proportions of agreement, with nearly half of respondents remaining neutral on both statements. This pattern reveals an important distinction between attitudinal acceptance of family planning in principle and readiness for active personal engagement in practice. The probable reason for the overwhelmingly positive attitudinal profile overall is likely a confluence of the relatively high educational attainment of the study population, the predominantly Protestant and Pentecostal Christian religious orientation of respondents, and the semi-urban character of Ovia North East LGA. It should be noted, however, that the Catholic Church's official position endorses only natural family planning methods and does not support artificial contraception, meaning that the generally positive Christian attitudinal profile observed in this study is more accurately attributed to Protestant and Pentecostal denominational orientations dominant in this community rather than to Christianity uniformly.⁶⁶ The lower agreement on items requiring personal action compared to items expressing general acceptance may reflect the persistence of gender role expectations even among otherwise progressive respondents. This is consistent with findings from a descriptive cross-sectional study conducted among 785 men in the communes of Bamako, Mali, where about three-quarters displayed positive attitudes towards family planning generally, but active personal engagement remained limited among a substantial proportion.⁴² A similar pattern of generally positive attitudes coexisting with lower active engagement was reported in a cross-sectional study conducted among married men in a rural

community in South West Nigeria, where the majority approved of family planning in principle but a substantial proportion had never actively supported their wives in accessing services.³⁹ This finding is significant because positive attitudes, while necessary, are not sufficient to drive behaviour change on their own, and the gap between attitudinal acceptance and behavioural engagement represents a missed opportunity.³⁰ The Ovia North East LGA Primary Health Care Department should collaborate with trained community health extension workers and local NGOs to implement structured male-focused behavioural skills training sessions at town hall meetings, motor parks, and community centres, specifically rehearsing practical actions such as accompanying partners to clinics, discussing contraceptive choices, and identifying available male methods.

Religion was the most strongly associated variable with attitude at the bivariate level ($\chi^2 = 46.842$, $p < 0.001$), with Christians showing a markedly higher proportion of positive attitude compared to respondents of Islamic or African Traditional Religion backgrounds. Age group ($\chi^2 = 7.552$, $p = 0.023$), level of education ($\chi^2 = 9.894$, $p = 0.007$), marriage type ($\chi^2 = 53.347$, $p < 0.001$), family type ($\chi^2 = 36.603$, $p < 0.001$), and socioeconomic status ($\chi^2 = 6.007$, $p = 0.011$) were also significantly associated. The association between religion and attitude reflects the well-documented influence of religious doctrine on reproductive health decisions in Nigeria, where certain Islamic teachings and some African Traditional Religion beliefs tend to discourage artificial contraceptive use, with some schools of Islamic thought viewing birth prevention as contrary to religious obligations, while African Traditional Religion frames large family size as honouring ancestral spirits and perpetuating lineage.¹² Evidence from a comprehensive review of religion and fertility in sub-Saharan Africa found that Muslim women were significantly less likely to use modern contraception than Christian women, and that religious leaders across all denominations were highly influential in shaping community members' contraceptive behaviour.⁶⁷ The age association, with older respondents being less likely to hold positive attitudes, mirrors the broader pattern of generational difference observed across sub-Saharan Africa, where older men are more likely to have internalised pronatalist norms that equate large families with wealth, virility, and social prestige. The association with marriage type, where polygamous men showed far lower positivity, is particularly noteworthy because polygamy is itself associated with higher desired family size. A community-based analytical cross-sectional study conducted among

452 married men in Oyo State, Nigeria, similarly found significant associations between religion, education, and attitudes toward family planning, with Muslim respondents more likely to hold negative perceptions.⁵² A descriptive cross-sectional study conducted among 200 men in Tourourou Village, Kayes Region, Mali, also reported that religious beliefs were a major determinant of attitudes toward family planning, with traditional and Islamic beliefs discouraging contraceptive practice among about half of the respondents.³⁸ These associations identify polygamous men, men of non-Christian religious backgrounds, and older men as priority groups for attitudinal change interventions. The strong influence of religion on attitudes toward family planning has important public health implications, as negative religiously influenced attitudes may reduce acceptance and use of modern contraceptives, thereby contributing to persistent unmet need for family planning, higher fertility rates, and increased risk of unintended pregnancies, with adverse effects on maternal and child health outcomes.⁴ In addition to engagement of the LGA Council of Traditional Rulers and Inter-Faith Committee, NGOs, faith-based organisations, community-based organisations, and civil society organisations operating in Ovia North East LGA have a critical role to play, and international health bodies including UNFPA and UNICEF can provide technical assistance, training materials, and advocacy support to facilitate partnerships between the LGA Primary Health Care Department and faith and community organisations.⁶⁸ The Ovia North East LGA Council of Traditional Rulers and the Inter-Faith Committee of Ovia North East should be formally engaged by the LGA Primary Health Care Department, with facilitation from UNFPA's Nigeria Country Office, to develop faith-sensitive family planning messaging and to publicly endorse family planning as consistent with the ethical principles of each religious tradition.

At the multivariate level, Christianity and nuclear family type were the only statistically significant independent predictors of positive attitude after adjustment. Christian respondents had over nine times the odds of holding a positive attitude towards family planning compared to non-Christians (OR = 9.086, 95% CI: 2.066–39.953, $p = 0.003$), representing the strongest predictor identified in this section. Men from nuclear families had approximately six and a half times the odds of positive attitude compared to those from non-nuclear families (OR = 6.530, 95% CI: 1.400–30.467, $p = 0.017$). The magnitude of the Christianity effect, with the caveat that it primarily reflects Protestant and Pentecostal denominational affiliations,

suggests that religious community membership operates as an independent and powerful determinant of attitudinal orientation toward family planning. This may be because mainstream Protestant and Pentecostal denominations in southern Nigeria have increasingly integrated reproductive health messaging into their pastoral activities, creating a faith-supported environment in which family planning is not seen as contradictory to spiritual values.⁶⁶ The nuclear family effect likely reflects the economic rationality of contraception in smaller household units, where the cost of each additional child is more directly felt by the parents without the redistributive support of extended family networks. This is consistent with finding from an analytical cross-sectional study conducted among 544 married women whose husbands participated in family planning decisions in Herat, Afghanistan which found that husbands' cultural and religious backgrounds were among the strongest determinants of their involvement in family planning decisions, with spousal support positively associated with facility attendance for about half of respondents.⁵⁰ A community-based descriptive cross-sectional study conducted among 165 married men in Singur District, West Bengal, India, similarly found that attitudinal barriers rooted in cultural and religious beliefs were the most persistent obstacles to male involvement in family planning, with negative attitudes toward condom use and male sterilisation reported by the majority.⁴¹ These findings have important public health significance because they suggest that faith-based channels represent an underutilised but potentially highly effective pathway for improving family planning attitudes.⁶⁶ The Edo State Ministry of Health should formalise a faith-based reproductive health partnership programme, providing structured training and resource materials to religious leaders of all denominations across Ovia North East LGA.

Regarding family planning practices, slightly more than half of respondents had at some point discussed family planning with their partner, though among those who had, discussions occurred only sometimes or rarely for the majority. About four in five approved of their partner using a family planning method, but only about one in four had ever accompanied their partner to a health facility for family planning services. About half had provided financial support for their partner's family planning, and a similar proportion had sought family planning information on their own initiative. It should be emphasised that male involvement in family planning does not mean only using male contraceptive methods personally, but encompasses a much broader spectrum of engagement including discussing

family planning options with the partner, approving and financially supporting the partner's use of a method, accompanying the partner to health facilities, joint decision-making on family size and spacing, seeking out family planning information, encouraging the partner to start or continue a method, and participating in community health talks, all of which constitute meaningful and valuable forms of male engagement.¹⁰ The probable reason for the gap between approval and active accompaniment to health facilities is multi-dimensional. In many Nigerian communities, family planning clinics are culturally coded as female spaces, and men who attend may face social stigma from peers. Additionally, the predominantly weekday daytime operating hours of most primary health centres conflict with the working schedules of men, and there is a general tendency in patriarchal settings for men to delegate the practical execution of family planning to their wives while limiting their own role to financial provision and occasional discussion. These findings are broadly consistent with results from a community-based descriptive cross-sectional study conducted among 166 married men in Zangon Kataf Local Government Area, Kaduna State, Nigeria, where about three-quarters had given consent for their wives to attend family planning clinics and a similar proportion had initiated discussions, but fewer than two-fifths had ever actually accompanied their wives.⁵⁶ A comparable pattern was reported in a descriptive cross-sectional study conducted among 419 married men in an urban squatter area of Karachi, Pakistan, where more than four-fifths believed that the husband should make family planning decisions but about two-thirds simultaneously felt that the wife should be the one using the methods.⁴³ This finding is of significant public health concern because low physical attendance at family planning facilities by men means that they miss the opportunity to receive direct counselling, to have misconceptions addressed, and to be guided toward male methods.³⁰ Addressing the reality of health worker shortages and security challenges in parts of Ovia North East LGA, Patent Medicine Vendors represent an important complementary channel for reaching men with family planning information and short-acting male commodities, given their community embeddedness, extended operating hours, and geographic proximity.⁶⁹ The Ovia North East LGA Primary Health Care Department should introduce male-friendly family planning clinic sessions held on weekday evenings and on Saturdays, while simultaneously working with the Pharmacists Council of Nigeria and the National Association of Patent and Proprietary Medicine Dealers to train and accredit PMVs in the LGA to provide family planning counselling and distribute condoms to male clients.

About three-quarters of respondents had ever used a family planning method, with condoms and withdrawal being the dominant methods ever used and vasectomy reported by only a negligible minority. At the time of the survey, less than half were currently using any method. Among those not currently using, the most commonly cited reason was no current need, followed by lack of knowledge and religious or cultural objections. The probable reason for the dominance of condoms and withdrawal over all other methods is that these are the two methods that require no health facility visit, no prescription, and no female partner involvement, making them accessible and controllable entirely by the man himself. The low vasectomy uptake is consistent with the pattern of low knowledge and cultural stigmatisation of male permanent methods described earlier in this discussion.⁴⁴ The relatively high proportion currently not using any method is concerning and may reflect the fact that many men in the mid-to-late reproductive age range have completed their desired family size but have not transitioned to a formal method, relying instead on the assumption of reduced fertility with age or on natural methods. This is consistent with findings from a descriptive cross-sectional study conducted among 384 men in the Suame Magazine industrial area of the Ashanti Region, Ghana, where despite awareness among nine in ten respondents, fewer than two-fifths were currently using any contraceptive method and condoms were reported by about a quarter.⁴⁶ A similar pattern was reported in a descriptive cross-sectional study conducted among 572 men in Meru County, Kenya, where about a third reported consistent condom use and no respondent reported vasectomy.⁴⁵ The public health significance of this finding is that reliance on condoms and particularly withdrawal leaves couples vulnerable to method failure, contributing to persistently high rates of unintended pregnancy.⁶⁸ The public health significance of these findings is that disparities in contraceptive use across socio-demographic groups may contribute to unmet need for family planning and unintended pregnancies, which are known to adversely affect maternal and child health outcomes.⁴

Family planning counsellors at all primary health centres in Ovia North East LGA should actively counsel male clients on the full range of available methods, including providing accurate, destigmatising information about vasectomy for men who have completed their desired family size, and actively supporting their partners to access long-acting reversible methods.

At the multivariate level, nuclear family type was the only statistically significant independent predictor of current use after adjustment for all other variables (OR = 1.878, 95% CI: 1.007–3.500, $p = 0.047$). Men from nuclear families had approximately twice the odds of currently using a family planning method compared to those from non-nuclear families. The probable reason is rooted in the economic and social dynamics of nuclear household structures. In nuclear families, the financial consequences of each additional child fall directly and exclusively on the couple, without the buffering effect of extended family financial support networks, creating a stronger economic incentive to regulate fertility. Nuclear family men may also experience greater spousal communication about family planning, given that decisions are made within a smaller dyad rather than being subject to the influence of in-laws, senior wives, or other extended family members who may hold pronatalist views. Furthermore, nuclear households in the Nigerian context tend to be associated with higher educational attainment, urban residence, and professional employment, all of which independently facilitate contraceptive use even when controlled for. These findings are in line with results from a community-based analytical cross-sectional study conducted among 577 married men in rural Eastern Ethiopia found that joint decision-making between spouses, reported by about seven in ten respondents, was a key positive factor in family planning use, a dynamic more likely to occur in nuclear family settings.²³ An analytical cross-sectional study conducted among 350 married men in Abeokuta South Local Government Area of Ogun State, Nigeria, similarly found that family influence was a significant negative factor in male involvement in family planning ($B = -3.545$, $t = -3.418$, $p < 0.05$), suggesting that extended family pressures reduce contraceptive uptake (53) Household decision-making structures play an important role in family planning uptake, indicating that effective interventions should extend beyond the couple to address wider family influences that shape reproductive behaviour in sub-Saharan African settings.¹⁰ The Ovia North East LGA Primary Health Care Department should adopt a family systems approach to family planning counselling that includes structured discussions with extended family members, particularly mothers-in-law and senior family figures, to address pronatalist norms and to create a more supportive social environment for couples who wish to use contraception.

Regarding factors associated with family planning uptake, about four in five respondents knew where to obtain family planning services in their community, and among these, nearly half were within 30 minutes of the nearest facility. Just over half considered the cost of services affordable and had previously had a family planning discussion with a health worker. A quarter reported that cultural or religious beliefs had at some point discouraged them from using family planning, about one in six felt embarrassed requesting services, and about three in ten had concerns about side effects. These findings indicate that while awareness of service availability is relatively high, important structural and attitudinal barriers to uptake persist. The probable reasons for these findings are multifactorial. The relatively high awareness of service location may be attributed to the presence of primary health centres and ongoing community-level sensitisation activities within the LGA. However, the fact that nearly half of respondents still live beyond 30 minutes from a facility suggests gaps in geographical distribution of services and possible transportation constraints. The moderate perception of affordability may reflect the influence of out-of-pocket health expenditure, which remains the predominant mode of healthcare financing in Nigeria. Concerns about side effects and embarrassment in requesting services likely stem from inadequate counselling, persistence of misconceptions, and the cultural framing of family planning as a sensitive or female-oriented issue. Similarly, the influence of cultural and religious beliefs reflects entrenched societal norms that discourage contraceptive use or associate it with negative moral or health consequences. These findings are consistent with those reported in other settings. A qualitative study conducted among 40 sexually active men in a slum area of Nakawa Division, Kampala, Uganda, identified an unwelcoming healthcare environment, long distances, and negative community perceptions as the principal structural barriers to male involvement in family planning, consistent with the barriers identified in this study.²¹ A descriptive cross-sectional study conducted among 200 participants in rural communities of northern Ghana similarly found that sociocultural beliefs and fear of side effects were the dominant barriers, reported by about three in ten respondents, while knowledge and proximity to services were the key facilitators.⁵¹ These findings highlight the need for integrated family planning interventions that address both access and behavioural barriers. Improving service quality, strengthening counselling, and addressing misconceptions about side effects are essential to increasing contraceptive uptake and reducing unmet need in the community.⁴ The role of behaviour change communication through mass media, social media, and community media deserves particular emphasis in this context. This is because mass media serves as a key

driver of behaviour change in family planning by improving awareness, correcting misconceptions, and normalising contraceptive use, thereby increasing the likelihood of uptake. Evidence from a nationally representative analysis of the Nigeria Demographic and Health Survey (2018) shows that exposure to family planning messages through television and radio was associated with increased contraceptive use.⁷ In light of these findings, The Ovia North East LGA Primary Health Care Department should prioritise the expansion and upgrading of primary health centre family planning services to reduce travel distance, while also training health workers to provide non-judgmental, male-friendly counselling that addresses side effect concerns with accurate evidence-based information.

Knowing where to obtain family planning was strongly associated with current use ($\chi^2 = 30.702$, $p < 0.001$), and perceived affordability was similarly strongly associated ($\chi^2 = 28.824$, $p < 0.001$), confirming that access factors are among the most powerful determinants of contraceptive behaviour in this population. Cultural and religious barriers were significantly associated with lower current use ($\chi^2 = 6.111$, $p = 0.013$). The strength of the association between knowledge of service location and current use is particularly notable and suggests that awareness of where to go is itself a meaningful barrier for a substantial minority of men, pointing to a gap in family planning communication that goes beyond messaging about why to use contraception toward practical information about where and how to access it. The association between perceived affordability and current use highlights the role of economic factors even in a predominantly middle-class population, suggesting that out-of-pocket costs remain a deterrent to consistent contraceptive use for a meaningful proportion of men. A community-based analytical cross-sectional study conducted among 577 married men in rural Eastern Ethiopia similarly found that access to family planning services and spousal employment were significantly associated with male involvement in family planning use.²³ A descriptive cross-sectional study conducted among 150 respondents in Jere Local Government Area of Borno State, Nigeria, similarly identified lack of access to information and services alongside cultural and religious barriers as the key factors limiting family planning practice.⁴⁷ This finding highlights the public health importance of improving access, affordability, and awareness of family planning services, as these factors directly influence contraceptive uptake and help reduce unintended pregnancies and related maternal health risks.⁷ The procurement and supply of family planning commodities in Nigeria is primarily

driven by international bodies such as UNFPA, which is the major funder of family planning commodities for the public sector, and USAID, which partners with NGOs to supply both public and private healthcare providers.⁷⁰ Within this framework, the Ovia North East LGA Primary Health Care Department's role is one of last-mile distribution, logistics management, and ensuring that commodities procured through UNFPA and USAID channels reach all primary health centres and community distribution points consistently. Community Development Associations across Ovia North East LGA should be engaged to promote awareness of service locations through local radio announcements, community notice boards, and social media platforms.

The level of male involvement in family planning was assessed using a composite of ten indicators spanning communication, approval, physical and financial support, personal use, joint responsibility, information seeking, encouragement, decision-making, and community participation. The most commonly met indicator was considering family planning a joint responsibility, reported by almost all respondents, followed by approving of the partner using a method and personal or partner use of a method. Community participation in family planning health talks or outreach was the least commonly met indicator, reported by only about one in four respondents. Overall, slightly less than two-fifths of respondents were classified as having high involvement, while nearly three-fifths had low involvement. This pattern is revealing because it shows that while men broadly accept family planning as a shared responsibility in principle, their engagement in the more active and visible dimensions, particularly community participation and physical accompaniment to health facilities, remains limited. The probable reasons for this disconnect are deeply embedded in the gender dynamics of the study setting. In Ovia North East LGA, as in much of southern Nigeria, reproductive health decision-making within households is evolving, with many men now intellectually accepting shared responsibility while still being constrained by social norms that render active male participation in family planning clinics or community health talks culturally unusual or even stigmatising. Additionally, the demands of male breadwinning roles leave limited time for participation in community health activities, which often take place during working hours. This pattern is broadly consistent with findings from a descriptive cross-sectional study conducted among 165 married men in Singur District, West Bengal, India, where about two-thirds were indirectly involved through spousal

communication and approval, but only about a third were directly involved through personal use of male methods.⁴¹ A similar pattern was reported in a community-based analytical cross-sectional study conducted among 588 married men across 12 communities of Abia State, Nigeria, where slightly more than half were classified as actively involved in family planning services, with about four in five reporting joint decision-making but far fewer attending clinics with their partners.¹⁸ This finding is significant because a predominantly low involvement profile at the population level means that women in this LGA are largely navigating reproductive health decisions with limited active male partnership, increasing their vulnerability to unmet need, coerced discontinuation of contraception, and unintended pregnancy.²⁷ The Ovia North East LGA Primary Health Care Department should adopt a comprehensive male involvement strategy targeting all ten dimensions of the involvement composite, with particular emphasis on increasing community participation and physical facility attendance through male-dedicated outreach events and community peer champion programmes.

Education, occupation, socioeconomic status, marriage type, and family type were all significantly associated with the level of male involvement at the bivariate level. The education gradient was particularly pronounced ($\chi^2 = 42.035$, $p < 0.001$), with tertiary-educated respondents having a substantially higher proportion of high involvement compared to those with only primary education. Occupation was significantly associated ($\chi^2 = 32.673$, $p < 0.001$), with civil servants and professionals having the highest involvement and artisans and skilled workers the lowest. Socioeconomic status showed one of the most striking associations ($\chi^2 = 38.636$, $p < 0.001$), with upper class respondents having near-universal high involvement while lower class respondents had predominantly low involvement. The probable reason for the education, occupation, and SES effects is that they all cluster together as proxies for exposure to health information, confidence in health-seeking environments, economic capacity to support a partner's family planning, and the flexibility of working schedules that professional employment often provides compared to informal or manual labour. Educated men in professional occupations are more likely to have encountered family planning education through workplace health programmes, to read health literature, to feel comfortable engaging with health workers, and to have the economic resources to purchase contraceptives or transport their partners to health facilities. Lower class men, who are more

likely to be employed in informal or agricultural sectors, face greater time pressure, economic precarity, and social marginalisation within the health system, all of which compound to reduce their capacity for active involvement. An analytical cross-sectional study conducted among 350 married men in Abeokuta South Local Government Area, Ogun State, Nigeria, found a statistically significant positive relationship between knowledge, motivational beliefs, and male involvement in family planning, confirming that the combination of information and positive attitude more prevalent among educated men predicts higher involvement.⁵³ A community-based analytical cross-sectional study conducted among 577 married men in rural Eastern Ethiopia found that access to television, spousal employment, and joint decision-making were significantly associated with male involvement, factors that similarly cluster with higher socioeconomic status.²³ Socioeconomic and educational disparities in male involvement in family planning, which limits equitable participation in reproductive health decision-making and contributes to lower contraceptive uptake among disadvantaged groups.⁷ These associations reveal that low male involvement in family planning in Ovia North East LGA is concentrated among the least educated, least economically secure, and most informally employed men, who are simultaneously among the most difficult to reach through conventional health facility-based interventions. The Ovia North East LGA Primary Health Care Department should deploy mobile health teams equipped with simplified audio-visual family planning materials to workplaces dominated by artisans, drivers, and farmers across the LGA, specifically targeting the wards with the highest concentrations of lower-income and less-educated men.

Health worker discussion of family planning with the respondent was the strongest independent predictor of high male involvement after multivariate adjustment (OR = 5.768, 95% CI: 3.366–9.885, $p < 0.001$), indicating that men who had previously received family planning counselling from a health worker were nearly six times more likely to demonstrate high overall involvement compared to those who had not. Good knowledge was also a significant independent predictor (OR = 2.028, 95% CI: 1.137–3.619, $p = 0.017$), with men demonstrating good knowledge having approximately twice the odds of high involvement. Upper class socioeconomic status was a significant predictor (OR = 27.794, 95% CI: 2.358–327.618, $p = 0.008$), though the very wide confidence interval reflects the small number of upper class respondents and warrants cautious interpretation. The primacy of health worker

interaction as the strongest predictor of male involvement is the most actionable finding of this study. The probable reason for this powerful effect is that health worker engagement addresses several barriers simultaneously, providing knowledge, normalising the topic for men, reducing embarrassment, correcting misconceptions about side effects and male methods, and providing specific information about where and how to access services. A community-based analytical cross-sectional study conducted among 588 married men in Abia State, Nigeria, found that access to family planning information from health workers was among the key predictors of male involvement.¹⁸ An analytical cross-sectional study conducted among 350 married men in Abeokuta South Local Government Area, Ogun State, Nigeria, similarly found that knowledge and motivational beliefs significantly predicted involvement ($r = 0.307, p < 0.05$).⁵³ The public health significance of this finding cannot be overstated, as it provides a clear and actionable lever for improving male involvement at scale.³⁰ Every health worker encounter with a male client in Ovia North East LGA, whether for malaria treatment, hypertension management, or any other condition, should be treated as an opportunity to deliver a brief structured family planning message. The Edo State Ministry of Health should develop and mandate the use of a standardised male family planning counselling checklist for use in all primary health centres across Ovia North East LGA, ensuring that no eligible male client leaves a consultation without having received at least a brief reproductive health discussion.

The relationship between knowledge, attitude, and level of male involvement showed a consistent directional pattern, with respondents having good knowledge and positive attitudes both demonstrating higher proportions of high involvement compared to those with poor knowledge and negative attitudes respectively, though neither association reached statistical significance at the bivariate level. The lack of significance for these associations at the bivariate level, despite the significance of knowledge at the multivariate level, likely reflects the confounding effect of other variables and the heavily skewed distribution of attitude in this sample, where almost all respondents held positive attitudes, leaving insufficient variation for the association to reach significance. The finding that good knowledge predicts high involvement after multivariate adjustment underscores the well-established principle that knowledge, while not sufficient on its own, is a necessary precondition for active engagement in reproductive health behaviours.³⁰ A community-based analytical cross-

sectional study conducted among 452 married men in Oyo State, Nigeria, reported that despite near-universal awareness, gaps in specific knowledge and negative perceptions among a minority remained significant barriers to active involvement.⁵² An analytical cross-sectional study conducted in Nepal using data from the Nepal Demographic and Health Survey found that men with good knowledge of family planning were 1.94 times more likely to use modern contraceptives.³⁶ Improving men's knowledge of family planning is essential for increasing their involvement, as knowledge remains a key driver of contraceptive use after adjusting for other factors. Strengthening male-focused health education can therefore improve informed decision-making and support uptake of family planning services.⁴ Findings collectively point to the need for an integrated approach to improving male involvement in family planning in Ovia North East LGA, one that simultaneously strengthens knowledge through targeted education, reinforces positive attitudes through community and faith-based programming, improves access through structural health system improvements, leverages behaviour change communication through media as a powerful demand creation tool, and leverages health worker contact as the most powerful available catalyst for behaviour change. The Ovia North East LGA Primary Health Care Department, in collaboration with the Edo State Primary Health Care Development Agency, UNFPA, USAID-supported NGOs, and relevant civil society organisations, should develop and implement a comprehensive male involvement in family planning strategy that addresses all these dimensions in a coordinated and sustained manner, with regular monitoring and evaluation to track progress toward measurable targets for male contraceptive uptake and active involvement.

CONCLUSION

The majority of men in Ovia North East LGA had good knowledge of family planning, with health workers, radio or television, and friends or relatives as the principal sources of information. Condoms were the most widely known method while vasectomy and IUDs remained poorly known. Being married was an independent negative predictor of good knowledge.

Almost all respondents demonstrated a positive attitude towards family planning, with the overwhelming majority rejecting the notion that family planning is a woman-only affair. Christianity and nuclear family type were the strongest independent predictors of positive attitude, while religion, age, education, marriage type, family type, and socioeconomic status were all significantly associated at the bivariate level.

Slightly more than half of respondents had discussed family planning with their partners, about four in five approved of their partners using a method, but only about one in four had ever accompanied their partner to a health facility. Less than half were currently using any family planning method, with condoms and withdrawal being the dominant methods and vasectomy remaining almost entirely unused. Nuclear family type was the only independent predictor of current use.

Knowledge of service location and perceived affordability were the most strongly associated factors with current family planning use, while cultural and religious beliefs served as significant barriers. Health worker discussion of family planning was by far the strongest independent predictor of high male involvement, followed by good knowledge and upper class socioeconomic status.

Overall, slightly less than two-fifths of respondents were classified as having high involvement in family planning activities, with considering family planning a joint responsibility being the most commonly met indicator and community participation in health talks being the least met. Education, occupation, socioeconomic status, marriage type, and family type were all significantly associated with the level of male involvement.

RECOMMENDATIONS

To the Edo State Ministry of Health:

1. The Edo State Ministry of Health should develop a state-wide male-targeted family planning education programme that specifically addresses the full range of contraceptive methods including vasectomy, using culturally sensitive messaging delivered through broadcast media, social media platforms, and community outreach.
2. The Ministry should develop and mandate the use of a standardised male family planning counselling checklist for all primary health centres in the state, ensuring that every eligible male client who presents at any facility for any reason receives at minimum a brief structured reproductive health discussion before departure.
3. The Ministry should formalise a faith-based reproductive health partnership programme, providing structured training and resource materials to religious leaders of all denominations, equipping them to deliver accurate family planning information within their congregations in a manner consistent with their doctrinal positions.

To the Edo State Primary Health Care Development Agency:

1. The Edo State Primary Health Care Development Agency should work with the Ovia North East LGA Primary Health Care Department to ensure a consistent and uninterrupted supply of free or heavily subsidised condoms and other male-centred contraceptives at all primary health centres and designated community distribution points across the LGA.
2. The Agency should prioritise the recruitment and training of male community health extension workers who can serve as male family planning champions in

communities where male attendance at health facilities remains constrained by cultural norms.

To the Ovia North East LGA Primary Health Care Department:

1. The Ovia North East LGA Primary Health Care Department should introduce dedicated male family planning consultation sessions held on weekday evenings and on Saturdays at all primary health centres within the LGA, to accommodate the working schedules of men who cannot attend during standard daytime hours.
2. The Department should deploy mobile health teams equipped with simplified audio-visual family planning materials to workplaces dominated by artisans, drivers, traders, and farmers, targeting wards with the highest concentrations of lower-income and less-educated men who are least likely to attend health facilities voluntarily.
3. The Department should develop and implement a comprehensive male involvement strategy with measurable targets for male contraceptive uptake, physical facility attendance, and community participation, with quarterly monitoring and annual evaluation to track progress and adjust programme delivery accordingly.

To the Ovia North East LGA Council of Traditional Rulers and the Inter-Faith

Committee of Ovia North East:

1. The Council of Traditional Rulers and the Inter-Faith Committee should be formally engaged by the LGA Primary Health Care Department to develop faith-sensitive and culturally grounded family planning messaging that frames birth

spacing within the ethical principles of each religious and cultural tradition, removing the perception that family planning is a Western or anti-religious practice.

2. Traditional rulers should use community meetings, town halls, and cultural events to publicly endorse family planning as a responsible practice consistent with the values of Edo culture, normalising male participation and reducing social stigma associated with men seeking family planning services.

To Community Development Associations across Ovia North East LGA:

1. Community Development Associations should partner with primary health centres to promote awareness of family planning service locations through local radio announcements, community notice boards, and social media platforms, ensuring that all community members know where and when to access services.
2. Associations should establish community peer champion networks comprising men who are actively involved in family planning and who can serve as trusted advocates and sources of information for their peers in informal social settings, workplaces, and community gatherings.

CONTRIBUTION TO KNOWLEDGE

This study contributes to the existing body of knowledge on male involvement in family planning by providing community-based evidence from Ovia North East Local Government Area using a comprehensive composite multi-indicator approach. Unlike many previous studies that assessed male involvement using single or limited indicators, this study utilized a ten-indicator scoring system, offering a more robust and multidimensional assessment of involvement covering communication, financial support, and community participation.

The study provides essential baseline data for Ovia North East LGA, a semi-urban/peri-urban setting in Edo State that was previously underrepresented in male-focused family planning research

Furthermore, this study highlights an important gap between knowledge, attitude, and actual practice. Despite a high level of knowledge and overwhelmingly positive attitudes towards family planning among respondents, the level of male involvement and actual contraceptive use remained relatively low. This finding reinforces the complexity of behavioural change and suggests that knowledge alone is insufficient to drive active participation.

In addition, the identification of health worker engagement as the strongest independent predictor of male involvement provides valuable insight into modifiable factors that can improve participation. This underscores the critical role of the healthcare system, particularly frontline health workers, in influencing male engagement in reproductive health. The study also adds to existing literature by demonstrating the influence of socio-economic status and family structure on male involvement within the Nigerian context.

POLICY IMPLICATION

The findings of this study carry significant policy implications for family planning programming at the local, state, and national levels in Nigeria. At the broadest level, the consistently low overall male involvement documented in this study, with fewer than two-fifths of respondents classified as highly involved despite near-universal awareness and predominantly positive attitudes, provides clear empirical evidence that the persistent gap between male knowledge and male action in Nigerian family planning cannot be closed by awareness campaigns alone. This finding demands a fundamental shift in the policy architecture of family planning in Nigeria, from a model that treats women as the primary and largely sole target of reproductive health services to one that actively designs, funds, and evaluates programmes for male participation as an equal priority.

Importantly, the finding that health worker contact with male clients was the single strongest independent predictor of high male involvement, with an odds ratio of nearly six, has immediate and actionable policy implications for health system design. It means that every primary health centre encounter with a male client represents a measurable opportunity to drive family planning involvement, and that a policy mandating brief structured male family planning counselling at all facility contacts would, based on the evidence from this study, yield substantial returns in terms of increased male participation. The Edo State Ministry of Health and the National Primary Health Care Development Agency should treat this finding as the primary lever for scaling male involvement in Ovia North East and in comparable settings across Nigeria, and should reflect it in facility performance indicators, health worker training curricula, and supervision checklists.

In addition, the influence of cultural and religious beliefs as barriers to family planning uptake highlights the need for culturally sensitive interventions. Policymakers should collaborate with religious and traditional leaders to design and implement community-based advocacy programs that address misconceptions and promote positive norms around male involvement. The role of mass media and behaviour change communication as a facilitator of family planning knowledge and use is reinforced by the findings of this study, which show that radio or television ranked as a principal source of family planning information alongside health workers. The policy implication is that state and federal government investment in broadcast and social media family planning campaigns must be treated as a complementary

arm of the health system, not a peripheral activity, particularly for reaching men who are unlikely to present at health facilities voluntarily.

Furthermore, the finding that respondents in nuclear families were nearly twice as likely to use family planning suggests that communication policies should shift from purely medical messaging to economically-grounded narratives that emphasize child spacing as a tool for household financial stability. Finally, the low rate of men accompanying their partners to health facilities highlights the need for policies that address structural and time-related barriers to male participation in family planning services. In particular, service delivery models should be designed to better accommodate men's work schedules and improve their access to care, including through the adoption of more flexible and inclusive service hours, such as evening or weekend clinic services.

Overall, a multi-sectoral approach involving healthcare providers, community leaders, and media engagement is necessary to enhance male involvement and improve reproductive health outcomes.

REFERENCES

1. Dockalova B, Barclay H, Marshall A. Sustainable Development Goals and Family Planning 2020. London: International Planned Parenthood Federation; 2016.
2. Aventin A, Robinson M, Hanratty J, Ruane-McAteer E, Tomlinson M, Clarke M, et al. PROTOCOL: Involving men and boys in family planning: A systematic review of the effective components and characteristics of complex interventions in low- and middle-income countries. *Campbell Syst Rev.* 2021;17:e1140.
3. Akokuwebe ME, Falayi EO, Adekola F, Saliu MY. Sexual behaviour of in-school rural adolescents in Ogun State, Nigeria. *Afr J Biomed Res.* 2019;22:135–143.
4. World Health Organization. Family planning/Contraception [Internet]. Geneva: World Health Organization; 2024 [cited 2025 Apr 19]. Available from: <https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception>
5. United Nations Population Fund. Family planning [Internet]. 2018 [cited 2018 Jan 16]. Available from: <http://www.unfpa.org/family-planning>
6. World Health Organization. Contraception: evidence brief. No. WHO/RHR/19.18. Geneva: World Health Organization; 2019.
7. National Population Commission (NPC) [Nigeria] and ICF. Nigeria Demographic and Health Survey 2018. Abuja, Nigeria, and Rockville, Maryland, USA: National Population Commission and ICF; 2019 p. 374
8. Federal Ministry of Health and Social Welfare of Nigeria (FMoHSW), National Population Commission (NPC) [Nigeria], and ICF. Nigeria Demographic and Health Survey 2023–24: Key Indicators Report. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF; 2024. p. 17.
9. Male Contraceptive Initiative. Male contraception & the Sustainable Development Goals [Internet]. [place unknown]: Male Contraceptive Initiative; [cited 2025 Jun 18]. Available from: <https://www.malecontraceptive.org/male-contraception-and-the-sdgs.html>
10. Chekole MK, Kahsay ZH, Medhanyie AA. Husbands' involvement in family planning use and its associated factors in pastoralist communities of Afar, Ethiopia. *Reprod Health.* 2019;16:33.
11. Sylvest R, Koert E, Vittrup I. Men's expectations and experiences of fertility awareness assessment and counseling. *Acta Obstet Gynecol Scand.* 2018;97(12):1471-1477. doi:10.1111/aogs.13449.

12. Abdi B, Okal J, Serour G, Temmerman M. Muslim men's perceptions and attitudes on family planning: a qualitative study in Wajir and Lamu counties in Kenya. *Sex Reprod Health Matters*. 2021;29(1):303–13. doi:10.1080/26410397.2021.1893890.
13. Abdi B, Okal J, Serour G, Temmerman M. "Children are a blessing from God" – a qualitative study exploring the socio-cultural factors influencing contraceptive use in two Muslim communities in Kenya. *Reprod Health*. 2020;17(1):1–11. doi:10.1186/s12978-020-0898-z.
14. Egeh AA, Dugsieh O, Erlandsson K, Osman F. The views of Somali religious leaders on birth spacing - A qualitative study. *Sex Reprod Healthc*. 2019;20:27–31. doi:10.1016/j.srhc.2019.02.003.
15. Lusambili AM, Muriuki P, Wisofski S, Shumba CS, Mantel M, Obure J, et al. Male involvement in reproductive and maternal and new child health: An evaluative qualitative study on facilitators and barriers from rural Kenya. *Front Public Health*. 2021;9:287. doi: [CrossRef] [PubMed].
16. Shongwe P, Ntuli B, Madiba S. Assessing the acceptability of vasectomy as a family planning option: A qualitative study with men in the Kingdom of Eswatini. *Int J Environ Res Public Health*. 2019;16:5158. doi: [CrossRef] [PubMed].
17. Wondim G, Degu G, Teka Y, Diress G. Male involvement in family planning utilization and associated factors in Womberma District, Northern Ethiopia: Community-based cross-sectional study. *Open Access J Contracept*. 2020;11:197–207. doi: [CrossRef] [PubMed].
18. Amuzie CI, Nwamoh UN, Ukegbu A, Umeokonkwo CD, Azuogu BN, Agbo UO, Balogun MS. Determinants of male involvement in family planning services in Abia State, Southeast Nigeria. *Contracept Reprod Med*. 2022;7:15. doi:10.1186/s40834-022-00182-z
19. Kriel Y, Milford C, Cordero J, Suleman F, Beksinska M, Steyn P, et al. Male partner influence on family planning and contraceptive use: Perspectives from community members and healthcare providers in KwaZulu-Natal, South Africa. *Reprod Health*. 2019;16:89. doi: [CrossRef]
20. Machinda ZI, Mbonile MJ, Mtae HG. Determinants of male involvement in family planning services in Tarime District, Tanzania. *Tanzan J Popul Stud Dev*. 2020;27:93–108.
21. Wambete S. N, Serwaa D, Dzantor E. K, Baru, A, Poku-Agyemang E, Kukeba M W, et al. Determinants for male involvement in family planning and contraception in Nakawa

- Division, Kampala, Uganda; An urban slum qualitative study. *PLOS Global Public Health*. 2024 May 31;4(5):e0003207-7.
22. World Health Organization. Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. Geneva. 2023.
 23. Mulatu T, Sintayehu Y, Dessie Y, & Dheresa, M. Male involvement in family planning use and associated factors among currently married men in rural eastern Ethiopia. *SAGE Open Medicine*, 2022, 10, 20503121221094178.
 24. Central Statistical Agency (CSA) & ICF. Ethiopia Mini Demographic and Health Survey 2019. Addis Ababa, Ethiopia & Rockville, Maryland, USA.
 25. Madugu NH, Abdul MA, Bawa U, Muhammad-Idris Z. Pattern of spousal support and communication among family planning clients in a tertiary care centre in northwestern Nigeria. *The Journal of Medical Research*, 2020; 6: 295-298.
 26. Khowaja F, Pervaiz M, & Khatoon, N. Male involvement in family planning among squatter settlement residents of Karachi. *Journal of Asian Midwives*, 2019; 6(1), 26–42. Retrieved from <https://ecommons.aku.edu/jam/vol6/iss1/4>
 27. Ilori OR, Ogedengbe S, & Awodutire PO. Level of men’s involvement in spousal contraceptive use among married men in a local government, Nigeria. *Acta Scientiarum. Health Sciences*, 2023; 45, e62852.
 28. World Health Organization (WHO). Family planning and reproductive health: A global perspective. WHO Reports; 2021. <https://www.who.int/reproductivehealth>
 29. Akinyemi A, Harris G, Kawonga M. Barriers to contraceptive use in rural Nigeria: An analysis of socio-cultural factors. *African Journal of Reproductive Health*, 2020; 24(3), 56-71.
 30. Hook C, Hardee K, Shand T, Jordan S and Greene ME. A long way to go: engagement of men and boys in country family planning commitments and implementation plans. *Gates Open Research*, 2021; 5, p.85. doi:<https://doi.org/10.12688/gatesopenres.13230.2>.
 31. Ogunjuyigbe PO, & Adepoju A.A. The influence of culture and peer pressure on contraceptive attitudes among men in southwestern Nigeria. *International Journal of Social Sciences and Humanity Studies*, 2022; 14(2), 251-267
 32. Bello BM, Fatusi AO, & Adepoju AA. Family planning and economic empowerment: A case study from Nigeria. *Journal of Global Health Economics*, 2023; 8(2), 45-57.

33. Ojo, O. O., Ndikom, C. M., & Peter, A. (2020). Predictors of the usage of contraceptive implants among women of reproductive age in Ondo State , Southwest Nigeria. *Journal of Preventive Medicine and Hygiene*, 61(1), E39–E47. DOI: <https://doi.org/10.15167/2421-4248/jpmh2020.61.1.1367>
34. Green EC, Murphy EM, Gryboski K. The health belief model. *The Wiley encyclopedia of health psychology*. 2020 Sep 2:211-4.
35. Sabale U, Suryarao P, Kodla C. Study of awareness of family planning methods among married men. *J South Asian Feder Obst Gynae*. 2022;14(5):531–533. doi:10.5005/jp-journals-10006-2131.
36. Shrestha VL, Lamichhane KD, Hamal S, Sapkota NL, Shrestha KM. Association of men’s contraceptive knowledge, attitude and behavior with modern contraceptive use: evidence from Nepal demographic health survey 2022. *BMC Public Health*. 2025;25:547. <https://doi.org/10.1186/s12889-025-21722-7>
37. Marcell AV, Byrne ME, Yao-N’dry N, Thiongo M, Gichangi P, OlaOlorun FM, et al. Males’ awareness of female and male contraception methods, information, outreach, and acquisition locations in Abidjan, Côte d’Ivoire, Nairobi, Kenya, and Lagos, Nigeria. *J Adolesc Health*. 2022;71(3):351–9. <https://doi.org/10.1016/j.jadohealth.2022.03.013>
38. Samaké A, Dembele S, Keita M, Sylla C, Haidara D, Haidara M, et al. Men’s knowledge, attitudes and perceptions on family planning in Tourourou Village, Gogui Rural Commune, Nioro Circle, Kayes Region of Mali. *Open J Obstet Gynecol*. 2023;13(3):662–80. doi:10.4236/ojog.2023.133056. Available from: <https://doi.org/10.4236/ojog.2023.133056>
39. Fajobi O, Fajobi DA, Olugbade OT, Olowookere SA. The factor(s) influencing male involvement in family planning- findings from a rural Community in South West, Nigeria. *Cent Afr J Public Health*. 2021 May 14 [cited 2025 Jun 30];7(3):94–101. Available from:<http://www.sciencepublishinggroup.com/j/cajph>
40. Ikwugbado E, Azuogu B, Okedo-Alex IN, Ani C, Obochi OA. Knowledge, attitude and practice of modern family planning methods among men in Ogbogu Community in Ogba-Egbema-Ndoni Local Government Area of Rivers State. *J Med Tropics [Internet]*. 2021 [cited 2025 Jun 30];23(1):50. Available from: <http://www.journalmedictropics.com/text .asp?2021/23/1/50/32>

41. Nath A, Acharya S, Bhattacharya R. A study on knowledge, attitude, and practice of contraception among males in a Rural Area of West Bengal. *Indian J Community Health* [Internet]. 2021 Mar 31 [cited 2025 Jun 30];33(1):15–20. Available from: <https://www.iapsmup.com/download/vol-33-issue-1-jan-march-2021/>
42. Traore F, Poda GG, Berthe H, Nebie O. Perception and involvement of men in the family planning of their spouses in the communes of Bamako, Mali. *J Comm Med and Pub Health Rep.* 2021 Jul 23;2(6):1–6.
43. Khowaja, F, Pervaiz, M, & Khatoon, N. Male involvement in family planning among squatter settlement residents of Karachi. *Journal of Asian Midwives.* 2019;6(1):26–42.
44. White, K.; Martínez Órdenes, M.; Turok, D. K.; Gipson, J. D.; Borrero, S. Vasectomy knowledge and interest among U.S. Men who do not intend to have more children. *American Journal of Men's Health* 2022, 16 (3), 155798832210985. <https://doi.org/10.1177/15579883221098574>.
45. Mwito, A. M, Ngige, L. W, Kieru, J. N. Male contraceptive uptake and associated socio-economic characteristics in Kenya. *East African Journal of Health and Science* 2022, 5 (1), 26–35. <https://doi.org/10.37284/eajhs.5.1.536>.
46. Appiah, S. C. Y., Osei, F. A., Mensah, N. K., Adonoo, P. L., Tanko, A. G., Sarpong, P. O. Males as partners in family planning service uptake in Ghana: A Descriptive Cross-Sectional Survey. *Health* 2019, 11 (08), 1043–1054. <https://doi.org/10.4236/health.2019.118082>.
47. Isa, B, Mandara, M, Adamu Buba, A, Mohammed, S. knowledge and practice of family planning among married men in a northern Nigerian community. *Journal of Advances in Medicine and Medical Research* 2023; 35 (23), 169–182. <https://doi.org/10.9734/JAMMR/2023/v35i235292>.
48. Oyefabi, A., Dambo, H., Nwankwo, B., Waje, C., Kure, S., Akabe, J. Determinants of male involvement in family planning decision making in a rural community in Northern Nigeria. *Journal of Community Medicine and Primary Health Care* 2022, 34 (3), 69–81. <https://doi.org/10.4314/jcmpfhc.v34i3.6>.
49. Ali, A.; Zar, A.; Wadood, A. Factors associated with modern contraceptive use among men in Pakistan: Evidence from Pakistan Demographic and Health Survey 2017-18. *PLOS ONE* 2022, 17 (9), e0273907. <https://doi.org/10.1371/journal.pone.0273907>.

50. Shabanikiya, H., Darman, A., Ghavami, V., Moghri, J., Varmaghani, M., Noughabi, J. J., et al. Men's involvement in family planning programs and associated factors from the perspective of women in Afghanistan; a case study. *Midwifery* 2023, 117, 103575. <https://doi.org/10.1016/j.midw.2022.103575>.
51. Kwawukume, S.A.K., Laar, A.S. & Abdulai, T. Assessment of men involvement in family planning services use and associated factors in rural Ghana. *Arch Public Health* 80, 63 (2022). <https://doi.org/10.1186/s13690-022-00822-5>
52. Afachung, O.A.; Oluwasanu, M.M.; Akande, S. Men's awareness, support and uptake of modern family planning: A case study of Oyo State Nigeria. *Texila international journal of public health* 2024, 12 (3). <https://doi.org/10.21522/tijph.2013.12.03.art049>.
53. Ayobami IO, & Oyewole O. Factors influencing male involvement in the uptake of family planning in abeokuta South Local Government of Ogun State, Nigeria. *Texila international journal of public health* 2020, 8 (3), 101–109. <https://doi.org/10.21522/tijph.2013.08.03.art011>.
54. Nath A, Acharya S, Bhattacharya R. A Study on knowledge, attitude, and practice of contraception among males in a Rural Area of West Bengal. *Indian J Community Health* [Internet]. 2021 Mar 31 [cited 2025 Jun 30];33(1):15–20. Available from: <https://www.iapsmup.com/download/vol-33-issue-1-jan-march-2021/>
55. Parija PP, Pal A, Panigrahi SK, Thakur P, Pal R. Male involvement in family planning in a rural area of India. *J Family Med Prim Care*. 2022;11:1943-8. doi:10.4103/jfmpe.jfmpe_1557_21.
56. Oyefabi A, Dambo H, Nwankwo B, Waje C, Kure S, Akabe J. Determinants of male involvement in family planning decision making in a Rural Community in Northern Nigeria. *J Community Med Prim Health Care*. 2022;34(3):69-81. doi:10.4314/jcmphc.v34i3.6.
57. Wikipedia contributors. Ovia North-East [Internet]. Wikipedia. 2025b. Available from: https://en.wikipedia.org/wiki/Ovia_North-East?utm_source=chatgpt.com
58. Ovia North East 2025 Target Population [Dataset]. 2025
59. Osagie J., Ikponmwosa O. Spatial distribution of primary health care centres in Ovia North-East Local Government area of Edo State -Nigeria. 2020 Apr.

60. Ojo PE, Ekun MO. Population estimation of Ovia North-East Local Government Area using geographic information system (GIS) and remote sensing. *Journal of Energy Technology and Environment*. 2024; 6 (3):2024–63.
61. Ovia North East Local Government Area. Available from: <https://manpower.com.ng/places/lga/275?utm>
62. Cochran WG. *Sampling techniques*. 3rd ed. New York: John Wiley & Sons;1997:1-422.
63. ICF. *Model Man's Questionnaire. Demographic and Health Surveys (DHS) Phase 8*. Rockville, Maryland: ICF; 2023
64. Ojih SE, Adeyeye B, Onoja IB, Adesina E, Omole F, Kayode-Adedeji T. Cultural practices and adoption of national family planning communication campaigns on select ethnic groups in Nigeria. *Healthcare*. 2023;11(4):495. doi:10.3390/healthcare11040495
65. Babalola S, Kusemiju B, Calhoun L, Corroon M, Ajao B. Using behavior change communication to lead a comprehensive family planning program: the Nigerian Urban Reproductive Health Initiative. *Glob Health Sci Pract*. 2015;3(1):28–41. doi:10.9745/GHSP-D-14-00129
66. Adedini SA, Babalola S, Ibeawuchi C, Omotoso O, Akiode A, Odeku M. Role of religious leaders in promoting contraceptive use in Nigeria: evidence from the Nigerian Urban Reproductive Health Initiative. *Glob Health Sci Pract*. 2018;6(3):500–514. doi:10.9745/GHSP-D-18-00135
67. Turner N. *Influence of religion and religiosity on fertility and contraceptive use in continental sub-Saharan Africa: a comprehensive review*. University of Gothenburg; 2021.
68. United Nations Population Fund (UNFPA) Nigeria. *Family planning*. Abuja: UNFPA Nigeria; 2024. Available from: <https://nigeria.unfpa.org/en/topics/family-planning-26>
69. Ajuwon AJ, Oshiname FO, Imaledo J, Ajayi O, Dipeolu IO. Delivery and utilisation of injectable contraceptive services in rural Nigeria: learning from the perspectives of patent medicine vendors and women of reproductive age. *Afr J Biomed Res*. 2016;19(2):79–86.
70. Bolarinde SO, Awotundun BO, Adeyemo EA. A narrative review of evidence to support increased domestic resource mobilization for family planning in Nigeria. *Reprod Health*. 2023;20:72. doi:10.1186/s12978-023-01607-x

APPENDIX I

INFORMED CONSENT FORM

MALE INVOLVEMENT IN FAMILY PLANNING ACTIVITIES IN OVIA NORTH EAST LOCAL GOVERNMENT AREA, EDO STATE, NIGERIA

INVESTIGATORS

CHIMA PERFECTION CHUKWUEBUKA

EDEBHAGBA STEPHNORA OMONIGHO

SUPERVISOR

PROF. V.Y ADAM

FINANCIAL SPONSORSHIP

This research project is self-sponsored.

PURPOSE OF THE RESEARCH

The purpose of this research is to evaluate the level of male involvement in family planning activities in Ovia North East Local Government Area of Edo State, Nigeria, by assessing their knowledge, attitudes, practices, and factors influencing their participation.

PROCEDURES AND PROTOCOL INVOLVED IN THE STUDY

You are kindly requested to complete a questionnaire designed to assess the knowledge, attitudes, practices of men, as well as the factors influencing male involvement in family planning activities in Ovia North East Local Government Area of Edo State, Nigeria. This questionnaire is for research purposes only.

COMPENSATION

There will be no financial compensation for participating in this study.

VOLUNTARY PARTICIPATION

Your participation in this research is completely voluntary. There will be no discrimination against you if you choose not to participate. You are free to change your mind and withdraw from the study at any time, even if you initially agreed to take part.

SIDE EFFECTS

There is no anticipated adverse effect associated with participating in this study.

BENEFIT

The benefit of this study will help improve family planning programs by providing information on men's knowledge, attitudes and practices regarding family planning. It will also guide health education, promote male participation in reproductive health, support policy development and contribute to existing research in community medicine.

CONFIDENTIALITY

All information and data obtained during this study will be kept confidential. Participant names will not be recorded on the questionnaires, and all collected information will be securely stored in a password-protected file on my personal computer. Any physical copies will be stored in a locked personal document cabinet.

CONTACT INFORMATION

CHIMA PERFECTION CHUKWUEBUKA

Medical Student

Tel: +2347039609388

Email: perfectionchima@gmail.com

EDEBHAGBA STEPHNORA OMONIGHO

Medical Student

Tel: +2349073029016

Email: stephnoraomo@gmail.com

Ethics and Research Committee
University of Benin Teaching Hospital
Benin City.
Email: ubthresearchethics@gmail.com

Phone Number: 07063331337

IF THERE IS ANY PORTION OF THIS CONSENT AGREEMENT THAT YOU DO NOT UNDERSTAND, ASK THE FIELD WORKER OR INVESTIGATOR BEFORE SIGNING.

Please, sign below if you have agreed to participate in the study.

CERTIFICATION OF CONSENT

I, having full capacity to consent for myself do thereby to my participation in the research study. The methods and means by which the study will be conducted have been explained to me by Ethical Committee. I have been given the opportunity to ask questions concerning this investigational study, and any such questions have been answered to my full and complete satisfaction. I understand that I may at any time during this study revoke this consent and withdraw myself from the study without prejudice.

Name of Participant: -----

Signature of participant: -----

Date: -----

APPENDIX II

DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE, SCHOOL OF MEDICINE, UNIVERSITY OF BENIN, BENIN CITY

ASSESSMENT OF MALE INVOLVEMENT IN FAMILY PLANNING ACTIVITIES IN OVIA NORTH EAST LOCAL GOVERNMENT AREA, EDO STATE, NIGERIA

Dear Respondent,

We are 600- level medical students of the University of Benin, Benin City. We are currently conducting a study to assess male involvement in family planning activities in Ovia North-East. All responses will be treated with strict confidentiality.

Thank you for your time and cooperation.

COMMUNITY:

SECTION A: SOCIODEMOGRAPHIC DATA

1. Age(in years) -----
2. Ethnicity: _____
3. Marital status: (a) Single (b) Married (c) Cohabiting
d) Divorced (e) Separated
4. Religion: (a) Christianity (b) Islam (c) ATR (d) Others(specify):

5. No of children: _____
6. Marriage type: (a) Monogamy[] (b) Polygamy[]
7. Family type: (a) Nuclear[] (b) Extended
8. Level of Education: (a) None[] (b) Primary[] (c) Secondary [] (d) Tertiary[]

9. Occupation:

10. What is your average monthly income in Naira?

11. Level of Education of spouse: (a)None[] (b)Primary[] (c) Secondary [] (d) Tertiary[]

12. Occupation of spouse

13. What is the average monthly income of spouse in Naira? _____

SECTION B: KNOWLEDGE OF FAMILY PLANNING

14. Have you ever heard of family planning? (a) Yes (b) No (If No, skip to section C)

15. If yes, what is your source of information? (Tick all that apply)

(a) Radio/TV (b) Social media (c) Friends/Relatives (d) Health workers (e)

Others: _____

16. Do you know what family planning is? (a) Yes (b) No

17. What is family planning? (Tick all that apply) (a) A way for couples to plan and decide the number and spacing of their children (b)Methods used to prevent unwanted or unplanned pregnancy (c) A practice that helps improve maternal and child health (d) A method used to select the gender of a baby (e) Family planning means stopping childbirth permanently for all couples

18. Which of the following are benefits of family planning? (Tick all that apply)

a) Helps space births

b) Prevents unwanted pregnancies

c) Reduces maternal and child mortality

d) Leads to permanent infertility in women who use it

e) Improves economic stability of families

19. What family planning methods are you aware of? (Tick all that apply) (a) Condoms (b) Oral contraceptive pills (c) Injectables (d)Implants (e) IUD (f) Vasectomy (g) Withdrawal (h) Safe period (fertility awareness) (I) None (j) Others: _____

20. Where do you think you can access family planning services?

(a) Government hospitals/health centres

(b) Private hospitals/clinics

(c)Pharmacies/chemists

(d) Traditional healers

(e) Online platforms

(f) Others: _____

21. A man can use or participate in family planning. (a) Yes (b) No (c) Not sure

SECTION C: ATTITUDE TOWARDS FAMILY PLANNING

Indicate your level of agreement:

Agree (A), Neutral (N), Disagree (D)

	Agree	Neutral	Disagree
22. Family planning is beneficial			
23. Men should attend family planning clinics with their partner			
24. Family planning helps to reduce financial burden.			
25. Family planning is a woman only affair			

26. Family planning helps improve maternal and child health			
27. Men should discuss family planning options with their partner			
28. Family planning is unacceptable to me			
29. I would support my partner to use a contraceptive method			
30. Women should have as many children as possible			
31. Men should use male family planning methods when their partner is not willing to			

SECTION D: UPTAKE AND PRACTICES OF FAMILY PLANNING

32. Have you ever discussed family planning with your spouse/partner?

(a) Yes (b) No

33. How often do you discuss FP with your partner?

(a) Never (b) Rarely (c) Sometimes (d) Often (e) Always

34. Do you approve of your partner using FP?

(a) Yes (b) No

35. Have you accompanied your partner to a health facility for FP services?

a) Yes (b) No

36. Have you provided financial support to your partner to access family planning services?

(a) Yes (b) No

37. Have you ever used a family planning method?

- (a) Yes (b) No

38. If Yes, which method did you use?

- (a) Condom (b) Withdrawal (c) Vasectomy (d) Partner uses a method (e) Others

39. Are you currently using any family planning method?

- (a) Yes (b) No

40. If Yes, which method do you use?

- (a) Condom (b) Withdrawal (c) Vasectomy (e) Partner uses a method (e) Others:

41. If No, why are you not using any method? (Tick all that apply)

- (a) Fear of side effects
(b) Partner refuses
(c) Against my religion
(d) Lack of knowledge
(e) No need / Trying to conceive
(f) Not accessible
(g) Prefer natural methods
(h) Others: _____

SECTION E: FACTORS ASSOCIATED WITH THE UPTAKE OF FAMILY PLANNING

42. Do you know where to obtain family planning services in your community?

- (a) Yes (b) No

43. How far is the nearest health facility that provides family planning services?

- (a) Less than 30 minutes
(b) 30–59 minutes
(c) 1 hour or more

(d) I do not know

44. How would you describe the cost of family planning services in your area?

- (a) Affordable
- (b) Too expensive
- (c) I do not know

45. Has a health worker ever discussed family planning with you?

- (a) Yes
- (b) No

46. Have cultural or religious beliefs ever discouraged you from using family planning?

- (a) Yes
- (b) No

47. Do you feel embarrassed or uncomfortable requesting family planning services?

- (a) Yes
- (b) No

48. Do your friends or family influence your decision to use (or not use) family planning?

- (a) Yes, positively
- (b) Yes, negatively
- (c) No

49. Have you ever had concerns about side effects of family planning methods (for you or your partner)?

- (a) Yes
- (b) No

50. If yes, which concerns?

SECTION F: LEVEL OF MALE INVOLVEMENT IN FAMILY PLANNING

51. Do you consider family planning a joint responsibility between you and your partner?

- (a) Yes
- (b) No

52. Have you ever taken the initiative to seek information about family planning on your own?

(a) Yes (b) No

53. Have you ever encouraged your partner to start or continue using a family planning method?

(a) Yes (b) No

54. Have you ever suggested a specific family planning method to your partner?

(a) Yes (b) No

55. Have you ever participated in community meetings, health talks, or outreach programs on family planning?

(a) Yes (b) No

56. How likely are you to participate in future family planning counselling or education sessions?


(a) Unlikely (b) Likely (c) Very likely

THANK YOU FOR YOUR PARTICIPATION.

APPENDIX IV

PLAGIARISM CLEARANCE FORM

INTELLECTUAL PROPERTY & TECHNOLOGY TRANSFER OFFICE (IPTTO)
Vice Chancellor's Office
University of Benin
PMB1154, Benin City, Nigeria



CLEARANCE FORM

DATE: 20-04-2026

NAME: Perfection Chukwuebuka Chima

MATRIC NO: MED1807381


DEPARTMENT: Medicine

FACULTY: Medicine

SESSION OF GRADUATION: 2023/2024

DIRECTOR
DATE
(IPTTO (VCO))
BEN. BENIN CITY
Head Of Unit (IPTTO)

INTELLECTUAL PROPERTY & TECHNOLOGY TRANSFER OFFICE (IPTTO)
Vice Chancellor's Office
University of Benin
PMB1154, Benin City, Nigeria



CLEARANCE FORM

DATE: 20-04-2026

NAME: STEPHNORA OMONIGHO EDEBHAGBA

MATRIC NO: MED1810357

DEPARTMENT: MEDICINE

FACULTY: MEDICINE

SESSION OF GRADUATION: 2023/2024

DIRECTOR
DATE
(IPTTO (VCO))
BEN. BENIN CITY
Head Of Unit (IPTTO)