Beyond the health care setting: exploring the intersections of gender, culture and religion and their influence on utilization of family planning services in Northern Nigeria

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A thesis submitted to Lancaster University in partial fulfilment
of the requirements for the degree of Doctor of Philosophy.
The candidate has already achieved 180 credits for the assessment
of taught modules within the blended learning PhD programme.

April 2022

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Lancaster University

I declare that this thesis is my own work and has not been
submitted for the award of a higher degree elsewhere

Acknowledgments

My profound gratitude goes to my supervisors, Dr Mark Limmer and Dr Amanda Bingley for the relentless support, advice, and skilful guidance that it took to complete this thesis. Their patience and belief in the importance of my work have been a major driving force for the realisation of this project. Though Amanda retired before the completion of the thesis, her wealth of experience and depth of knowledge pushed me out of my comfort zone and challenged me to improve the quality my work. In his own style and gentle ways, Mark, on whose shoulders my regular supervision fell from the start, and who singlehandedly pushed me through the last phase of my thesis, relentlessly challenged me on theory and methodology and profoundly influenced my understanding of this new area of research. Working with him has been a privilege as he provided invaluable guidance and mentorship in more ways than can be imagined.

To my parents, I am forever grateful for your prayers, support and encouragement. It would never have been possible without you.

To my beautiful wife and daughters, my profound gratitude for your support, tolerance and encouragement throughout this long and tortuous journey that has finally come to an end. It’s already a strange feeling in our home when I sit without my eyes glued to a laptop screen or textbook, but our life will gradually return to normalcy.

Finally, I would like to thank the numerous men and women who shared their stories as this work would not have been possible without their help. Despite cultural constraints, the women exhibited kindness and sacrifice by participating in the study. You may never see this thesis but will surely feel the impact of the policies and programmes it might influence.

Abstract

Everyday Nigeria loses about 145 women of childbearing age as a result of pregnancy related complications, making it the second largest contributor to maternal deaths globally. About 74% of these deaths could be partly averted if all women had access to services that allow them to avoid unintended pregnancies. Despite investments to improve utilization of family planning services, Nigeria's contraceptive prevalence rate (CPR) remains low (17%), with significantly poorer coverage in North-West (6.2%).

The study aimed to explore the beliefs and perceptions of lay men and women of reproductive age about family planning and how gender norms and expectations, cultural practices and religious beliefs exert influence on utilization of modern family planning services in northern Nigeria. An integrative review approach to systematic review of mixed-methods studies revealed knowledge gaps relating to the ways by which culturally assigned masculine gender roles and cultural promotion of large families in the context of extreme poverty influence women's ability to utilize family planning services. There was also lack of a clearly-defined rational for prohibition of family planning on religious grounds. These knowledge gaps guided the design of this qualitative research. It draws on data collected through focus group discussions and in-depth interviews with 65 participants, comprising of current users and non-users of family planning services, traditional and religious leaders identified using stratified purposeful sampling.

The findings suggest that culturally influenced, gendered construction and segregation of power allow men to exert control over women's contraceptive use, though some women passively resist power imposition through covert contraceptive use to regulate their fertility. Other women decline contraception due to reliance on procreation as a means of self-empowerment where large number of children could improve marriage stability. The study also revealed cultural preference for large families, competition for children amongst co-wives, poor spousal communication that stifles women's voices, men's capitalization on public's mistrust of modern contraceptives and the religiously legitimized performance of masculinity to enforce non-use of modern contraceptives despite conflicting beliefs on prohibition of permanent methods contribute to low uptake. Thus, improving CPR in northern Nigeria will require a change in policy and practice that focuses heavily on social and behaviour change communication strategies to foster long-term sustainable and normative shift in culturally and religiously influenced gender dynamics that promote practice of family planning without disempowering women.

Table of Contents

Contents

Acknowledgments i

Abstract ii

Table of Contents iii

List of Abbreviations vii

Tables and Figures ix

Chapter One 1

Introduction 1

1.1 Introduction 1

1.2 Maternal mortality in Nigeria: regional variation and prevention strategies 4

1.3 Nigeria's family planning landscape 8

1.4 Social determinants of access to family planning services 10

1.5 Aim and objectives of the study 16

1.6 Research questions 17

1.7 Intended contributions to knowledge 17

1.8 Thesis structure 18

Chapter Two 23

Literature Review 23

2.1 Introduction 23

2.2 Literature review design and approach 23

2.3 Review questions 26

2.4 Review method 26

2.4.1 Inclusion and exclusion criteria 26

2.4.2 Literature Search strategy 28

2.4.3 Data collection process 40

2.4.4 Assessment of relevance and quality of identified studies 40

2.5 Review and synthesis of results 42

2.5.1 Data analysis and synthesis 44

2.5.2 Gender and family planning 45

2.5.3 Religion and family planning ... 51
2.5.4 Culture and family planning ... 53
2.6 Discussion ... 57
2.7 Conclusion ... 63
Chapter Three ... 65
Methodology ... 65
3.1 Introduction ... 65
3.2 Theories of knowledge: Ontological and Epistemological foundations ... 66
3.3 Gender as a social determinant of health ... 69
3.4 Gender: a theoretical overview ... 71
3.4.1 Feminist theories of gender ... 72
3.4.2 Masculinity theories of gender ... 75
3.4.3 A gender perspective to this research ... 81
3.5 Research methods ... 82
3.5.1 Study setting ... 82
3.5.2 Sample size ... 83
3.5.3 Recruitment strategy ... 84
3.5.4 Data collection ... 88
3.5.5 Data analysis ... 95
3.6 Ethical Considerations ... 98
3.6.1 Recruitment strategy and informed consent ... 98
3.6.2 Confidentiality ... 100
3.7 Reflection on methodology ... 101
Chapter Four ... 107
Findings ... 107
4.1 Introduction ... 107
4.2 Demographics of study participants ... 109
4.3.1 Lack of information about modern contraceptives ... 110
4.3.2 Myths and misconceptions about family planning ... 114
4.4 Manifestations and impact of gender inequalities and assumptions ... 117
4.4.1 Women’s feeling of powerlessness due to male dominance ... 117

4.4.2 Gendered division of labour 123
4.4.3 Deliberate concealment of contraceptive usage 126
4.4.4 Silencing of women's voice and disregard for their opinion 127
4.4.5 Women's dread of polygamy and divorce by men 128
4.5 Cultural influences on contraception 130
4.5.1 Poor spousal communication 131
4.5.2 Competition for children and the associated economic benefits 132
4.5.3 Preference for large families and male children 134
4.5.4 Reliance on natural and traditional contraceptive methods 137
4.6 Influence of religion on contraceptive decision-making, choice and use 138
4.6.1 Family planning contradicts Islamic teachings 139
4.6.2 Belief in destiny regarding family size and sustenance (God's will syndrome) 140
4.6.3 Permission of child spacing on health grounds 143
4.6.4 Prohibition of permanent contraceptive methods 145
4.7 Conclusion 147
Chapter Five 149
Discussion 149
5.1 Introduction: revisiting the purpose of the study 149
5.2 Review of key findings and contribution to knowledge 151
5.2.1 Gender and power relations: performance of masculinity and passive resistance of power imposition 153
5.2.2 Intersection of culture and gender: put up and shut up? 159
5.2.3 Religion as source of legitimacy for non-use of modern contraceptives 165
5.2.4 Gender relations, culture, religion and family planning: making sense of it all 169
5.3 Strengths of the study: positive contributions 171
5.4 Limitations 175
5.5 Policy and practice implications 177
Chapter Six 181
Conclusion 181
6.2 Recommendations for further research 188
6.3 Final words 189

References 191
Appendix I: Sample search strategy 238
Appendix II: Data extracted from identified studies 240
Appendix III: Quality assessment criteria for qualitative research studies (adapted from McMaster University critical review form) 250
Appendix IV: Quality assessment of included studies 254
Appendix V: Flyers for Recruitment of Study Participants 257
Appendix VI: Expression of Interest Form 259
Appendix VII: Participant Information Sheet for Male Participants 261
Appendix VIII: Participant Information Sheet for Female Participants 268
Appendix IX: Consent Form 274
Appendix X: Focus Group Discussion Guide 276
- Female Users of Family Planning 276
- Female Non-users of Family Planning 278
- Men's Group 280

Appendix XI: Interview Discussion Guide 283
- Community and Religious Leaders 283
- Lay men and women 285

List of Abbreviations

AMED	Allied and Complementary Medicine Database
ASSIA	Applied Social Sciences Index and Abstracts
BMC	BioMed Central
CINAHL	Cumulative Index to Nursing and Allied Health Literature
CPR	Contraceptive prevalence rate
CSDH	Commission on Social Determinants of Health
DFID	Department for International Development
DHS	Demographic and Health Survey
DPHDC	Directorate of Public Health and Disease Control
DPRS	Directorate of Planning, Research and Statistics
EMBASE	Excerpta Medica Database
FGD	Focus group discussion
FMOH	Federal Ministry of Health
FOS	Federal Office of Statistics
FP	Family Planning
GHeL	Global Health eLearning
HCCC	Health Communication Capacity Collaborative
ICF	International Classification of Functioning, Disability and Health
IDI	In-depth interview
IRBC	Immigration and Refugee Board of Canada
LGA	Local Government Area
MDGs	Millennium Development Goals

MCHIP	Maternal and Child Health Integrated Programme
MEDLINE	Medical Literature Analysis and Retrieval System Online
MMR	Maternal Mortality Ratio
MPH	Master of Public Health
NBS	National Bureau of Statistics
NGO	Non-governmental Organization
NPC	National Population Commission
PHC	Primacy Health Centre
PhD	Doctor of Philosophy
PRB	Population Reference Bureau
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PsycINFO	Psychological Information Database Medical
RH	Reproductive Health
SBCC	Social and Behavior Change Communication
SMOH	State Ministry of Health
TBA	Traditional birth attendant
TFR	Total fertility rate
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Tables and Figures

Table 2.1: Inclusion and exclusion criteria Page 27

Table 2.2: Search terms for literature search Page 29

Table 2.3: Studies conducted in Nigeria systemically identified and included in the study Page 33

Table 2.4: Studies conducted in Africa and Middle East identified and cited in the literature review Page 37

Table 2.5: Data extraction form Page 40

Table 2.6: Summary criteria to critically appraise findings from research Page 42

Table 3.1 Data collection methods and number of study participants across the selected LGAs Page 94

Table 4.1 Description of study participants Page 109

Figure 2.1: Flow diagram of the study selection process Page 32

Figure 2.2: Venn diagram showing the intersections of gender, culture and religion Page 43

Chapter One

Introduction

1.1 Introduction

As a young man who grew up in northern Nigeria, I had early life exposure of living in an environment where life for most people is a daily struggle between meeting their basic needs and generating an income to invest in their own and their children's future. Despite this, their very livelihood is an endless battle with myriad of preventable diseases, with out-of-pocket health expenditure that pushes them deeper into poverty. The desire to contribute towards alleviating the burden of diseases and saving lives informed my early life decision to seek a medical career.

Up till the time I graduated from medical school and in the initial stage of my medical career in northern Nigeria, my passion was to specialise in Obstetrics and Gynaecology. This I thought will allow me to be in the frontline of saving women's lives through provision of high-quality reproductive health services and lifesaving obstetric and gynaecological procedures. For the first time, I was faced with numerous cases of prolonged obstructed labour in teenage girls who required emergency caesarean section; severe anaemia leading to heart failure in multiparous women; severe post-partum haemorrhage leading to death; wards filled to capacity with eclamptic patients and

marriage breakdown due to vesico-vaginal fistula following complicated labour and delivery, among others.

However, I gradually came to the realisation that the burgeoning burden of health problems in the region, coupled with the dearth of competent frontline health care providers and resources, required a higher level of focus on the preventative aspect of medicine through the design and implementation of programmes aimed at promoting safe motherhood, in addition to improving access to and strengthening quality of health care, especially in hard-to-reach rural communities. At this point I lacked knowledge on the broad range of social factors that influence health and the technical capacity and access to resources to bring about the change I desire, but I was convinced I had a greater chance of contributing to changing the gloomy statistics in the region if I focused on the preventative aspect of medicine. I therefore enrolled for a master's degree in Public Health (MPH) which provided the opportunity to acquire a deeper understanding of the sociology and politics of health, public health approach to management, principles and practice of health promotion and disease prevention, and the design, implementation and evaluation of public health programmes. As a doctor, my training has been on the traditional scientific approach to research that is underpinned by positivist philosophy, and the evidence that guided my practice is largely generated using quantitative methods. It was during the MPH programme I learned about qualitative research paradigms and their contribution to health care.

Following the completion of the MPH programme, I took up a position in a USAID funded Maternal and Child Health Integrated Programme (MCHIP), which focused on reducing maternal, neonatal and child mortality and accelerating progress towards achieving Millennium Development Goals (MDGs) 4 and 5. However, despite 3 years of intensive programme activities aimed at generating demand for and increasing access to family planning services which was recognized as a key strategy to reducing maternal death, only minimal impact was made in spite of high level of awareness of modern contraceptives. At this point, I developed an interest in gaining a deeper understanding of the social factors and actors that influence decision making at household and community level on matters of family size and contraception.

From the PhD induction academy in summer of 2013, I was immersed into a life changing journey that provided me the opportunity to gain more critical insight into social determinants of health, public health research and how research could shape policy and practice. I was able to gain a deeper understanding of research philosophy, the differing epistemological and ontological bases, research paradigms within which knowledge is socially constructed, legitimated and understood, research methods and what informs choices, and how to critique the assumptions that underpin evidence for policy and practice.

1.2 Maternal mortality in Nigeria: regional variation and prevention strategies

Despite advances in obstetric medicine and public health over the past century, maternal mortality continues to claim the lives of women of childbearing age worldwide (Zureick-Brown *et al*., 2013 and Meh *et al*., 2019). In 2017 alone, about 810 women died everyday across the globe from preventable causes related to pregnancy and childbirth (WHO 2019). Though pregnancy is recognized as neither a disease nor a disorder, complications related to pregnancy and childbirth resulted in the death of approximately 295,000 women worldwide in 2017, 94% of which occurred in low-resourced developing countries (WHO, 2019a). Although over the last three decades many countries have reduced their maternal mortality levels and contributed to the global decline in maternal deaths, maternal mortality rates have stagnated in sub-Saharan Africa where 50% of deaths occur (Meh *et al*., 2019).

At country level, Nigeria loses about 145 women of childbearing age daily, making it the second largest contributor to maternal mortality globally (UNICEF 2017a). Despite having the largest economy in West Africa, it has a slow rate of annual reduction in maternal deaths (1.5%) and a high maternal mortality ratio (MMR) of 576 women per 100,000 live births (Durojaye, 2013; NPC/ICF International, 2014 and WHO, 2015 and UNICEF 2017a). The MMR has rather increased from 545 women per 100,000 live births in 2008 despite promotion of institutional deliveries, training and deploying new skilled birth attendants

and increasing availability of resources for emergency obstetric and newborn care (Meh *et al*., 2019).

However, even within the same country, there is a huge north-south divide and regional variations in educational attainment, socio-economic status, cultural practices and religious beliefs, geographic access to health care services and quality of maternal health services, which are linked with health outcomes such as maternal mortality (Siegrist and Marmot, 2006 and UNICEF, 2017b). Whilst MMR is as low as 166 women per 100,000 live births in South-West, it is up to 1,549 women per 100,000 live births in North-East and 1,600 per 100,000 live births in a North-Western state like Kano (Meh *et al*., 2019). Like many countries in sub-Saharan Africa, the leading causes of maternal deaths in Nigeria are pregnancy related complications such as severe bleeding, infections and high blood pressure leading to pre-eclampsia and eclampsia, and complications from delivery and unsafe abortion (WHO, 2019a).

A large proportion of these maternal deaths are preventable, as the health-care solutions to prevent or manage these complications are well known (WHO, 2019a). An estimated 74% of these deaths could be averted if all women had access to services that allow them to delay motherhood, avoid unintended pregnancies, and prevent and treat pregnancy and childbirth complications (DFID, 2010; UNFPA, 2012; Chola *et al.,* 2015 and Ganatra and Faundes, 2016). More specifically, the use of oxytocics immediately after birth to reduce risk of bleeding, good hygiene during delivery and early use of antibiotics when

signs of infection are recognised as well as early detection and treatment of pre-eclampsia have been shown to be effective in saving women's lives (WHO, 2019a).

With regard to family planning, there is compelling evidence that it could avert 32% of all maternal deaths if contraceptives were made available to all women who wanted them, as they allow them to delay motherhood, space births, avoid unintended pregnancies and unsafely performed abortions, and stop childbearing when they have reached their desired family size (PRB, 2009 and Osotimehin, 2012). Yet Ganatra and Faundes (2016) have argued that for contraception to have a significant effect on reducing maternal mortality, it must reach a very large proportion of women with the highest risk of maternal death.

However, it is important to make a distinction between family planning and contraception and understand how the two overlap. Family planning is the information, means and methods that allow individuals or couples to make a conscious effort to decide if and when to have children and attain the desired number of children (NPC/ICF International, 2018; WHO, 2018a and UNFPA, 2019). Contraception on the other hand refers to the deliberate use of artificial methods or other techniques to prevent pregnancy following sexual intercourse (Casey, 2018). It has separated sex from procreation and has provided individuals and couples greater control and enjoyment of their lives (Speroff and Darney, 2011). Although both family planning and contraception may involve the use of wide

range of methods such as pills, condoms, intrauterine devices, surgical procedures as well as non-invasive methods like withdrawal and abstinence (UNFPA, 2019), contraception is practiced solely for the prevention of pregnancy following sex. Whilst a sexually active girl aged 17 years is not necessarily concerned about planning a family but uses contraceptives to enjoy sex without fear of pregnancy, couples use contraceptives for the purpose of deciding if and when to have a child and to determine their number. Thus, reference will be made to family planning in the literature review chapter as the focus of the study is on utilization of contraceptives for the purpose of family planning by couples.

The recognition of the potential impact of family planning in averting maternal deaths led to global efforts to increase access to and utilization of family planning services over the past four decades which resulted in the aversion of 4.1 million maternal deaths, owing to a sharp decline in fertility from 6 or 7 children to 2 or 3 children per woman in the developing world with the exception of Sub-Saharan Africa, where women still give birth to an average of 5 children (GHeL, 2008 and Rossi, 2016). Nigeria still remains one of the developing countries with low uptake of family planning despite its potential benefits as will be discussed in the next section.

1.3 Nigeria's family planning landscape

Whilst contraceptive use could help couples and individuals to decide freely and responsibly if, when and how many children to have, this basic right can only be realised if there is an enabling environment that promotes demand for family planning services and ensures unbroken family planning commodity supply chain (United Nations, 2015). Based on the 2014 Nigeria family planning scale-up plan, the government prioritized improving utilization of family planning services by increasing financing at all levels of government, generating demand for family planning services, building capacity of service providers and strengthening delivery channels through improved forecasting and distribution of commodities (FMOH, 2014). Currently, the Federal Government contributes $33 million (£25.3 million) annually for contraceptives procurement while the state and local governments support family planning service provision and manage service delivery at secondary and primary care levels respectively (FMOH, 2014). Although the private sector is the major source of contraceptives in Nigeria (60%) with higher penetration and service availability in the south (Auta and Banwat, 2011), initiatives by the government to provide free family planning commodities from 2011 have contributed to an improvement in public sector supply. The government committed itself to provision of free access to contraceptives to reduce, and where possible eliminate, unmet need for family planning with the aim of increasing contraceptive prevalence rate (CPR) from 10% in 2013 to 36% by 2018 (FMOH, 2014; UNFPA, 2017 and Adefalu *et al.,* 2018).

Although there is an empirically verified high demand for family planning services to either space or limit childbearing worldwide (Mwaikambo *et al*., 2011), evidence from Nigeria Demographic and Health Surveys (DHS) from 2003 to 2018 has shown that the uptake of family planning among women of reproductive age still remains low despite these investments to generate demand for and increase utilization of modern contraceptives. Whilst this effort resulted in increased availability and improved knowledge of modern contraceptives among both married men and women (94%), there have been less than expected gains in contraceptive uptake from 1990 to 2018 by women living in Nigeria (3.8% to 17%) and the North-West geopolitical zone in particular (0.7% to 6.2%). This low uptake of modern contraceptives has resulted in the high total fertility rate that characterizes northern Nigeria (6.6 in North-West and 6.1 in North-East) (Izugbara *et al.*, 2010; Kana *et al*., 2016; WHO, 2016; Adanikin, McGrath and Padmadas, 2017; FMOH, 2018 and NPC and ICF, 2019). In Kano State, located in North-West, there is very low unmet need for family planning (16.5%) despite an extremely low CPR of 6.3%. Here, only about 21% of women demand for family planning services whereas up to 55% still do not intend to use any form of contraceptive even when they are made available, resulting in high total fertility rate (TFR) of 6.5 (NPC and ICF, 2019).

This is in sharp contrast with southern Nigeria where over the same period modern contraceptive use in South-West and South-East recorded a significant increase from 10.5% to 24.3% and from 3.9% to 12.9% respectively (FOS, 1992 and NPC/ICF, 2019). The

TFR in the south also ranges from 3.9 to 4.7 (NPC and ICF, 2019). It is important to recognize that northern Nigeria is ethno-linguistically diverse and religiously differentiated from the south, with a predominant Hausa-Fulani and Kanuri Muslim population (Gwarzo, 2011). However, beyond culture and religion, there are wide range of social factors that affect access to, and utilization of modern family planning as discussed in the next section.

1.4 Social determinants of access to family planning services

Between and within any particular country, there are differences in the health of populations or groups of people that do not necessarily relate to their inherent predisposition to adverse health conditions, but to factors that are often beyond their control (WHO, 2010a and Rubin, 2016 in Rubin *et al.,* 2016). Whilst these factors are significantly influenced by political and economic forces that determine the availability and distribution of healthcare and other related resources, social and cultural practices and mores, and other personal and environmental factors in homes, neighbourhoods and communities also make a significant contribution towards shaping differences in health status (Rubin, 2016 in Rubin *et al.,* 2016). These complex arrays of non-medical influences, that taken together constitute the social determinants of health, combine to translate into health disparities experienced by people within and between countries (WHO, 2020a). They are the social, economic and physical conditions in the environment in which people are born, live, grow, learn, work, worship and age, and the wider set of forces and systems

shaping the conditions of daily life (WHO, 2020a). As we live in a world that is deeply structured by wealth, sex and gender (Monro, 2005), these social constructs have contributed to inequalities and inequities that damage the physical and mental health of millions of women and girls across the globe (WHO, 2010b and WHO, 2019b).

Regarding family planning, country data has consistently documented significant disparities in access to and utilization of services due to variation in wealth, ethnicity, residence, geographic access, education, and other social factors (WHO, 2010b). Despite Nigerian government's supply side interventions across the country that are aimed at increasing access to either free or low-cost, affordable family planning services by tackling social determinants such as geographic access, availability and affordability, the regional disparities persist as shown by the DHS data above. Even where services are available, the poor pattern of health care providers' attitude and behaviour also undermines women's health care seeking behaviour. This was revealed in a systematic review by Mannava *et al*. (2015) that identified verbal and physical abuse, rudeness by ignoring or ridiculing women, lack of regard for privacy, poor communication, unwillingness to accommodate traditional practices, and authoritarian or frightening attitudes to be common practices in Africa, which adversely affects women's willingness to utilize healthcare services. My personal engagement in the implementation of family planning programmes in Kano, Katsina and Zamfara States in northern Nigeria from 2009 to 2012 has also enabled me to learn that increasing availability of family planning commodities and rolling out demand

generation activities by simply creating awareness on the health benefits of family planning does not translate to increased uptake of services due to deep rooted social factors which exert influence on family planning use that are not being systematically addressed.

Numerous studies in sub-Saharan African countries have shown that gender inequities, religious beliefs and cultural practices that promote high parity exert a greater level of influence on women's ability to negotiate and use contraception than the other aforementioned social determinants, even where they are largely addressed (Erulkar and Bello 2007 in Unumeri *et al*., 2015; Ezeah and Achonwa, 2015 and Measure Evaluation, 2017). A deep-seated resistance to modern contraceptives still persists and often takes the form of outright opposition for either religious, cultural or health reasons in many communities in sub-Saharan Africa (Cleland, Ndugwa and Zulu, 2011).

On the influence of religious beliefs on family planning, opinions on permissibility of contraceptive use in Christianity, which is practiced by a minority in northern Nigeria, vary greatly among the three major denominations, namely Roman Catholicism, Eastern Orthodoxy and Protestantism (IRBC, 2015 and Pinter *et al*., 2016). Whilst the Catholic church has the strictest rulings against contraceptive use, Eastern Orthodoxy permits temporary forms of contraception and disallow permanent methods except on medical grounds whereas the Protestant church allows couples to make their decisions regarding

family size and contraception (Pinter *et al*., 2016). With regard to Islam, Merali and Merali (2005) asserted the permissibility of family planning in Islam and supported their position with verses from the Holy Qur'an and narrations from Islamic scholars that indicate the earliest followers of the prophet practiced contraception with his knowledge. However, at a meeting on family planning in 1988 held by 23 prominent Islamic scholars, they ruled that Islam only allows use of contraceptives for child spacing and forbids use of permanent contraceptives (Zarabozo, 2017), although this position was challenged by Merali and Merali (2005) who argued that permanent contraceptive methods are permissible except if they pose harm to health and the procedure involves a man accessing the private part of a woman that is forbidden for him.

In another article by Johnson-Hanks (2006 in Yeatman and Trinitapoli, 2008), they concluded that Muslims choose to either use or reject contraceptives based on their population agenda. They argued that Muslims have lower fertility in areas where they are the majority and vice-versa. This does not appear to hold true as speed of population growth is to a certain extent based on a countries' stage of demographic transition, with faster population growth in countries at early or middle stage of their demographic transition (sub-Saharan Africa) and significantly slower in Muslim dominated countries that have completed their transition (Roudi-Fahimi, May and Lynch, 2016). The fact that Muslim majority north African and Middle Eastern countries that are ruled by Islamic law have CPRs ranging from 55 to 65% makes the assertion by Johnson-Hanks unsustainable

(Roudi-Fahimi, 2004). This does not also hold true for northern Nigeria's predominant Muslim population with a high TFR (Oginni, Ahonsi and Adebajo, 2015).

Although there are contrasting views on the positions of Islam and Christianity on family planning, we still lack an understanding on the beliefs of men and women in northern Nigeria on the position of religion on family planning and how these beliefs influence their practices. More so, the low CPR in northern Nigeria could not be explained by religion alone as cultural influences on birth control, traditional values about children and gender roles reinforced by culture and religion also exert influence on fertility (Schenker and Rabenou, 1993). The social desirability to have many children and the rampant practice of polygamy keep fertility from declining despite efforts to increase family planning utilization (Unumeri *et al*., 2015 and Gribble, 2016). Additionally, early age at marriage as a form of control against premarital sex limits access to formal education and self-empowerment opportunities for many women, which drastically affects their ability to make or be involved in contraceptive use decisions (Unumeri *et al*., 2015 and Gribble, 2016).

On the influence of gender on health, socially defined gender norms, decision making power and resource control vary for men and women in most communities, with men usually having more authority and influence on decisions to access health care services by women (Sahay, 2018). More so, women's socioeconomic dependence on their husbands coupled with a culture that restricts them to their houses ('*kulle*') and mandates them to

obtain their husband's consent before accessing health services deprives them of their liberty and contributes to poor health outcomes (Erulkar and Bello 2007 in Unumeri *et al*., 2015 and Ezeah and Achonwa, 2015). Although, these gender inequalities have resulted in significant gender differentials in access to health care and burden of diseases (Ezeah and Achonwa, 2015), we still lack an understanding of how these gendered divisions of power and labour in settings within northern Nigeria affect women's decision-making process, willingness and ability to use to modern contraceptives.

In spite of the broad similarities in gender norms, religious beliefs and cultural practices with other African countries, the CPR in northern Nigeria is significantly lower than that of many neighbouring countries like Ghana (26.2%), Cameroun (22.1%), Burkina Faso (23.5%) and Cabo Verde (59.9%) and Muslim majority North African countries such as Egypt (60%) and Morocco (67%) (UN, 2012; PRB, 2012; UN, 2017 and The World Bank, 2020). Although large scale surveys have enabled us to learn why women discontinue contraceptive use, they have left us with paucity of rich qualitative data from settings within northern Nigeria that will allow for an in-depth understanding of the cultural and religious contexts and dynamics within which decisions to access family planning services are made and how gender norms and expectations intersect with culture and religion to influence utilization of family planning services in the region. Examining the differences in family planning service utilization and causal factors through the lens of gender, with focus on hegemonic masculinity, will enable us to understand if gender norms and

expectations placed on women, vis-à-vis cultural practices and religious beliefs, are depriving women of something they truly wish they had (contraception), to avoid something they do not desire (pregnancy) (Creanga *et al*., 2011).

1.5 Aim and objectives of the study

The study aims to explore the beliefs and perceptions of lay men and women of reproductive age about family planning and how gender norms and expectations, cultural practices and religious beliefs exert an influence on utilization of modern family planning services in northern Nigeria. To achieve this aim, the study had the following three objectives:

1. Explore the beliefs and perceptions of laymen and current female users and non-users of family planning about modern family planning methods and services.
2. Explore the role men play in shaping decision making and influencing access to and utilization of family planning services by women.
3. To explore the impact of gender norms and expectations, cultural practices and religious beliefs on utilization of family planning services by women in northern Nigeria.

1.6 Research questions

The following research questions were explored in this study:

1. What are the beliefs and perceptions of lay men and women about family planning?

2. How do gender norms and expectations, cultural practices and religious beliefs affect utilization of modern family planning services by women of reproductive age in northern Nigeria?

1.7 Intended contributions to knowledge

It is expected that the study will provide significant new insight on lay beliefs and perceptions about family planning and how gender intersects with culture and religion to exert influence on family planning decision making and use. The findings from the study may be used by Nigerian government, at national and state levels, and development partners to inform policies and the design and implementation of long-term, capital-intensive national family planning scale-up programmes that appropriately address these underlying social determinants with the aim of generating sustained demand for and increasing utilization of modern contraceptive methods and reducing the access inequalities. Additionally, it could improve the knowledge of family planning programme managers, health care providers and key opinion leaders on the appropriate communication strategies, channels and target audience, the content of family planning promotional messages and what could realistically work towards tackling the underlying

social factors and closing the north-south divide in utilization of family planning services in Nigeria.

1.8 Thesis structure

The thesis is comprised of six chapters structured to provide context to the research, an exploration and review of the existing literature, description of the methodology, the research findings and a discussion on what has been learnt, its limitations and contributions. It was concluded with recommendations for further research in the future to improve our knowledge and better understand how utilization of family planning services by women in northern Nigeria could be improved.

This first chapter began with a brief introduction about my experiences, prior knowledge and why this topic is of interest to me before moving on to brief overview of global and Nigeria's maternal mortality burden and the strategies for reducing maternal deaths. It then went on to describe Nigeria's family planning landscape, the north-south divide and disproportionate access to and utilization of family planning services despite government initiatives, and the social determinants of access to family planning, with a focus on the role of gender, culture and religion on access to and utilization of family planning services. The chapter ended with the aim and objectives of the study, the research questions I hope to answer and the intended contribution of the research to our knowledge, policy and

practice with regard to improving utilization of family planning services in northern Nigeria.

Chapter Two provides an approach to the literature review, the inclusion and exclusion criteria, literature search strategy, and assessment of relevance and quality of the studies before moving to the synthesis of the findings, using integrative review and synthesis approach, to understanding how existing body of knowledge provides answers to the research question. The review integrated findings from the qualitative and quantitative studies that enabled us to understand what is already known on how either gender role, norms and expectations, cultural practices or religious beliefs in both northern and southern Nigeria influence utilization of family planning services. The integrative review and synthesis of the findings, which was performed through the lens of gender using some of the existing theories of gender, allowed us to identify the knowledge gaps that guided the next stage of the research.

Chapter Three began with a brief overview of the ontological and epistemological foundations of knowledge before moving on to introduce and critique the feminist and masculinist theories of gender. More specifically, several masculinist theoretical perspectives were critically analysed before attention was focused on hegemonic masculinity, as it was identified to be the most appropriate for the research setting and context. The chapter then presents a brief description of the study setting (Kano State)

before focusing on the choice of methods and their rational, ethical considerations and the methodological challenges associated with qualitative data collection methods involving women in these culturally conservative setting and how I sought to overcome them. The method of data analysis used to generate the themes and subthemes that sought to reflect what the men and women were trying to communicate was also presented in the chapter before concluding with a reflection on my role in the research process, exploring how my prior knowledge and experience of working in the field, my interactions with the participants, and with the data they provided may have influenced the conclusions that were drawn.

Chapter Four presents an analysis the results of the research by drawing directly on the narratives of the beliefs, perceptions, lived experiences and practices of the men and women that participated in the study and relating the findings to the relevant literature. The chapter began with an analysis of the demographics of the study participants, their awareness and knowledge about modern contraceptives and the way in which myths and misconceptions about modern contraceptives influence their decision-making process and the choices they make. The chapter then examines the various ways in which gender inequalities and power struggles manifest among couples and the ways in which women strive to achieve balance of power within their home to regain control of their reproduction. The chapter also explores how the practice of masculinity result in gender inequalities and intertwine with cultural practices and religious beliefs to exert an impact

on women's ability to contribute to decision making process on family planning in their homes, their choice of methods and utilization of services.

Chapter Five seeks to draw together the entire learning from the preceding chapters. It began by revisiting the purpose of the study before focusing on review of the key findings from the study and its contribution to knowledge. Through an engagement with Connell's theory of hegemonic masculinity (Connell and Messerschmidt, 2005), the chapter explores how culturally constructed and markedly segregated, differentiated and assigned gender roles, coupled with the external actors that reinforce gender roles, result in an imbalance in power relations within the household in favour of men and allow them to occupy a position of dominance in women's social and reproductive life. The chapter also presents a critical analysis of the wide range of cultural practices that intersect with gender norms and expectations to exert an influence on the use of family planning services and how religious scriptures and teachings are interpreted and implemented in a manner that justifies the exercise of power and control over women's contraceptive use in a setting where culture also favours large family sizes. The chapter then concludes with a reflection on what was learnt, a consideration of the contributions of the study to existing knowledge, the methodological limitations of the study and the policy and practice implications of the findings.

Chapter Six concludes the study and reflects on how well the findings of this thesis have addressed the research questions and achieved the aim and objectives. Whilst recognizing the study's original contribution to knowledge and the policy and practice implications of the findings, it also acknowledges the need to continue to research the interface between gender, culture, religion and family planning, and other social determinants of health, if a larger population of women of reproductive age are to gain access to modern contraceptives and take control over their reproductive and sexual health.

Chapter Two

Literature Review

2.1 Introduction

This chapter presents a review of the literature on beliefs and perceptions of lay men and women of reproductive age about family planning and specifically focuses on gender as the theoretical framework for examining the mediatory effects of the linkage between gender, culture and religion on utilization of family planning services by women in northern Nigeria. Recognizing that decision making on the design and implementation of public health programmes relies on good research evidence, a systematic literature review was conducted with the aim of identifying, appraising and synthesizing the empirical evidence that aims to answer the research questions (Scargle, 2000; Hill, Brice and Enoch in Pencheon *et al*., 2004; Bown and Sutton, 2010 and Aveyard, Payne and Preston, 2021).

2.2 Literature review design and approach

Considering this research does not exist in isolation, a review of the literature is essential in order to identity what other academic work exists in the area, what the strengths and limitations of this work are, how this research relates to the work of others and its contribution to the overall body of knowledge, however modest it might be (Aveyard,

Payne and Preston, 2021). There are many different types of literature review designs and methods, just as research studies vary in many ways including the type of research questions they are asking, the reasons they are being asked, the theoretical and ideological perspectives underlying these questions and in the research methods they employ (Gough, Thomas and Oliver, 2012). With the initial scoping during the literature search identifying studies with diverse range of research methods that may be relevant to the research question and meet the inclusion criteria, a systematic review of mixed methods studies with interpretation was considered the most appropriate for the review as it allows for the examination of these diverse studies within one review (Aveyard, Payne and Preston, 2021).

As Harden and Thomas (2005) argued, research questions should not be confined in their answers to only one type of study (either quantitative or qualitative studies only) but should rather incorporate a range of study designs in their review based on the relevance of the study to the research question. Recent developments have therefore seen approaches that advocate the combination of different types of study designs to answer research questions in literature reviews. The integrative review approach to systematic review of mixed-methods studies was therefore adopted as it incorporates the simultaneous inclusion and integration of a wide range of literature (experimental and non-experimental research) in the review rather than just qualitative methods, as developed by Whittemore and Knafl (2005). It also allows for a systematic approach to the identification, selection, critical appraisal and synthesis of the available empirical

evidence from primary research studies that meet pre-specified eligibility criteria to answer the research questions (Jahan *et al.,* 2016). With the research focused on the themes of gender, culture and religion and recognizing that masculinities and the ways in which they are performed can vary between cultures (Kimmel, 1992), the literature was systemically reviewed, analysed, synthesized and discussed through the lens of gender, with its intersection with culture and religion recognized and acknowledged. This systematic approach differs from non-systematic literature reviews, sometimes referred to as narrative reviews (Popay *et al*., 2006), in the extent to which the process is replicable and the degree to which rigour is applied to reduce likelihood of bias (Wong, 2007).

An initial scoping during the research proposal development stage and for this literature review indicated scarce literature on influence of gender, culture and religion on utilization of family planning when narrowed down to northern Nigeria. The literature search was therefore expanded to cover the whole of Nigeria to maximize retrieval of studies that improve our understanding of how these social determinants of health influence utilization of family planning services in the country. A detailed description of the approach to the literature review is narrated in subsequent sections.

2.3 Review questions

The literature review was primarily aimed at answering the question: how do gender norms and expectations intersect with cultural and religious practices and beliefs to influence utilization of modern family planning services by women of reproductive age in northern Nigeria?

The specific questions the review aimed to answer were:

- What are the beliefs and perceptions of lay men and women about modern family planning methods?
- How do societal gender norms and expectations, sexual division of power and labour, prevailing cultural practices and beliefs based on interpretation of religious scriptural injunctions affect utilization of modern family planning services?

The findings from the literature review will be used at the end of the chapter to highlight current gaps in the research evidence that will be addressed through this piece of research.

2.4 Review method

2.4.1 Inclusion and exclusion criteria

In order to be included in the review, a set of inclusion and exclusion criteria were applied to determine relevance of a study to the review, as outlined in table 2.1 below.

Table 2.1: Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
Research design: both qualitative and quantitative methods	Editorials, resource and policy documents and non-systematic literature reviews
Focused on either gender, culture or religious influence on family planning	Not primarily focused on how either gender, culture or religion influence family planning utilization
Contraceptive access and utilization: either choice, use and non-use for contraceptive purpose	Focus on contraceptive use for prevention of sexually transmitted infections or treatment of medical conditions
Focus on **women of reproductive age** (15 – 49 years)	
Published between 1970 and 2018: most databases cover from 1970, when modern contraceptives became widely available (Williamson, Hart and Petticrew, 2006)	
Published in English language: no evidence of bias from use of language restrictions in literature review (Morrison *et al*., 2012)	
Country: Nigeria	

2.4.2 Literature Search strategy

Whilst recognizing that no search can be absolutely exhaustive, the goal of this search is to comprehensively find as many published studies as possible through an extensive systematic search to enable us to understand what is already known and identify knowledge gaps that could be addressed through further research (Jekel, Elmore and Katz, 1996; Bland, 2003 and Petrie and Sabin, 2005). Thus, with Wittemore and Knafl's (2005) integrative review approach to systematic review of mixed-methods studies in mind, a well-designed systematic literature search was conducted with a pre-defined focus on electronic databases, hand searching of journals, bibliographies and reference list of relevant papers and citation tracking and search following methods described by Lipsey and Wilson (2001), Walsh and Wigens (2003), Williamson, Hart and Petticrew (2006) and Aveyard, Payne and Preston (2021). Supplementary searches using google scholar and Lancaster University Library's OneSearch were conducted to locate papers identified through reference list of relevant papers, relevant studies conducted in Africa and Muslim majority countries of Middle East and for theoretical literature on gender (Aveyard, Payne and Preston, 2021). The search consisted basically of two parts: finding bibliographic references to potentially eligible studies and obtaining full texts of the shortlisted studies to identify those that meet inclusion criteria. The electronic database search was carried out over a period of four months from June to September 2018 in the following databases: MEDLINE, EMBASE, CINAHL, AMED, ASSIA, PsycINFO, Cochrane and Digital Dissertations.

A search using Google scholar and snowballing technique was also conducted to allow for identification of studies not earlier retrieved (Glasziou, 2001 and Davies, 2007).

In order to maximize studies retrieval, a set of key words that cover the relevant domains were used (table 2.2). The search was iterative and heuristic, broadened using ‘exploding’ thesaurus terms, truncation and wild cards (Hart, 2001; Hill, Brice and Enoch in Pencheon *et al*., 2004 and Williamson, Hart and Petticrew, 2006).

Table 2.2: Search terms for literature search

Subject Group	Search terms used
Family planning	“Family planning”, “family planning services”, “contraception”, “contracept*”, “modern family planning", birth control,
Gender	“Feminity”, “masculinity”, “gender”, "gender role*", “male”, “female”, "gender studies", "women’s studies", “femin*” and “mascul*”
Culture	“culture”, “cultur*”, “cultural practice*"
Religion	“Religion”, “religio*”, “religious belief”, “religious belie*”, “islam*”, “Christian*”
Setting	“Nigeria”, “northern Nigeria”, “Sub-Saharan Africa”

In addition to the above search, the journals listed below were handsearched to maximize retrieval of relevant articles (Sacks *et al.*, 1992 in Blair and Mosteller, 1992):

Journal of Family Planning and Reproductive Health Care

Journal of Reproductive Health and Contraception

Journal of Obstetrics and Gynaecology

Reproductive Health Matters

BMC Reproductive Health

Contraception

International Family Planning Perspectives

Journal of Adolescent Health

Perspectives on Sexual and Reproductive Health

This comprehensive search process resulted in the initial identification of 2,229 studies that were reduced to 1,062 following removal of duplicates, as reflected in the PRISMA flow diagram in figure 2.1 below. The titles were reviewed following which an additional 998 were excluded because they were either duplicates (149) or they had irrelevant focus, study population or setting based on face validity (849). The abstract of the 64 remaining studies were then reviewed resulting in the exclusion of 28 studies that were either missed duplicates, irrelevant or not conducted in Nigeria. The full texts of 36 articles were obtained for full review and assessment based on aforementioned criteria to determine eligibility for inclusion. This led to the exclusion of 14 additional studies that based on

abstract seemed to have a focus on influence of either gender, culture or religion on family planning but a full text review showed they were rather only passively mentioned among list of factors influencing contraceptive use. Of the 22 studies, 14 were conducted in northern Nigeria (5 qualitative, 7 quantitative and 2 mixed method) and 8 in the south (1 qualitative and 7 quantitative). However, 3 studies were conducted in settings in both northern and southern Nigeria.

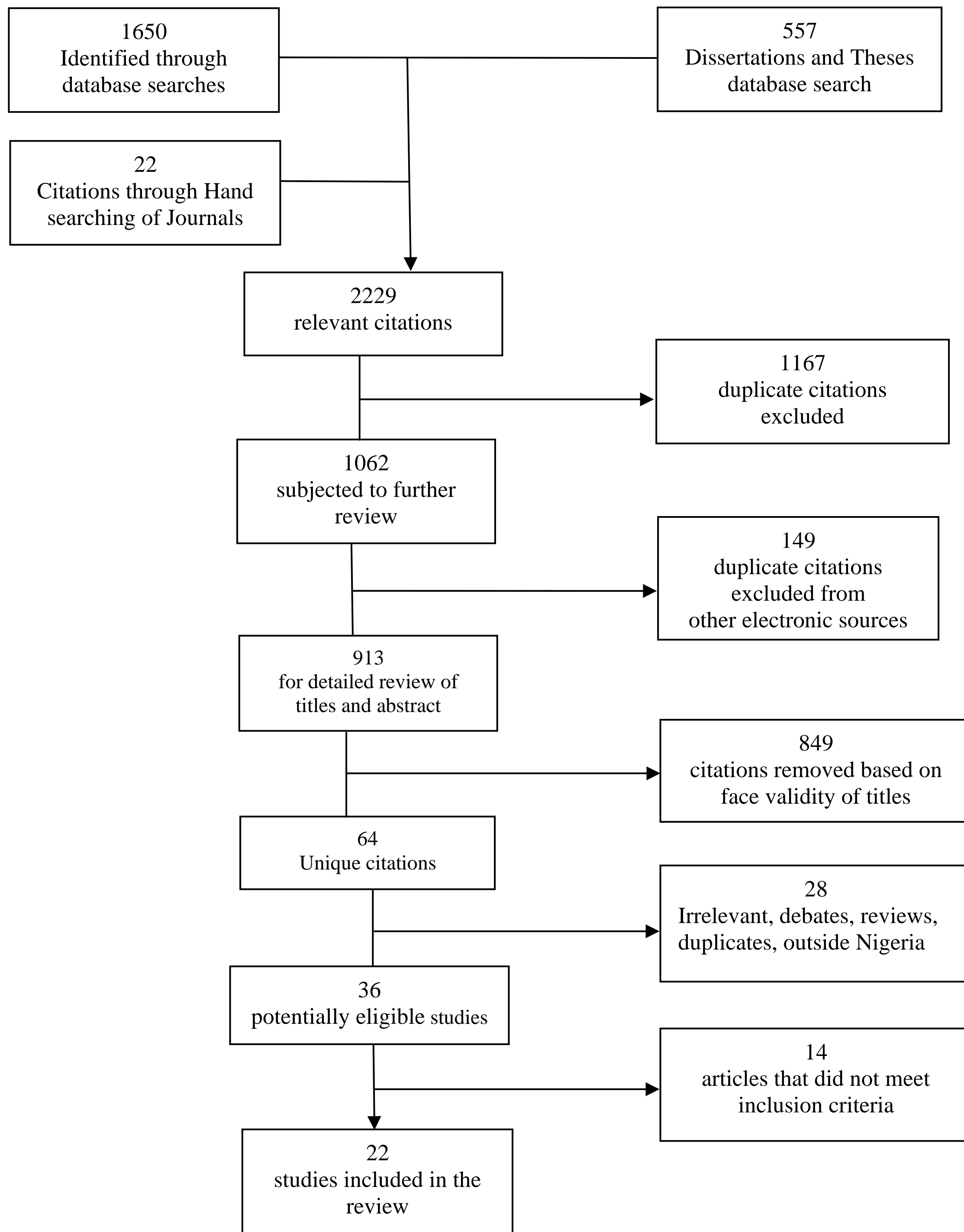

Figure 2.1: Flow diagram of the study selection process

Table 2.3: Studies conducted in Nigeria systemically identified and included in the study

Author, Date	Research question	Design	Study setting	Participants	Data collection	Data analysis	Results/Findings
Gwarzo, 2011	What are the views of Islamic scholars on position of Islam on family planning?	Qualitative	Zamfara and Sokoto States, North-West	Islamic religious scholars	Structured in-depth interviews	Thematic analysis	Family planning permissible for child spacing, birth control permissible only on medical grounds
Orisaremi and Alubo, 2012	How do unequal gender relations inhibit the attainment of women's reproductive rights?	Qualitative	Plateau State, North Central	Community, religious and opinion leaders and lay men and women	In-depth interviews and focus group discussions	Thematic analysis	Wide abuse of women's right, desire for large family size, use of natural/traditional family planning, denial access to modern family planning by men
Izugbara *et al*., 2010	Why is spousal contraceptive communication rare in northern Nigeria? Why are husbands and wives unable to initiate it?	Qualitative	Jigawa and Kano State, North-West	Local NGO staffs, family planning services providers, community leaders, lay men and women	In-depth interviews and focus group discussions	Thematic analysis	Poor spousal contraceptive communication driven by ample incentives to keep having children
Okwor and Olaseha, 2010	What is the perception of married men in respect of spousal use of modern contraceptives?	Qualitative	Oyo State, South-West	Married men	Focus group discussions	Thematic analysis	Most men perceived family planning as good but were opposed to women initiating discussion on family planning or its use. Considered mark of disrespect if a woman adopts family planning without consent
Ujuju *et al*., 2011	What are the roles of religion, culture and male involvement in the use of Standard Days Method of family planning?	Qualitative	Enugu, South-East and Katsina, North-West	Nurses and community providers of standard days method, lay men and women	Focus group discussions and in-depth interviews	Thematic analysis	Religion forbids use of modern contraceptives, but SDM acceptable; opposition to modern family planning by male partners

Aransiola, Akinyemi and Fatusi, 2014	What are the local notions regarding male partner's involvement in family planning adoption by women in urban slums?	Qualitative	Oyo State, South-West and Kaduna, North-West	Lay men and women	Focus group discussions	Thematic analysis	Low male partner support for family planning due to misconception and cultural reasons
Kana *et al.*, 2016	What is the prevalence of contraceptive use in a rural setting and what are the determinants of their use?	Mixed methods	Bauchi State, North-East	Lay men and women, heads of health facilities and proprietary patent medicine vendors	Cross-sectional survey and focus group discussions	Mean, percentage, bivariate analysis; Thematic analysis for qualitative data	Regular availability of family planning commodities, high family planning awareness but low uptake due to lack of male partner support, stigma and religious beliefs
Akaba, Ketare and Tile, 2016	What is the knowledge, attitude, and extent of involvement of men in family planning? What is the extent of spousal communication on family planning?	Mixed methods	Abuja, North-Central	Married men and women, religious and community leaders, and family planning providers	Cross-sectional survey, focus group discussions and in-depth interviews	Percentages and chi-square test; Thematic analysis	Men major decision makers regarding family size, use and choice of family planning methods and timing of pregnancy
Adefalu *et al.*, 2018	What is the level of awareness, knowledge and perception of women of reproductive age regarding contraception?	Quantitative	Kebbi and Sokoto States, North-West	Women of reproductive age	Cross-sectional study	Descriptive statistics and chi-square	High contraceptive awareness among married women (89%); 58% believe family planning conflicts with their moral, cultural and religious beliefs
Anozie *et al.*, 2017	What are the reasons for low uptake of family planning services and commodities in Abakaliki?	Quantitative	Ebonyi State, South-East	Women of reproductive age	Cross-sectional survey	Descriptive statistics	22.7% using family planning method. Low uptake due to objection by husband, culture and religious opposition and fear of side effects

Durowade *et al.*, 2017	What are the barriers to the use of modern contraceptives among women of reproductive age in Ise-Ekiti community?	Quantitative	Ekiti State, South-West	Women of reproductive age	Cross-sectional survey	Descriptive statistics and chi-square	51% using contraceptive. Reason for non-use: objection by husband, desire for more children, culture and religious opposition and fear of side effects
Rabiu *et al.*, 2016	What are the contraceptive choices among grand multiparous women attending antenatal clinic?	Quantitative	Kano State, North-West	Grand multiparous pregnant women	Cross-sectional survey	Descriptive statistics and chi-square	95.5% awareness of modern family planning but only 42% usage. Reasons for non-use: objection by husband, desire for more children and fear of side effects
Okigbo *et al.*, 2018	What is the association between changes in gender norms and modern contraceptive use over time among women in urban Nigeria?	Quantitative	Abuja and Ilorin (North-Central); Benin (South-South), Ibadan (South-West), Kaduna and Zaria (North-West)	Women of reproductive age	Multilevel longitudinal study	Descriptive and multilevel multinomial logistic regression	Increased family planning uptake from 21-32% due to positive change in gender-equitable attitudes towards couple's family planning decision making
Chigbu *et al.*, 2013	What are the experiences and opinions of women regarding contraceptive rights?	Quantitative	Ebonyi State, South-East	Women of reproductive age	Cross-sectional survey	Descriptive statistics and chi-square	Denial of access to family planning by partners accounted for 2/3rd of unplanned pregnancies. Formal education did not influence exercise of reproductive rights
Balogun *et al.*, 2016	What are the effects of male partner's support on spousal modern contraceptive use?	Quantitative	Kwara State, North-Central	Women of reproductive age	Cross-sectional survey	Descriptive statistics, chi-square and logistic regression	Male partners objection contributed significantly to low uptake (46%) and family planning discontinuation (23%) among users

Etokidem *et al.*, 2017	What is the level of knowledge of family planning among rural community women? What are their family planning preferences and practices?	Quantitative	Cross River, South-South	Women of reproductive age	Cross-sectional survey	Descriptive statistics, chi-square and binary logistic regression	Only 17% using family planning methods. Religion, culture and male partner objection cited as reason for non-use of family planning services
Bukar *et al.*, 2013	What is the attitude of people towards the empowerment of women to an independent right to accept, choose and utilize a contraceptive method of their choice without recourse to their male partners?	Quantitative	Gombe State, North-East	Lay men and women	Cross-sectional survey	Descriptive statistics	85% of men and 64% of women rejected women's right to independent contraceptive acceptance, choice and practice. 73% of women felt men should influence contraceptive acceptance by women, despite 88% being educated
Ezeanolue *et al.*, 2015	What is the level of male partner's awareness and support for contraceptives on female intent to use contraceptives?	Quantitative	Enugu, South-East	Men and pregnant female partners	Cross-sectional survey	Chi-square and logistic regression model	Over 2/3rd of men who were aware of modern family planning supported their spouses to use them if they express desire to do so.
Ijadunola *et al.*, 2010	What is the extent of male involvement in family planning decision making among couples?	Quantitative	Osun State, South-West	Men and family planning service providers	Cross-sectional survey	Descriptive statistics and multiple logistic regression	89% of men approved of spousal family planning method use but 65% will not attend the clinic with partners. Poor spousal contraceptive communication and religion identified as barriers to family planning
Audu *et al.*, 2008	What are the contraceptive practices among women in monogamous and polygamous marriages?	Quantitative	Borno State, North-East	Married women	Cross-sectional survey	Descriptive statistics and chi-square	74% of women in monogamy and 65% of those in polygamy have never used contraception largely for cultural reasons.

Fakeye and Babaniyi, 1989	What are the reasons for non-use of family planning by non-pregnant women of reproductive age?	Quantitative	Kwara State, North-Central	Women of reproductive age	Cross-sectional survey	Descriptive statistics	Male partners objection, fear of side effects, desire for more children, religion cited as reasons for non-use of family planning
Orji, Ojofeitimi and Olanrewaju, 2007	What is the role of men in family planning decision-making in both rural and urban areas of Nigeria?	Quantitative	Osun State, South-West	Lay men	Cross-sectional survey	Descriptive statistics and chi-square	High level of family planning awareness but disapprove use due to cultural and religious reasons and concerns about promiscuity; belief in joint decision by spouses regarding family planning

Table 2.4: Studies conducted in Africa and Middle East identified and cited in the literature review

Author, Date	**Research question**	**Design**	**Study setting**	**Participants**	**Data collection**	**Data analysis**	**Results/Findings**
AlYamani *et al.* (2019), Middle East	What is the level of awareness and use of contraceptives by middle eastern women?	Systematic review	Entire middle eastern countries	Secondary data	PUBMED search	Narrative synthesis	50.92% of women aged 15-49 year use contraception.
Bogale, *et al.* (2011), Ethiopia	What is the level of married women's decision-making power on the use of modern contraceptive method in Dawro zone? What the differences on decision-making power among urban and rural married women in Dawro Zone?	Quantitative	Dawro zone, Southern Ethiopia	Married women of reproductive age	Cross-sectional surveys	Description, bivariate and multivariate analysis	Married women who reside in urban area more likely to decide on the use of modern contraceptives than rural women due to better knowledge about the methods, gender equitable attitude and better involvement in decisions related to children, socio-cultural and family relations.

Mgaya *et al*. (2013), Tanzania	Is grand multiparity a risk factor for adverse pregnancy outcome?	Quantitative	Muhimbili National Hospital, Dar es Salaam	Multiparous women	Cross-sectional survey	Chi-square and Student's *t*-test	Grand multiparity remains a risk in pregnancy and is associated with an increased prevalence of maternal and neonatal complications
Nanda, Schuler and Lenzi (2013), Tanzania	Which of four gender attitude scales, if any, predict contraceptive use? Whose gender attitudes, if anyone's, predict contraceptive use?	Quantitative	Dodoma and Mwanza regions	Lay men and women	Cross-sectional survey	Descriptive statistics, Chi-square and Student's *t*-test	Wives endorsed more inequitable gender attitudes compared with husbands on all gender attitude scales. For wives, more equitable gender attitudes were positively associated with contraceptive use. For husbands, the role of gender attitudes had no significant association with wives' reported contraceptive use.
Sedgh, Ashford and Hussain (2016)	Why are women with an unmet need for contraceptives not using a method? How do these reasons vary across countries and regions? And how have the reasons cited changed over time?	Quantitative	52 developing countries; 32 in Africa, 13 in Asia and 7 in Latin America and the Caribbean	Secondary data	DHS data from 2005 to 2014	Descriptive statistics	Non-use of contraceptives due to concerns about side effects, opposition by close family and friends, infrequent sex, lack of awareness and access,
Shaikh, Azmat and Mazhar (2013) Islamic countries	What are the policies and programmes of Islamic countries on family planning and modern contraception?	Systematic review	Afghanistan, Bangladesh, Egypt, Indonesia, Iran, Jordan, Kuwait, Malaysia, Morocco, Nigeria,	Secondary data	PUBMED and Google scholar searches	Narrative synthesis	Despite historical permissibility of contraception within the Islamic legacy and country policies that support family planning, some religious scholars regard family planning as an external western conspiracy aimed at curtailing the growth and strength of the Islamic world

			Pakistan, and Turkey				
Srikanthan and Reid (2008)	What are the religious and cultural influences that may affect the acceptance and use of various methods of contraception, including emergency contraception?	Systematic review	Not specified	Secondary data	PUBMED search	Narrative synthesis	Religious and cultural factors could influence the acceptance and use of contraception by couples from different religious backgrounds. Within religions, different sects may interpret religious teachings on contraception in varying ways, and individual women and their partners may choose to ignore the teachings. Cultural factors also infliuence couples' decisions about family size and contraception.

2.4.3 Data collection process

A data extraction form was developed using the form developed by Munro *et al.* (2007 in Noyes and Lewin, 2011). The data extracted from the papers that met the inclusion criteria is captured in a tabular form in appendix II.

Table 2.5: Data extraction form

Criteria	Description
Identification	Unique identifier
Title	Study title
Aim	Aim of the study
Study setting/location	Where the study was conducted
Design / Method	Methodological approach employed
Sampling	Sampling approach used
Participants	Study sample size and participants characteristics
Data analysis	Data analysis approach
Results	Main results/key themes from the study
Conclusion/Recommendations	Conclusion/recommendations made by authors

2.4.4 Assessment of relevance and quality of identified studies

Despite engaging in a thorough process of identification of relevant studies based on the aforementioned criteria, an appraisal of their methodological quality was necessary

because of its potential impact on conclusions that will be drawn (Hartling *et al.,* 2009; Demaerschalk, 2004 and Rychetnik and Wise, 2004 in Ciliska, Thomas and Buffet, 2008). Although there is considerable debate around the review of qualitative studies and the method by which they should be appraised and synthesized, a number of assessment tools have been developed based on the assessment of similar characteristics for quantitative studies (Williamson, Hart and Petticrew, 2006). However, there is no agreement on which tool is best suited for evaluation of studies as evidence has shown that divergent findings on quality of a study are obtained when differing tools are used for evaluating the same study (Brouwers *et al.,* 2005 and Wells and Little, 2009).

For the purpose of this review, the McMaster University critical review tools for quantitative and qualitative studies developed by Law *et al*. (1998) and Letts *et al*. (2007) respectively were adapted and used as they offered a comprehensive and systematic approach (the adapted tools are included in appendix III). For each study, its relevance to the review and research question was assessed looking at its purpose, context and setting. The internal validity was assessed by looking at how well the study was conducted, most notably in relation to whether any suggestions of causality are robust and whether potentially confounding variables have been taken account of, as deemed applicable. This was followed by assessment of external validity to determine how generalisable the results of a study are to wider populations and any ethical implications contained therein. The quality of the studies was rated as either high, medium or low quality using the criteria

recommended by Hannes (2011). A table showing the quality assessment for each of the papers is included as appendix IV.

Table 2.6: Summary criteria to critically appraise findings from research

Aspect	**Qualitative Term**	**Quantitative Term**
Truth value	Credibility	Internal Validity
Applicability	Transferability	External Validity or generalizability
Consistency	Dependability	Reliability
Neutrality	Confirmability	Objectivity

Each of these criteria were rated individually with a score of 1 assigned for low rating, 2 for medium and 3 for high rating, with an overall quality rating calculated for each paper. However, papers were not excluded on the basis of having a lower rating alone.

2.5 Review and synthesis of results

In this section, a critical analysis and synthesis of the findings from the literature review was carried out with a view to understanding how existing body of knowledge provides answers to the research question and identify gaps in knowledge that could be addressed through this research. The data was analysed through the lens of gender, with focus on hegemonic masculinity, and the discussion was structured in a manner that explored how

gender norms and expectations, cultural and religious practices and beliefs intersect to exert an influence on uptake of family planning services in Nigeria. Whilst recognizing some degree of similarities exist in the north and south, focus will be placed on how these factors differentially exert influence on family planning decision making and use across the two regions and contribute to huge disparities in uptake. It is unclear at this stage if any of the three social determinants exerts more influence over the others on decision making and practices regarding utilization of family planning services.

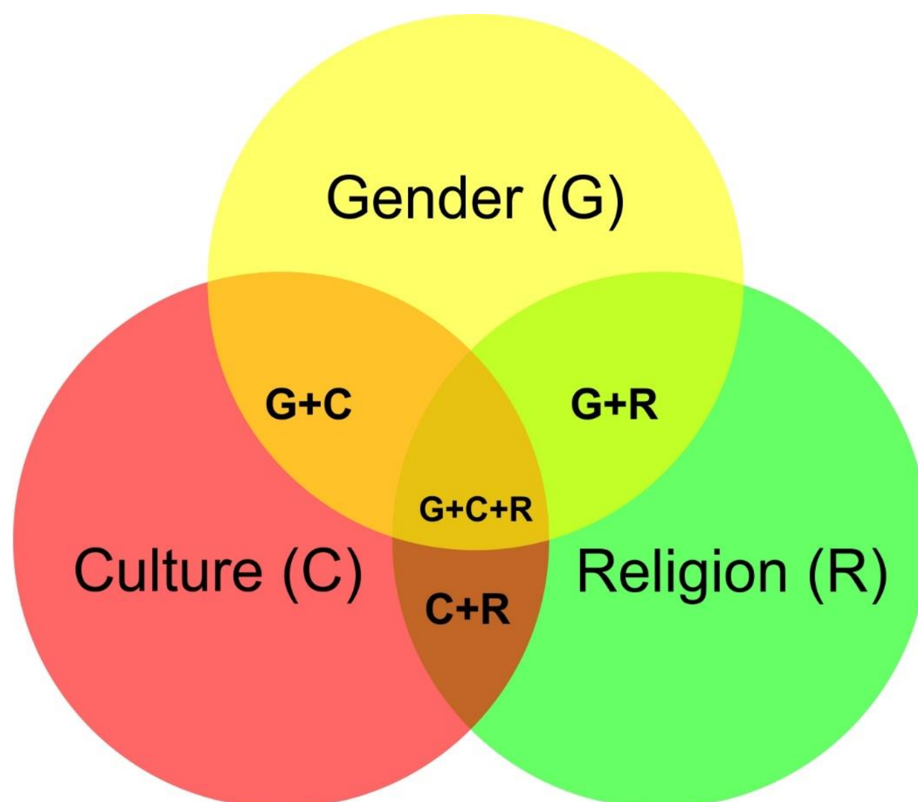

Figure 2.2: Venn diagram showing the intersections of gender, culture and religion

Of the 22 studies that met inclusion criteria, only 5 focused on influence of gender, culture and religion on utilization of family planning in the same study whereas the rest (17) focused on either one or two of the variables, with majority (14) including gender in the discussion. As earlier discussed, the integrative review approach to analysis and synthesis of literature was adopted. It is a broad type of literature review method that allows for the simultaneous inclusion of experimental and non-experimental research in order to more fully understand a phenomenon of concern. Here, a well-defined research question is followed by a comprehensive search, as demonstrated above, critical appraisal of the studies, data extraction and analysis with the aim of achieving a thorough and unbiased interpretation of the primary sources, along with an innovative synthesis of the data (Aveyard, Payne and Preston, 2021), as discussed below.

2.5.1 Data analysis and synthesis

Following an in-depth process of systematic assessment of the quality of each of the 22 identified studies using the adapted McMaster University critical review forms (appendix III), it was incorporated into the analysis and synthesis of the literature by taking into account the impact of studies with higher and lower quality rating. With the three themes identified a priori, the results and key findings of the individual quantitative and qualitative studies were extracted, coded, categorized, analyzed and synthetized into the relevant thematic areas of gender, culture and religion, with reference made to theory of gender within the review. With regard to the quantitative studies, the data extracted was

mostly quantitative results reported in percentages or proportions, for example, percentage of women who were unable to use modern contraceptives due to denial of access by their husbands. These percentages on same issues were pooled across the papers and converted into "qualitized" data by transforming them into textual descriptions or pooled narrative interpretation of the quantitative results. A convergent integrated approach was then applied to integrate the data by assembling the "qualitized" data with the qualitative data, categorizing and pooling them based on similarity in focus and meaning to produce a set of integrated findings under the relevant themes (Lizarondo *et al.*, 2020). However, overlaps in the roles of gender, culture and religion were recognized as they were found not to be clear cut standalone factors that influence utilization of family planning services.

2.5.2 Gender and family planning

It is essential to have a distinction between sex and gender in research. Gender describes male and female characteristics that are socially constructed, with inequalities between the two genders being socially produced in the most part rather than biologically driven (Annandale and Hunt, 2000). It is a dense and contested term that refers to the varied and complex arrangements between men and women, encompassing the organization of reproduction, the sexual divisions of labour and cultural definitions of feminity and masculinity (Bradley, 2013). It is related to how we are perceived or expected to think, behave and act as men and women because of the way society is organized, not primarily

because of our biological differences (Hammarstrom, 2002 in Wamala and Lynch, 2002). Attitudes towards gender roles and relationships, known as gender norms, operate at the individual, household and community levels of the socioecological system leading to social conformity (Okigbo *et al.,* 2018). In societies where 'natural' gender order is entrenched as a whole, inequitable gender norms towards women exist as men tend to exercise and maintain power over women in settings where the cultural dynamic ideologically legitimizes the dominant position of men and justifies the subordination of the common population of men and women (Connell and Messerschmidt, 2005; Robertson, 2007 and Anderson, 2008). This performance of hegemonic masculinity may directly and indirectly influence health outcomes through women's lack of decision-making power and access to health care services.

Gender norms and the cultural dimensions that reflect differences in gender roles and expectations will be critically analyzed using the Theory of Gender and Power developed by Robert Connell in 1987 and adapter by Wingood and DiClemente (2002) to better understand how they influence utilization of family planning services. This is a social structural theory based on existing philosophical writings on sexual inequality, gender and power imbalance that posits that three distinct but overlapping structures characterize the gendered relationships between men and women, namely sexual division of labour, sexual division of power and cathexis, and serve to explain the gendered roles men and women assume (Wingood and DiClemente, 2000 and 2002). These three interrelated

structures are still preserved in our society through sociocultural mechanisms that continuously segregate power and assign roles and responsibilities to the different genders.

The division of power refers to the allocation of more power to one gender over the other. In a patriarchal society such as northern Nigeria, men generally tend to exercise more power over women, who often have to seek permission from them to access health care services, even when faced with a medical emergency (Okigbo *et al.,* 2018). The structure of cathexis, also referred to as the structure of affective attachments and social norms, dictates sexual behaviors the society deems appropriate for women and is characterized by the emotional and sexual attachments that women have with men. This structure constrains the expectations that society has about women regarding their sexuality, and, as a consequence, shapes women's perceptions of themselves and others and limits their life experiences of reality (Wingood and DiClemente, 2002 and Okigbo *et al.,* 2018).

Regarding family planning, whilst evidence suggests that gender equality positively influences contraceptive use, studies from African settings that demonstrate intersectionality of gender norms and expectations and contraceptive use are sparse (Bogale, *et al.,* 2011; Nanda, Schuler and Lenzi, 2013 and Okigbo *et al.,* 2018). Although some researchers claim that gender inequalities between men and women are natural consequence of biological difference and therefore difficult to change, Sen and Ostlin

(2010) challenge this view and argued that they are indeed socially governed and actionable. This was demonstrated in a six-year longitudinal study on family planning in Nigeria from 2010 to 2016 by Okigbo *et al.* (2018). The study evaluated the association between gender-equitable attitudes and modern contraceptive use by utilizing four exposure variables, namely: wife beating, house-hold decision making, couples' family planning decisions and family planning self-efficacy, which may differentially affect modern contraceptive use. They were able to demonstrate an increase in the proportion of women reporting higher levels of gender-equitable attitudes towards couples' family planning decisions from 40% to 58%, with an increase in family planning use from 21% to 32%.

In a study by Rabiu *et al.* (2016) with grand multiparous women in northern Nigeria, a high-risk group that has an increased risk of complications and poor maternal and perinatal outcomes (Mgaya *et al*., 2013), only 42% were using any family planning method due largely to objection by their husbands, despite more than 95% being aware of modern contraceptives. Similarly, some studies in North-Central Nigeria where more than 90% of the participants were either multiparous or grand multiparous and nearly two-third were Christians, revealed nearly 50% of women were unable to utilize contraceptives due to male partner's hinderance either through complaints to spouse's family, denial of money for feeding or refusal to pay for transport fare to the clinic (Fakeye and Babaniyi, 1989 and Balogun *et al.*, 2016). Only 7.2% reported covert use of contraceptives. In other

communities in the north, women remove contraceptive pills from the sachet and put them in unmarked envelops due to fear of husbands' fury if they discover their covert contraceptives use (Ujuju *et al*., 2011). In these parts of the country where cultural division of labour limits women's economic potential and constrains them to unpaid domestic work, it results in widening of economic inequalities and power imbalance in favour of male gender, which contributes to adverse health outcomes among women.

However, even among well-educated women working in or utilizing the services of tertiary health centers in North-East Nigeria, more than two-thirds of them were of the opinion that men do and should influence the contraceptive acceptance and choice by their spouses and objected to the use of any contraceptive without their consent (Bukar *et al.*, 2013). Despite their high educational status, they objected to the independent right of women to contraceptive acceptance, choice and practice, which suggests that culturally legitimized performance of masculinities that allows men to have a dominant social role over women may have more influence than education in matters of procreation. As observed by Sen and Ostlin (2010), gender relations of power constitute the root causes of gender inequalities and are among the most influential of the social determinants of health. They determine whether people's needs are acknowledged, whether they have modicum of control over their lives, how they perceive their rights and whether they can realise them.

However, women in South-West and South-East Nigeria enjoy a slightly higher degree of gender equity than their northern counterparts as they are more likely to be involved in joint decision with their partners or be the main decision-makers regarding contraception and family size (Orji, Ojofeitimi and Olarenwaju, 2007 and Aransiola, Akinyemi and Fatusi, 2014). Despite this, studies in these geopolitical zones with predominantly Christian population revealed that although nearly 70% of the women that participated were using a contraceptive, disapproval by husbands, the desire to have more children and the perception that family planning promotes infidelity by women were among the main reasons for non-use of family planning methods (Okwor and Olaseha, 2010; Durowade *et al.*, 2017 and Chigbu *et al*., 2017).

Interestingly, a totally different picture emerged in the study by Ijadunola *et al.* (2010) and Ezeanolue *et al*. (2015) in southern Nigeria which showed that men who had partners that expressed a desire to use contraception were more likely to be aware of modern contraceptives and support their spouses' use. Thus, it appears good spousal communication about family planning could improve men's approval of contraception by women. Although this indicates an imbalance of power and control over contraceptive use decision making, it nevertheless underscores the fact that taking adequate steps to minimize gender bias in programme design and implementation by using systematic approaches that build awareness and transform values among service beneficiaries can improve utilization of services (Sen and Ostlin, 2010).

The next section explores if the denial of women's access to family planning services in both predominantly Muslim and Christian communities is informed by religious teachings, beliefs or interpretation of religious scriptural injunctions.

2.5.3 Religion and family planning

Religion plays a pivotal role in human society as predominant religious values continue to shape and regulate individual behaviour (Wusu, 2015). In Nigeria, the role of religion on contraceptive use still remains an issue of significant debate, with the popular religions, Islam and Christianity, propagating varied teachings on contraception (Wusu, 2015). Despite the role of religion in everyday life of Nigerians, studies on the influence of religion on non-use of modern contraceptives are sparse.

Although one in five maternal deaths could be averted by family planning (Okigbo *et al*., 2018), a study conducted in predominantly Muslim communities in North-West Nigeria revealed that more than half of the respondents were not using contraceptives because of the belief that family planning conflicts with their moral, cultural and religious beliefs, with no explanatory detail given regarding how their beliefs prevent family planning use (Adefalu *et al.*, 2018). This belief that family planning conflicts with Islamic teachings is contrary to the findings of a research by Gwarzo (2011) with over 90 Islamic scholars from selected states in northern Nigeria. The scholars were unanimously of the opinion that child-spacing is not only permissible but was actually practiced by the companions of

Prophet Muhammad. Nevertheless, most of the scholars opined that birth control is not permissible in Islam, except where pregnancy threatens the life of the mother or her child. They also pointed out that family planning should not be practiced based on economic considerations of having a large family size without the means to cater for them as each child's destiny is ordained by God. They quoted a verse from the Qur'an: "…And no living creature is there on earth but its provision is due from Allah. (Qur'an chapter 11: verse 6)".

While in doctrinal stance the use of all forms of modern contraceptives is forbidden amongst Catholics because of its consideration as an affront to God's injunction, Protestantism does not categorically prohibit any form of contraception (Wusu, 2015). Consequently, it is unsurprising that the study by Ikechebelu *et al.* (2005 in Ujuju *et al.*, 2011) in South-East Nigeria revealed that the Billing's Method, a natural contraceptive method, was the most frequently used contraceptive method. This may be associated with their belief that it is the only method approved by the Catholic Church, the predominant religion in the region. However, some Muslim women from the north pointed out that although it is Islamically acceptable, it is religiously inappropriate for a wife to deny her husband sex during her fertile period due to adoption of Billing's method. They also buttressed that even this natural method could not be practiced without husband's approval, an indication of the overriding influence of gender on family planning

and how religion serves as a tool for legitimizing the performance of hegemonic masculinity.

Other studies in South-East, South-West and South-South Nigeria with 95.5% Christian study participants revealed nearly 60% of women that practice family planning use natural methods because of the belief that use of modern contraceptives was against their religion (Ijadunola *et al.*, 2010; Esike *et al.*, 2017 and Etokidem *et al.,* 2017). Among those who do not use a method, one-third cited objection by their husband and only about 10% cited culture and religion as reasons for non-use of contraceptives (Ijadunola *et al.*, 2010 and Etokidem *et al.,* 2017).

The next section examines how cultural practices, which were earlier cited by some of the women, influence decisions and practices regarding modern family planning use.

2.5.4 Culture and family planning

Attempts by humans to control their numbers are of such antiquity that their real origin is concealed by the mists of time. From ancient methods like prepubertal coitus, coitus interruptus and use of plant extracts to more advanced modern methods, there is evidence of support for regulation of fertility in all cultures, even in societies where social and religious rules have favoured the abundant production of children (Schenker and Rabenou, 1993). Nevertheless, women in many communities in northern Nigeria are

naturally expected to continue to give birth until “they had exhausted the eggs in their ovaries” or become too old (Orisaremi and Alubo, 2012). A study of Tarok women who are predominantly Christian and marry either by elopement, abduction, widow inheritance or by simply being “given out” to wealthier men, revealed low family planning uptake largely for two reasons. Firstly, the number of offspring a man has, especially sons, serves as a yardstick for measuring his strength and wealth. Secondly, sons accord their mothers some level of respect and protection from divorce (Orisaremi and Alubo, 2012).

As studies by Aransiola, Akinyemi and Fatusi (2014) and Kana *et al.* (2016) have shown, despite desire by couples in many parts of northern Nigeria to use contraceptives to limit family size, societal censorship, stigma attached to family planning and pressure from extended family to have many children often force couples to halt contraception. Besides societal censorship and pressure, poor spousal communication due to women’s inability to initiate conversation about family planning with their partners also contributes to low uptake. This was revealed in studies conducted in North-West and North-East Nigeria which showed that although up to 76% of men would approve of modern contraceptives use by their wives, only one-third were aware of their spouse’s contraceptive usage and more than 50% of women were not using any form of contraception because of difficulty initiating conversation with their partners (Kana *et al*., 2016 and Akaba, Ketare and Tile, 2016). In most of these communities, men take pride in dominating decision making on

family size, contraceptive choice, and timing of pregnancy, which have been shown to influence women's contraceptive use (Akaba, Ketare and Tile, 2016).

Poor spousal communication on contraception is in many ways also driven by the abundant incentives husbands and wives have to continue procreation. Women believe having many children safeguards their marriage as it prevents their husbands from marrying additional wives due to financial strain and incapability to shoulder additional responsibilities (Izugbara *et al*., 2010 and Kana *et al*., 2016). This was demonstrated in a study by Audu *et al.* (2007) that showed a statistically significant association between monogamy and non-utilization of family planning, as up to 74% of women in monogamy have never used any contraceptive. Even when the men eventually marry more wives, the large number of children sustains their attention and investment in the wife and her children (Audu *et al*., 2007; Izugbara *et al*., 2010; Kana *et al*., 2016 and Akaba, Ketare and Tile, 2016). Other factors strongly associated with non-use of family planning include desire to have more children especially males, having 3 or more female children, number of male children of co-wives and living in rural areas (Fakeye and Babaniyi, 1989; Audu *et al*., 2007 and Aransiola, Akinyemi and Fatusi, 2014).

Conversely, some men consider large number of offspring to be a status symbol, and also use same as a tool for control of their wives from objecting to polygyny as most women will rather succumb to polygamy than get divorced and leave behind their children (Audu

et al., 2007 and Izugbara *et al.*, 2010). Whilst most of these men depend on God to determine their number of children ("what God wills syndrome"), others make decision based on their financial capability to cater for them. Hence, they instruct their wives to stop contraception with even a slight improvement in their income (Aransiola, Akinyemi and Fatusi, 2014). This is a demonstration of how gendered imbalance of power intersects with religious beliefs on family size and a culture that promotes large families exert a negative influence on women's ability to utilize modern family planning services.

However, in other studies in South-West Nigeria, more than 45% of respondents who do not use any form of contraception said they had no reason. This may be due to misconceptions about family planning that are yet to be resolved or confidentiality attached to their reasons for non-use of contraceptives. Some of the respondents desired to have many children owing to their belief that family planning was against their culture, reduces sexual pleasure and promotes promiscuity (Durowade *et al*., 2017 and Etokidem *et al.*, 2017). Available evidence from other African countries with low CPR also indicate husbands' opposition, religious beliefs, poor knowledge about contraceptives and lack of spousal communication were amongst the main reasons for poor family planning uptake (Okwor and Olaseha, 2010 and Ezeanolue *et al*., 2015).

Divergent arguments were put forward for non-use of contraceptives by women in the north and south which is a manifestation of the cultural differences between the two

regions. It can be argued that the sexual division of labour that constrains women in the north to unpaid domestic work creates a feeling of insecurity which makes them resort to procreation to gain financially and materially from their spouses, besides securing themselves from divorce.

2.6 Discussion

The literature review was conducted with the aim of answering the research questions on the beliefs and perceptions of lay men and women about modern family planning methods and how societal gender norms and expectations, sexual division of power and labour, prevailing cultural practices and beliefs based on interpretation of religious scriptural injunctions affect utilization of modern family planning services.

Although the review has enabled us to learn that nearly half of women, including those at high risk of pregnancy and birth related complications, were not using any form of modern contraceptive due to denial of access by their husbands with power exercised through various means to enforce their decision, we lacked an in-depth understanding of the rational for their actions. This has forced a low proportion of women in some communities in the north to resort to convert contraceptive use, although there was strong objection to this practice by majority of women who believe husband's consent must be gained prior to any form of contraceptive use. It appears the sexual division of power and labour

creates an imbalance that allows the male gender to influence family planning decision making and use by women.

Contrary to our understanding that educational status and capabilities of women influences their behaviour, we have seen that even among women with high educational status that are expected to be better informed about their reproductive rights, gender relations of power exert a high degree of influence on family planning utilization and matters of procreation. However, as nearly all the studies utilized quantitative research methodologies using structured questionnaires to explore factors affecting family planning, there is gross lack of in-depth information to allow for a better understanding of how gender norms in these settings influence decisions on family planning use by women. Even where life is at risk due to grand multiparity, more than half of all women were denied and deprived access to family planning services by men. Based on the design of these studies, responses by women were restricted to options given in the questionnaires with no room to gain deeper insight into how manifestations of gender norms in the household and community affect their right to make decisions, determine who has the final authority on family planning in the family and most importantly understand the basis upon which those decisions on utilization of family planning services are made.

The growing body of scientific scholarship identified through this literature review seems to focus only on the proportion of women denied access to contraceptives by men which leaves us requiring answers beyond the numbers that can only be obtained using

qualitative methodology. Given the multidimensionality of the factors under the three structures of the theory of gender and power, the use of qualitative methodology in this research will allow for in-depth exploration to capture complexities of men's and women's perception and action regarding family planning use and provide a contextualized picture in subsequent chapters on the multiple levels of influence of gender norms on modern contraceptive use.

Regarding religion, studies in predominantly Christian communities in southern Nigeria revealed use of natural contraceptive methods among nearly two-thirds of Catholics due to belief in religious prohibition of contraception. About one-third of these women also cited opposition to use of modern contraceptives by their husbands. In Muslim communities of northern Nigeria, more than half of Muslim women who were not using contraceptives cited religious opposition as the basis for their decision even though this is contrary to the findings of a study with Islamic scholars in northern Nigeria that indicate permissibility of child spacing, not birth control, in Islam. However, most Islamic scholars in Muslim majority countries approve of contraception for the purpose of limiting family size and to enhance parents' physical and financial comforts (Roudi-Fahimi, 2004). Srikanthan and Reid (2008) went further to state that it is the ignorance of these provisions amongst Muslims that prevents them from taking advantage of the liberal doctrinal position of Islam on contraception.

Currently, the governments of many Muslim majority countries have endorsed family planning and allowed couples to decide for themselves the number and timing of their

children. Nearly all Muslim majority countries of North Africa and Middle East such as Morocco, Egypt, Qatar, Kuwait, Iran, Turkey and Bahrain have achieved high CPR ranging from 58-80% following the endorsement of the Programme of Action of the United Nations' 1994 International Conference on Population and Development, and the 2000 Millennium Development Summit Declaration which called for universal access to family planning (Roudi-Fahimi, 2004; Shaikh, Azmat and Mazhar, 2013; Roudi-Fahimi, May and Lynch, 2016; WHO, 2018a and AlYamani *et al.,* 2019). Even war-torn Muslim majority countries such as Afghanistan and Iraq have CPR of 22% and 52.8% respectively (UN, 2012), 5-13 times that of Muslim dominated northern Nigeria. Shaikh, Azmat and Mazhar (2013) challenged arguments by Islamic scholars who consider family planning a western conspiracy aimed at curtailing the growth and strength of the Islamic world as being uninformed of both the socio-political and demographic realities in many Muslim countries, as well as the historical permissibility of contraception in Islam.

Whilst the studies identified and included in the review have to a certain extent demonstrated how gendered divisions of power intersect with culture and religion to negatively influence family planning use, nearly all the papers provided no in-depth exploration of why Muslims and Christians in northern Nigeria perceive their religious beliefs to conflict with modern family planning use. Although the numbers give an insight into the proportion of women who believe religion does not permit family planning, we are still yet to fully understand what is peculiar about the religious beliefs and practices

of men and women in northern Nigeria that is cited as reason for rejection of family planning when other Muslim majority countries have endorsed family planning and achieved high CPR. It is by use of qualitative methodology in this research that we can gain more insight and acquire a deeper understanding of how the interpretation of doctrinal positions and injunctions of religious scriptures as well as affiliation to various sects inform decisions, attitude and behaviour regarding family planning use in northern Nigeria.

On the influence of culture on family planning, the review has revealed cultural promotion of and attitudes towards large family sizes as a yardstick for measuring men's strength and wealth and how large number of children accord women some level of respect and protection from divorce. More so, poor spousal communication on contraception, societal censorship and stigma attached to family planning as well as pressure on couples from extended family members to have many children all exert a negative effect on utilization of family planning services. This also holds true in many parts of Sub-Saharan Africa where women are more likely to use contraceptives if they have perception of approval in their community, as evidenced in the study by Stephenson *et al.* (2007).

The review also revealed low uptake of family planning services by women in order to procreate and have large number of children as a safeguard against polygamy and divorce. This desire for women to risk their lives through procreation in order to gain power and authority in the household clearly challenges conventional thinking in family planning

programmes that view high fertility as disempowering for women, and contraceptive use as capable of redressing gender inequality. For these women having large number of children is the only tool for empowerment in the household (Izugbara *et al*., 2010). This demonstrates how culturally accepted patterns of behaviour exert an influence on fertility decisions leading to improvement in gendered power dynamics but at the same time negatively impact on family planning uptake and health outcomes. However, it is important to note that these practices do not cut across other parts of Africa as studies by Upadhyay (2012) and Sedgh, Ashford and Hussain (2016) in parts of East and West Africa demonstrated an association between women's empowerment in the household and desire for fewer children, despite similarities in cultural context and practices.

Thus, there is need to gain deeper insight through this research into why in a predominantly poor region with extremely poor households women will continue to procreate and put their lives at risk and further impoverish the household, thereby worsening their overall financial and economic status. Whilst the literature review has yielded rich data, it has exposed knowledge gaps across the three themes that informed the design of the discussion guides for data collection, the focus of the group discussions and issues to continue to explore in in-depth interviews as well as the presentation and discussion of the findings in the subsequent chapters.

2.7 Conclusion

Although as far back as 1970s the world fertility survey has demonstrated a strong desire for fertility control in nearly all societies (Schenker and Rabenou, 1993), the uptake of family planning in developing countries like Nigeria has remained persistently low, with stagnation despite expansion of services (Blackstone, 2017). This literature review has revealed how an imbalance of power between the two genders intersects with cultural practices and religious beliefs to influence decision making on contraceptive use and highlighted some of the reasons why women are either denied access to contraceptives or decline their use for their own gains. However, with most of the studies utilizing quantitative research methodologies, there is still a wide gap in knowledge that remains to be filled to enable us better to understand how Connell's three major structures that characterize the gendered relationships between men and women (Wingood and DiClemente, 2000) influence contraceptive use, even among educated women and those at high risk of pregnancy related complications and death. The complexities of gender relations of power and how they exert modicum of control over women's perception of their reproductive rights and decisions to utilize family planning services in northern Nigeria remain to be fully understood.

Whilst appreciating that challenging gender norms, cultural practices and religious beliefs, especially in the area of reproduction, touches one's sense of self and identity, our inability as programme managers to achieve a substantial improvement in utilization family planning services despite the implementation of large scale programmes calls for

further research to achieve a better understanding of how these complex social determinants of health intersect to influence decision making and actions regarding utilization of family planning services. The use of qualitative methodology in this research will enable us to address knowledge gaps identified above that still exist in the literature, deepen our understanding and lead to design and implementation of innovative, evidenced based high impact interventions.

Chapter Three

Methodology

3.1 Introduction

This chapter begins with a brief overview of research paradigms with a focus on the ontological and epistemological foundations and justification for the choice of qualitative approach for exploring lay beliefs on family planning and how gender, culture and religion influence utilization of family planning services. It then provides an overview of gender as a social determinant of health before moving on to gender theories, with focus on hegemonic masculinity. Here consideration was given to how gender identities may be differently constructed, organized and cohered, the continuum along which masculinity operates and the application of gender perspective for the analysis of data generated through this research. The subsequent sections provide background information on the study setting and a detailed account of the methods, focusing on the sampling, recruitment strategy and data collection methods. A description of the thematic approach to data analysis and the ethical considerations throughout the process of study participants recruitment, data collection and storage was given before concluding with a reflective account of the entire process of planning and conduct of the data collection and the potential influences of the researcher in the process.

3.2 Theories of knowledge: Ontological and Epistemological foundations

Whilst maintaining health and dealing with diseases and illnesses remain universal challenges for human societies to varying degrees, health professionals have had a long history of integrating insights from the social sciences to contribute to our understanding of health and how health and illness have been dealt with over time in different societies (Green and Thorogood, 2018). For several decades, healthcare researchers have used qualitative research methods to access experiences, interactions and documents in their natural context and in a way that gives room to their particularities and that of the materials studied to be understood (Flick, 2007). More recently, these methods of social research have been adopted and accepted as part of the toolbox of approaches needed to generate useful knowledge and provide evidence for policymakers and practitioners in the fields of public health and primary care (Green and Thorogood, 2018).

Qualitative research is an umbrella term for a wide variety of systematic approaches to and methods for the study of social phenomena in natural social world, the meanings people attach to their experiences of the social world and how they make sense of that world (Pope and Mays, 2000; Saldana, 2011 and Teherani *et al*., 2015). A number of different philosophical orientations and approaches exist within the wider framework of this type of research, all of which aim to understand, describe and interpret social phenomena as perceived by individuals, groups and cultures (Merriam, 2009 and Holloway and Wheeler, 2010). Whilst the approaches (grounded theory, ethnography,

action research, phenomenological research and narrative research) may differ in their data collection and analysis methods, they share common characteristics such as primacy of data and the qualitative researchers focus on the 'emic' perspective, the views of the people involved in the research and their perceptions, meanings, and interpretations (Holloway and Wheeler, 2010).

Although qualitative research methods were deployed in this research study, Morgan and Smircich (1980 in Cunliffe, 2010) argued that simply placing methods as the driving force in empirical research ignores the deeper philosophical assumptions about the nature of reality and knowledge and reduces social research to a mere technique. As research is essentially about producing knowledge about the world that we can claim as valid, this section focuses briefly on research paradigms, ontology and epistemology to enable us to unpack the assumptions on which research knowledge is built and understand the kinds of knowledge produced (Green and Thorogood, 2018).

Research paradigms are a loose collection of logically related assumptions, beliefs and practices that regulate inquiry within disciplines, and are characterized by ontological, epistemological and methodological differences in their approach to conceptualizing and conducting research and their contribution towards construction of knowledge (Rawnsley, 1998; Mackenzie and Knipe, 2006; Weaver and Olson 2006 in Bunniss and Kelly, 2010 and Berryman, 2019). Although Bunniss and Kelly (2010) have identified four major paradigms currently in use within health research, it has largely been dominated by positivistic philosophies of knowledge (Crossan, 2003 and Flick, 2018). Positivism is often

associated with realism and assumes that it is possible to observe social life and establish reliable and valid knowledge that can be used to affect the course of social change (Crossman, 2014). It assumes that knowledge can be neutral or value free and objective, and generalizable theory can be developed to accurately describe the world (Crossan, 2003; Mackenzie and Knipe, 2006; Darlaston-Jones, 2007 and Bunniss and Kelly, 2010). The consequence of such a position is that social research is often committed to ideals of measurement and objectively, rather than reconstruction and interpretation (Silverman, 2013 and Flick, 2018).

Constructionist or interpretivist research paradigm however emphasize on the constructive aspects of knowledge, based on the belief that reality and knowledge are socially constructed and subjective, as reality could have multiple and diverse interpretations (Creswell, 1998; Ajetunmobi, 2002; Weaver and Olson, 2006; Taylor, Kermode and Roberts, 2007; Bunniss and Kelly, 2010 and Silverman, 2013). Here, research is viewed as being to a large extent a product of the values of researchers and thus knowledge is socially constructed by people active in the research process (Mertens, 2005). Qualitative research generally draws on post-positivist, constructionist or interpretivist beliefs that there is no single reality, but that the researcher rather elicits participants' views of reality (Teherani *et al*., 2015).

However, the constructionist paradigm has come under criticism as an approach to health research as Bury (1986 in Green and Thorogood, 2018) argued that in the arena of health and illness, where research deals with phenomena such as distress, pain and death, such an extreme view is untenable and unhelpful. Despite this criticism, my position remains that the positivist understanding and approach to research is not suitable and appropriate for this research on exploration of lay believes and perceptions about modern family planning, and how gender, culture and religion intersect to influence decision making on access to and utilization of family planning services by women. As it will be difficult to transfer such a research interest into measurements using numbers, qualitative methods were used independently to uncover such social processes, issues and relations, access areas of peoples' social life and culture, and explore understanding of their everyday lives and way of life in a manner that is not open or amenable to quantitative research.

3.3 Gender as a social determinant of health

Between and within any country, there are differences in the health of populations or groups of people that do not necessarily relate to their inherent predisposition to adverse health conditions, but rather to factors that are often beyond their control (WHO, 2010 and Rubin, 2016 in Rubin *et al.,* 2016). Whilst these factors are significantly influenced by political and economic forces that determine the availability and distribution of healthcare and other related resources, social and cultural practices and mores, and other personal and environmental factors in homes, neighbourhoods and communities also make a

significant contribution towards shaping differences in health status (Rubin, 2016 in Rubin *et al.,* 2016). These complex arrays of influences, that taken together constitute the social determinants of health, combine to translate into health disparities experienced by people within and between countries. As we live in a world that is deeply structured by sex and gender (Monro, 2005), these social constructs have contributed to inequalities and inequities that damage the physical and mental health of millions of women and girls across the globe (WHO, 2019). The distinction between sex and gender has already been made in section 2.5.1.

Gender is increasingly recognized as an important determinant of health for men and women as beyond biological differences, gender norms, roles and behaviour have an influence on how men and women access health services and how health systems respond to their different needs (WHO, 2011). In 2005, the World Health22 Organization (WHO) set up an international commission on social determinants of health (CSDH) to explore social effects on health, with gender recognized as one of the 'structural drivers' producing the unequal living conditions out of which grow health inequalities (Connell, 2012). However, the commission's understanding of gender embedded in the policy documents released was critiqued by Bates, Hankivsky and Springer (2009 in Connell, 2012) as being seriously limited and inadequate for purpose. Attention is focused on the theories of feminity and masculinity in the next section to improve our understanding of

existing theories. More so, Kuhlmann (2002 in Connell, 2012) argued that an explicit engagement with gender theory is needed in health sciences.

Whilst socially constructed models of masculinity can have deleterious health consequences for men, women generally tend to bear the major burden of negative health effects from gender-based social hierarchies, partly due to systematic discrimination in access to power and resources and due to less visible biosocial processes, norms and expectations (WHO, 2011). These gender relations of power are now understood to constitute the root causes of gender inequality and are among the most influential of the social determinants of health (Sen and Ostlin, 2010). This is demonstrated by a growing body of evidence which shows that even in health, biology is not destiny, as sex and society, nature, nurture and environment interact in fascinating ways to determine who is well or ill, who is treated or not, who is exposed or vulnerable to ill-health and how, and whose health needs are acknowledged or dismissed (Sen and Ostlin, 2010).

3.4 Gender: a theoretical overview

In this section, attention is focused on gender theories to provide a brief overview of some of the established theories of feminity and masculinity and try to capture the complex interplay of the social drivers which influence decision making and practices at household and community levels that exert an impact on health. Research on gender issues requires

a thorough understanding of theoretical frameworks as they fundamentally shape research approaches and are therefore an essential underpinning for this research (Parpart, Connelly and Barriteau, 2000). Gender theory used here refers to the study of what is understood as masculine or feminine behaviour in any given context, community, society or field of study (Jule, 2014). While the term sex refers to categories of the biologically observable human body, female and male, gender is a 'busy term' that refers to the socially produced, varied and complex arrangements between men and women, encompassing the organization of reproduction, the sexual divisions of labour and cultural definitions of masculinity and feminity (Holmes, 2007; Bradley, 2013 and Jule, 2014).

3.4.1 Feminist theories of gender

Feminist theory is a type of conflict theory that examines inequalities in gender-related issues and how these gender roles and inequalities are maintained (Parpart, Connelly and Barriteau, 2000). Though feminist scholarship has only been active in the field of medical sociology for about four decades, it has mounted a significant challenge to the patriarchal visions of both the sociological and health care establishments during this period (Annandale and Clark, 1996).

Liberal feminism, considered the 'mainstream' face of feminism that stemmed from 18th and 19th century thinking about equal rights, is focused on women's oppression and explores means of achieving equal rights via reform, particularly in the public legal,

institutional and political struggles for equality (Tong, 2001 and Monro, 2005). Hence, some liberal feminists recommend androgyny as a means of liberating both men and women, with some arguing for monoandrogyny where individuals combine traditional male and female characteristics, whereas others advocate polyandrogyny where some personality types are totally masculine, some are totally feminine, and others are a mixture of both (Tong 1998 in Monro 2005). Although its emphasis on individual rights is useful for supporting diversity, there are some difficulties with this approach as it overlooks the collective nature of politics and society and the practicality of this in the real world. Thus, it is criticised for reasons ranging from its theory to the mundane workings of the society it envisions (Okin, 1998 in Gerson, 2002).

Radical feminism on the other hand is a philosophy that emphasizes the patriarchal roots of inequality between men and women, and views patriarchy as dividing societal rights, privileges and power primarily along the lines of sex, resulting in the oppression of women and privileging men (Lewis, 2019). It considers the role of the family in perpetuating male dominance especially in patriarchal societies, like Nigeria, where men's contributions are regarded as more valuable, and women's viewpoints tend to be silenced or marginalized to the point of being discredited or considered invalid. Radical feminists hold that this patriarchal system that oppresses women must be eliminated and that women should be free to exercise total sexual and reproductive freedom and extricate themselves from the institution of compulsory heterosexuality (Tong, 2001). Whilst this militant approach

could be regarded as promoting reproductive rights for women (Lewis, 2019), it seems to be plagued by a narrow understanding of gendered oppression and a misguided strategy for change that fails to offer women a clear path to liberation (West, 2017), especially in settings where this research was conducted.

However, Marxist feminists analyse the ways in which women are exploited by men through capitalism and the individual ownership of property and assets (Monro, 2005). They focused on labour relations, unpaid domestic labour and sex relations, and promoted a revolutionary approach in which the overthrow of capitalism was necessary to the dismantling of male privilege (Beasley 1999 in Monro, 2005). They claim it is impossible for anyone, especially women, to achieve true freedom in a class-based society (Tong, 2001). To them, the solution to gender inequality is economic; they believe tackling capitalism tackles patriarchy. However, this theory was criticised from numerous viewpoints, with observations that women's oppression within the family predates capitalism and exists even in communist societies and in poor resource settings (Thompson, 2016).

Psychoanalytic feminists however argued that the roots of women's oppression are embedded deep in the female psyche and hence focus on the psychological processes that lead to the formation of women that makes them different from men (Tong, 2008 and Monro, 2005). Although there is a range of different psychoanalytic feminisms, they

seem to link unconscious mental phenomena with the construction of femininity on both psychological and social levels and believe there is no gender or sexuality prior to a child learning language (Monro, 2005).

Whilst I acknowledge there are other feminist theories not covered in this section such as the postmodern feminists (Elbert, 1991; Tong 2001 and 2008), modern feminism has, through its three waves of evolution, impacted virtually all structures, systems and disciplines, challenging traditional ontological and epistemological assumptions about human nature as well as ‘maleness’ and ‘femaleness’ (Tong, 2001). However, despite issues of health and illness being virtually synonymous with the emergence of second wave feminism and the increased focus on gender perspective in health research since 1980s (Annandale and Clark, 1996 and Hammarstrom, 2002 in Wamala and Lynch, 2002), the contemporary acceptance of gender as a legitimate area of study in the sociology of health and illness belies a hard fought and ongoing battle for recognition (Annandale and Clark, 1996).

3.4.2 Masculinity theories of gender

Up till today, a vast majority of scholarship dealing with gender inequality focuses on women and the ways in which they are structurally and systematically subordinated to men and disadvantaged (Kimmel and Bridges, 2014). Scholars of inequality note, however, that there are two sides to inequality: disadvantage and privilege. Masculinities scholars

study the social role and meanings of masculinities, the ways men as a group are privileged, the costs of those privileges and the ways in which not all men are granted equal access to them (Kimmel and Bridges, 2014). The term masculinity refers to the social roles, behaviours and relations of men within a given society as well as the meanings attributed to them, which varies historically, cross-culturally, intra-psychically and contextually (Kimmel, 2001; Mac an Ghaill and Haywood, 2012 and Kimmel and Bridges, 2014).

While the concept of masculinity has achieved a remarkable pre-eminence across the cultural landscape, it is a recent historical product that has only been used since the mid-twentieth century (Connell, 1995 and Whitehead, 2002). The study of masculinity seeks to both identify the social construction of gender as well as illuminate the ways in which men play a role in gender and sexual inequality (Kimmel and Bridges, 2014). As stated by R. W. Connell in 1993, serious historical work on themes of masculinity was 'extremely rare' (Tosh, 2011 in Arnold and Brady, 2011) as it was initially labelled sex role theory in the work of researchers like Hacker (1957), though the field continued to develop as a concept through to the 1980s (Hesselbart, 1981), the 1990s (Messner, 1998) and beyond. Attention is thenceforth focused on masculinity theories in order to understand explicitly how masculinities were conceptualised.

Sociobiological theory was the earliest theoretical framework developed for understanding masculinity and gender relations (Robertson, 2008). At the most basic

level, masculinity was understood as the outward expression of being biologically male, with male behaviours being accounted for through a form of genetic and/or biological determinism. The Y chromosome, testosterone and other hormonal influences were seen as creating a drive towards certain behaviours in men such as being territorial, aggression, competitiveness, emotional reticence and sexual promiscuity (Moynihan, 1998 and Robertson, 2007). Although this may explain some of the behaviours of men regarding control of women's decision-making power and access to health care in northern Nigeria, the wide range of health inequalities that exist between the sexes cannot be accounted for only in this limited biomedical way (Robertson, 2007). Additionally, seeing such differences as essential and fixed in this way leaves little or no possibility for change (Robertson, 2008).

However, these biological-determinist explanations for human behaviour were long questioned by psychological and sociological work, resulting in an early alternative explanation for understanding of human behaviour and the differentiation of behaviours between the sexes, through the 'role theory' (Robertson, 2008). The assumption here is that social expectations about a person's status in any given society produce conformity to a given role and its related functions. The fulfilment of these roles is encouraged through a range of explicit or implicit rewards and sanctions that are brought to bear in order to facilitate conformity. Yet, failure to live up to these expectations could create pressures and strains that can result in feelings of failure and stress, with potential effect

on health (Robertson, 2007). However, this theory was criticised for being implicitly homogenising with blurring of behaviour and norm, failing to engage with issues of power, polarisation of issues through the promotion of 'sex differences' and neglect for structure at the micro-level of socialization (Robertson, 2008 and Connell and Messerschmidt, 2005).

In response to these limitations, Coleman (1990), Gutterman (1994), Peterson (1998) and Messner (1998) explored the concept of masculinity within the postmodern context and questioned it as a coherent concept rather than as something other than a unified identity (Robertson, 2008). Clatterbaugh (1998 in Robertson, 2007) specifically questioned the coherence of masculinity and suggested that men's identities are too diverse for the term 'masculinity' to be of use. He went further to state that even if we use the term to represent this diversity it remains unclear what constitutes the component parts of the plural and who or how are people assigned to these component parts. These postmodernist views reinforce a social constructivist stance that breaks loose of any given definition for gender (Moynihan, 1998), although Robertson (2007) argued that it is the need to illuminate what is hidden that makes the use of a masculinity theoretical framework important.

Recently some writers on gender and health have suggested that a more coherent framework for understanding gender, masculinity and its relationship to health is that provided by Connell in her relational theory. It is the approach that gives a central place

to the patterned relations between women and men (and among women and men) that constitute gender as a social structure (Connell, 2012). The theory understands gender as multidimensional, embracing at the same time power, economic, affective and symbolic relations and operating simultaneously at intrapersonal, interpersonal, institutional and society-wide levels. Theorists in this current share a concern with everyday social practices, such as housework, paid labour, childbearing and sexuality, in which gender is enacted. However, it is now understood that the structure of gender relations in any given society (gender order) and institution (gender regime) change overtime (Connell, 2012). Based on this evidence, Connell (1995 in Robertson, 2007) suggests there is relational patterning of masculinities in the current western gender order, which consists of hegemonic, subordinated, marginalized and complicit masculinities. Whilst recognizing each of these orders have their characteristic features, attention is focused on hegemonic masculinity, which is regarded as the 'leading position' (Robertson, 2007).

Hegemonic masculinity is a social process in which one form of institutionalized masculinity is "culturally exalted" above all others (Anderson, 2008). It is a pattern of practice and cultural dynamic that ideologically legitimizes the dominant position of men in society and justifies the global subordination of the common population of men and women, and other marginalized ways of being a man (Connell and Messerschmidt, 2005; Robertson, 2007 and Anderson, 2008). Although hegemonic masculinity was not assumed

to be normal in the statistical sense as only a minority of men might enact it, it was certainly deemed to be normative (Connell and Messerschmidt, 2005). It embodied the currently most honoured way of being a man and required all other men to position themselves in relation to it (Anderson, 2008 and Connell and Messerschmidt, 2005). However, men who meet the normative standards of hegemonic masculinity and received the benefits of patriarchy without enacting a strong version of masculine dominance could be regarded as showing a complicit masculinity (Connell and Messerschmidt, 2005). Connell alleged that most men gain from the overall effect of the subordination of women and the subordination and marginalization of some men and thus share in what she termed the patriarchal dividend (Robertson, 2007). Whilst hegemony did not mean violence, it could be supported by force to achieve a dominant social role over women and other gender identities. It is a form of ascendancy achieved through cultural ideals, collective institutional power and persuasion (Connell and Messerschmidt, 2005 and Robertson, 2007).

Though the relational theory has improved our knowledge and understanding of the patterned relations between men and women that constitute gender as a social structure (Connell, 2012), a crucial part of its enduring appeal across a wide range of disciplines is that it provides a critical feminist analysis of historically specific masculinities while at the same time acknowledging the varying degrees to which individual men play in the

reproduction of dominant forms of masculinity, thus overcoming the social determinism of sex-role theory (Wedgwood, 2009).

In the next chapter, the data generated through this research was analysed through the lens of hegemonic masculinity to understand the influence of gender on access to family planning services by women of reproductive age and its intersectionality with culture and religion as social determinants of health.

3.4.3 A gender perspective to this research

Whilst gender as a floating signifier was initially a puzzling concept to me as a medical professional who was trained to think definitively, theories of gender, more specifically hegemonic masculinity, served as the lens through which the complex terrain of gender and health was explored. By so doing, the impact of gender norms and expectations, and how they intersect with cultural practices and religious beliefs to influence in causal ways family planning decisions, behaviour and practices in northern Nigeria was studied to allow for a better understanding of the social factors, tension and forces that need to be addressed in the design and implementation of family planning programmes. However, it is recognized that minimizing gender bias in health systems requires systematic approaches to building awareness and transforming values among service providers, steps to improve access to and utilization of health services as well as effective mechanisms for accountability (Sen and Ostlin, 2010).

3.5 Research methods

For this study, qualitative methods were deployed to allow in-depth exploration of less easily measured phenomena such as beliefs and perceptions as discussed in the subsequent sections (Creswell, 1998; Pope and Mays, 2000; Denzin and Lincoln, 2003; Silverman, 2013 and Cleary, Horsfall and Hayer, 2014).

3.5.1 Study setting

The study was conducted in Kano State, located in North-West Nigeria. Created on 27th May 1967 from part of the Northern Region, Kano state borders Katsina State to the North-West, Jigawa State to the North-East, Bauchi State to the South-East and Kaduna State to the South-West. With an annual population growth of 3.3%, it is the most populous state in Nigeria with a projected population of 13.08 million (based on 2006 census), who are predominantly Muslims living across its 44 Local Government Areas (LGAs) (UNFPA, 2013 and, 2018). The state is divided into 3 senatorial zones, namely Kano North, Kano South and Kano Central, comprising of 14, 15 and 15 LGAs respectively.

It is historically a commercial and agricultural state, with 75% of the population living in rural areas where they are largely dependent on subsistence agriculture (NPC, 2019). The state has a total of 1,114 health facilities comprising of 36 hospitals and 1078 primacy health centres (PHCs), more than 90% of which are in rural and semi-urban LGAs. Despite this large number of health facilities, there is limited access to basic health care services as most of them lack adequate number and mix of skilled human resource and basic

equipment and essential medicines which have significantly contributed to the high under-five mortality (217/1,000 live births), high MMR (1,600 deaths per 100,000 live births) and a low life expectancy of 51 years (Galadanci *et al*., 2010; Paths2, 2013 and NPC, 2019). Women of reproductive age make up 20% of the state's population, of which only 5.6% in union (either married or cohabiting) use modern family planning methods and only 16.5% have unmet need for family planning both to space and limit their pregnancies (NPC, 2019).

3.5.2 Sample size

Stratified purposeful sampling, a non-probability sampling technique that entails the selection of study participants from a stratified sample (Palinkas *et al*., 2013 and Benoot, Hannes and Bilsen, 2016), was used to allow for selection of information-rich participants who were willing to participate and share their experiences and opinions in order to gain insights and in-depth understanding of the topic being studied (Byrne, 2001; Suen, Huang and Lee, 2014 and Gentles *et al*., 2015). Working in collaboration with the State Ministry of Health (SMOH), this sampling technique was used to select 6 LGAs in the 3 senatorial zones of the state, and one health facility per LGA, with focus on both high and low volume family planning service delivery points. Bichi and Dambatta were selected in Kano North, Municipal, Nassarawa and Dala in Kano Central and Sumaila in Kano South. This was aimed at capturing variations in beliefs and perceptions among both lay male and female users and non-users across the state thereby generating rich, in-depth information that may

allow for partial generalizations to similar populations (Streubert and Carpenter, 1999; Myers, 2000 and Palinkas *et al*., 2013).

Regarding sample size, the initial plan was to recruit a total of 36 – 48 participants, aged > 18 years, in groups of 6-8 for the focus group discussions. The plan was to conduct 2 focus group discussions with female family planning users in Bichi (rural) and Municipal (urban), 2 focus group discussions with female non-users of family planning in Sumaila (rural) and Dala (urban) and 2 focus group discussions with men in Dambatta (rural) and Nassarawa (urban) that include traditional and religious leaders, to generative sufficient data to achieve saturation (Strauss and Corbin 1998, in Bryman, 2004). For each group, the plan was to conduct separate focus group discussions with participants from rural and urban LGAs. Additionally, a sample of 6 male and female participants, a mix of lay community members and key influencers, were to be selected for in-depth semi-structured interviews to explore the topic in greater depth.

3.5.3 Recruitment strategy

Different recruitment strategies for men and women were deployed considering the challenges associated with recruitment of women from their homes to attend heath facilities or town halls for data collection exercises. For the women, a plan was made ab initio to recruit them via purposeful sampling of those who attend family planning clinics (for family planning users) and other maternal and child health clinics (for non-users)

within their communities. Following the selection of study sites, meetings were held with the heads of the facilities and relevant units to explain the purpose of the study and seek help in recruiting participants through dissemination of information about the study, which was publicized from 30th April 2018 with a plan to commence data collection on 30th May 2018. The flyers and participant information sheets were made available in family planning, antenatal and immunization units of the selected facilities, as outlined below:

Dala LGA: Dala Maternal and child Health Primary Health Care (PHC) Centre

Sumaila LGA: Sumaila General Hospital

Bichi LGA: Bichi General Hospital

Municipal LGA: Murtala Muhammad Specialist Hospital

Although the plan was to conduct 4 focus group discussions with female participants in 4 LGAs listed above, a back-up plan was made to select an additional facility in case the required number of participants could not be recruited. Hence, Gwagwarwa PHC in Nassarawa LGA was selected as a backup, with information sheets made available in the facility. Additionally, the daily group health education forums were used to disseminate information, especially to those women who are unable or unwilling to read printed resources.

Two days prior to the commencement of data collection, a state-wide health workers strike was embarked upon resulting in the shutdown of all health facilities in the state. Although a plan was made to postpone the data collection, the traditional birth attendants (TBA) in Dala LGA volunteered to identify female non-users of family planning within their communities who are willing to participate in the study. Each of the 8 women who attended the facility were given detailed information about the study during a one-to-one consultation with the head of the PHC in the absence of the TBA and the focus group discussion facilitator to ensure their consent for participation in the study was obtained without coercion. The strike action was called off on 1st June 2018 which allowed for the continuation of the data collection with the female participants as planned. Due to our inability to recruit Christian female participants in the 4 initially planned sites, a fifth focus group discussionhad to be conducted in Nassarawa LGA with a group of Christian female family planning users.

Whilst the recruitment of 8 women in each of the LGAs to participate in the study did not pose a challenge considering the relatively small sample size compared to the number of women who attend these clinics, many women expressed no desire to participate. This was partly because they regarded the time frame as being too short to make a fully informed decision about the implication of their action. Some women objected to participation without the consent of their husbands and were not able to return solely for the study even if given consent, whereas others found the wait at the facility for the study

unbearable, considering the already long waiting time to be attended to by a health care provider for the primary purpose of their visit. Hence, except for very few women who had attended the facility earlier in May 2018 and were aware of the study, the focus group discussions and interviews were conducted largely with women who visited the facilities on the day of the study, were available and willing to participate and purposefully selected based on their potential to enhance understanding of the topic under study. All recruited women were within reproductive age and certain characteristics such as ethnicity, education, employment, religious sect and socioeconomic status were not used to determine eligibility for participation.

For the men, information about the study was publicized through the offices of the district heads of Dambatta and Nassarawa LGAs using flyers and information sheets from the first week of May 2018. Those interested in taking part voluntarily registered their interest with the ward heads and completed the expression of interest forms which allowed them to be notified the data collection date. The consent forms were signed on the data collection day after which the focus group discussions and in-depth interviews were conducted in a private area within each LGA Secretariat.

For the in-depth interviews, the participants were selected from the focus group discussions except for a religious leader who had the potential to add to the richness of the data generated. More detail is provided in the data collection section.

3.5.4 Data collection

The data for the study was collected through focus group discussions and in-depth interviews. Focus group discussion is an effective way to bring people from similar backgrounds or experiences together to gain insight on their perspectives, beliefs and attitudes about certain issues and to seek explanation for behaviours in a way that will not be easily obtained through surveys (Wong, 2008; Bearss *et al*., 2016 and Zacharia, Paul and Sherule, 2016). Although focus group discussions are a form of group interviews that capitalize on communication between research participants, they differ from focus group interview as they use group interaction to provide distinctive type of data. Here, instead of the researcher asking each person to respond to a question in turn, the participants are encouraged to talk to one another, asking questions and commenting on each other's experiences and points of view (Kitzinger in Pope and Mays, 2000).

Focus group discussions allows for the recruitment of a small group of people who usually share a particular characteristic and facilitates an informal group discussion around a particular topic or set of issues by actively encouraging group members to interact with each other (Silverman, 2013). Group work can actively facilitate discussion of taboo topics and generate more critical comments than interview, as the less inhibited group members break the ice for shyer participants and create a platform for interaction. Besides the group processes being able help the study participants to explore and clarify their views in ways that will be less easily accessible in a one-to-one interview, when the group dynamics work well the co-participants act as co-researchers, taking the research in new

and often unexpected directions (Pope and Mays, 2000). More importantly for this research, focus group discussions help researchers to tap into the many different forms of inter-personal communication people use in their day-to-day interaction, including anecdotes, teasing, dissent and arguing, which is useful as people's knowledge and attitudes are not entirely encapsulated in reasoned responses to direct questions. This allows focus group discussions to "reach the parts that other methods cannot reach" (Pope and Mays, 2000).

However, despite the strengths of this method, it relies heavily on assisted discussion to produce results, which makes the skill of the moderator critical to the quality of the facilitation. The discussion could also be "hijacked" and dominated by outspoken participants if this is not recognized and managed well by the facilitator. Additionally, though effort is made to identify information reach participants, with the participants being self-selected to a certain extent, this makes the study results harder to generalize to the larger population (Leung, 2009). But we must recognize that the purpose of qualitative research is to provide in-depth explanations, meanings and understandings of human behaviour over the prediction and generalizing of causes and effects (Carminati, 2018). As such, the strength of qualitative inquiries defined by the constructionist tradition is the understanding of how individuals, through their narratives, perceive and experience their lives, constructing meanings within their social and cultural contexts (Carminati, 2018).

The in-depth interviews designed to follow the focus group discussions with selected participants aim to explore in the issues raised in as much detail as possible and uncover new areas that were not anticipated at the outset of the data collection (Pope and Mays, 2000 and Jamshed, 2014). By using this method, researchers are likely to be asked questions by interviewees which in the process of answering them they may potentially undo earlier efforts not to impose their own concepts on the interview. However, if the questions are not answered, this could reduce the willingness of the interviewee to answer subsequent questions (Pope and Mays, 2000). Other qualitative data collection methods such as observation, which can be argued to be the basis of all scientific enquires, were considered but deemed not feasible to immerse oneself and observe the study settings to gather rich data within the timeframe for the research. Besides, triangulation of focus group discussions and in-depth interviews were expected to equally generate sufficient data to the point of saturation within the timeframe for the research.

Prior to the data collection, a one-day meeting was held with the Family Planning/Reproductive Health (FP/RH) Coordinator of the SMOH and an experienced female staff of the Planning, Research and Statistics Directorate (DPRS) of the SMOH who was nominated by the SMOH to facilitate the data collection with females. During the meeting, the aims and objectives of the research were discussed and the focus group discussion and interview guides were thoroughly reviewed to ensure common understanding of their contents and the information the questions aim to generate. Role plays were conducted to ensure thorough training of the researcher to facilitate and

explore the issues of interest with great depth of detail, being guided by the aim and objectives the study was designed to achieve. At this point it was agreed that the SMOH staff will not be involved in obtaining consent to avoid influencing a participant to enter the study against her free will.

For the female participants, the data collection sessions were conducted on the same day consent was obtained in a secluded area within the facility and was facilitated by the female staff from the SMOH, supervised by the State FP/RH Coordinator. The data collection by a female was aimed at providing a relaxed atmosphere that allows free interaction of the women to share their beliefs and perceptions without any hindrance by the presence of a male figure and to blur the division, separateness and power imbalance between the researcher and study participants (Karnielli-Miller, Strier and Pessach, 2009). Following the first focus group discussion with females in Kano Municipal LGA, I observed while listening to the audio recordings there was lack of full engagement of all study participants in the discussion which I understood was attributed to shyness by some of the participants to openly speak about a sensitive topic in an unfamiliar group setting. I also observed the wordings of the Hausa translated version of the focus group discussion guide were not captured in a way that allowed the moderator to effectively communicate the issues being raised. More so, the issues raised were not explored in great depth and with full interaction among the participants to improve the richness of the data produced. This resulted in the review of the Hausa translation of the focus group discussion guide

and further coaching on full group engagement and on instances where further in-depth exploration is required to obtain information relevant to the study.

For the men, the focus group discussions were moderated by me and conducted on an agreed date, at a venue local to each of the participants within their LGAs. Whilst recognizing that focus group discussions provide a welcoming, non-hierarchical and non-threatening environment that enables the participants to freely interact and openly share their feelings, the voice of one or several group members may dominate the conversation thereby preventing the emergence of dissenting, conflicting, contentious and non-normative views (Smithson, 2000 and Karnielli-Miller, Strier and Pessach, 2009). This was minimized by creating an atmosphere of mutual respect and support in expressing feelings, opinions and perceptions that may be common to the group or deviate from mainstream culture, facilitating involvement of all group members in the discussion and prompting less vocal members to express and clarify their views without fear of criticism. Despite this, it was observed that some men were not keen to freely interact and air their opinions, beliefs and perceptions but were rather either responding with short responses or agreeing with statements made by other participants.

In addition to the focus group discussions, one-to-one semi-structured in-depth interviews with 4 male and female participants were conducted. Three of the focus group discussion participants, who were observed to have the potential to add richness to the

data but either remained less vocal during the group interaction as their voices were drowned or chose to remain less vocal due to their position in the community to allow others to contribute were selected to obtain additional information through in-depth interviewing. I understood these individuals were not unnecessarily probed during the focus group discussions in order not to make them feel like “insects under the microscope” but were rather interviewed afterwards to disclose rich, detailed data on their private accounts, experiences and perceptions about family planning. Additionally, interviews minimize concerns from study participants for group harmony and the effect of cultural norms such as sensitivity to social hierarchy among participants (Kwan, Chun and Chesla, 2011), which in this case the male focus group discussions included traditional and religious leaders from the communities.

Although the focus group discussion and interview guides were very similar in terms of the questions they ask, they were only designed to serve as a guide for the researchers to probe what the study participants said in the focus group discussions in as much detail as possible during the interview and to uncover new areas that might not have been anticipated. Issues covered by the focus group discussion guide were also included in the interviews to explore if being alone might shape the data generated and to allow the interviewee enough time to reflect on their beliefs and perceptions, respond to issues raised regarding influence of gender, culture and religion on utilization of family planning

and develop their own account of issues important to them and how they can be addressed.

Overall, a total of 8 focus group discussions with 64 participants and 4 in-depth interviews were conducted from 31st May to 28th June 2018. This iterative data collection process was deployed to the point of data saturation (Dworkin, 2012).

Table 3.1 Data collection methods and number of study participants across the selected LGAs

S/N	**Location (LGA)**	**Method of data collection**	**Study participants**	**Number of participants**	**Moderator**
1	Bichi	Focus group discussion	Female family planning users	8	Fatima Abubakar
2	Dala	Focus group discussion	Female family planning non-users	8	Fatima Abubakar
3	Dala	In-depth interview	Female family planning non-user	1	Fatima Abubakar
4	Dambatta	Focus group discussion	Males	8	Nasir M. Bashir
5	Kano Municipal	In-depth interview	Religious leader	1	Nasir M. Bashir
6	Kano Municipal	Focus group discussion	Female family planning users	8	Fatima Abubakar
7	Kano Municipal	Focus group discussion	Female family planning users	8	Fatima Abubakar
8	Kano Municipal	In-depth interview	Female family planning user	1	Fatima Abubakar

9	Nassarawa	Focus group discussion	Female family planning users (Christian group)	8	Fatima Abubakar
10	Nassarawa	Focus group discussion	Males	8	Nasir M. Bashir
11	Sumaila	Focus group discussion	Female family planning non-users	8	Fatima Abubakar
12	Sumaila	In-depth interview	Female family planning non-user	1	Fatima Abubakar

3.5.5 Data analysis

The data collection was followed by a thematic data analysis, an inductive approach that involves analyzing the data with little or no predetermined structure or framework, with the data itself used throughout the process to derive the structure of the analysis (Thomas, 2006 and Burnard *et al*., 2008). Braun and Clarke's six steps to thematic analysis were used. This approach involves initial reading of the texts to organize and become familiar with the data; identifying and generating initial codes; searching for themes; reviewing and building overarching themes to reduce overlap and redundancy among themes; defining and naming the themes; and producing a report of the data analysis (Braun and Clarke, 2006).

Though thematic analysis is considered to offer flexibility and theoretical freedom (Braun and Clarke, 2006), the stepwise and yet recursive process of analysis through the lens of

hegemonic masculinity was not a straightforward and linear one. It was rather a time-consuming systematic approach that involved singlehandedly listening to the audio recordings from the commencement of the data collection process to guide any amendments to the tools or process as discussed above and iteratively reading the transcripts to familiarize with the data. Although my participation in the data collection allowed me to have prior knowledge of part of the data, this familiarization process enabled me to begin to look for and notice patterns of meaning and issues of potential interest in the data and jot them down throughout the process.

Despite being a native Hausa speaker with proficiency in written and spoken Hausa language, the audio recordings were transcribed into Hausa language and translated into English language by experts in Hausa Language department of Ahmadu Bello University, Zaria, Nigeria. The manual and systematic generation and continuous refinement of as many potential data-driven codes as possible was done in English language by simultaneously and iteratively listening to the Hausa audio recording and reading the English language translations, with full attention given to each data item. By manually undertaking this coding process, I was able to identify interesting aspects that formed the basis of repeated patterns across the data set. More so, a nuanced understanding of the data captured in the Hausa language audio recordings made it possible to assess how well the translations truly reflect the data generated. This also made it possible to recognize and acknowledge tensions within the groups as well as areas of contradictions and inconsistencies within and across study groups, which are discussed in subsequent

chapters. The long list of initial codes was then sorted and analysed using diagrams and tables with a view to identifying how they may potentially combine leading to the formation of overarching themes and sub-themes. At this stage, I had a review of the codes, themes and sub-themes with my supervisors after which some themes and sub-themes were collapsed or merged into others whereas some were deemed irrelevant to the study's aim and objectives. I went through a recursive process of review of the coded data extracts to form a coherent pattern without excluding any relevant study finding, considered the validity of the individual themes in relation to the entire data set and analysed whether the themes accurately reflect the meanings evident in the data set as a whole. This whole process led to continuous refinement of the themes to clearly define what each theme is about and what aspect of the data it captures, even though there were certain degrees of intersectionality recognised. The detailed findings from the data analysis are presented in the next chapter.

However, despite numerous publications of step-by-step guides to thematic analysis and potential pitfalls to avoid throughout the process, concerns were raised by Braun and Clarke (2019) about how it is understood and implemented as they have noted untheorized mashups of the approach with grounded theory techniques and the way it was being treated as a standalone approach. Although it may appear they have succumbed to methodolatry by treating the method like baking recipe that must be followed precisely in the above order and prioritizing procedure over reflexivity, theoretical engagement and creative scholarship, they argued that creative uses of the

approach are welcome if done deliberately and thoughtfully, as expansion and refinement of methods is a sign of a vital field. Without trying to reinvent the wheel and be creative about the way I used this analytical process, I was able to follow the six steps to rigorously analyse and make sense of what appeared to be a large volume complex data and present the findings in a well—organized manner, with extracts that illustrate and support the claims made.

3.6 Ethical Considerations

Throughout this section, reference was made to Lancaster University's guidance on research ethics and Economic and Social Research Council's framework for research ethics (ERSC, 2015).

3.6.1 Recruitment strategy and informed consent

In most parts of northern Nigeria, men play the role of gatekeepers of women, from whom they seek permission to visit health facilities to access health care. At the planning stage of the data collection, it was recognised that recruiting women from their homes to participate in focus group discussions on family planning in their communities would be challenging as this would require disclosure to family members to obtain permission. The recruitment was therefore done via purposeful sampling of women who attended the health facilities as discussed above.

With the anticipation of difficulty obtaining permission to revisit the facility solely for the study, only women who attended the facilities on the day of the study to access services were considered for inclusion. Each woman was given detailed information about the study during a one-to-one closed-door consultation with a female health care provider working in the facility, in the absence of both the researcher and the SMOH staff that facilitated the data collection. They were made to understand they had the right not to participate without giving any reason and their decision will not affect their care or right to receive care. This was to ensure informed consent was obtained without coercion. Those who did not agree to participate were not denied access to services. For those who agreed, consent forms were either signed or thumb printed prior to data collection, and none of the participants requested a copy of the forms.

For the men, due to financial constraints and high cost of organizing large community sensitization and information sharing forums, information regarding the study was publicized through the district and village heads and religious leaders during their weekly meetings, who in turn disseminated the information verbally and using flyers and information sheets through places of worship and men's groups. The men were informed participation was voluntary and their refusal to participate will not result in denial of any service or benefits in the community. Those interested in taking part were requested to return their expression of interest forms in a sealed envelope through the district/village head or religious leader within 2 weeks of receipt. They were followed up through phone calls to discuss the study, fill the demographic information sheet, obtain verbal consent

and set a date for data collection. However, it was not everyone who volunteered to participate that was included as they were either not available on the planned date and time for the study or had other competing priorities. The consent forms were signed on the day of the data collection prior to commencement and none of the participants made a request for a copy of the form.

All the participants were informed about their full autonomy to withdraw from the study at any time before, during or up to 2 weeks after data collection. They were advised to directly contact either the researcher or the Directorate of Public Health and Disease Control (DPHDC) of the SMOH or other personnel mentioned on the participant information sheet but none of them chose to do so.

3.6.2 Confidentiality

The data collection sessions with all groups and individuals were held in secluded areas either within the facility or LGAs in a confidential manner that allowed only the moderators and study participants to be informed about the purpose of the meeting. Although the participants were requested to maintain confidentiality on all issues discussed, they were informed about the limits to confidentiality to avoid any misunderstanding. They were made to understand that where information obtained indicated either the participant or someone else was at risk of significant harm, the researcher will break the confidentiality. However, the scope was limited to maltreatment

and abuse in health care settings, coercion in choice of family planning methods and poor infection prevention practices by health care providers in the family planning clinics. There was no plan to flag up adult safeguarding issues due to domestic abuse through this study as there are other culturally and legally acceptable platforms in the community. Under such circumstances, it was planned that confidentiality will be broken through discussion and written communication with my research supervisors first to determine the most appropriate course of action, and where it was collectively agreed it is appropriate, the information is to be shared with the Public Health Directorate of the SMOH for further action. Throughout the data collection, none of the issues listed above were raised.

Information obtained was kept strictly confidential and anonymized, and only the staff of Hausa Department of Ahmadu Bello University Zaria, Nigeria, who assisted with translation had access to the audio recordings. In the analysis section, only data with no identifiable information was included. Where direct quotes from the in-depth interviews or focus group discussions were used, anonymity was maintained by using fictitious names to represent the study participants.

3.7 Reflection on methodology

In 1970s, confessional accounts of field research experiences became a common genre as methodological self-consciousness began to overtake earlier concerns by qualitative researchers to prove their scientific credentials (Seale, 1999). This was first captured by

Geertz (1973) in his seminal essay on 'thick description' which over a decade later led qualitative researchers into what amounted to a new paradigm, placing the discovery of reflexivity at the centre of methodological thinking and informing new writing practices (Seale, 1999).

The principle of reflexivity is about researchers subjecting their own research practice and all aspects of the research process to the same critical analysis they deploy when studying their topic. Rather than striving for objectivity and minimizing the biases of values, subjective impressions and partial accounts that might threaten scientific knowledge, we instead accept that these values are inevitably part of the research process. It is well recognized that it is impossible to have a field of study that is untainted by values, with the researcher standing outside of those values and subjectivities to study the world objectively. However, through reflexivity we can take subjectivity seriously without abandoning all claims to producing useful accounts of the world by critically reflecting on the whole research itself and our role in generating and analyzing the data (Green and Thorogood, 2018). I appreciate that my gender, my social status relative to the study participants and the risk of power imbalance, wider socially and culturally determined values that made it hard and problematic to directly interact with the female participants, the prior assumptions I bring to the research based on my lived experience in northern Nigeria and work in the field of family planning will inevitably shape the kind of data generated and the way it is analyzed. Taking into cognizance these issues whilst being

sensitive to local context and respecting local values, beliefs, norms and practices, the data collection was conducted in a manner that ensured compliance to ethical standards and produced data that allowed for better understanding of the issues of interest from the point of view, beliefs and lived experience of the study participants.

Reflecting on the planning and execution of the data collection, the process was partly influenced by my experience of working in the field of public health for numerous years with non-governmental organizations who imbibed in me a culture of operating through government institutions to achieve community buy-in and acceptance, create sense of ownership and promote sustainability. This informed the decision to work closely with the DPHDC and DPRS of the SMOH to obtain ethical approval from the Ministry and identify competent female staff with experience in qualitative research and provision of family planning services to facilitate the data collection with females. The facilitation by a female staff provided a relaxed, neutral and unbiased atmosphere that allowed the women to share their beliefs and perceptions without any hindrance by my physical presence in the setting. Besides blurring the division and power imbalance between myself as the researcher and the study participants, her lived experience in family planning service provision and research facilitation skills enabled her to ask difficult questions and confront assumptions without putting the participants under undue pressure and move the discussion forward when dealing with controversial issues. However, despite the extra time spent with the facilitator to understand the aim and objectives of the research and

become familiar with the facilitation guides and the issue being explored, she lacked nuanced understanding of what might be important as she was not directly involved in the rest of the study and therefore missed opportunities to explore some issues I would have explored in greater depth. Whilst this was by no means a fallible decision, I believe there would have been a better level of engagement and depth of interaction with the participants if I was able to moderate the sessions. This was one way in which I acknowledge my gender could affect the quality of the data generated. However, being able to listen to the audio recordings on the same day after the data collection provided an opportunity to propose ways in which the data collection could be guided to improve depth and breadth of subsequent data generated.

The time frame for the data collection was also very tight. As a distance learning student who was undertaking another full-time postgraduate programme in clinical medicine in England, I had limited time to travel to Nigeria to organize the entire process of recruitment and data collection and therefore had to be pragmatic in my approach. Although I was able to collect large amount of data with triangulation of methods used to improve the richness of the data and achieve saturation, the tight timeline impacted on my ability to reflect on the data generated while in the field, especially from the focus group discussions and interviews with women, and learn from one focus group discussion or interview to the next and adequately fine tune the processes to improve the depth and richness. It was during the process of the data analysis I realized that conducting one focus

group discussion with group of female Christians did not acknowledge variation in beliefs and practices across the various denominations, which therefore did not allow for in-depth understanding of the influence of different denominations of Christianity on utilization of family planning services. This was acknowledged as a limitation in section 5.4 and further discussed in detail.

Regarding the data collection with men, not everyone who volunteered was selected as they were not available on the planned date and time for the study in each LGA. This narrow data collection window and tight timelines could have possibly excluded men who had the potential to improve the richness of the data generated. Though this may be regarded as being convenient and may not be the most valuable strategy of finding research participants, it was not possible to purposively aim for maximal variation with mix of typical and extreme cases to represent the diverse cultural and social landscape without detailed background information on the study participants (Saldana, 2011 and Flick, 2018).

More importantly, my personal research interest on this topic which was informed by both the desire to acquire in-depth knowledge on the influence of gender, culture and religion on utilization of family planning services based on perceived gaps from previous work experience and review of the literature motivated me to conduct the study. This pre-existing knowledge and the desire to focus on key issues of interest could influence the

way in which probing questions were identified and asked and the direction the data collection session took. Yet in order to effectively probe, we cannot as interviewers be stonily impersonal: we have to give something of ourselves in order to merit an open response (Green and Thorogood, 2018). Hence, we have to effectively explore issues while being mindful of generating tension and power imbalance that could shape the kind of data generated.

Following the data collection, as I listened to the audio recordings and read the translated scripts, I recognized that working with one's own language does not eradicate the problems of translation. To some extent all language use implies a translation, in which we assume shared meanings but cannot take them for granted (Green and Thorogood, 2018).

The next chapter provides the study findings, following a meticulous process of record keeping and data analysis. It demonstrates consistent and transparent analysis in the way the findings are presented, seeking for similarities and differences across accounts to ensure all perspectives are represented by including rich and thick verbatim description of study participants' accounts to support the study findings.

Chapter Four

Findings

4.1 Introduction

This chapter offers an analysis of the data generated from the focus group discussions and in-depth interviews. It begins with a tabular presentation of the demographic characteristics of the study participants, then goes on to explore their lay beliefs, myths and misconceptions about family planning before presenting an analysis of the data through the lens of hegemonic masculinity in a way that demonstrates how gender inequalities and assumptions intersect with religious beliefs and cultural practices to influence utilization of modern family planning methods by women of reproductive age in northern Nigeria. Although manifestations and impact of gender inequalities on family planning service utilization are presented under a separate subsection, the analysis of the data revealed and demonstrated intersectionality between normative gender roles and expectations, religious beliefs and cultural practices.

With gender, culture and religion identified as a priori themes, a recursive and lengthy process of reading and re-reading the materials whilst simultaneously listening to the audio recordings led to the identification and review of the codes by constant comparison with the rest of the date and refinement of the sub-themes was undertaken. This

systematic approach led to the identification of coherent pattern, merger of related sub-themes where considerable overlap and repetition was recognized as well as naming and grouping them under the appropriate themes in a way that accurately reflect the meanings evident in the data and message conveyed by the study participants. Although some degree of intersectionality was recognised and acknowledged, the themes and sub-themes were named in a way that clearly define what each theme is about and what aspect of the data it captures.

Although quotes were used to give the study participants a voice in the findings and contribute transparency and authenticity to the analysis, the names used are only pseudonyms in order to protect their confidentiality and anonymity. By taking into consideration the religious and cultural backgrounds of the study participants, it was quite a straightforward process assigning pseudonyms to the interview participants that will resonate with them when they read publications from the theses or attend the research dissemination sessions with stakeholders in the state. However, the pseudonym assignment process for the focus group discussions participants was quite challenging and as it entailed repeatedly listening to the recordings to recognize their voices and assign the same pseudonym to an individual where more than one quote from them was used. The anonymization was quite complex and by no means something that could be done on automatic pilot with a 'one size fits all' approach (Saunders, Kitzinger and Kitzinger, 2015).

4.2 Demographics of study participants

A total of 65 people participated in the study. Sixty-four of them participated in the 8 focus group discussions while 4 participated in the in-depth interviews, with 3 of the in-depth interviews participants identified from the women who participated in the focus group discussions. All the study participants were married, about three-quarters of them were females under the age of 40 years, and 63.1% live in urban areas due to 2 additional focus group discussions conducted with women in urban LGAs. Additionally, nearly half of the study participants had no formal education which could partly explain why only 23.1% were employed full-time. None of the women were employed full-time and only 4 (6.2%) were employed part-time.

Table 4.1 Description of study participants

Factors	Sample size (n)
Sex	
Male	17 (26.2%)
Female	48 (73.8%)
Age (year range)	
18 – 24	17 (26.2%)
25 – 29	14 (21.5%)
30 – 34	11 (17.0%)
35 – 39	9 (13.8%)
40 – 44	6 (9.2%)
45 – 49	5 (7.7%)
50 – 54	3 (4.6%)
Place of residence	
Rural	24 (36.9%)
Urban	41 (63.1%)

Marital status	
Married	65 (100%)
Single	0 (0.0%)
Divorced/Widowed	0 (0.0%)
Educational status	
Non-formal	31 (47.7%)
Primary	11 (16.9%)
Secondary	17 (26.2%)
Post-secondary	6 (9.2%)
Employment status	
Employed full-time	15 (23.1)
Employed part-time	6 (9.2%)
Not employed	44 (67.7%)
Retired	0 (0.0%)

4.3 Lack of information, myths and misconceptions about modern contraceptives

This section provides an analysis of the data with a focus on how sources of information about family planning affect what is known and how it is processed and interpreted, and the way in which myths and misconceptions about modern contraceptives influence the decision-making process of individuals and couples and the choices they make.

4.3.1 Lack of information about modern contraceptives

The interaction that ensued with the study participants revealed there are wide range of information sources about family planning in the state. Mass media channels and word of mouth through interaction with family and friends, health care providers and to a lesser

extent religious and traditional leaders appeared to be the main sources of family planning information, though to varying degrees:

"We obtain information through electronic media like radio, during naming ceremonies, in hospitals during antenatal clinics and sometimes in Islamiya[1] schools. Some clerics and village heads also preach about it." Jummai, 27 year old female (Focus group discussion, family planning user, Bichi LGA [rural])

Whilst most of the study participants in urban LGAs indicated radio programmes, antenatal and family planning clinics were their main information sources, women in rural LGAs seem to rely more on lived experience of current and previous family planning users who discontinued due to side effects. Word of mouth through interaction with family and friends appeared to exert more influence on choice and usage of contraceptives as they were regarded as more reliable sources:

"Yes, they do discuss when friends who use them meet and share their experience... I wanted to go to a facility to obtain a method but was advised not to do so by a friend who had a bad experience… she said the negative consequences are not worth the risk. That is why many of us don't use them." Aisha, 21 year old female (In-depth interview, family planning non-user, Sumaila LGA [rural])

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1 An educational institution/school where pupils study and learn Qur'an and other Islamic texts

Despite the high level of awareness about modern contraceptives, there appeared to be lack of comprehensive knowledge on the benefits and specific side effects of each method which could partly be due to either information being sourced from lay persons in the community or lack of adequate information sharing by family planning providers. Additionally, some women were not made to understand side effects such as menstrual irregularities are transient and often resolve within 3-6 months. This contributed towards generating a fertile ground for creation and spread of rumours and misconceptions, which exert influence on method choice and decision to use contraceptives especially in rural areas where uptake remains significantly low, as indicated by both the men and women in the study groups:

"…some women consider the one inserted in the womb as dangerous. I personally rejected it after trying injection and pills without success… if you remember, I mentioned the irregular bleeding that made me to change method… but you know some of the contraceptives may cause some women to grow fat… most of us do not like this." Talatu, 32 year old female (Focus group discussion, family planning user, Bichi LGA [rural])

Male partners are another influential source of information on family planning for women. In these settings, men regard themselves as the heads of their households because they often have exclusive control over their resources and are the sole decision makers on women's reproduction and access to health services. Here, there is a social

norm and culture of men gathering in the evening hours in groups locally referred to as *majalisa*, where they discuss issues affecting them as individuals and the society at large. These also serve as platforms through which they gain information on family planning and their side effects and use it in a way that allows them to exert modicum of control over women's access to family planning:

"Yes they do discuss family planning in their forum where some members could be health personnel… But some men use this avenue to enquire about the side effects of each method and then use the information obtained to persuade their wives against family planning." Tijjani, 36 year old male (Focus group discussion, Nasarawa LGA [urban])

For men who oppose family planning, selectively choosing to lean towards contraceptives side effects and myths rather than their benefits allows them to continue to rely on this, along with other factors, to misinform their spouses and exercise dominance over their contraceptive choice and use. This suggests that hegemonic masculinity is a pattern of practice, as performed by men in these settings, rather than a set of role expectations or an identity. Although theories of masculinity, with focus on hegemony, were covered in the methodology chapter, a focus on how it is performed or practiced, and how it influences women's utilization of family planning services will be further discussed in section 5.2.1 of the discussion chapter.

4.3.2 Myths and misconceptions about family planning

Comments made by numerous study participants in both rural and urban LGAs indicate there are widespread myths and misconceptions about family planning, ranging from scepticisms about the rational for the promotion and provision of free family planning services to false beliefs about the potential risks and complications of some of the methods. As stated in the methodology chapter, more than 55% of the population of Kano State are poor, with three-quarters living in rural areas where they have limited access to basic health care services due to lack of trained personnel, basic equipment and essential medicines. These conditions have fueled mistrust for modern contraceptives which are offered free of charge, when their prioritized health needs are not being met by the government.

"…there must be a hidden agenda because most of us have many health issues but none are treated for free… even paracetamol is not given to our sick children when taken to hospital but the more costly contraceptives are given freely if you are initiating at the time of birth. If it's another time, you are charged a token which is surely far less than their cost. This makes us doubt if it is really for our own good." Fatima, 38 year old female (Focus group discussion, family planning non-user, Dala LGA [urban])

The provision of free contraceptives also contributed to the suspicion that family planning is a western agenda promoted largely for the purpose of population control rather than

its health benefits, as indicated by comments made by some of the older female non-users of family planning services. These are potential influencers of younger women who may consider modern contraceptives use. This suspicion may not be unconnected with programmes rolled out in 1980s that promoted family planning using messages on population control, without local input and due consideration for the cultural and religious peculiarities of northern Nigeria (Renne, 1996).

"We see it as white man's strategy of preventing birth to reduce our population. They argue that the higher the number of children you have, the less likely you will be able to cater for their needs. But one should put trust in God…" Balaraba, 42 year old female (Focus group discussion, family planning non-user, Sumaila LGA [rural])

Other participants raised mythical issues related to specific family planning commodities, with fears expressed about intrauterine devices perforating the uterus and moving up to the brain, failure of return to fertility and severe complications attributed to death of women. Besides these myths, there also appeared to be heightened concerns about failure or delay in return of fertility. Whilst combined hormonal contraceptives are known to have a possible increased risk of breast and cervical cancer, it appeared women in both rural and urban areas perceive these risks to be associated with all modern contraceptives and strongly hold on to these beliefs which affect their use:

"a lot of women I know are afraid of damage to the womb which can prevent them from further conception, and some of them are concerned about risk of cancers of the womb and breast and other side effects... It is the reason why they chose to use only natural or traditional methods because they are not even sure which of the new ones to trust." Hassana, 25 year old female (Focus group discussion, family planning user, Kano Municipal LGA [urban])

However, comments made by men showed that despite buttressing the myths, side effects and risks of modern contraceptives to induce some degree of apprehension and exercise power and control over women's contraceptive use, there has been a gradual shift in attitude towards family planning with some women being positively disposed towards contraceptives use. An increased understanding of the contribution of child spacing to improving pregnancy outcomes, maternal and child health; the knowledge that temporary methods do not prevent future conception and the economic hardship associated with catering for a large family have contributed to varying degrees towards a shift in perception and attitude. But the women lamented even when they are willing to use the modern methods, the lack of geographic proximity and access to family planning services, especially in rural areas, short operating hours of the health facilities, unavailability of the method of choice, high cost of services, and the unfriendly, hostile and unwelcoming attitude of the service providers limit their ability to access and utilise modern contraceptives.

"Most first-time users have little or no choice. They request for any available method to start with... You see… it is not easy for women to travel to another facility to seek their preferred method. How do they know it is available there? Can they even afford it after spending all their money on transport?" Ladidi, 44-year-old female (Focus group discussion, family planning user, Bichi LGA [rural])

4.4 Manifestations and impact of gender inequalities and assumptions

Beyond lack of knowledge about risks and side effects of each modern contraceptive as well as rife myths and misconceptions about family planning, it appeared sexual division of power and labour, cultural definitions of feminity and masculinity, as well as gendered norms and expectations exert an impact on women's family planning decision making power, choice and utilization in terms of their feelings of voicelessness and powerlessness, disregard for their opinion and gender disparities with regard to division of labour and earning potentials, as discussed in this section.

4.4.1 Women's feeling of powerlessness due to male dominance

In both rural and urban settings, it was interesting to note that both young and middle-aged male and female study participants opined that men dominate decision making and exercise power and control over contraceptive choice and use within the household. Though some men approve of family planning as a lifestyle choice and others on health grounds, where it is only the women that desire to adopt family planning, they are not

able to openly do so without the consent and approval of their husbands, even in situations where pregnancy and childbirth may be to the detriment of their physical and mental health and wellbeing. It could be expressed as the norm that both Muslim and Christian women do not feel they have the right to singlehandedly make decisions on family planning and cannot use contraceptives without their husband's approval as he is regarded as the head of the household, both culturally and religiously. Even where their health is at stake, the women considered themselves fortunate if they gain their husband's permission to use modern contraceptives.

"The husband's role enables him to have influence on decision making at home… Ah! he is the head of the house… he has to approve before I can use a contraceptive. How can I even use without his permission?" Charity, 29 year old female (Focus group discussion, Christian family planning user, Nasarawa LGA [urban])

Sociocultural mechanisms and practices within these settings, such as early girl child marriage and restriction and confinement of women to lives within their homes, known as *kulle* in Hausa language, have also promoted, embedded and perpetuated sexual division of power in a way that makes it natural for men to exercise power and control over women's decision and practices on matters relating to their health and perform acts that signify and embody a higher status for the male gender. The culture of early child marriage, which is rationalised and legitimised as a religious norm in the region (Amzat, 2020), is practiced with the belief that a young bride can be moulded by a more powerful

man into a good wife and give birth to more offspring. These girls tend to have less power and autonomy in their relationships, often lack access to health care services and knowledge about contraception to enable them to make informed choices and are less able to choose if and when to have children.

“You see… early marriage is another major factor especially in rural areas where girls at the age of 13 or 14 years are married to older men. They are too young to make any decision in their homes. They start having children at an early age and do not often have access to information to learn about contraception until much later in life. By then it is too late for some of them because they’ve already had too many children and suffered the pregnancy related health consequences… they do not consider contraception as an option”. Shamsu, 27 year old male (Focus group discussion, Nasarawa LGA [urban])

The comments made by the men showed that women are not regarded as having the right to make decisions regarding their reproductive life without the approval of their husbands. This has also been reported in the literature in studies conducted in both northern and southern Nigeria by Bukar *et al.* (2013), Akaba, Ketare and Tile (2016) and Chigbu *et al.* (2013) and based on my experience of growing up and living in North-West Nigeria and working on reproductive health programmes in several states across the entire northern Nigeria.

"I don't feel it is right for the wife to decide on her own to adopt family planning, that is why it is called family planning… [laughs]… on a serious note, it should be discussed with the husband and he has to approve." Samaila, 52 year old male (Focus group discussion, Nasarawa LGA [urban])

In situations where women chose to exercise their rights to access family planning services without their husband's consent, this results in conflict leading to marital disharmony and divorce in extreme cases. Although increased knowledge and awareness of the health benefits of family planning and influence of formal education on indigenous gender norms and roles may have contributed to changing attitude towards family planning, men who are regarded as "traditionalist" are still considered to have a stronger opposition to family planning and act in a way that is dominating, a practice that is culturally normative within these settings. Without being violent, these men may exercise their power and exert their position as heads of the households by threatening to divorce their wives due to non-compliance with their directives:

"It causes problems that may lead to divorce, especially if the husband did not understand the issue or he is a traditionalist." Umar, 34 year old male (Focus group discussion, Nasarawa LGA [urban])

"…but you know the man is traditionally the head of the house and there will be problem if the wife disobeys his command and uses any method without his consent." Mallam Tasiu, 53 year old (In-depth interview, Islamic scholar)

This dominant position of men seemed to have been idealized, legitimised and taken as the norm in these settings, resulting in the subordination of women and lack of decision-making power in matters affecting their health and survival. More so, men's exercise of power and control over women's contraceptive choice and use seems to have created a feeling of powerlessness and lack of control by women over their reproduction. This was expressed as a feeling of anguish and frustration among the women as they are compulsorily made to procreate even in situations of economic hardship where they are left with the responsibility of meeting the basic needs of the family due to abdication of responsibilities by their partners.

"…some men do not care how their children are faring, they just want to have children... We as the mothers have to feed and sponsor their education… Quite frustrating. This is why I believe it is the wife and not the husband that should decide on adopting family planning. But it doesn't happen. Sadly, some women are even made to have children against their wish." Comfort, 34 year old female (Focus group discussion, Christian family planning user, Nasarawa LGA [urban])

It also appeared the situation may be more intricate in some households where the decision-making power may not lie exclusively in the hands of their male partners as they are also under the influence of extended family who may have a culture of promoting large family sizes. This may be more applicable in rural settlements where there is a

culture of multiple extended families living within the same compound, with culture intersecting with gender to influence household family planning practices.

"I have seen a couple who were using family planning but had to stop. The mother-in-law noticed she hasn't given birth for 3 years and instructed them to stop using family planning methods when she found out. They had to comply. Now she is pregnant against her wish… they live in the same house and there is nothing else she could do… so sad… [hmm] some issues are just not under your control… " Sadiya, 24 year old female (Focus group discussion, family planning user, Bichi LGA [rural])

Despite their frustrations and feeling of helplessness, some women believed they have right to use contraceptives on medical grounds without the consent of their husband; either due to previous complications of pregnancy and delivery or pre-existing medical conditions that pose additional risk to their health. This position was supported by the Islamic scholar interviewed who suggested escalation of denial of contraceptive use to her parents for dispute resolution. Whilst this may appear to be a means of addressing the issue of denial of contraceptive rights of women by taking power away from their husbands and other external agents like extended family members, it does not give them control over their contraceptive choices and their own bodies.

4.4.2 Gendered division of labour

The division of labour based on the ideological separation of the spheres of production and reproduction into work for men and home/family care for women, with wage acting as the mediating factor between the two spheres, still persists in Nigeria, especially in the north. Whist this may be considered to influence women's ability to become gainfully employed and reduce financial dependence on their husbands, comments by some of the study participants, especially those in rural LGAs, indicates they are contented and willing to comply with these stereotypical gender roles and expectations:

"I honestly feel the expectation from birth is that women look after the house, become married and stay at home to look after children. That is why it is girls that assist with house cleaning and cooking from early age when the boys are out playing or going to the farm when they grow older. Personally, I don't see any reason why I should change my role... I am happy to look after my children while my husband is out working to earn a living." Talatu, 32 year old female (Focus group discussion, family planning users, Bichi LGA [rural])

This gender stereotyping has resulted in women with post-secondary education who express desire to work requiring the approval of their husbands, and sometimes his family members, to take up paid jobs outside their home. This continues to have a negative impact on women's ability to afford and access health care services, including modern

contraceptives. Even if a woman considers opting for modern contraceptive use without the knowledge of her husband, there was concern about inability to afford the cost of treatment in case she develops complications that require treatment at a health facility:

*"…it is hard in our community to go out for any work, besides there is hardly any good work for us since most of us don't have tertiary education… In my case I have a diploma. My husband wanted me to work but his mother and the co-wife caused a lot of problem. I had to give up." Umma, 35 year old female (*Focus group discussion, family planning user, Bichi LGA [rural])

The opportunities accorded men, through gendered labour divisions, to engage in income generating activities and businesses, despite no significant differences in their abilities, also creates wealth gap that allows some men to exert total power and control over decision making on family planning. Whilst some of the men believe they have the financial wherewithal to meet the needs of their family regardless of its size which makes them reject propositions for contraceptive use, other men in these settings consider a large family an issue of pride.

"…most men that are well to do in this community don't even think of family planning. Even when their wives bring up the subject, they shun them away." Jummai, 27 year old female (Focus group discussion, family planning user, Bichi LGA [rural])

However, some of the male study participants appeared to have reflected on the untold economic hardship on heads of households as a result of the huge financial demands to meet their large family's needs. Although this could be regarded as a problem affecting low- and middle-income earners, their comments indicate even those regarded as wealthy within their communities had their wealth and ability to cater for their family impacted negatively by their large size.

"The large family has already impacted negatively on his wealth because I swear to God he used to provide food in bulk for the family which would last for 12 months. But this has now become impossible. The man has 41 children out of whom only 10 can fend for themselves, the remaining 31 are totally dependent". Shamsu, 27 year old male (Focus group discussion, Nasarawa LGA [urban])

The enactment of gendered division of labour through culturally and religiously accepted and stylised repetition of practices and acts has promoted a favourable social condition of men over women with the expectation that men fulfil the role of breadwinners. Large family size, either as a personal choice or a decision influenced by cultural norms and religious beliefs, has catapulted these men deeper into poverty resulting in difficulties fulfilling or living up to this social role. This gender role strain was regarded by some women as men's dereliction of their assigned responsibilities, which is partly the reason

why some women advocate for birth control as they are left to shoulder the responsibility of meeting the family's basic needs. Although the comments by the study participants indicated this practice is similar in both rural and urban areas, there are more opportunities in urban areas for women to be either gainfully employed, engage in small scale home-based business activities or menial labour to earn a living to cater for themselves and their children.

"*Well, I think women campaign for birth control more than the men because some of the men fail to live up to their responsibilities. When their wives get pregnant, they disappear and leave the whole burden on the women, who suffer trying to feed themselves and look after their children".* Talatu, 32 year old female (Focus group discussion, family planning user, Bichi LGA [rural])

4.4.3 Deliberate concealment of contraceptive usage

In an environment where women experience inequalities as a result of gender and power imbalance with the resultant lack of control on matters relating to their reproduction, this leads to a persistent feeling of frustration that is existentially painful. It was gathered from the interaction with the study participants that in order to avoid this, some women opt to covertly use contraceptives to regain control of their reproduction and conceal their usage status from their husbands as they are the ones largely bearing the consequences of multiple poorly spaced pregnancies and the rearing of their children. Some covertly use

contraceptives shortly after marriage to allow themselves time to study the character of their husbands and their compatibility, information they might have had little or no time to gather prior to marriage:

"Well, you know men customarily regard themselves as the ones with the power to command their wives to adopt family planning or not. It is better if the two parties make a joint decision to adopt it… in most cases the women may be willing to adopt it but their husbands will kick against it. Sometimes the women have to secretly adopt it [Noise]." Saratu, 24 year old female (Focus group discussion, family planning non-user, Dala LGA [urban])

However, the background noise and mumbled comments made by the study participants as a sign of disagreement with this opinion shows this practice is not approved even by educated women in urban settlements due to the belief that husband's approval is a prerequisite to contraceptive use for both cultural and religious reasons. In situations where the husband uncovers the contraceptive usage, this could result in marital disharmony that may lead to divorce.

4.4.4 Silencing of women's voice and disregard for their opinion

Women's deliberate non-disclosure of their contraceptive usage to their husbands may not be unconnected with the silencing of their voices and disregard for their opinion on matters of their reproduction and its associated complications, as expressed by some of

the study participants in rural settlements. In these predominantly poor settings, culturally accepted gendered distribution of labour leaves women economically dependent on men and unable to bring vital income to the household as they are relegated to unpaid domestic work, which renders them powerless, voiceless and compliant with their husband's wishes. The gender linked power structures that lead to widespread socio-economic subjugation of these women and performance of masculinity that restrain the flow of emotions leaves them little freedom to express their wishes. Even when they do, their opinions and suggestions rarely count, as lamented by one of the study participants in Bichi LGA:

"She is the one that bears the whole burden of pregnancy, the pain of labour and spends more time looking after the children… hmm… the whole day she navigates from one task to another… no rest! Her opinion should count, and she should also be able to make decision about family planning. But it doesn't happen…" Ladidi, 44 year old female (Focus group discussion, family planning user, Bichi LGA [rural]).

4.4.5 Women's dread of polygamy and divorce by men

Another issue that emerged through the interaction with the men is a strongly held belief about rejection of contraception by women in order to conceive large numbers of children as a means of creating financial hardship that prevents their husbands from practice of polygamy. Whilst this pattern of behaviour and practice may be solely aimed at gaining

some degree of power and control over their husbands and giving them a voice in decision making in their homes, the effect inadvertently transcends beyond their husbands to affect the welfare and upbringing of their children. As the primary beneficiaries of their action, it was gathered from the men's perspective that the women consider the economic hardship on the family a lesser problem compared to problems associated with polygamy:

"Some women believe if they have many children their husband will not have the means to marry more wives due to the financial difficulty and hardship of looking after the family. To them it is not hardship as they consider the co-wife a bigger evil… they are using the children as a means of exercising power and control." Aliyu, 48 year old male (Focus group discussion, Danbatta LGA [rural])

More so, in these settings where threshold for divorce is low, some women use contraceptives to achieve a surge in power and secure themselves from divorce by having fewer children in households where they understand their husbands are in the habit of divorcing their wives following delivery of children. However, others had a contrary belief and experience because they consider large number of children a form of protection from divorce because in their opinion men are unlikely to divorce a wife with many children due to concerns about the children's nurture and upbringing in their mother's absence. To these women, contraception is only a means of disempowerment.

"…some men have the habit of divorcing their wives after they give birth to a few children which is a bad habit. So a lady that is wise enough will secretly use an implant to enable her understand the character and behaviour of her husband before bearing children for him." Samaila, 52 year old male (Focus group discussion, Nasarawa LGA [urban])

"Some women see it [having many children] as a sign of dominance in the house… others see it as a form of protection from divorce since men are not likely to divorce a wife with many children as they fear no one will look after them well if she leaves them behind." Mallam Tasiu, 53 year old (In-depth interview, Islamic scholar)

It therefore appeared beyond men's outright exercise of power and control over women's contraceptive use, there is a complex interplay of factors that influence women's decision and ability to use or reject modern contraceptives, and in some cases conceal their usage status, in order to passively gain power and control and have a voice in their homes.

4.5 Cultural influences on contraception

In many developing countries like Nigeria, contextual factors such as community-level cultural beliefs and practices, presence and quality of reproductive health services and macroeconomic factors have been identified as some of the causes of substantial geographic variations in contraceptive use, after accounting for individual and household

factors. Whilst recognizing that culture does not operate as a standalone factor in influencing contraceptive decision making and use, this section presents the findings of the study on how culturally accepted patterns of behaviour, beliefs and practices exert influence on contraception.

4.5.1 Poor spousal communication

The interaction with the women revealed how the interplay between gender norms and cultural practices contribute to poor spousal communication especially on reproductive matters. The imbalance in power relations between men and women has resulted in some women finding themselves in a position where they are afraid to bring up the issue of contraception due to uncertainty about the response from their spouses and fear of the consequences of their suggestions, whilst others seem to comply with their husband's wish as a 'sign of honour'. Although this was recognised as being more prevalent in rural areas as suggested by the religious leader interviewed, both Muslim and Christian women acknowledge this as a problem faced by women in rural and urban settings.

"You know some women cannot even raise the issue with their husbands even if they want to. So how will they make the decision as a family to use contraceptives? Blessing, 30 year old female (Focus group discussion, Christian family planning user, Nasarawa LGA [urban])

"I agree with you (the above statement), but you know some men are not even approachable with these issues. They see it as another expenditure… but that is not being smart. Can't they realise that smaller families have lesser expenditure? I think it may just have to do with poor communication between them." Comfort, 34 year old female (Focus group discussion, Christian family planning user, Nasarawa LGA [urban])

The regular practice of men spending their evening hours outside their homes in the company of their male friends in their community forums, despite being at work the whole day, creates limited opportunities for women to interact with them and negotiate contraception in spite of being in a marital union. As revealed by the women, the tension generated when matters of contraception are raised due to men's feeling of their power and authority being challenged creates anxiety about losing their husband's goodwill and favour, which prevents such issues from being elaborately explored and unanimously agreed upon. However other factors discussed above such as women's anxieties about having co-wives and worries about being divorced, along with competition for children and other material benefits in the household (discussed below) fundamentally limit their communication on matters of contraception.

4.5.2 Competition for children and the associated economic benefits

Rivalry and competition for higher number of children among co-wives in polygamous settings appeared to be a recurring issue mentioned by both male and female

participants. This seemed to be a common practice in wealthy households where allocation and sharing of financial resources by the husband to meet the needs of the family is based on each wife's number of children. These women also compete for higher number of children in order to gain a larger share of inheritance in the event of their husband's death. But even in poor households where living is a daily struggle due to meagre income, women complete for children because of the belief that they bring wealth. Additionally, the seventh day naming ceremony is often their only means of having a ram slaughtered for the family and acquiring social capital through material gifts from family and friends:

"Though they may understand the benefits of family planning, they are carried away by the greed of having ram slaughtered for the naming ceremony and other gifts given to them when they give birth." Sadiya, 24 year old female (Focus group discussion, family planning user, Bichi LGA [rural])

It is important to note that even in rural areas where women may be less educated and empowered, some of them refrain from engaging in these competitive practices due to the recognition of the risks associated with multiple, poorly spaced pregnancies.

4.5.3 Preference for large families and male children

Besides competition for children among co-wives for material gain, the pervasive culture of preference for large families continues to be a major factor determining levels of fertility and contraceptive use by women in the region. Their own desires and pressure from extended family to bear many children, sociocultural norm within the setting that favours large families and the belief that Islam encourages procreation as contained in the saying of the prophet (discussed in the next section) all play a role to varying degrees in influencing decisions on contraception. One of the female family planning users in Kano Municipal LGA lamented how women are being put under immense pressure if they do not give birth within the first year after marriage.

"In our culture, people cherish giving birth to many children, some even want up to ten or so. That is why people begin to lament as soon as a woman reaches nine months after wedding without giving birth and start to mount pressure on her." Rakiya, 20 year old female (Focus group discussion, family planning user, Kano Municipal LGA [urban])

"Y*ou see family pressure and innate desire to have many children is a huge factor... some people just don't care about having many children, they consider it a thing of pride. For some women, it is the husbands that force them to have many children because they regard it to be a status symbol in the community, especially with cost of living being relatively low".* Mallam Tasiu, 53 year old (In-depth interview, Islamic scholar)

As reflected in the comment by the Islamic scholar above, some men consider large family size a thing of pride and a manifestation of their power and control over their wives. Whilst this is a demonstration of how hegemonic masculinity, culture and religion intersect to influence decisions on procreation, it was interesting to note that some men who desire to have small family sizes are unable to exert their influence on women who have an opposing view and preference. Despite poverty and low household income, these women justify their desire for large number of children based on their need for company due to loneliness at home and the support the children provide for domestic work and small-scale trading to augment their meagre income. Additionally, children are regarded as a form of safety net when parents age, become frail and struggle to support themselves in the absence of retirement savings or any source of income.

"S*ome people believe it is better to have as many children as possible because they are unsure of who will look after them when they are old and frail."* Abdullahi, 37 year old male (Focus group discussion, Danbatta LGA [rural])

It also emerged that the high fertility preference by some couples is a mechanism to compensate for current or potential future child losses, which may be informed by their lived experience of multiple child losses or losses suffered by others within their community. This however demonstrates lack of understanding of the correlation between short birth-to-conception intervals and increased risk of child mortality because an

attempt to have high fertility to maintain large number of living children adversely affects the survival chances of the existing children.

Besides the desire for large families, the participants also divulged the pronounced and implied desire for male children by men, and in some cases by extended family members who also have a say in decisions on reproduction, which results in pressure being mounted on women to avoid or discontinue contraceptive use in order to fulfil their desire and relieve themselves of the burden. This forces some women to continue to give birth at regular intervals beyond their desired family size in the quest for male child. Additionally, the discriminatory practice of slaughtering two rams as opposed to one to celebrate the birth of a male child has made some women to reject contraception in an attempt to have a male child, an outcome that is in fact biologically determined and thus beyond their control. In some situations where they are not able to have a male child, their husbands end up marrying additional wives in order to either fulfil their desires or that of their family members:

"I know a woman who forced her son to marry another wife simply because his first wife has no male child… only females… four of them. Can you see how culture influences people's decision? …The son is a policeman who is very loyal to his mother. He has a house which he gave to her while he rented apartments for his wives." Umar, 34 year old male (Focus group discussion, Nasarawa LGA [urban])

4.5.4 Reliance on natural and traditional contraceptive methods

Another issue that emerged is the culture and practice of both natural and traditional contraception, especially by older females in rural areas. Whilst some women believe they are endowed with natural contraception and hence make no effort to use any traditional or modern method, others rely on traditional methods partly due to their belief in their effectiveness:

"The issue is that… I have not adopted new methods because I am blessed with natural planning." Rabi, 39 year old female (In-depth interview, family planning non-user, Sumaila LGA [rural])

For those who opt for traditional methods, a large array of options appeared to be available to them. These include charms swallowed or tied around the waist before sex and writing of verses from religious scriptures in a calabash that is placed upside down underneath the couple's bed as a form of contraception. Other women cited swallowing of pinch of salt just after sexual intercourse with their partners as emergency contraception whereas some rely on long term options by ingesting seeds of some plants, with the belief that the number of seeds swallowed is commensurate with couple years of protection:

"There are some seeds that are swallowed by interested women… you swallow the number of seeds commensurate to the number of years you want to rest before the next

conception… some women take salt immediately after sleeping with their husbands as it also prevents conception… You see, there are many options, but they are not 100% effective." Hajara, 47 year old female (In-depth interview, family planning non-user, Dala LGA [urban])

Nevertheless, it appeared not all women who use traditional methods opt for them solely due to belief in their effectiveness as some women resort to them after experiencing side effects associated with modern contraceptives. Irregular and unpredictable menstrual pattern and prolonged menstrual bleeding lead to interference with religious practice and sexual intercourse and affects women's ability to sexually satisfy their partners which makes these side effects intolerable.

"I used the injection following which I spent 17 days bleeding… this made me to lose the Ramadan fasting of last year. My husband complained repeatedly because we could not sleep together, and I am his only wife. This caused conflict between us and I had to resort to use of traditional methods." Rabi, 39 year old female (In-depth interview, family planning non-user, Sumaila LGA [rural])

4.6 Influence of religion on contraceptive decision-making, choice and use

Religious beliefs and values based on interpretation of religious scriptures and the preaching of clerics and scholars continue to play a pivotal role in shaping and regulating

individual and couple's reproductive decisions, attitudes and practices. The findings below demonstrate existence of a complex relationship between religious beliefs and individual choices and practices, partly informed and molded by cultural practices and personal preference.

4.6.1 Family planning contradicts Islamic teachings

One of the most widely held beliefs among Muslims in this study is that family planning, mainly for the purpose of limiting family size, is contrary to the teachings of Islam. Though contraception for the purpose of child spacing is regarded by some people as permissible, many still consider family planning to conflict with both their culture and Islamic teachings. The commonly cited reason for this belief by the study participants is the saying (Hadith) of Prophet Muhammad (peace be upon him): "*Marriage is part of my sunnah, and whoever does not follow my sunnah has nothing to do with me. Get married, for I will boast of your great numbers before the nations. Whoever has the means, let him get married, and whoever does not, then he should fast for it will diminish his desire*." This is often interpreted to mean family planning is not allowed in Islam although some of the men and women cited the use of natural family planning methods such as withdrawal by the companions of the prophet during his time, more than 1440 years ago.

The Islamic scholar interviewed however argued that those citing the above Hadith have misunderstood the message of the prophet. He focused on the ills and effects of

unchecked population growth and argued that the Prophet will only be proud of Muslims of sound character and not their mere number. It could however be argued that this was his own opinion rather than the position of Islam as he did not dispute the fact that the Hadith promoted procreation to have large number of Muslims on judgement day. Hence one can claim that Muslims rejecting family planning on religious grounds have a Hadith to back their argument:

"Again, those saying that the Prophet admonishes people to marry and give birth to as many children as possible so that he can be proud of them on judgement day misunderstood his message. He can only be proud of people with sound health and character. These are the type of people that he refers to, not people that are ill-mannered."
Mallam Tasiu, 53 year old male (In-depth interview, Islamic scholar)

4.6.2 Belief in destiny regarding family size and sustenance (God's will syndrome)

Some Muslims are also of the belief that their conception and its timing, as well as their family size is destined by God. They believe whether they use family planning methods or not, they will have their predetermined number of children. They often cite the verse of the Holy Qur'an "*the pens are lifted, and the pages have dried*". However, some women who also strongly hold on to this belief consider adoption of temporary family planning methods for healthy timing and spacing of pregnancies. It was therefore not surprising they were not using any method of contraception at the time of the study as they might have possibly completed their resting phase and were planning to conceive another child.

They wondered what happens to someone's predetermined number of children if ability to conceive a child is truncated by use of permanent methods:

"You see, whatever you are destined to give birth to, you must do so… it is better to use the temporary method like the one inserted in the womb so that you can rest. But if you adopt the permanent method, what happens to the other children destined for you to give birth to?" Sumayya, 29 year old female (Focus group discussion, family planning non-user, Dala LGA [urban])

Nonetheless as we have seen earlier, some of the participants argued that these religious beliefs and cultural practices that promote large family sizes have brought untold hardship to a lot of low- and middle-income families. Yet others did not share this view as they consider the sustenance of their family, as well as their health and welfare, to be entirely in God's hand and they have no means of influencing their destiny. But some cautiously argued that while they cannot dispute or risk being regarded as going against the sayings of Prophet Muhammad which will be blasphemous, it is better to have fewer children that an individual has the financial wherewithal to cater for to avoid the risk of falling into and living in poverty:

"Well, I am not disputing that saying of the Prophet but you should understand that, as long as you cannot take adequate care of many children, it is better to limit your family size and bear only the few you can fully cater for. If not, they may end up being a liability to the people." Usman, 31 year old male (Focus group discussion, Danbatta LGA [rural])

However, on further analysis there appeared to be a contrast between the beliefs of lay Muslim men and women and that of Islamic scholars on the use of birth control methods to limit family size for the prevention of financial hardship and poverty. Both men and women in rural and urban LGAs believed that Islam permits birth control on economic and financial grounds if one does not have the means to meet the needs of a large family. Some went further to cite examples of where even wealthy men eventually became poor due to huge financial demands of large families. However, the position of the Islamic scholar, backed by a verse from the Holy Qur'an, was that Islam does not permit limiting family size for fear poverty and equated this practice to infanticide:

"If one is limiting the number of the children for the fear of poverty, it is prohibited because Allah (S.W.T) says, 'do not kill your children for the fear of poverty, we shall provide for them and you, killing them is a big sin (Chapter Israh, 17:31).' So stopping birth completely must be due to an acceptable health reason." Mallam Tasiu, 53 year old (In-depth interview, Islamic scholar)

Whilst it could be argued that contraception is neither synonymous with abortion nor infanticide, I wonder whether men prefer to adopt the interpretation that Islam forbids limitation of family size because it aligns with their own desires and a culture that promotes large family sizes.

4.6.3 Permission of child spacing on health grounds

Though Muslim non-users of family planning methods have partly based their decisions and actions on religious grounds, there was consensus among both Muslim and Christian family planning users that their religion permits contraceptive use for child spacing, mainly for the purpose of preserving and improving maternal and child health. Even men who live in rural areas where uptake of family planning is low, with male authority and other gender dynamics intersecting with culture to influence family planning, regarded family planning as permissible in Islam though their interpretation of the religion's stance differs, leading to lack of a unified position.

"In Islam, family planning is not prohibited. During the time of the Prophet (PBUH), his companions used to release outside (the vagina) during intercourse. This was aimed at bringing about spacing between the births." Garba, 41 year old male (Focus group discussion, Danbatta LGA [rural])

"Yes, Christianity permits us to practice family planning… there is no prohibition. Our religion commands us to take care of all the needs of our children like feeding an-d clothing... Family planning enables us to control their number and take care of them." Vivian, 36 year old female (Focus group discussion, Christian family planning user, Nasarawa LGA [urban])

Although religious scholars do not openly talk about and promote family planning, it appeared, based on the remarks made the religious scholar their silence on government's family planning programmes should be regarded as their silent approval.

"Well, you know the Prophet said if you notice any wrong thing, correct it either with your hand, tongue or heart. The government has been using the media to create awareness about family planning but Islamic scholars have not said anything against it. This is a sign of acceptance because if it was wrong, they would have criticized it." Mallam Tasiu, 53 year old (In-depth interview, Islamic scholar)

Their failure to openly discuss family planning was regarded as a sign of indifference towards promotion of family planning and fear of denting their image as promoters of a western agenda, as misconceptions about family planning being a population control strategy persist in the region. However, an increased understanding of the contribution of child spacing to improving maternal and child health, the knowledge that temporary contraceptive methods do not prevent future conception, and the belief that both Islam and Christianity do not prohibit contraception for birth spacing have contributed towards a gradual shift in perception and attitude towards adoption of family planning.

4.6.4 Prohibition of permanent contraceptive methods

Despite the gradual change in perception and practice, there was consensus among study participants that Islam does not permit use of permanent contraceptive methods except on health grounds. This may be due to the belief that predetermining family size and using irreversible contraceptives to achieve this purpose is not permissible in Islam.

"…my understanding is Islam allows family planning only for the spacing children as stopping birth permanently is prohibited… if the health of the woman is at risk, she can stop completely but I cannot tell you the exact verse." Salamatu, 19 year old female (Focus group discussion, family planning user, Bichi LGA [rural])

This belief, especially when held by young women in their early reproductive years, could have an impact on their total fertility as they are likely to at best space their pregnancies and could end up with short pregnancy intervals that increases their risk of pregnancy related complications. This belief might have arisen from the ruling that under normal circumstances, irreversible contraception is absolutely prohibited in Islam. More so, children, regardless of their number are regarded as a gift from God, hence a Muslim should rather pray for means of sustenance than limit their number. Some of the male participants in the same group however argued that limiting the number children with the aim of adequately catering for and nurturing them to avoid constitution of nuisance to

the society is preferable to having a large family beyond control. This appears to be a position on moral grounds without backing using religious scripture.

"I know of a man who died leaving behind 20 children. As I speak to you, the children are now a nuisance to the society. How do you expect the Prophet to be proud of people like that? One can limit the number of his children with the aim of giving them adequate care and avoiding nuisance in the society." Samaila, 52 year old male (Focus group discussion, Nasarawa LGA [urban])

Regarding the ruling of Christianity on permanent contraception, it was unclear from the discussion with the Christians whether the uncommon practice of permanent contraception among Christians was based on religious injunction or individual preference. Just like in the Muslim community, it seemed permanent contraceptive methods are mainly adopted on health grounds and even when such methods were discussed during the focus group discussionss and interviews, no mention was made of vasectomy, a permanent method of male contraception, as they did not consider it an option. With the imbalance of power in favour of men and being culturally and religiously regarded as heads of their households, when they do consider contraception, male contraceptive methods are not considered an option and they generally tend to rely on women to prevent pregnancy, despite the fact that vasectomy is more effective, less invasive and carries lower risk of complications. With men unwilling to risk being put under pressure to consider vasectomy, adopting religious rulings on prohibition of all

forms of permanent contraception except when health of the woman is at risk excludes them from undergoing this procedure.

"…it is not common to use permanent methods, only in rare cases and mostly for health reasons…. I think a lot of women are more comfortable with the types that last long than to have womb turned [tubal ligation] or removed [hysterectomy]… Afterall, most people just want to space". Comfort, 34 year old female (Focus group discussion, Christian family planning user, Nasarawa LGA [urban])

4.7 Conclusion

In the methodology chapter, I discussed gender as a social determinant of health and some of the theories of gender to allow for a better understanding of the rationale and justification for the choice of methods. There was specific attention to Connell's relational patterning of masculinities, with focus on hegemonic masculinity, a pattern of practice and cultural dynamic that ideologically legitimizes the dominant position of men in society and justifies the subordination of the common population of men and women. The study findings presented in this chapter have enabled us to learn how the practice of masculinity result in manifest gender inequalities and intertwine with cultural practices and religious beliefs to have a negative impact on women's ability to contribute to decision making process on family planning in their homes, their choice of methods and utilization of services. In the next chapter, I bring together the themes identified and discuss them in

relation to theories of masculinity, with focus on hegemony and its impact on women's ability to utilize modern contraceptives.

Chapter Five

Discussion

5.1 Introduction: revisiting the purpose of the study

As discussed in the introduction chapter, we know that pregnancy is neither a disease nor a disorder, yet complications of pregnancy and childbirth result in the death of about 145 women of childbearing age daily in Nigeria, making it the second largest contributor to maternal mortality globally (UNICEF 2017; WHO, 2019a and WHO, 2020b). An estimated 74% of these deaths could be averted if all women had access to services that allow them to delay motherhood, avoid unintended pregnancies, and prevent and treat pregnancy related complications (DFID, 2010; UNFPA, 2012; Chola *et al.,* 2015 and Ganatra and Faundes, 2016). The recognition family planning as a strategy for reducing maternal mortality led to investment by Nigerian government to improve uptake by creating awareness and generating demand for family planning, increasing financing at all levels of government, building capacity of service providers and strengthening delivery channels through improved forecasting and distribution (FMOH, 2014). Although this led to increased availability and improved knowledge of modern contraceptives among both married men and women (94%), there has been less than expected gain in contraceptive uptake by women from 1990 to 2018 across the country (3.8% to 17%) and North-West geopolitical zone in particular (0.7% to 6.2%) (FOS, 1992 and NPC/ICF, 2019).

Whilst recognizing that a wide range of social and institutional factors may influence modern contraceptive access, choice and uptake, the study was focused on exploring how socially constructed gender norms and expectations, cultural practices and religious beliefs within the North-West region could enable us to better understand the underlying causes of the huge disparities in contraceptive uptake between northern and southern Nigeria, as national family planning policies are the same across the country. This study was therefore carried out with the aim of exploring the beliefs and perception of lay men and women of reproductive age about family planning and to improve our understanding of how gender roles, cultural practices and religious beliefs within the northwest region affect utilization of modern family planning services.

Working with the belief that reality and knowledge are socially constructed and subject to multiple and diverse interpretations with no ultimate correct way of knowing (Bunniss and Kelly, 2010 and Silverman, 2013), I adopted the constructionist research paradigm as I regarded the positivist understanding and approach not appropriate for achieving the aims and objectives of this research. Although this chapter offers an in-depth discussion of the findings, we have learnt from the study that reliance on natural and traditional contraceptive methods, concerns about contraceptives' side effects and failure, geographic access and affordability, poor attitude of health workers and low educational status of couples were among the social determinants that continue to exert a negative impact on uptake of family planning services in the region. However, the exact ways in

which these factors operate and their relationship with health is not precisely understood in causal terms (Kelly *et al*., 2007), and these issues will not be discussed in this thesis as they are beyond its aim and objectives and do not directly address the research question.

5.2 Review of key findings and contribution to knowledge

Before turning our focus onto the discussion of the study findings, I would like to draw attention to and reflect on some of the challenges faced when exploring issues of contraception during the focus group discussions with women. Although six of the eight focus group discussions were conducted with women in an effort to generate more data from both users and non-users of modern contraceptives, many of the quotes or verbatims used to give the study participants a voice in the findings chapter and contribute transparency and authenticity to the analysis were from men. Although the women were found to be relatively less willing to open up and freely interact with other study participants and the facilitator, despite her decades of experience in family planning service provision and qualitative research, they were still able to convey their views during the data collection sessions, with many 'quotable' examples that were reflected in the findings chapter. Whilst they found it relatively easy to cite issues such as concerns about side effects of contraceptives, affordability, geographic access and mistrust due to perception of family planning as a population control agenda, they were less willing to engage deeply and allow for exploration of microlevel issues within the households raised by some of the study participants. It appeared they found it particularly difficult to

elaborate on issues such as reliance on traditional methods before or after sex as emergency contraception and their lack of power and control on reproduction due to external influence on household decision making by extended family members as it made them appear weak. They were also less elaborate on initiation and deliberate concealment of contraceptive use shortly after marriage to enable them assess compatibility with their husbands, as there appeared to be a general disapproval of this practice from the other study participants.

Whilst this may be partly due to the unease about discussing such a sensitive topic with strangers, it may also be a manifestation of the performance and practice of masculinity that subjugates women and restraint their flow of emotions even in the absence of men which leaves them little freedom to openly express their thoughts, feelings and wishes. Although women are generally regarded as willing to express their emotions, their prolonged period of subjugation from early childhood through adulthood and into marital life through men's exhibition of strength, dominance, toughness and control in these settings has created what Holland *et al*. (1998) termed the "male in the head" which has narrowed down, and to a large extent closed, the space for free discussion of contraception to the degree that even when they are on their own they still feel the stricture. Hence despite the facilitation of the focus group discussions by an experienced female with the aim of providing a relaxed atmosphere that allow free interaction without any hindrance by the presence of a male figure, the social problems associated with

culturally legitimised men’s dominant position over women in these setting through the performance and practice of hegemonic masculinity have manifested themselves in not only the use of family planning services by women but the data collection process. However, I found the men in the 2 focus group discussions I moderated to be more open and willing to express how they exert control over family planning decisions and practice within their households.

5.2.1 Gender and power relations: performance of masculinity and passive resistance of power imposition

Reproduction touches upon the most intimate feelings and deepest emotions of nearly every person as we are confronted, at least once in our life, with the idea, wish or decision to have or not to have children (De Sutter, 2017 in Rizk and Gerris, 2017). Although men and women are biological partners in the reproductive process (Isiugo-Abanihe, 1994), men in northern Nigeria are often the sole decision makers on women’s reproduction and access to health care services, including contraceptives (Yaye *et al*., 2019).

Culturally influenced, markedly differentiated and assigned “masculine” and “feminine” gender roles for boys and girls right from early childhood and the gendered construction, segregation and assignment of unpaid domestic labour and child upbringing to women and paid work to men, despite radical restructuring worldwide (Ferguson, 2013 in Waylen *et al.,* 2013) still persist in northern Nigeria. This allows men to play an important role as

heads of households, and regard themselves as the custodians of the interests of their lineage and protectors of and providers for their families. They are the ones who make most decisions pertaining reproduction and family life. More so, the socioeconomic dependence of wives on their husbands gives them great influence in the household, a position that is strengthened by a patrilineally organized family structure within the region (Isiugo-Abanihe, 1994).

5.2.1.1 Hegemonic masculinity: an identify or pattern of practice in North-West Nigeria?

As the findings of the study have shown, despite women bearing the physical, mental and emotional strains of pregnancy, child birth and upbringing, men, and in some cases extended family members, dominate decision making and exercise power and control over contraceptive choice and use within the household. Even where women desire to use contraceptives on health grounds, they lack the right to make decisions to do so without the consent and approval of their husbands and they are often silenced when they try to raise the issue of contraceptive use even for the purpose of child spacing. This lack of decision making power and outright disregard for their opinion on matters that directly affect them creates a feeling of powerlessness and voicelessness in their homes, and the resultant persistent feeling of frustration that is existentially painful. With divorce rates in northern Nigeria being among the highest in West Africa and Kano State being home to the largest number of divorcees in Nigeria (Adow, 2012), these women are forced into submissiveness due to fear of divorce and separation from their children. As the study

has shown, they are often subjugated by more powerful men into grand multiparity against their wish, with the attendant economic and health consequences associated with multiple pregnancies and large family sizes. This suggests hegemonic masculinity is not an identity carried proudly by men in these settings, but rather a culturally and religiously accepted role expectation as heads of their households and a pattern of practice performed by these men that allows them to occupy a dominant position over women's decisions, the choices they are able to make and the actions they are able to take (Connell and Messerschmidt, 2005).

Additionally, this pattern of male dominance and female submissiveness regarding contraception is a manifestation of the configurations of gender practice within these settings that allows men to continue to claim and sustain a leading position in women's social and reproductive life. Connell (1995 in Robertson, 2007) argued that although few men meet the normative standards of hegemonic masculinity, this does not stop them from benefitting from the general effect of this hegemony, with majority of them gaining from the overall effect of the subordination of women. In these settings, a correspondence between cultural ideals and collective institutional power has allowed for the establishment of hegemonic and complicit masculinities that affect contraceptive choices and the risks women take in adopting less effective traditional options perceived to be devoid of side effects such as irregular menstrual bleeding that affect their sexual functioning and ability to satisfy their spouses.

5.2.1.2 Women's passive resistance of power imposition

As noted by Koester (2015), often what it means to be a woman is to be powerless by being quiet, obedient and accommodating of a 'real man' who by contrast exercises power by being outspoken and able to impose his will on her. Although the widely accepted definition of power is getting someone else to do what you want them to do (Koester, 2015) and in this context men's exercise of power and control over women's reproduction, the findings of the study have shown that women in these settings, despite being socially assigned the roles of wife and mother, passively resist this imposition of power in certain ways. It appeared some of the women seek to empower themselves not in the conventional way of recognizing inequalities in power and outrightly asserting the right to have rights and acting to press for and bring about change within the household in favour of greater equality (Cornwall, 2016).

As we have learnt from the interaction with the study participants, women deploy a series of strategies through which they attempt to assert some power and control within a social, economic, cultural and religious context where they are relatively powerless. Some passively adopt power by opting to covertly use modern contraceptives and conceal their usage status in order to regain control of their reproduction, especially in settings where they suffer the health and socioeconomic consequences of multiple poorly spaced pregnancies and childbirth, and shoulder the burden of child upbringing. Others covertly use contraceptives shortly after marriage to allow themselves time to assess compatibility

with their husbands, an exercise they might have had little or no time to perform before marriage.

However, others use procreation as a means of self-empowerment. Whilst being subjected to a form of hegemonic masculinity, through hierarchical domination and subjugation, which in extreme situations may involve the display of strength, toughness, aggressive and violent behaviour to oppose use of family planning methods and bear large number of children (Morettini, 2016), they also find the large number of children to be a means through which they exert power and control within the household as well. Although having a large number of children in low-income households causes material hardship that is linked to poor health, cognitive, and behavioural outcomes as well as poor long-term health and economic prospects for the children (Karpman *et al*., 2018), it allows women to passively adopt power to resist polygamy as the huge financial burden and hardship on the men compels them to a life of monogamy. As studies in several African countries have shown, polygamy, though legal, fuels poverty and leads to husbands neglecting one family over another, leaving thousands of women and children impoverished and easy prey to exploitation (Bhalla, 2018).

Besides protection from polygamy and its untoward effects, it also appeared women reject family planning in order to have large number of children which they believe improves their marriage stability and minimizes their risk of being divorced. As lamented

by the women, the thoughts, and in some cases the lived experience, of the emotional trauma of separation from one's children and the stigma of divorce, which could potentially have long-lasting detrimental effect on their chance or intent of remarrying, compels them to procreate beyond their wishes as large number of children within the household serves as a form of protection from divorce. As Lazarus *et al*. (2017) have shown in their study on remarriage after divorce in Nigeria, the differential impact of the gendered socio-cultural penalties of divorce on remarriage leaves women worse-off than men, even for women considered to have "economic power".

Thus, at the macro level it could be deduced that social, economic and cultural norms promote men's dominance and exercise of power over women's reproductive rights, decision making on their desired timing of pregnancies and number of children, access to and choice of contraception which is generally regarded as disempowering to women (Kiani *et al*., 2018). However, at a micro level within their households, women resist this exercise of power by utilizing the reproductive potential of their bodies to have a large number of children as a means of altering the balance of power by allowing them to maintain some level of control and minimize their domination and subjugation within the household. The willingness of women to risk their lives through procreation in order to gain power and authority in the household clearly challenges our conventional thinking in family planning programmes that view high fertility as disempowering for women, and contraceptive use as capable of redressing gender inequality.

Although analyzing the data through the lens of hegemonic masculinity has enabled us to understand the patterns of cultural ideals, dynamics and practices that allowed men to achieve ascendency and legitimized dominant position and control over women's contraceptive use (Connell and Messerschmidt, 2005 and Robertson, 2007), it seemed there is a complex interplay of factors that influence women's decision to use or reject modern contraceptives in an attempt to exert power and control and have a voice in their own homes, though not always successful.

5.2.2 Intersection of culture and gender: put up and shut up?

Family life in Nigeria is guided by culturally and religiously normative principles, institutions and beliefs that vary among ethnic groups, though of recent many families and couples have started operating outside the confines of recognized traditional norms and values (Isiugo-Abanihe, 1994). Although western influence has aided the modification of traditional gender dynamics and influence of culture on household decision making and practices, especially in southern Nigeria, the conventional family relationships, gender roles, cultural ideals and practices are never completely obliterated, even among the most educated and civilised Nigerians (Isiugo-Abanihe, 1994). As the findings from the study have shown, there are wide range of cultural practices that intersect with gender norms and role expectations to exert an influence on the use of family planning services across the state. Although some of the issues uncovered in this study are not unique to the state or region, the study has enabled us to better understand the extent to which they

influence household decision-making, the rationale for decisions made and actions taken, who makes them and how they affect reproduction and family size.

5.2.2.1 Large family size: culture and interplay of power

As obtained in many settings in Sub-Saharan Africa (Stephenson, 2007), there is a pervasive culture of preference for large families which remains a key factor in determining levels of contraceptive use within the region. However, it appeared the underlying factors influencing these decisions vary between the two genders. To men, a large family is culturally an issue of pride and a manifestation of their power and control over their wives, a demonstration of how hegemonic masculinity intersect with culture to influence decisions on procreation, despite its potential ramification on household income and wellbeing. This was recently exhibited on 20th January 2020, when the Majority Leader of Nigeria's House of Representatives, Alhassan Ado Doguwa, who represents Doguwa/Tudun Wada Federal Constituencies of Kano State, stood up on the floor of the house to present his four wives and state that he has 27 children, in a bid to signify his power not only in the legislative chamber but also at home. In his own words:

"Mr Speaker, I will let you know that with me today here are my four respected wives (He called on the women to rise). Mr Speaker and Honourable members, I have asked them to rise to respect the house on behalf of my family. And one other reason is to let you know that when members call me a powerful man, I am not only powerful on the floor of the house, I am also powerful at home because I deal with four wives… they have produced 27 children for me and I'm still counting [loud laughter and applause by House Members]".

Besides culturally influenced desire for large families, there was also an expression of preference and longing for male children by men, and in some cases by extended family members, who also exert influence on decisions regarding reproduction by couples. This is a manifestation of the persistence of the widespread culture of male child preference by men that was documented as a far back as 1970s, either for socioeconomic, cultural or religious reasons (Yount, Langsten and Hill, 2000). Though the sex of a child is determined biologically, cannot be altered by and is not under the control of women (Rajaretnam and Deshpande, 1994), they cave in to the pressure to have a male child, by continuing to procreate with the hope of having one, even when their health is at risk.

On the part of the women, factors within and outside the household have also been found to influence decision on contraceptive use and choice. Within the community, traditional attitudes and cultural values held by community members that favour having many children play a role on women's contraception to varying degrees. As the studies by Stephenson *et al.* (2007) and Mairiga *et al*. (2010) in Sub-Saharan Africa and North-East Nigeria have also shown, a woman's decision to adopt a modern contraceptive method was strongly influenced by how she perceived other community members would judge her actions. She may choose to adopt family planning, or indeed choose a specific method, purely based on the choices made by other women in the community. However, those who are unable to bear children, or a male child, face harsh social consequence in the form of discrimination and unfair allocation of resources within their home, especially

from their in-laws, as this study has shown. They often overhear negative remarks within their social cycles which makes them become socially isolated due to difficulties communicating with friends who have children. These discriminatory practices have been shown to have various psychological and psychosomatic effects, that include depression, raised anxiety levels, lowered self-esteem, feelings of blame and guilt, somatic complaints and reduced sexual interest (van Balen and Bos, 2009).

Within the household, besides procreation to gain power and control over their husbands on issues relating to polygamy and divorce, the study has also revealed that women's fertility patterns and decision to use modern contraceptives is influenced by the rivalry and competition among co-wives for higher number of children which serves as a locus of control over household resources. This co-wife competition is heightened and elevated in these settings where their welfare as well as the educational and health attainment of their children depends solely on their husband's investment decisions. Since spouses in Nigeria rarely follow joint household financial management practices, the locus of decisions is determined by who controls and allocates economic resources within the family. The sex-role differential, strengthened by patrilineality and patrilocality, confers profound authority in the family on men, who perhaps more than their wives place a high premium on having children from whom they gain both socially and economically (Isiugo-Abanihe, 1994). With allocation of resources to women in the household based on their

number of children, this disincentivises them to use any form of contraception to curtail their number of children despite the risks associated with multiparity and childbirth.

5.2.2.2 Stifling of women's voices on reproductive rights

Another issue that emerged is poor spousal communication among couples which affects women's ability to contribute to decision-making on matters relating to their fertility and conception. The interaction with the study participants indicates the poor communication stemmed partly from gender imbalance of power between men and women, as some women find it difficult to bring up the issue of contraception due to the tension generated when their husband's feel their power and authority is being challenged. In some cases, the incentives both men and women have to keep having children for reasons discussed above also prevents them for communicating about and making joint decisions on contraception.

As studies of husband-wife communication have shown, there is a strong positive association between spousal communication and contraceptive use (Link, 2011). However, the active occupation by men of a culturally constructed and idealised oppressive position that stifles women's voices on matters of reproduction within their homes gives little or no room for communication regarding family planning. This is a manifestation of how the society is organised in gender unequal ways, either through relative consensus or the use of force in extreme circumstances (Jewkes *et al*., 2015). Whilst it could be understood that the processes related to contraceptive decision-making

between spouses can be complex and driven by changing attitudes and circumstances over their life course, it is essential for them to engage in contraceptive discussion to discern each other's attitude to family planning and engage in shared decision-making regarding fertility and contraception (Adanikin, McGrath and Padmadus, 2019).

5.2.2.3 Men's misuse of lack of trust in modern contraceptives

Besides the aforementioned social and institutional factors that affect women's use of modern family planning methods, we have learned that some women opt for traditional methods for various reasons ranging from belief in their endowment with natural contraception, perceived effectiveness of traditional methods and concerns about side effects of modern contraceptive methods. However, what appeared to be equally important were the rampant myths and misconceptions about promotion of family planning primarily for population control and fears about harmful effects of new medicinal products following the death of 11 children in Kano State when Pfizer conducted a clinical trial of new drug for treatment of meningitis in the state following an epidemic in 1996 (Trovan clinic study) without a properly documented ethical approval (Wise, 2001). A similar suspicion of western health interventions led to the boycott of the polio campaign by three states in northern Nigeria (Kano, Kaduna and Zamfara) due to public distrust of the polio vaccine that was thought to be associated with fertility decline in girls (Jegede, 2007). This study has enabled us to identify and learn how men in these settings have sought to capitalize on this lack of public trust in modern contraceptives that

is largely fueled by myths and misconceptions and use it as a strategy to condemn and strongly discourage the use of contraceptives by women in order to achieve their own agenda. This lack of public trust, which is essential in promoting public health, has partly contributed to the low CPR and low unmet need for family planning among married women in the region despite the high TFR.

Although family planning programmes designed and implemented by Nigeria governments are largely focused on the supply side of family planning with the aim of increasing contraceptives uptake to reduce TFR and pregnancy related complications that result in high maternal deaths, it appears the cultural environment and practices, and community attributes intersect with gender norms to aggregately exert, though in varying ways, a significant level of influence on the use of modern contraceptives resulting in low CPR.

5.2.3 Religion as source of legitimacy for non-use of modern contraceptives

As in other parts of Sub-Saharan Africa where studies by Cleland, Ndugwa and Zulu (2011) have shown a deep-seated resistance to modern contraceptive use that often takes the form of outright opposition for either religious or cultural reasons, this study has also revealed non-use of contraceptives in the region on religious grounds. There were divergent views among study participants on religious rulings on contraception, with a lack of unified understanding on the positions of Islam and Christianity on family planning.

Historically, religion has often raised debate on whether contraceptives should be used or not (Abdi *et al.,* 2020).

There was strong argument by some of the study participants that family planning contradicts teaching of Islam based on their belief that a child's conception and its timing, as well as their family size and sustenance is destined by God. They argued that whether they use contraceptives or not, their number of children has already been predetermined by God, hence both traditional and modern contraceptives have no place in their life. They cited verses of the Holy Qur'an and Hadith of the Prophet to back their position, as earlier captured in the findings chapter. However, some of the study participants had a contrary view as they argued that Islam permits birth control to limit family size in order to improve the health and wellbeing of the mother and her child and to prevent financial hardship on the family. This position was challenged by the Islamic scholar who believed Islam does not permit limiting family size for fear of poverty and equated this practice to infanticide. Whilst this suggests divergent views and understanding among the study participants on the rulings of Islam on family planning even for child spacing, there was a greater consensus on prohibition of permanent methods of contraception in Islam except on health grounds.

However, evidence from different authoritative sources suggest that Islam does not forbid the use of contraceptives. The Quran specifically recommends that mothers breastfeed

for two years as a means of child spacing to give the mother adequate time to recover from childbirth and care for her child (Abdi *et al.,* 2020)*.* Similarly, some Hadiths narrated that withdrawal method was practiced during the time of the Prophet, which many Muslim scholars use to legitimise use of reversible contraceptives. However, all the four Schools of Islamic Jurisprudence agree that permanent methods are not permissible without medical justification (Abdi *et al.,* 2020), although Merali and Merali (2005) categorised them permissible except if they pose harm to health and the procedure involves a man accessing the private part of a woman that is forbidden for him. However, despite this evidence, some of the study participants oppose family planning and do not use any contraceptive method because of the beliefs that children are a gift from God and producing them is the purpose of marriage, hence family planning contradicts the will of God and challenges his ability to provide. Even the Islamic scholar interviewed cited the following verses in opposition to family planning: “And kill not your children for fear of want. We shall provide sustenance for them as well as for you. Verily the killing of them is a great sin.” (Qur’an 17:31), even though neither of these verses talk about contraception. They rather focus on the value of children and the obligation to protect their lives.

Despite the reliance on religious beliefs as the basis for opposition to contraception in northern Nigeria, no valid religious explanations exist as to why contexts sharing similar religious beliefs have significantly higher CPRs, as discussed in the literature review

chapter under section 2.5.2. Thus, while religion was cited as one of the reasons for non-use of family planning by Muslims in northern Nigeria, the evidence suggested there was disconnect between religious teachings and the use of modern contraceptives in the region. It rather appeared religious scriptures and teachings are interpreted in a manner that provides legitimacy for a cultural and social imperative and justifies the coercive exercise of power and control over women's contraceptive decision-making, access and use. The condemnation of family planning on religious grounds makes violation of men's directive against contraceptive use a sin these women do not wish to commit. This therefore creates an avenue for the continued subjugation of women and control of their behaviour, and promotion of a culture of large family sizes in the name of religion.

With regard to Christianity, whilst the participants indicated their religion support family planning use to promote health and wellbeing of the mother and children, it was unclear from the discussion whether the uncommon use of permanent methods by Christians was based on religious injunction or individual preferences, as it seemed permanent contraceptive methods were only used on health grounds.

In a state where Catholics constitute up to 90% of Christians (Odumosu and Simbine, 2011) and the Roman Catholic Church only allows 'natural' birth control (McClain, 2020), it was interesting to note that all the Christian females in the study stated that their religion supported practice of family planning. However, given that the Christian study

participants were not grouped into Catholics and non-Catholics, it was difficult to ascertain whether their attitudes towards family planning, and the use and non-use of various forms of modern contraceptives were informed by individual choice, male partners' influence or church teachings on birth control based on interpretations of the verses of the Bible or their scholars.

5.2.4 Gender relations, culture, religion and family planning: making sense of it all

When I reflect on the findings from this study, and vividly recall my interaction with the men in the state, I find women's right to reproductive decision-making, choice and use stifled by a complex interplay of cultural practices and religious beliefs operating in a context of unequal gender relations. As someone who has lived nearly all his life in northern Nigeria, I know that a young girl growing up in either a rural or urban settlement may have her innate desire and aspiration to have a small family size. However, these girls may be married at a young age and soon realise their reproductive decisions are influenced by numerous factors that are largely beyond their control. As we have learnt from the findings of this study, culturally assigned and religiously legitimised gender roles and expectations and the practice of hegemonic masculinity by dominant men often render them powerless and voiceless in their own homes and lead to the subjugation of their rights to reproductive decision-making and choice. Being economically dependent on their husbands and coupled with a culture that promotes a large family size, they soon realise allowing themselves to have a large number of children is not only a means of

economic and material gain, but a means of passively resisting the exercise of power by men and acquiring some level of protection from divorce and polygamy.

However, they may also realise at the early stage of their marriage that covert contraceptive use to prevent early and unwanted pregnancies and childbirth may be a means to their empowerment in households where childbirth is a risk factor for divorce. But they may also become subjects of harassment by extended family members who are accustomed to and promote large family sizes. Additionally, men's occupation of a culturally legitimised position of power often stifles their voices on matters of reproduction which makes discussion on contraceptive use a difficult subject within the household. More so, men's deliberate misuse of the public's lack of trust on modern contraceptives due to myths and misconceptions and use of religion as a source of legitimacy for coercive control of contraceptive use often leaves women who desire to use modern contraceptives with no choice but to either rely on natural or traditional methods, or use none at all.

When I recently watched an episode of "My Next Guest Needs No Introduction" where David Letterman hosted Melinda Gates, the co-founder of Bill and Melinda Gates Foundation, I noted how she recalled receiving a call from the Pope reminding her as a baptised Catholic of the position of Catholicism on contraception as she was actively promoting and making huge financial investment to increase access to modern

contraceptives in the developing world. She lamented how rural women were confronting her to demand for their own injection (contraceptives) when she was campaigning for increased routine immunization coverage in Africa. Owing to the exercise of power and control by men, these women are only able to visit health clinics on twelve weekly basis to covertly receive injectable contraceptives when available because they are not able to negotiate condom use with their husbands and will dare not be seen keeping sachets of or taking oral contraceptives.

Hence while we are often pre-occupied with how we provide contraceptive services, this study suggests this is not the key problem. Regardless of how accessible the services are, the cultural, religious, social and family factors combine to impede women's access to them.

5.3 Strengths of the study: positive contributions

The preliminary discussion with Kano SMOH officials on the aims and objectives of the study and the potential contributions the study could make to the design and implementation of future family planning programmes resulted in their early buy-in and timely ethical approval for the study. Their involvement at the early stage facilitated the selection of LGAs and sites for the data collection and the selection of female staff to facilitate the data collection session with women in recognition of the challenges associated with men engaging in in-depth discussions with women in a culturally

conservative and religiously sensitive setting on the subject of procreation and contraceptive use. This was a demonstration of what could be achieved when research students work closely with relevant government parastatals and staff to plan for research in its early stage.

With regard to participants recruitment and data collection, different approaches were used for men and women in recognition of the challenges associated with recruitment of eligible females from their homes solely for the purpose of research as discussed in the methodology chapter. For this reason, the female study participants were recruited in a health care setting following attendance of family planning or maternal and child health clinics and the data collection was conducted on the same day in a secluded environment within the facility to ensure confidentiality. For the men, besides being from the state, my recruitment of those that consented within their communities and the conduct of the data collection within these natural settings allowed me to gain access into their social world, blend into the setting and obtain detailed information beyond what was asked.

Whilst the focus group discussions in this study provided opportunity to engender interaction between the study participants and gain insight into their shared meanings, norms and values regarding contraception, the subsequent semi-structured interviews allowed the data collection to be directed, though fairly free-flowing, towards exploring in greater depth some of the issues raised during the focus group discussions to obtain

rich information that allowed the aim and objectives of the study to be achieved (Silverman, 2013; Green and Thorogood, 2018 and Flick, 2018). Although a discussion guide was used throughout, the questions and their order were not fixed and they were adapted to the flow of the conversation to allow for issues raised to be explored in greater detail with follow up related questions before moving to another area of interest. Put together, these methods have allowed for the capture of large quantities of rich, textured and complex data on such a sensitive niche topic as reproduction and contraceptive use than would have been possible using either of these methods.

As the data collection was conducted in the local language (Hausa) spoken in Kano State, the large volume of data generated was transcribed and translated to English language by experts in Hausa Language Department of Ahmadu Bello University Zaria, Nigeria, using a naturalised approach to ensure maximum accuracy and completion within the required timelines. Though as a native speaker I have a sound ability to speak and write in Hausa language, I recognised the complexity of translating Hausa words and phrases to English and the difficulty in choice of appropriate words and capture of sounds. I ensured the quality of the transcription and translation by thoroughly reviewing the entire scripts while listening to the audio recordings and provided feedback to the translators where a few errors were identified.

The analysis of the data also allowed for the exploration of how masculine performances and practices, established through cultural ideals, expectations and practices that are intertwined with religious beliefs, influence contraceptive decision-making and use by women. It allowed for greater depth of understanding on the power interplay and tussle within the household, how women use conception and contraception to passively acquire power and tilt its balance in their favour, the influence of external forces on women's ability to regulate their conception and how religion is used to enhance performance of masculinities.

Another strength of this research was the early engagement with a clearly defined theoretical framework, right from the proposal development stage, in recognition of its central role in research. An understanding of gender as a social determinant of health (Men *et al*., 2011), cultural definitions of feminity and masculinity, feminist and masculinist theories of gender and science of masculinity practice was pivotal to the conduct of this research. Connell's theory of masculinity, with a focus on hegemonic masculinity (Connell 1995), served as the lens through which the complex terrain of gender was explored in relation to culture and religion to understand how they influence in causal ways family planning decisions, behaviour and practices in northern Nigeria.

5.4 Limitations

Despite the strengths of the study, the findings should be interpreted in light of a number of limitations. Whilst the study has improved our understanding of lay beliefs and perceptions about modern family planning methods, some of the social and institutional determinants of access to family planning and the influence of gender, culture and religion on use of modern family planning methods, there are a number of constraints that affect the data collection and analysis.

The study utilized stratified purposeful sampling, a non-probability sampling technique that was geared towards the selection of information-rich participants who were willing to participate and share their experiences and opinions in order to gain insights and in-depth understanding of the topic being studied. However, by design, the data collection was limited to only women who attended family planning and other maternal and child health clinics within the facilities who expressed interest in participating in the study on the day they learnt about the study. Although this allowed for the recruitment of the required number of willing study participants, which was vital to the success of the research, the extra-time required to stay at the facility for the research could have contributed in the decline to participate by other potential information rich participants. Despite the assurance of confidentiality, the fear of participating in a study without the prior consent of their partners, given the short time frame from provision of information to recruitment, could have contributed to the decline to participate by some women. This

approach could have limited the maximum variability of study participants and inclusion of those with the necessary knowledge and experience on the issues of interest (Green and Thorogood, 2018 and Flick, 2018). It could have also made those that attended to be in hurry to conclude the study and return home as this was not the primary purpose of their visit to the facility. Hence, they may not have adequately reflected on issues raised and articulate their responses. However, this limitation was recognised in the early stages of data collection leading to a repeat of the exercise in one of the LGAs (Kano Municipal) by recruitment of those who declared they were not constrained by time required to participate in the study. The data generated from the initial focus group discussion was still incorporated in the analysis.

Another limitation arose from the female research facilitator's depth of interaction with the study participants during the focus group discussions. Despite her experience in qualitative data collection and family planning service provision for more than 20 years, she lacked nuanced understanding of what might be important as she was not directly involved in the rest of the study and therefore missed opportunities to explore some issues I would have explored in greater depth. These include how women arrive at decisions to conceal their family planning usage status, the extent to which delayed or low fertility contributes to a tilt in the balance of power in their favour, and how they are able to withstand external influences from extended family and friends on procreation that is driven by culture and religion. Although this could potentially be an opportunity for further research, it raises a methodological concern about how we can use 'external'

facilitators to conduct groups in situations where it was clearly inappropriate for the main researcher to take the role himself.

An additional limitation of the study was the grouping of all Christian study participants into one group for the focus group discussionwithout consideration for variation in beliefs and practices across the various denominations. As earlier discussed, the two main denominations, Catholics and Protestants, have divergent positions on contraception. It was therefore difficult to ascertain without disaggregating the study participants into Catholics and non-Catholics and conducting two separate focus group discussions if there was a disconnect between Catholic religious teachings and their practice of family planning or if their practice was informed by local church teachings or individual interpretation and choice. This therefore limits our ability to draw a conclusion on the influence of Christianity on practice of family planning.

5.5 Policy and practice implications

Although increasing access to and utilization of family planning services to delay motherhood and avoid unintended pregnancies has been recognised as one of the strategies for reducing maternal mortality, increasing CPR in northern Nigeria has remained a challenge, with only marginal gains recorded from 1990 till date. Nigerian government's investment geared towards creating awareness about health benefits of family planning, building capacity of service providers, strengthening supply chains and increasing availability of family planning commodities have increased knowledge of family

planning without significantly increasing uptake. Despite this study's limitations, the findings have contributed to our knowledge and understanding of lay beliefs and perceptions about family planning and influence of gender, culture and religion on family planning uptake to allow for policy and practice recommendations.

The use of modern family planning methods in northern Nigeria is a hugely difficult issue to address as there are several obstacles that need to be tackled through the design and implementation of long-term capital-intensive family planning programmes that bring on board all relevant stakeholders and opinion leaders. The conventional thinking that informed the design of family planning programmes largely targeted at strengthening supply side of family planning programmes and increasing availability of modern contraceptives has failed as the demand and unmet need for family planning (21% and 18% respectively) remain low in northern Nigeria despite high level of awareness (94%) (NPC, 2019).

My experience of working on family planning programmes that are focused on the supply side of family planning, with little attention to social and behaviour change communication (SBCC) strategies, has shown that they are unlikely to achieve significant gains within short time frames. More so, we have learnt from this study that the incentives men and women have to procreate in order to gain power and control within or outside their households, in a setting where the culture promotes large families, coupled with

strongly held religious beliefs on procreation and rife myths and conceptions about modern contraceptives, still play an important role in reducing utilization of family planning services. Hence, there is need for a shift in thinking in the design of policies and programmes by government and its partners away from the thought that *if you build it they will come* to one that focuses on the underlying social determinants that drive people to take action to plan their families (Krenn *et al.,* 2014).

As we have learnt in this study, gender norms and expectations, entrenched cultural practices and religious beliefs remain some of the key downward drivers of modern contraceptive use. Addressing these complex challenges is far from using a straightforward scattergun approach and is seldom mirrored by the sophistication of an approach that could take decades to achieve measurable outcomes and impact. Achieving a change requires a measured shift in policy and investment from supply side of family planning and training of service providers to heavily focus on social and behaviour change communication (SBCC) strategies that use the science and the data to focus on positively influencing and fostering long-term sustainable and normative shift in gender roles and expectations and cultural ideals and norms on family planning at household and community levels (HCCC, 2020). This will by no means be achieved through our conventional five-year programme cycles that have left behind carcasses of poorly conceived, designed and implemented programmes that have made no significant impact in tacking the underlying drivers of change. It will rather require an investment in long

term SBCC strategy that involves active participation of key influencers and opinion leaders from the grassroot level in the design and implementation of programmes that address lay beliefs, myths, misconceptions and suspicions about family planning, and openly acknowledges the potential side effects of family planning commodities to ensure informed decision about their use is required. With little or no trust in external behaviour change communication campaigns through the mass media that have only yielded marginal gains over more than three decades as people attribute little value to them, a bottom-up approach that involves locally trusted health care providers, community and religious leaders is needed. With trust already earned in the community as their capital, they have the advantage of being able to foster dialogue to change ideational factors such as attitudes and beliefs and increase social approval for family planning by demedicalizing and demystifying the practice of family planning (Krenn *et al.,* 2014), to achieve a gradual and sustainable shift in gender norms and cultural practices in favour of modern contraceptives use.

Chapter Six

Conclusion

This research is the culmination of many years of reflection, during my early years of clinical and public health practice, about maternal deaths in northern Nigeria and the potential impact of family planning in saving lives through planned management of pregnancy. When I began this PhD journey in 2013 with the submission of my initial proposal, the CPR in northern Nigeria, as reported in the 2008 Nigeria DHS, was significantly low despite government interventions and pockets of donor funded programmes in which I was personally involved in several states across the region. Two rounds of national surveys published in 2014 and 2019 have shown no substantial achievement in moving the needle towards improved utilization of family planning services despite higher investment to create awareness and increase commodities availability. The final chapter of this thesis reflects on how well the research objectives have been met, the potential contributions the study has made to policy formulation and public health practice in relation to family planning in Nigeria and potential areas for further research.

The study was performed through the lens of gender with a view to acquiring a better understanding of how culturally idealised and religiously legitimised systemic structures that institutionalise male dominance and power over women on multiple scales affect their ability to utilize family planning services. By so doing, the complex terrain of gender

and how it is intertwined with and performed in relation to culture and religion to stifle women's reproductive rights and choices and affect their every level of human experience, interpersonal relationships and individual emotions was explored.

Acknowledging the multidimensionality of masculinity and the varying ways in which they are performed and manifest, hegemonic masculinity provided a coherent approach to understanding the relational nature of gender and its relationship with health (Connell, 2012). As we have earlier learnt, it is a pattern of practice and cultural dynamic that ideologically legitimizes the dominant position of men in society and justifies the global subordination of the common population of men and women, and other marginalized ways of being a man (Connell and Messerschmidt, 2005; Robertson, 2007; Anderson, 2008). It is a social process in which one form of institutionalized masculinity is "culturally exalted" above all others and has arguably become a global phenomenon that takes place across various social levels in different societies (Anderson, 2008 and Morettini, 2016). Although gender is lived differently in diverse places, bodies and locations, the use of a gender lens in this research, with focus on hegemonic masculinity, has allowed us to untangle biases and see the ways in which gendered power relations in the research setting permeate structures within the community and households, and reveal how gender hierarchies that are often seen as 'natural' operate in households through economically, religiously and socio-culturally determined relations to exert an influence

on women's contraceptive use (Harcourt, 2019). Hegemonic masculinity formed the theoretical framework that informed this research and sought to address its objectives.

The first objective of the study was to explore the beliefs and perceptions of laymen and current female users and non-users of family planning about modern methods and services. As the study has revealed, mass media channels, word of mouth through interaction with family, friends and other community members, health care providers, and to lesser extent religious and traditional leaders appeared to be the main sources of family planning information, though to varying degrees. Whilst their beliefs and perceptions could be shaped by their sources and the kind of information they obtain, it appeared information sourced from female current and past users of family planning methods who are believed to have wealth of lived experience of modern contraceptive methods use and their male partners influence their thoughts about what is considered to be true and fuels the spread of myths and misconceptions about family planning that appeared to be rife in these settings. Despite effort being made by health care providers to create awareness on benefits of modern contraceptives, it appeared concerns about failure of return to fertility, increased risk of cancers and menstrual irregularities that affect women's ability to satisfy the sexual desires of men and the strongly held beliefs about other risks and potential complications of some of the methods affects women's decision to use contraceptives. The study also revealed widespread scepticisms and fears about the safety of new medicinal products such as contraceptives and the rational for the promotion and provision of free family planning services with the suspicion that it is a

population control agenda promoted by western countries. Men who oppose modern contraceptive use, either due to their perceived health risks, rational for their promotion or desire to have a large family, propel these myths and misconceptions and use them as a means of exercising dominance and control over women's contraceptive choice and use. This practice underscores the suggestion by Connell that hegemonic masculinity is a pattern of practice performed by these men, rather than an identity or set of role expectations, that allows them to occupy a dominant position over women's decisions, the choices they are able to make and the actions they are able to take regarding contraception.

The second objective was informed by Connell's relational theory, with a focus on hegemonic masculinity, as it sought to explore the role men play in shaping decision making and exerting an influence on women's access to and utilization of family planning services. By focusing on the differential power relations between men and women and how these both create and are created and sustained through social structures (Robertson, 2007), we were able to understand how gender roles and expectations, established through a correspondence between cultural ideals and religious legitimacy, guarantee men a dominant position over women within their homes and the community at large. We have seen how the assignment of "masculine" and "feminine" gender roles for boys and girls right from early childhood and the gendered construction of labour has allowed an employed man to claim authority in the family and a housebound woman to

be resigned to childcare and domestic work thereby making her economically dependent on her spouse (Connell, 1995). This socio-culturally promoted, embedded and perpetuated sexual division of labour has led to women's dependence on men and their subjugation within their household, thereby creating a feeling of powerlessness and voicelessness as they are often unable to contribute to decision making regarding their reproduction and contraceptive use. Despite the frustrations expressed by some women about the impact of these gendered labour divisions on their autonomy and ability to exert power and control within their households, women in rural settlements seemed to be contented and willing to comply with these stereotypical culturally embedded gender roles and expectations.

Whilst concerns about marital disharmony, the dread of divorce and polygamy and disregard for women's opinion by men has to a large extent led to submissiveness by women to men's desire not to use any contraceptive method, we have learnt that some women defend their rights to use them on health grounds whereas others resort to their covert use and non-disclosure in order to either assess compatibility with their spouses shortly after marriage or gain control over their reproduction. Although this practice was not found to be largely acceptable, it appeared to be a means by which women passively exert power in these settings. However, we already know from Connells extensive work on the patterning of contemporary masculinities that not all men exhibit and meet the normative standards of hegemonic masculinity (Connell 1995 in Roberson, 2007). We

have also learnt from this study that not all men exhibit this pattern of behaviour and practice consistent with hegemonic masculinity due to either the recognition of women's right to reproductive decision-making and choice, their understanding of the health and economic benefits of contraception or an inherent desire to have a small family size. For some of these men, their desire for smaller families is threatened by a culture that promotes and values large families and women who consider having a large number of children a tool for resource control within the household and a means for creating economic hardship that prevents their husband's from practice of polygamy. This willingness to procreate and potentially put their lives at risk of pregnancy related complications in order to passively empower themselves challenges our conventional thinking in family planning programmes that view high fertility as disempowering for women, and contraceptive use as capable of redressing gender inequality.

Finally, I wanted to explore how gender norms and expectations intersect with cultural practices and religious beliefs to exert an impact on women's ability to utilize family planning services in northern Nigeria. With the population of northern Nigeria being predominantly Muslim, Islam is deeply entrenched in the traditional spheres of the people and serves as the moral and legal framework for their cultural practices (Nolte, Danjibo and Olajide, 2009). Although Islam permits the use of modern contraceptives largely for child spacing, the study has revealed the use of religion to legitimize cultural preference for large families in the region based on a *Hadith* that encourage Muslims to marry and

procreate, without contextual interpretation of its content. Some have pushed far to the extent of believing contraception, whether temporary or permanent, contradicts the teaching of Islam and their family size and its sustenance is entirely in God's hands. With the recognition of men as the heads of their households by religion, this has allowed men who do not support contraception to exert power and control over women's contraceptive use leading to high fertility and large family sizes, a cultural practice that is cherished in the region. Regarding Christianity, it was interesting to learn that even though nearly 90% of Christians in the state are Catholics, there was belief among the study participants that their religion morally supports family planning to promote health and wellbeing of the mother and her children. However, it was difficult to ascertain whether these contrasting beliefs and attitudes towards family planning were informed by individual choice, male partners' influence or church teachings on birth control based on interpretations of the verses of the Bible or their scholars.

The study has also allowed us to learn how religiously legitimized cultural preference for large families has resulted in rivalry and competition among co-wives for higher number of children, especially males, which is a determining factor for the allocation of resources within the household. The culturally idealised and embedded sexual division of labour that disempowered women and led to their financial dependence on men, coupled with a culture that values and promotes high fertility, as well as the pressure from extended family to give birth to many children, have synergically combined to exert an influence on

women's ability to use modern contraceptives. Poor communication between spouses that stemmed partly from gendered imbalance of power that stifles women's voices also affects their ability to negotiate contraceptive use, even though in some cases the silence is driven by incentives associated with having children.

6.2 Recommendations for further research

Despite the positive contributions of the study to our knowledge and understanding of lay beliefs and perceptions about family planning and how gender intersects with culture and religion to influence modern contraceptives use, there are certain critical areas that could be further explored in future research to improve our depth of understanding of how these social determinants play a role in decision-making process and practice of family planning. Issues regarding how women arrive at decisions to risk adoption and concealment of their family planning usage status and the extent to which delayed or low fertility contributes to a tilt in the balance of power in their favour could be further explored. It is vital to understand why a woman would take this bold decision in a culturally conservative setting which could lead to suspicion of promiscuity and marital disharmony that may result in divorce to guide the development of behaviour change communication messages targeted at men's attitude to contraception.

Regarding permanent contraception, we have learnt that the study participants regard permanent contraceptives to be permissible only when the health of a woman is at stake.

However, we do not fully understand if men who support family planning in these settings are willing to use condoms or undergo vasectomy to promote the health and wellbeing of their wives and children when side effects or other reasons prevent the women from using modern contraceptives and pregnancy poses a risk to their lives. Considering the permissibility of polygamy in Islam, the value placed by the society and some men's pride in having large families, we could further explore to ascertain if they would be willing and what would inform their willingness to use contraceptives, especially permanent methods like vasectomy.

Although the study generated rich data through interaction with the targeted lay men and women, multiple perspectives on permissibility of family planning by various denominations of Christianity could be obtained through wider representation of Christians in the state, including their religious leaders, and the disaggregation of the study participants by sects during the data collection exercise. This will provide a more comprehensive picture on whether their practices are informed by religious scripture, local church teachings or individual interpretation and choice.

6.3 Final words

Reflecting on my PhD journey from the thought of enrolling for the programme to identifying the aim and objectives of the study at the proposal development stage, the research findings have no doubt improved our knowledge and understanding of how the

quadruple effects of a society's deeply entrenched beliefs and perceptions, gender dynamics, cultural practices, and religious beliefs influence in causal ways complex decision-making processes, behaviours and practices regarding contraception. Though I recognize that there is no magic wand to addressing these problems and increasing utilization of family planning services through our conventional five-year programme cycle approach, a number of policy and practice implications of the study were identified, and recommendations were made that could improve utilization of family planning services, whilst acknowledging the challenge of tackling the underlying social factors that disincentivize use of modern contraceptives by women. Although not much is offered in the way of solutions, as a programme manager involved in the design and implementation of family planning programmes, I have learnt through this research that improving CPR in northern Nigeria requires a heavy focus on fostering long-term sustainable and normative shift in culturally and religiously influenced gender dynamics that promote practice of family planning without disempowering women.

References

Abdi, B., Okal, J., Serour, G. and Temmerman, M. (2020) "Children are a blessing from God" – a qualitative study exploring the socio-cultural factors influencing contraceptive use in two Muslim communities in Kenya. Reproductive Health, Vol. 17, pp. 1 – 11. https://doi.org/10.1186/s12978-020-0898-z

Adanikin, A. I., McGrath, N. and Padmadas, S. S. (2017) Impact of men's perception on family planning demand and uptake in Nigeria. *Sexual and Reproductive HealthCare*, Vol. 14, pp. 55-63.

Adanikin, A. I., McGrath, N. and Padmadus, S. S. (2019) Power relations and negotiations in contraceptive decision-making when husbands oppose family planning: analysis of ethnographic vignette couple data in Southwest Nigeria. Culture, Health & Sexuality, Vol. 21 (12), pp. 1439-1451.

Adefalu, A. A., Oladapo Alabi Ladipo, Oluwaseun Oladapo Akinyemi, Oluwafemi Akinyele Popoola, Olajimi Oluwatosin Latunji and Omowunmi Folake Iyanda (2018) Awareness and opinions regarding contraception by women of reproductive age in North-West Nigeria. *Pan African Medical Journal*. 2018;30:65. Doi:10.11604/pamj.2018.30.65.12975.

Adow, M. (2012) Nigeria's Kano shakes off divorce capital tag [online]. Accessed on 12 June 2020, available at https://www.aljazeera.com/blogs/africa/2012/07/24886.html

Ajetunmobi, O. (2002) *Making sense of critical appraisal*. London: Arnold.

Akaba, G., Ketare, N. and Tile, W. (2016) A community-based, mixed-methods study of the attitudes and behaviors of men regarding modern family planning in Nigeria. *International Journal of Gynaecology and Obstetrics*, vol. 135, pp. 86 – 90.

AlYamani, A. A., Alsaffar, H. F., Abufaia, R. E., Basamad, M. A., Alzaher, S. H., Almatrafi, R. S., Rukun, R. A., Alkheledan, H. S., Alsaab, A. A., Aljohani, R. R., Felemban, A. F. and Jowharji, T. W. (2019) Awareness and use of contraceptives in the Middle East [oniline]. Accessed on 25 October 2020, available at https://www.ecronicon.com/ecmi/pdf/awareness-and-use-of-contraceptives-in-the-middle-east.pdf

Amzat, J. (2020) Faith effect and voice in early marriage in a Nigerian state. *Sage Open*, doi:10.1177/2158244020919513

Anderson, E. (2008) Inclusive masculinity in a fraternal setting. *Men and Masculinities*, Vol. 10 (**5**), pp. 604 – 620.

Annandale, E. and Clark, J. (1996) What is gender? Feminist theory and the sociology of human reproduction. *Sociology of Health & Illness*, Vol. 18 (**1**), pp. 17 – 44.

Annandale, E. and Hunt, K. (2000) *Gender inequalities in health*. Philadelphia: Open University Press.

Aransiola, J. O., Akinyemi, A. I. and Fatusi, A. O. (2014) Women's perceptions and reflections of male partners and couple dynamics in family planning adoption in selected urban slums in Nigeria: a qualitative exploration. *BMC Public Health*, Vol. 14: 869 http://www.biomedcentral.com/1471-2458/14/869

Audu, B., Yahya, S., Geidam, A., Abdussalam, H., Takai, I. and Kyari, O. (2008) Polygamy and the use of contraceptives. *International Journal of Gynecology and Obstetrics*, Vol. 101, pp. 88–92.

Auta, A. and Banwat, S. B. (2011) The public health sector supply of modern contraceptives in rural Nigeria: an analysis of selection, forecasting and inventory control. *Reviews in Health Care*, Vol. 2 (**3**), pp. 185-193.

Aveyard, H. (2014) *Doing a literature review in health and social care: a practical guide*. 3rd edition. Berkshire: Open University Press.

Aveyard, H., Payne, S. and Preston, N. (2021) *A post-graduate's guide to doing a literature review in health and social care*. London: Open University Press.

Balogun, O., Adeniran, A., Fawole, A., Adesina, K., Aboyeji, A. and Adeniran, P. (2016) Effect of Male Partner's Support on Spousal Modern Contraception in a Low Resource Setting. *Ethiopian Journal of Health Science*, Vol. 26 (**5**), pp. 439 – 448. DOI: http://dx.doi.org/10.4314/ejhs.v26i5.5

Bearss, K., Taylor, C. A., Aman, M. G., Whittemore, R., Lecavalier, L., Miller, J. Pritchett, J., Green, B. and Scahill, L. (2016) Using qualitative methods to guide scale development for anxiety in youth with autism spectrum disorder. *Austism*, Vol. 20 (**6**); pp. 663 – 72.

Benoot, C., Hannes, K. and Bilsen, J. (2016) The use of purposeful sampling in a qualitative evidence synthesis: a worked example on sexual adjustment to a cancer trajectory. *BMC Medical Research Methodology*, Vol. 16 (**21**), pp. 1 – 12.

Berryman, D. R. (2019) Ontology, Epistemology, Methodology, and Methods: Information for Librarian Researchers. Medical Reference Services, Vol. 38 (**3**), pp. 271 – 9.

Bhalla, N. (2018) ‘Put up and shut up’: polygamy breeds poverty for Kenyan women and children [online]. Accessed on 15 October 2020, available at https://uk.reuters.com/article/us-kenya-women-polygamy-insight/put-up-and-shut-up-polygamy-breeds-poverty-for-kenyan-women-and-children-idUSKBN1L0009

Blackstone, S. R. (2017) Determinants of contraceptive use among Nigerian couples: evidence from the 2013 Demographic and Health Survey. *Contraception and Reproductive Medicine*, Vol. 2 (**9**); https://doi.org/10.1186/s40834-017-0037-6

Bland, M. (2003) *An introduction to medical statistics*. 3rd ed. Oxford: University press.

Bogale, B., Wondafrash, M., Tilahun, T. and Girma, E. (2011) Married women's decision making power on modern contraceptive use in urban and rural southern Ethiopia. *BMC Public Health*, Vol. 11, pp. 342 – 348.

Bown, M. J. and Sutton, A. J. (2010) Quality control in systematic reviews and meta-analysis. European Journal of Vascular and Endovascular Surgery, Vol. 40 (5), pp. 669 – 677.

Bradley, H. (2013) *Gender*. 2nd ed. Cambridge: Polity.

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, Vo. 3, pp. 77-101.

Braun, V. and Clarke, V. (2019) Reflecting on reflexive thematic analysis. *Qualitative Research in Sports, Exercise and Health,* Vol. 11 (**4**), pp. 589-597, DOI: 10.1080/2159676X.2019.1628806

Brouwers, M. C., Johnston, M. E., Charette, M. L., Hanna, S. E., Jadad, A. R. and Browman, G. P. (2005) Evaluating the role of quality assessment of primary studies in systematic reviews of cancer practice guidelines. BMC Medical Research Methodology, 5: 8. DOI: 10.1186/1471-2288-5-8.

Bukar, M., Audu, B. M., Usman, H. A., El-Nafaty, A. U., Massa, A., and Melah, G. S. (2013) Gender attitude to the empowerment of women: An independent right to contraceptive acceptance, choice and practice. *Journal of Obstetrics and Gynaecology*, Vol. 33 (**2**), pp. 180-183. DOI: 10.3109/01443615.2012.737052.

Bunniss, S. and Kelly, D. R. (2010) Research paradigms in medical education research. *Medical Education,* Vol. 44, pp. 358 -366.

Burnard, P., Gill, P., Stewart, K., Treasure, E. and Chadwick, B. (2008) Analyzing and presenting qualitative data. *British Dental Journal,* Vol. 204, pp. 429 – 432.

Byrne, M. (2001) Sampling for qualitative research. *AORN Journal*, Vol. 494, pp. 497-498.

Carminati, L. (2018) Generalizability in qualitative research: a tale of two traditions. *Qualitative Health Research,* Vol. 28 (**13**); pp. 2094 – 2101.

Casey, F. E. (2018) Contraception [online]. Accessed on 16 May 2019, available at https://emedicine.medscape.com/article/258507-overview#a2

Chigbu, C. O., Onyebuchi, A. K., Onwudiwe, E. N. and Iwuji, S. E. (2013) Denial of women's rights to contraception in southeastern Nigeria. *International Journal of Gynecology and Obstetrics,* Vol. 121; pp. 154–156.

Chola, L., McGee, S., Tugendhaft, A., Buchmann, E. and Hofman, K. (2015) Scaling up family planning to reduce maternal and child mortality: the potential costs and benefits of modern contraceptive use in South Africa [online]. Accessed on 16 October 2020, available at http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0130077

Ciliska, D., Thomas, H. and Buffet, C. (2008) An introduction to evidence-informed public health and a compendium of critical appraisal tools for public health practice. Ontario: NCCMT.

Clearly, M., Horsfall, J. and Hayter, M. (2014) Data collection and sampling in qualitative research: does size matter? *Journal of Advanced Nursing*, Vol. 70 (**3**), pp. 473 – 475.

Cleland, J. G., Ndugwa, R. P. and Zulu, E, M. (2011) Family planning in sub-Saharan Africa: progress or stagnation? *Bulletin of the World Health Organization*; Vol. 89, pp. 137-143. doi: 10.2471/BLT.10.077925 DOI: http://www.who.int/bulletin/volumes/89/2/10-077925/en/

Coggon, D. (2003) *Statistics in clinical practice*. 2nd ed. London: BMJ.

Connell, R. W. (1995) *Masculinities*. 2nd ed. Cambridge: Polity Press.

Connell, R. (2012) Gender, health and theory: conceptualising the issue, in local and world perspective. Social *Science and Medicine*, Vol. 74, pp. 1675 – 1683.

Connell, R. W. and Messerschmidt, J. W. (2005) Hegemonic masculinity: rethinking the concept. *Gender & Society*, vol. 19, pp. 829 – 859.

Cornwall, A. (2016) Women's empowerment: what works? *Journal of International Development*, vol. 28; pp. 342 – 359.

Creanga, A. A., Gillespie, D., Karklins, S. and Tsui, A. O. (2011) Low use of contraception among poor women in Africa: an equity issue. *Bulletin of the World Health Organization*, Vol. 89, pp. 258-266. doi: 10.2471/BLT.10.083329

Creswell, J. W. (1998) *Qualitative inquiry and research design: choosing among five traditions.* California: Sage Publications, Inc.

Crossan, F. (2003) Research philosophy: towards an understanding. *Nurse Researcher*, Vo. 11 (**1**), pp. 46 – 55.

Crossman, A. (2014) Positivism [online]. Accessed on 2 October 2019, available at http://sociology.about.com/od/P_Index/g/Positivism.htm

Cunliffe, A. L. (2010) Crafting qualitative research: Morgan and Smircich 30 years on. *Organizational Research Methods*, Vol. 14 (**4**), pp. 647-673.

Darlaston-Jones, D. (2007) Making connections: The relationship between epistemology and research methods. *The Australian Community Psychologist,* Vol. 19 (**1**), 19 – 27.

Davies, M. B. (2007) *Doing a successful research project: using qualitative or quantitative methods.* New York: Palgrave Macmillan.

DeCoster, J. (2004) Meta-analysis notes [online]. Accessed on 20 April 2018, available at http://www.stat-help.com/notes.html.

Demaerschalk, B. M. (2004) Literature-searching strategies to improve the application of evidence-based clinical practice principles to stroke care. *Symposium on Cerebrovascular Disease*, Vol. 79 (**10**), pp. 1321 – 9.

Denzin, N. K. and Lincoln, Y. S. (1994) *Handbook of qualitative research*. London: Sage.

De Sutter, P. (2017) Political emotions and reproductive medicine: from individual suffering to European regulation. In Rizk, B. and Gerris, J. (2017) *Complications and outcomes of assisted reproduction.* Cambridge: University Press.

DFID (2010) Choices for women: planned pregnancies, safe births and health newborns [online]. Accessed on 28 August, 2020, available at http://www.dfid.gov.uk/documents/prd/rmnh-framework-for-results.pdf

Durojaye, E. (2013) Substantive equality and maternal mortality in Nigeria. *The Journal of Legal Pluralism and Unofficial Law,* 44 (65); pp. 103 – 132.

Durowade , K. A., Omokanye, L. O., Elegbede, O. E., Adetokunbo, S., Olomofe, C. O., Ajiboye, A. D., Adeniyi, M. A. and Sanni, T. A. (2017) Barriers to contraceptive uptake among women of reproductive age in a semi-urban community of Ekiti State, Southwest Nigeria. Ethiopian Journal of Health Science, Vol. 27 (**1**): 121. Doi: http://dx.doi.org/10.4314/ejhs.v27i2.4

Dworkin, S. L. (2012) Sample size policy for qualitative studies using in-depth interviews. *Archives of Sexual Behaviour*, 41 (6); pp. 1319 – 1320.

Elbert, T. L. (1991) The "difference" of postmodern feminism. College English, Vol. 53 (**8**), pp. 886-904.

ESRC (2015) Economic and Social Research Council (ESRC) Framework for research ethics [online]. Accessed on 11 May 2017, available at http://www.esrc.ac.uk/funding/guidance-for-applicants/

Esike COU, Anozie OB, Ani M, Ekwedigwe K, Onyebuchi AK, Ezeonu PO, Umeora OUJ. (2017) Barriers to family planning acceptance in Abakaliki, Nigeria. Tropical Journal of Obstetrics and Gynaecolology, Vol. 34, pp. 212-7.

Etokidem, A. J., Ndifon, W., Etowa, J. and Asuquo, E. F. (2017) Family Planning Practices of Rural Community Dwellers in Cross River State, Nigeria. *Nigerian Journal of Clinical Practice*, Vol. 20, pp. 707-15.

Ezeah, P. and Achonwa, C. (2015) Gender in equality in reproductive health services and sustainable development in Nigeria: a theoretical analysis. *International Journal of Sociology and Anthropology*, Vo. 7 (**2**), pp. 46 – 53.

Ezeanolue, E. E., Iwelunmor, J., Asaolu, I., Obiefune, M. C., Ezeanolue, C. O., Osuji, A., Ogidi, A. G., Hunt, A. T., Patel, D., Yang, W. and Ehiri, J. E. (2015) Impact of male partner's awareness and support for contraceptives on female intent to use contraceptives in southeast Nigeria. *BMC Public Health*, Vol. 15:879. DOI: 10.1186/s12889-015-2216-1.

Fakeye, O. and Babaniyi, O. (1989) Reasons for non-use of family planning methods at Borin, Nigeria: male opposition and fear of methods. *Tropical Doctor*, Vol. 19, pp. 114-117.

Federal Office of Statistics (1992) Nigeria Demographic and Heath Survey 1992. Lagos: FOS and IRD/Macro International Inc.

Ferguson, L. (2013) Gender, work, and the sexual division of labour. in Waylen, G., Celis, K., Kantola, J. and Wldon, L. (2013) *The Oxford handbook of gender and politics*. Oxford: University Press.

Flick, U. (2007) *Designing qualitative research*. London: Sage.

Flick, U. (2018) *An introduction to qualitative research*. 6th ed. London: Sage.

Galadanci, H. S., Idris, S. A., Sadauki, H. M. and Yakasai, I. A. (2010) Programmes and policies for reducing maternal mortality in Kano: a review. *African Journal of Reproductive Health*, Vol. 14 (**2**), pp. 31 – 36.

Ganatra, B. and Faundes, A. (2016) Role of birth spacing, family planning services, safe abortion services and post-abortion care in reducing maternal mortality. *Best Practice and Research Clinical Obstetrics and Gynaecology*, Vol. 36, pp. 145 – 155.

Gentles, S. J., Charles, C., Ploeg, J. and McKibbon, K. A. (2015) Sampling in qualitative research: insights from an overview of the methods literature. *The Qualitative Report,* Vol. 20 (**11**), pp. 1772 – 1789.

Gerson, G. (2002) Liberal feminism: individuality and oppositions in Wollstonecraft and Mill. *Political Studies*, Vol. 50, pp. 794 – 810.

Glasziou, P., Irwig, L., Bain, C. and Colditz, G. (2001) *Systematic reviews in health care: a practical guide.* Cambridge: University press.

Global Health eLearning Centre (2008) Maternal survival – programming issues: Deaths averted with family planning [online]. Accessed on 28 June 2017, available at http://www.globalhealthlearning.org/page.cfm?course=53&topic=3&page=2

Gough, D., Thomas, J. and Oliver, S. (2012) Clarifying differences between review designs and methods. *Systematic Reviews*, Vol. 1 (**28**); pp. 1-9 doi: 10.1186/2046-4053-1-28

Green, J. and Thorogood, N. (2018) *Qualitative methods for health research*. 4th ed. London: Sage.

Gribble, J. (2016) Family planning in West Africa [online]. Accessed on 20 November 2020, available at
http://www.prb.org/Publications/Articles/2008/westafricafamilyplanning.aspx

Gwarzo, T. H. (2011) Islamic Religious Leaders and Family Planning in Northern Nigeria: A Case Study of Zamfara, Sokoto and Niger States. Journal of Muslim Minority Affairs, Vol. 31 (**1**); pp. 143 – 151.

Hammarstrom, A. (2002) What could a gender perspective mean in medical and public-health research? in Wamala, S. P. and Lynch, J. (2002) *Gender and social inequalities in health: a public health issue.* Sweden: Studentlitteratur.

Hannes K. (2011) Chapter 4: Critical appraisal of qualitative research. In: Noyes J, Booth A, Hannes K, Harden A, Harris J, Lewin S, Lockwood C (editors), *Supplementary Guidance for Inclusion of Qualitative Research in Cochrane Systematic Reviews of Interventions.* Version 1 (updated August 2011). Cochrane Collaboration Qualitative Methods Group, 2011. Available from URL http://cqrmg.cochrane.org/supplemental-handbook-guidance

Harcourt, W. (2019) What does gender lens bring to development studies? [online]. Accessed on 2 January 2011, available at http://www.developmentresearch.eu/?p=412

Harden, A. and Thomas, J. (2005) Methodological issues in combining diverse study types in systemic reviews. *International Journal of Social Research Methodology*, Vol. 8 (**3**); pp. 257 – 271.

Hart, C. (2001) *Doing a literature search: a comprehensive guide for the social sciences*. London: Sage.

Hartling, L., Ospina, M., Liang Y., Dryden, D. M., Hooton, N., Seida, J. K. and Klassen, T. P. (2009) Risk of bias versus quality assessment of randomised controlled trials: cross sectional study. *BMJ*, 339:b4012. doi: https://doi.org/10.1136/bmj.b4012

Health Communication Capacity Collaborative (2020) Designing a social and behaviour change communication strategy [online]. Accessed on 31 October, 2020, available at https://sbccimplementationkits.org/courses/designing-a-social-and-behavior-change-communication-strategy/

Hill, A., Brice, A. and Enoch, K. (2004) Finding evidence. *in* Pencheon, D., Guest, C., Melzer, D. and Gray, J.A.M. (eds.) *Oxford handbook of public health practice.* Oxford: University press, pp. 80-5.

Holland, J., Ramazanoglu, C., Sharpe, S. and Thompson, R. (1998) *The male in the head: Young people, heterosexuality and power*. London: Tufnell Press.

Holloway, I. and Wheeler, S. (2010) *Qualitative research in nursing and healthcare*. 3rd Ed. Chichester: Wiley-Blackwell.

Holmes, M. (2007) *What is gender? Sociological approaches*. London: Sage.

Ijadunola, M. Y., Abiona, T. C., Ijadunola, K. T., Afolabi, O. T., Esimai, O. A. and OlaOlorun, F. M. (2010) Male Involvement in Family Planning Decision Making in Ile-Ife, Osun State, Nigeria *African Journal of Reproductive Health,* Vol. 14 (**4**), pp. 45-52.

Immigration and Refugee Board of Canada (2015) Nigeria: situation of Christians, including those living in northern cities, Lagos and Abuja; state protection (2011 – October 2015) [online]. Accessed on 9 November 2020, available at https://www.ecoi.net/local_link/315753/454485_de.html

Isiugo-Abanihe, U. C. (1994) Reproductive motivation and family-size preferences among Nigerian men. *Studies in Family Planning*, Vol. 25 (**3**), pp. 149-161.

Izugbara, C., Ibisomi, L., Ezeh, A. C. and Mandara M. (2010) Gendered interests and poor spousal contraceptive communication in Islamic northern Nigeria. *Journal of Family Planning and Reproductive Health Care,* Vol. 36 (**4**), pp. 219–224.

Jahan, N., Naveed, S., Zeshan, M. and Tahir, M. A. (2016) How to conduct a systematic review: a narrative literature review. *Cureus*, Vol. 8 (**11**): e864. DOI 10.7759/cureus.864

Jamshed, S. (2014) Qualitative research method – interviewing and observation. *Journal of Basic and Clinical Pharmacy*, Vol. 5 (**4**); pp. 87 – 88.

Jegede, A. S. (2007) What led to the Nigerian boycott of the polio vaccination campaign. *PLoS Medicine*, vol. 4 (**3**); pp. 417 – 422.

Jekel, J.F., Elmore, J.G. and Katz, D.L. (1996) *Epidemiology, biostatistics and preventive medicine.* Philadelphia: W.B. Saunders.

Jewkes, R., Morrell, R., Hearn, J., Lundqvist, E., Blackbeard, D., Lindegger, G., Quayle, M., Sikweyiya, Y. and Gottzén, L. (2015) Hegemonic masculinity: combining theory and practice in gender interventions. Culture, Health and Sexuality, Vol. 17 (**2**), pp. 112–127.

Jule, A. (2014) Gender Theory. In: Michalos, A. C. (eds) Encyclopedia of Quality of Life and Well-Being Research. Dordrecht: Springer. DOI https://doi.org/10.1007/978-94-007-0753-5

Kana, M. A., Tagurum, Y. O., Hassan, Z. I., Afolanranmi, T. O., Ogbeyi, G. O., Difa,, J.A., Amede, P. and Chirdan, O. O. (2016) Prevalence and determinants of contraceptive use in rural Northeastern Nigeria: Results of a mixed qualitative and quantitative assessment. *Annals of Nigerian Medicine*, Vol. 10, pp. 3-10.

Karnielli-Miller, O., Strier, R. and Pessach, L. (2009) Power relations in qualitative research. *Qualitative Health Research*, Vo. 19 (2), pp. 279 – 289.

Karpman, M., Gonzalez, D., Zuckerman, S. and Adams, G. (2018) What explains the widespread material hardship among low-income families with children [online]. Accessed on 13 August 2020, available at https://www.urban.org/sites/default/files/publication/99521/what_explains_the_widespread_material_hardship_among_low-income_families_with_children_0.pdf

Kelly, M. P., Morgan, A., Bonnefoy, J., Butt, J. and Bergman, V. (2007) The social determinants of health: Developing an evidence base for political action [online]. Accessed on 26 May 2020, available at https://www.who.int/social_determinants/resources/mekn_report_10oct07.pdf

Kiani, Z., Simbar, M., Dolatian, M. and Zayeri, F. (2018) Women's empowerment in reproductive decision-making needs attention among Iranian women. *Iranian Journal of Public Health*, Vol. 47 (**3**), pp. 464 – 465.

Kimmel, M.S. (1992) Reading men: men, masculinity and publishing. *Contemporary Sociology*, Vol. 21 (**2**); pp. 162-171.

Kimmel, M. (2001) Masculinities and feminities [online]. Accessed on 20 February 2020, available at https://www.sciencedirect.com/topics/medicine-and-dentistry/masculinity

Kimmel, M. and Bridges, T. (2014) Masculinity [online]. Accessed on 19 February 2020, available at https://www.oxfordbibliographies.com/view/document/obo-9780199756384/obo-9780199756384-0033.xml

Kitzinger, J. (2000) Focus groups with users and providers of health care. in Pope, C. and Mays, N. (eds.) *Qualitative research in health care*.2nd ed. London: BMJ.

Koester, D. (2015) Gender and power: six links and one big opportunity [online]. Accessed on 22 September 2020, available at https://www.dlprog.org/opinions/gender-and-power-six-links-and-one-big-opportunity

Krenn, S., Cobb, L., Babalola, S., Odeku, M. and Kusemiju, B. (2014) Using behavior change communication to lead a comprehensive family planning program: the Nigerian Urban Reproductive Health Initiative. *Global Health: Science and Practice*, Vol. 2 (4), pp. 427 – 443.

Kwan, C. M. L., Chun, K. M. and Chesla, C. A. (2011) Cultural norms shaping research group interviews with Chinese American immigrants. *Asian Am J Psychol*, Vo. 2 (**2**); pp. 115 – 127.

Law, M., Stewart, D., Pollock, N., Letts, L., Bosch, J. and Westmorland, M. (1998) Critical review form – quantitative studies [online]. Accessed on 2 October 2018, available at https://srs-mcmaster.ca/wp-content/uploads/2015/04/Critical-Review-Form-Quantitative-Studies-English.pdf

Lazarus, S. I., Rush, M., Dibiana, E. T. and Monks, C. P. (2017) Gendered penalties of divorce on remarriage in Nigeria: a qualitative study. *Journal of Comparative Family Studies,* Vol. 48 (**3**), pp. 351 – 366.

Letts, L., Wilkins, S., Law, M., Stewart, D., Bosch, J. and Westmorland, M (2007) Critical review form – qualitative studies (version 2.0) [online]. Accessed on 2 October 2018, available at https://srs-mcmaster.ca/wp-content/uploads/2015/04/Critical-Review-Form-Qualitative-Studies-Version-2-1.pdf

Leung, F. (2009) Spotlight on focus groups. *Canadian Family Physician*, Vol. 55 (**2**); pp. 218 – 219.

Lewis, J. J. (2019) What is radical feminism? [online]. Accessed on 29 December 2019, available at https://www.thoughtco.com/what-is-radical-feminism-3528997

Link, C. F. (2011) Spousal communication and contraceptive use in rural Nepal: an event history analysis. *Studies In Family* Planning, Vol. 42 (**2**), pp. 83 – 92.

Lipsey, M.W. and Wilson, D.B. (2001) Practical Meta-analysis. London: Sage.

Lizarondo L, Stern C, Carrier J, Godfrey C, Rieger K, Salmond S, Apostolo J, Kirkpatrick P, Loveday H. (2020) Mixed methods systematic reviews. In: Aromataris E, Munn Z (Editors). *JBI Manual for Evidence Synthesis* [online]. Accessed on 5 October 2020, available at https://synthesismanual.jbi.global . https://doi.org/10.46658/JBIMES-20-09

Macan Ghaill, M. and Haywood, C. (2012) Understanding boys': Thinking through boys, masculinity and suicide. Social Science & Medicine, Vol. 74 (4), pp. 482 – 489.

Mackenzie, N. and Knipe, S. (2006) Research dilemmas: paradigms, methods and methodology [online]. Accessed on 13 October 2019, available at http://www.iier.org.au/iier16/mackenzie.html

Mairiga, A. G., Kullima, A. A., Bako, B. and Kolo, M. A. (2010) Sociocultural factors influencing decision-making related to fertility among the Kanuri tribe of north-eastern Nigeria. *African Journal of Primary Health Care and Family Medicine*, vol. 2 (1); pp. 1- 4.

Mannava, P., Durrant, K., Fisher, J., Chersich. M. and Luchters, S. (2015) Attitudes and behaviours of maternal health care providers in interactions with clients: a systematic review. *Globalization and Health*, Vol. 11 (36), pp. 1- 17.

McClain, L. (2020) How the catholic church came to oppose birth control [online]. Accessed on 20 December 2020, available at https://theconversation.com/how-the-catholic-church-came-to-oppose-birth-control-95694

Measure Evaluation (2017) Contraceptive prevalence rate (CPR) [online]. Accessed on 23 August 2020, available at https://www.measureevaluation.org/prh/rh_indicators/family-planning/fp/cpr

Meh, C., Thind, A., Ryan, B. and Terry, A. (2019) Levels and determinants of maternal mortality in northern and southern Nigeria. *BMC Pregnancy and Childbirth*, Vol. 19, Article number: 417. DOI: https://doi.org/10.1186/s12884-019-2471-8

Men, C. R., Frieson, K., Socheat, C., Nirmita, H. and Mony, C. (2011) Gender as a social determinant of health: Gender analysis of the health sector in Cambodia [online]. Accessed on 29 October 2020, available at https://www.who.int/sdhconference/resources/draft_background_paper15_cambodia.pdf

Merali, A. and Merali, S. (2005) From marriage to parenthood: the heavenly path [online]. Accessed on 14 December 2020, available at https://www.al-islam.org/from-marriage-to-parenthood-heavenly-path-abbas-and-shaheen-merali/chapter-4-family-planning#permissible-methods

Merriam, S. B. (2009) *Qualitative research: a guide to design and implementation*. 3rd Ed. San Francisco: Jossey-Bass.

Mertens, D. M. (2005) *Research and evaluation in education and psychology: integrating diversity with quantitative, qualitative and mixed methods*. 2nd Ed. Thousand Oaks: Sage.

Mgaya, A. H, Massawe, S. N., Kidanto, H. L. and Mgaya, H. N. (2013) Grand multiparity: is it still a risk in pregnancy? *BMC Pregnancy and Childbirth*, Vol. 13: 241. https://doi.org/10.1186/1471-2393-13-241

Monro, S. (2005) *Gender politics: citizenship, activism and sexual diversity*. London: Ann Arbor. Accessed on 3 January 2020, available at www.jstor.org/stable/j.ctt183q5wt**.**

Morettini, M. (2016) Hegemonic masculinity: how the dominant man subjugates other men, women and society [online]. Accessed on 12 October 2020, available at https://www.globalpolicyjournal.com/blog/27/10/2016/hegemonic-masculinity-how-dominant-man-subjugates-other-men-women-and-society

Morrison, A., Polisena, J., Husereau, D., Moulton, K., Clark, M., Fiander, M., Mierzwinki-Urban, M., Clifford, T., Hubbon, B. and Rabb, D. (2012) The effect of English-language restriction on systematic review-based meta-analyses: a systematic review of empirical studies. *International Journal of Technological Assess Health Care*, Vol. 28 (**2**), pp. 138-44. doi: 10.1017/S0266462312000086

Moynihan. C. (1998) Theories of masculinity. *BMJ,* Vol. 317, pp. 1072 – 5.

Mwaikambo, L., Speizer, I. S., Schurmann, A., Morgan, G. and Fikree, I. S. (2011) What works in family planning interventions: a systematic review of the evidence. *Stud Fam Plann*., Vol. 42 (**2**): 67–82.

Myers, N. (2000) Qualitative research and the generalizability question: standing firm with Proteus. *The Qualitative Report*, Vol. 4 (**3**); available at http://nsuworks.nova.edu/tqr/vol4/iss3/9

Nanda, G., Schuler, S. R. and Lenzi, R. (2013) The influence of gender attitudes on contraceptive use in Tanzania: new evidence using husbands' and wives' survey data. *Journal of Biosocial Science*, Vol. 45 (**3**), pp. 331–344.

National Bureau of Statistics (2018) Demographic statistics bulletin. Abuja: NBS.

National Population Commission (NPC) and ICF International (2014) *Nigeria Demographic and Health Survey 2013*. Abuja: NPC and ICF Macro.

National Population Commission (NPC) and ICF International (2019) *Nigeria Demographic and Health Survey 2018*. Abuja: NPC and ICF Macro.

Nigeria Federal Ministry of Health (2014) Nigeria Family Planning Blueprint (Scale-Up Plan). Abuja: FMOH.

Nigeria Federal Ministry of Health (2018) Second national strategic health development plan 2018 – 2022: ensuring healthy lives and promoting the wellbeing of Nigerian populace at all ages. Abuja: FMOH.

Nolte, I., Danjibo, N. and Olajide, A. (2009) Religion, politics and governance in Nigeria [online]. Accessed on 10 January 2021, available at http://epapers.bham.ac.uk/1644/1/Nolte.pdf

Noyes, J. and Lewin S. (2011) Chapter 5: Extracting qualitative evidence. In: Noyes J, Booth A, Hannes K, Harden A, Harris J, Lewin S, Lockwood C (editors), *Supplementary Guidance for Inclusion of Qualitative Research in Cochrane Systematic Reviews of Interventions.* Version 1 (updated August 2011). Cochrane Collaboration Qualitative Methods Group, 2011. Available from URL http://cqrmg.cochrane.org/supplemental-handbook-guidance

Odumosu, O. and Simbine, A. T. (2011) Religious organizations, values and rivalry in Nigeria: exploring the implications for development and politics [online]. Accessed on 28 October 2020, available at

https://assets.publishing.service.gov.uk/media/57a08ae740f0b652dd00098e/working_paper_64___complete_for_web.pdf

Oginni, A. B., Ahonsi, B. A. and Adebajo, S. (2015) Trend and determinants of unmet need for family planning services among currently married women and sexually active unmarried women aged 15 – 49 years in Nigeria (2003 – 2013). *African Population Studies*, Vol. 29 (**1**), pp. 1483 – 99.

Okigbo, C. C., Speizer, I. S., Domino, M. E., Curtis, S. L., Halpern, C. T. and Fotso, J. C. (2018) Gender norms and modern contraceptive use in urban Nigeria: a multilevel longitudinal study. *BMC Women's Health*, Vol. 18:178, https://doi.org/10.1186/s12905-018-0664-3

Okwor, E. U. and Olaseha, I. O. (2010) Married men’s perception about spousal use of modern contraceptives: a qualitative study in Ibadan Northwest Local Government Area, Southwest Nigeria. *International Quarterly of Community Health Education*, Vol. 30 (**3**), pp. 223-238.

Orisaremi, T. C. and Alubo, O. (2012) Gender and the Reproductive Rights of Tarok Women in Central Nigeria. *African Journal of Reproductive Health*, Vol. 16 (**1**), pp. 83-96.

Orji, E. O., Ojofeitimi, E. O. and Olanrewaju, B. A. (2007) The role of men in family planning decision-making in rural and urban Nigeria. *The European Journal of Contraception and Reproductive Health Care*, Vol. 12 (1), pp. 70-75. DOI:10.1080/13625180600983108.

Osotimehin, B. (2012) Family planning saves lives, yet investments falter. *The Lancet*, vol. 380 (**98370**), pp. 82 – 83.

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N. and Hoagwood, K. (2013) Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Adm Policy Ment Health*, Vol. 42 (**5**); pp. 533 – 544.

Parpart, J. L., Connelly, M. P. and Barriteau, V. E. (2000) *Theoretical perspectives on gender and development.* Ottawa: International Development Research Centre.

Paths2 (2013) Where we work: Kano State [online]. Accessed on 2 September 2019, available at http://www.paths2.org/where-we-work/kano%20state

Petrie, A. and Sabin, C. (2005) *Medical statistics at a glance*. 2nd ed. Massachusetts: Blackwell publishing.

Petticrew, M. (2009) Systematic reviews in public health. *Bulletin of the World Health Organization* 2009;87:163-163. doi: 10.2471/BLT.09.063719

Pinter, B., Hakim, M., Seidman, D. S., Kubba. A., Kishen, M. and Di Carlo, C. (2016) Religion and family planning. *The European Journal of Contraception & Reproductive Health Care*, Vol. 21 (**6**); pp. 486-495, DOI: 10.1080/13625187.2016.1237631

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M. and Britten, N. (2006) *Narrative Synthesis in Systematic Reviews: A Product from the ESRC Methods Programme. ESRC Methods Programme*, [online]. Accessed on 20 March, 2019, available from: http://www.lancaster.ac.uk/shm/research/nssr/research/dissemination/publications.php.

Pope, C. and Mays, N. (2000) Quality in qualitative health research. in Pope, C. and Mays, N. (eds.) *Qualitative research in health care*. 2nd ed. London: BMJ.

Pope, C. and Mays, N. (2000) Qualitative methods in health research. in Pope, C. and Mays, N. (eds.) *Qualitative research in health care*. 2nd ed. London: BMJ.

Population Reference Bureau (2009) Family planning saves lives [online]. Accessed on 2 December 2020, available at https://www.prb.org/fpsl/

Population Reference Bureau (2012) Women's need for family planning in arab countries. Washington, DC: Population Reference Bureau.

Rabiu, A., Abubakar, I. S., Garba, I. and Haruna, I. U. (2016) Contraceptive choices among grand multiparous women at Murtala Mohammed Specialist Hospital, Kano. *Annals of African Medicine,* Vol. 15, (**2**), pg. 58 – 62.

Rajaretnam, T. and Deshpande, R. V. (1994) The effect of sex preference on contraceptive use and fertility in rural South India. International Family Planning Perspectives, Vol. 20 (**3**); pp. 88-95.

Rawnsley, M. M. (1998) Ontology, epistemology and methodology: a clarification. Theoretical Concerns, Vol. 11 (**1**), pp. 2 – 6.

Renne, E. P. (1996) Perceptions of population policy, development, and family planning programs in northern Nigeria. *Studies in Family Planning,* Vol. 27 (**3**), pp. 127-136.

Robertson, S. (2007) *Understanding men and health: masculinities, identity and well-being*. Berkshire: Open University Press.

Robertson, S. (2008) Theories of Masculinities and Men's Health-Seeking Practices [online]. Accessed on 18 February 2020, available at http://man-ni.org/resources/stevespeech.pdf

Rossi, P. (2016) Strategic choices in polygamous households: theory and evidence from Senegal [online]. Accessed on 17 May 2019, available at https://economics.stanford.edu/sites/g/files/sbiybj9386/f/pauline_rossi_2016_restud.pdf

Roudi-Fahimi, F. (2004) Islam and family planning. Washington, DC: Population Reference Bureau.

Roudi-Fahimi, F., May, J. F. and Lynch, A. C. (2016) Demographic trends in Muslim countries [online]. Accessed on 16 October 2020, available at http://www.prb.org/Publications/Articles/2013/demographics-muslims.aspx

Rubin, L. (2016) Social determinants of health. in Rubin, L., Merrick, J., Grydanus, D. E. and Patel, D. R. (2016) *Social determinants of health in Health Care for People with Intellectual and Developmental Disabilities Across the Lifespan*. Switzerland: Springer.

Rumsey, S. (2004) *How to find information: a guide for researchers*. Berkshire: Open University press.

Sacks, H.S., Berrier, J., Reitman, D., Pagano, D. and Chalmers, T.C. (1992) Meta-analyses of randomized control trials: an update of the quality and methodology. *in* Blair, J.C. and Mosteller, F. (eds.) *Medical uses of statistics*. 2nd ed. Massachusetts: NEJM Books, pp. 427-442.

Sahay, K. H. (2018) Couples' agreement on gender norms and modern contraceptive use in urban Nigeria. The Sciences and Engineering, 78(11-B)(E).

Saldana, J. (2011) *Fundamentals of qualitative research.* New York: Oxford University Press.

Saunders, B., Kitzinger, J. and Kitzinger, C. (2015) Anonymising interview data: challenges and compromise in practice. *Qualitative Research*, Vol. 15 (**5**); pp. 616 – 632.

Scargle, J.D. (2000) Publication bias: The "File-Drawer" problem in scientific inference. *Journal of Scientific Exploration,* Vol. 14 (**1**), pp. 91-106.

Schenker, J. G. and Rabenou, V. (1993) Family planning: cultural and religious perspectives. *Human Reprod,* Vol. 8 (**6**); pp. 969 – 76.

Seale, C. (1999) *The quality of qualitative research*. London: Sage.

Sedgh, G., Ashford, L. S. and Hussain, R. (2016) Unmet need for contraception in developing countries: examining women's reason for not using a method. New York: Guttmacher Institute.

Sen, G. and Ostlin, P. (2010) *Gender equity in health: the shifting frontiers of evidence and action.* New York: Routledge.

Shaikh, B. T., Azmat, S. K. and Mazhar, A. (2013) Family planning and contraception in Islamic countries: A Critical Review of the Literature. *Journal of Pakistan Medical Association*, Vol. 63 (**4**), suppl. 3; pp. 67 – 72.

Siegrist, J. and Marmot, M. (2006) *Social inequalities in health: new evidence and policy implications*. Oxford: University press.

Silverman, D. (2013) *Doing qualitative research*. 4th ed. London: Sage.

Smithson, J. (2000) Using and analysing focus groups: limitations and possibilities. Int J Social Research Methodology, 3 (2); pp. 103 – 119.

Speroff, L. and Darney, P. D. (2011) *A clinical guide for contraception*. 5th edition. Philadelphia: Lippincott.

Srikanthan, A. and Reid, R. L. (2008) Religious and cultural influences on contraception. *Journal of Obstetrics and Gynaecology Canada*, Vol. 30 (**2**); pp. 129 – 137.

Stephenson, R., Baschieri, A., Clements, S., Hennink, M. and Madise, N. (2007) Contextual influences on modern contraceptive use in Sub-Saharan Africa. *American Journal of Public Health*, Vol. 97 (**7**); pp. 1233 – 1240.

Streubert, H. J. and Carpenter, D. R. (1999) Qualitative research in nursing: Advancing the humanistic imperative. 2nd ed. Philadelphia: Lippincott.

Suen, L. J., Huang, H. M. and Lee, H. H. (2014) A comparison of convenience sampling and purposeful sampling. Hu Li Za Zhi, 16 (3); pp. 105 – 11. doi: 10.6224/JN.61.3.105.

Taylor, B., Kermode, S., and Roberts, K. (2007) *Research in Nursing and Health Care: Evidence for Practice.* 3rd ed. Sydney: Thomson.

Teherani, A., Mirtimianakis, T., Stenfors-Hayes, T., Wadhwa, A. and Varpio, L. (2015) Choosing a qualitative research approach. *Journal of Graduate Medical Education*, Vo. 7(**4**); pp. 669 – 670.

The World Bank (2020) Contraceptive prevalence, modern contraceptive methods (% of women ages 15 – 49) [online]. Accessed on 22 December 2020, available at Contraceptive prevalence, modern methods (% of women ages 15-49) | Data (worldbank.org)

Thomas, D. R. (2006) A general inductive approach for analyzing qualitative evaluation data [online]. Accessed on 10 July 2017, available at http://journals.sagepub.com/doi/abs/10.1177/1098214005283748?journalCode=ajec

Thompson, K. (2016) Liberal, Marxist and Radical Feminist Perspectives on Society: An Introduction [online]. Accessed on 30 December 2019, available at

https://revisesociology.com/2016/07/11/liberal-radical-marxist-feminist-perspectives-society-sociology/

Tong, R. (2001) Feminist theory. *International encyclopedia of the social and behavioural sciences*. 1st Ed. Orlando: Elsevier.

Tong, R. (2008) *Feminist thought: a more comprehensive introduction*. 3rd ed. North Carolina: Westview Press.

Tosh, J. (2011) The History of Masculinity: An Outdated Concept? in Arnold, J. and Brady, S. (eds.) *What is Masculinity? Historical Dynamics from Antiquity to the Contemporary World.* London: Palgrave Macmillan.

Ujuju, C., Anyanti, J., Adebayo, S. B., Muhammad, F., Oluigbo, O. and Gofwan, A. (2011) Religion, culture and male involvement in the use of the Standard Days Method: evidence from Enugu and Katsina states of Nigeria. *International Nursing Review*, Vol. 58, pp. 484–490.

UNFPA (2012) Reducing maternal mortality: the contribution of the right to the highest attainable standard of health. New York: UNFPA.

UNFPA (2013) UNFPA in Kano State: population projection [online]. Accessed on 2 September 2019, available at http://nigeria.unfpa.org/kano.html

UNFPA (2017) UNFPA Nigeria: Family planning. Accessed on 12 February 2019, available at https://nigeria.unfpa.org/en/node/6119

UNFPA (2019) Family planning [online]. Accessed on 15 May 2019, available at https://www.unfpa.org/family-planning

UNICEF (2017a) Nigeria: Maternal and child health [online]. Accessed on 29 October 2020, available at https://www.unicef.org/nigeria/children_1926.html

UNICEF (2017b) Maternal health: current status and progress [online]. Accessed on 29 October 2020, available at http://data.unicef.org/topic/maternal-health/maternal-mortality/

United Nations (2012). 2012 Update for the MDG Database: Contraceptive Prevalence [online]. Accessed on 12 June 2019, available at https://www.un.org/en/development/desa/population/publications/dataset/fertility/data/2012_Update_MDG(5.3)_CP.xls

United Nations (2015) Trends in contraceptive use worldwide2015 [online]. Accessed on 22 March, 2019, available at http://www.un.org/en/development/desa/population/publications/pdf/family/trendsContraceptiveUse2015Report.pdf

United Nations (2017) World family planning: 2017 highlights. New York: United Nations.

Unumeri, G., Ishaku, S., Ahonsi, B. and Oginni, A. (2015) Contraceptive use and its socio-economic determinants among women in north-east and north-west regions of Nigeria: a comparative analysis. *African Population Studies*, Vol. 29 (**2**), pp. 1851 – 1867.

Upadhyay, U. D. (2012) Women's Empowerment and ideal family size: An examination of DHS empowerment measures in Sub-Saharan Africa. *International Perspectives on Sexual and Reproductive Health,* Vol. 38 (**2**), pp. 78 – 89.

van Balen, F. and Bos, H. M. W. (2009) The social and cultural consequences of being childless in poor-resource settings. *Facts, Views and Vision in ObGyn*, Vol. 1 (2), pp. 106 – 121.

Walsh, M. and Wigens, L. (2003) *Introduction to research: Foundations in Nursing and health care.* Cheltenham: Nelson Thorns limited.

Weaver, K. and Olson, J. K. (2006) Understanding paradigms used for nursing research. *Journal of Advanced Nursing*, Vol. 53 (4), pp. 459 -469.

Wedgwood, N. (2009) Connell's theory of masculinity – its origins and influences on the study of gender. *Journal of Gender Studies*, Vol. 18 (4), pp. 329–339.

Wells, K. and Little, J. H. (2009) Study quality assessment in systematic reviews of research on intervention effects. *Research on Social Work Practice,* Vol. 19 (1): 52-62, doi: 10.1177/1049731508317278.

West, E. (2017) The pitfalls of radical feminism [online]. Accessed on 30 December 2019, available at https://jacobinmag.com/2017/07/radical-feminism-second-wave-class

Whitehead, S. M. (2002) *Men and masculinities: key themes and new directions*. Oxford: Blackwell Publishing.

Whittemore, R. and Knafl, K. (2005) The integrative review: update methodology. *Journal of Advanced Nursing,* Vol. 52; pp. 546 – 553.

WHO (2010a) A conceptual framework for action on the social determinants of health [online]. Accessed on 19 December 2019, available at https://www.who.int/sdhconference/resources/ConceptualframeworkforactiononSDH_eng.pdf

WHO (2010b) Social determinants of sexual and reproductive health: Informing future research and programme implementation. Geneva: WHO.

WHO (2011) Gender as a social determinant of health: gender analysis of the health sector in Cambodia [online]. Accessed on 19 December 2019, available at https://www.who.int/sdhconference/resources/draft_background_paper15_cambodia.pdf

WHO (2015) Maternal mortality in 1990 – 2015. Geneva: WHO.

WHO (2016) Family planning/contraception [online]. Accessed on 2 February 2019, available at http://www.who.int/mediacentre/factsheets/fs351/en/

WHO (2018a) World health statistics 2018: Monitoring health for the SDGs. Geneva: WHO.

WHO (2018b) Family planning/contraception [online]. Accessed on 15 May 2019, available at https://www.who.int/news-room/fact-sheets/detail/family-planning-contraception

WHO (2019a) Maternal mortality [online]. Accessed on 29 October 2020, available at https://www.who.int/news-room/fact-sheets/detail/maternal-mortality

WHO (2019b) Women and gender equity [online]. Accessed on 26 December 2019, available at

https://www.who.int/social_determinants/themes/womenandgender/en/

WHO (2020a) Social determinants of health [online]. Accessed on 2 December 2020, available at https://www.who.int/health-topics/social-determinants-of health#tab=tab_1

WHO (2020b) Maternal health in Nigeria: generating information for action [online]. Accessed on 9 September 2020, available at https://www.who.int/reproductivehealth/maternal-health-nigeria/en/

Williamson, L. M., Hart, G. J. and Petticrew, M. (2006) Young women and contraceptive use: a systematic review of qualitative research on uptake, choice and discontinuation. Glasgow: MRC.

Wingood, G. M. and DiClemente, R. J. (2000) Application of the theory of gender and power to examine HIV-related exposures, risk factors, and effective interventions for women. *Health Education and Behavior*, Vol. 27 (5): pp. 539-565.

Wingood, G. M. and DiClemente, R. J. (2002) The theory of gender and power: a social structural theory for guiding public health interventions. In: DiClemente, R. J., Crosby, R. A. and Kegler, M. C. (editors). *Emerging theories in health promotion practice and research: strategies for improving public health*. San Francisco, CA: Jossey-Bass; p. 313–45.

Wise, J. (2001) Pfizer accused of testing new drug without ethical approval. *BMJ*, Vol. 322, p. 194.

Wong, L. (2007) Summarizing research findings: systematic review and meta-analysis. *Malaysian family physician: the official journal of the Academy of Family Physicians of Malaysia*, Vol. 2 (1), pp. 8–12.

Wusu, O. (2015) Religious influence on non-use of modern contraceptives among women in Nigeria: comparative analysis of 1990 and 2008 NDHS. *Journal of Biosocial Science*, Vol. 47, pp. 593–612.

Yaye, S., Okonofua, F., Ntoimo, L., Udenigwe, O. and Bishwajit, G. (2019) Men's perception of barriers to women's use and access of skilled pregnancy care in rural Nigeria: a qualitative study. *Reproductive Health*, Vol. 16 (86), pp. 1 – 12.

Yeatman, S. E. and Trinitapoli, J. (2008) Beyond denomination: the relationship between religion and family planning in rural Malawi. Demogr Res, Vol. 19 (55), 1851 – 1882.

Yount, K. M., Langsten, R. and Hill, K. (2000) The effect of gender preference on contraceptive use and fertility in rural Egypt. Studies in Family Planning, Vol. 31 (4); pp. 290-300.

Zarabozo, J. A. (2017) Is family planning allowed in Islam? [online]. Accessed on 15 December 2020, available at https://www.missionislam.com/family/familyplanning.htm

Zureick-Brown, S., Newby, H., Chou, D., Mizoguchi, N., Say, L., Suzuki, E. and Wilmoth, J. (2013) Understanding global trends in maternal mortality. *Int Perpect Sex Reprod Health*, Vol. 39 (1); doi: 10.1363/3903213.

Appendix I: Sample search strategy

#	Database	Search term	Results
1	Medline	"FAMILY PLANNING SERVICES"/ OR CONTRACEPTION/	33636
2	Medline	(contraception OR "family planning").ti,ab	32095
3	Medline	(contracept* OR "family planning" OR "modern family planning").ti,ab	64470
4	Medline	(1 OR 2 OR 3)	80549
5	Medline	FEMININITY/ OR MASCULINITY/	1136
6	Medline	(gender OR masculinity OR feminity).ti,ab	264246
7	Medline	(gender OR masculinity OR feminity OR "gender role*").ti,ab	264246
8	Medline	(5 OR 6 OR 7)	264556
9	Medline	CULTURE/	30884
10	Medline	(culture OR cultur* OR "cultural practice*").ti,ab	1019214
11	Medline	(9 OR 10)	1036676
12	Medline	RELIGION/	13314
13	Medline	(religion OR religio*).ti,ab	29035
14	Medline	(12 OR 13)	37545
15	Medline	(4 AND 8 AND 11 AND 14)	29
16	Medline	15 [DT 1980-2018] [Human age groups Adolescent OR Young adult OR Adult OR Middle Aged] [Languages English]	16

#	Search	Results
S36	S31 AND S35	0
S35	S32 OR S33 OR S34	3
S34	TI Nigeria	0
S33	Nigeria	3
S32	(MH "Nigeria")	0
S31	S19 AND S30	2
S30	S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29	1,634
S29	TI religio*	108
S28	religio*	720
S27	(MH "Religion")	0
S26	TI cultur*	327
S25	cultur*	1,577
S24	(MH "Culture")	0
S23	TI female OR male OR masculinity OR femininity OR gender	123

S22	female OR male OR masculinity OR femininity OR gender	487
S21	(MH "Female")	0
S20	(MH "Male")	0
S19	S15 OR S16 OR S17 OR S18	8
S18	TI "family planning" OR contraceptive* OR contraception OR "birth control"	4
S17	"family planning" OR contraceptive* OR contraception OR "birth control"	11
S16	(MH "Contraception") OR (MH "Contraception Behavior")	1
S15	(MH "Family Planning Services")	0
S14	((S1 OR S3 OR S4 OR S5) AND (S1 AND S3 AND S4 AND S5)) AND nigeria	0
S13	((S1 OR S3 OR S4 OR S5) AND (S1 AND S3 AND S4 AND S5)) AND nigeria	0
S12	((S1 OR S3 OR S4 OR S5) AND (S1 AND S3 AND S4 AND S5)) AND nigeria	0
S11	((S1 OR S3 OR S4 OR S5) AND (S1 AND S3 AND S4 AND S5)) AND nigeria	0
S10	((S1 OR S3 OR S4 OR S5) AND (S1 AND S3 AND S4 AND S5)) AND nigeria OR west africa	16
S9	((S1 OR S3 OR S4 OR S5) AND (S1 AND S3 AND S4 AND S5)) AND nigeria	0
S8	((S1 OR S3 OR S4 OR S5) AND (S1 AND S3 AND S4 AND S5)) OR nigeria	3
S7	(S1 OR S3 OR S4 OR S5) AND (S1 AND S3 AND S4 AND S5)	0
S6	S1 OR S3 OR S4 OR S5	2,397
S5	religion OR religio*	720
S4	culture OR cultur*	1,577
S3	gender OR (masculinity or femininity) OR (male or female)	487
S2	(gender or gender*) OR (masculinity or femininity) OR (male or female)	507
S1	(family planning or contraceptives) OR contracept* AND birth control*	15

Appendix II: Data extracted from identified studies

ID	Reference	Title	Aim	Study setting/location	Design/Method	Sampling	Participants	Data analysis	Results/Findings	Conclusion/Recommendations
5	Gwarzo, 2011	Islamic Religious Leaders and Family Planning in Northern Nigeria: A Case Study of Zamfara, Sokoto and Niger States	To explore the views of Islamic scholars on position of Islam on family planning	Zamfara and Sokoto State, Northern West	Qualitative structured in-depth interviews	Snowball sampling	Islamic religious scholars	Thematic analysis	FP permissible for child spacing, birth control permissible only on medical grounds	Sensitization of Islamic scholars on reproductive health issues
14	Orisaremi and Alubo, 2012	Gender and the reproductive rights of Tarok women in Central Nigeria	To understand how unequal gender relations inhibit the attainment of women's reproductive rights	Plateau State, North Central	Qualitative in-depth interviews and FGDs	Purposive sampling	IDI - community, religious and opinion leaders; FGDs - males, females and youths	Thematic analysis	Wide abuse of women's right, desire for large family size, use of natural/traditional FP, denial access to modern FP by men	Attainment of women's right still a major challenge due to male dependence and lack of decision making power
16	Izugbara *et al.*, 2010	Gendered interest and poor spousal contraceptive	To understand the barriers to spousal contraceptive	Jigawa and Kano State, North West	Qualitative in-depth interviews and FGDs	Purposive sampling	Local NGO staffs, FP services providers ,	Thematic analysis	Poor sponsal contraceptive communication driven by ample incentives to	New norms of gender relations key to promoting contraceptive uptake and smaller families in northern Nigeria

		communication in Islamic northern Nigeria	communication				community leaders, lay men and women		keep having children	
19	Okwor and Olaseha, 2010	Married men's perception about spousal use of modern contraceptives: a qualitative study in Ibadan Northwest Local Government Area, Southwest Nigeria.	To assess the perception of married men in respect of spousal use of modern contraceptives	Oyo State, South West	Qualitative FGDs	Purposive sampling	Married men	Thematic analysis	Most men perceived FP as good but were opposed to women initiating discussion on FP or its use. Considered mark of disrespect if a woman adopts FP without consent	Joint decision making, truthfulness and trust could limit suspicion and fears about FP
22	Ujuju *et al.*, 2011	Religion, culture and male involvement in the use of the Standard Days Method: evidence from Enugu and Katsina	Exploratory study on the use of Standard Days Method (SDM) of FP	Enugu, South East and Katsina, North West	Qualitative FGDs and in-depth interviews	Purposive sampling	Nurses and community providers of SDM, lay men and women	Thematic analysis	Religion forbids use of modern contraceptives, but SDM acceptable; opposition to modern FP by male partners	SDM religiously and culturally acceptable; scale up to areas with high resistance to modern FP

		states of Nigeria.								
24	Aransiola, Akinyemi and Fatusi, 2014	Women's perceptions and reflections of male partners and couple dynamics in family planning adoption in selected urban slums in Nigeria: a qualitative exploration.	To examine local notions regarding male partner's involvement in FP adoption by women in urban slums	Oyo State, South West and Kaduna, North West	Qualitative FGDs	Purposive sampling	Lay men and women	Thematic analysis	Low male partner support for FP due to misconception and cultural reasons	Need to target men along side female partners in FP programmes
6	Kana *et al.*, 2016	Prevalence and determinants of contraceptive use in rural Northeastern Nigeria: Results of a mixed qualitative and	To assess prevalence and identify determinants of contraceptive use in a rural setting	Bauchi State, North East	Mixed method: cross-sectional survey and FGDs	Systematic sampling	Lay men and women, heads of health facilities and PPMVs	SPSS - mean, percentages, bivariate analysis; Thematic analysis for qualitative data	Regular availability of FP commodities, high FP awareness but low uptake due to lack of male partner support, stigma and	Spousal support is a key determinant of contraceptive use

		quantitative assessment							religious beliefs	
7	Akaba, Ketare and Tile, 2016	A community-based, mixed-methods study of the attitudes and behaviors of men regarding modern family planning in Nigeria.	To investigate the knowledge, attitude, and extent of involvement of men in FP and to evaluate spousal communication regarding FP	Abuja, North Central	Mixed method: cross-sectional survey, FGDs and in-depth interviews	Multistage sampling (quant) and purposive (qual)	Married men and women, religious and community leaders, and FP providers	SPSS - percentages and chi-square test; Thematic analysis	Men major decision makers regarding family size, use and choice of FP and pregnancy timing	Obtaining support of men and their commitment to FP is of crucial importance in Nigeria
1	Adefalu *et al.*, 2018	Awareness and opinions regarding contraception by women of reproductive age in North-West Nigeria	To examine the level of awareness, knowledge and perception of women of reproductive age regarding	Kebbi and Sokoto States, North West	Cross-sectional study	Systematic sampling	Women of reproductive age	SPSS - descriptive statistics and chi-square	High contraceptive awareness among married women (89%); 58% believe FP conflicts with their moral, cultural and	Improve knowledge on contraception

			contraception						religious beliefs	
2	Anozie *et al*., 2017	Barriers to family planning acceptance in Abakaliki, Nigeria	To know the reasons for low uptake of FP services and commodities in Abakaliki	Ebonyi State, South East	Quantitative cross-sectional survey	Simple random sampling	Women of reproductive age	Descriptive statistics	22.7% using FP method. Low uptake due to objection by husband, culture and religious opposition and fear of side effects	Focus on male involvement in the design and implementation of future programmes
8	Durowade *et al.*, 2017	Barriers to contraceptive uptake among women of reproductive age in a semi-urban community of Ekiti State, Southwest Nigeria	To unravel the barriers to the use of modern contraceptives among women of reproductive age in Ise-Ekiti community	Ekiti State, South West	Quantitative cross-sectional survey	Multistage sampling	Women of reproductive age	SPSS - descriptive statistics and chi-square	51% using contraceptive. Reason for non-use: objection by husband, desire for more children, culture and religious opposition and fear of side effects	Improve uptake using community-based culturally acceptable interventions

9	Rabiu *et al*., 2016	Contraceptive choices among grand multiparous women at Murtala Mohammed Specialist Hospital, Kano	To explore the contraceptive choices among grand multiparous women attending antenatal clinic	Kano State, North West	Quantitative cross-sectional survey	Simple random sampling	Grand multiparous pregnant women	SPSS - descriptive statistics and chi-square	95.5% awareness of modern FP but only 42% usage. Reasons for non-use: objection by husband, desire for more children and fear of side effects	Health education directed at couples rather than women only.
10	Okigbo *et al*., 2018	Gender norms and modern contraceptive use in urban Nigeria: a multilevel longitudinal study	To examine the association between changes in gender norms and modern contraceptive use over time among women in urban Nigeria	Abuja and Ilorin (North Central); Benin (South South), Ibadan (South West), Kaduna and Zaria (North West)	Multilevel longitudinal study	Multistage sampling	Women of reproductive age	Descriptive and multilevel multinomial logistic regression	Increased FP uptake from 21-32% due to positive change in gender-equitable attitudes towards couple's FP decision making	Interventions that promote gender equality have potential to increased modern FP use.
11	Chigbu *et al*., 2013	Denial of women's rights to contraception in southeastern Nigeria.	To evaluate women's experiences and opinions regarding contraceptive rights	Ebonyi State, South East	Quantitative cross-sectional survey	Simple random sampling	Women of reproductive age	SPSS - descriptive statistics and chi-square	Denial of access to FP by partners accounted for 2/3rd of unplanned pregnancies. Formal education did	Denial of women's contraceptive rights due to culture of male dominance

									not influence exercise of reproductive rights	
12	Balogun *et al.*, 2016	Effect of Male Partner's Support on Spousal Modern Contraception in a Low Resource Setting	To evaluate the effect of male partner's support on spousal modern contraceptive use	Kwara State, North Central	Quantitative cross-sectional survey	Purposive sampling	Women of reproductive age	SPSS - descriptive statistics, chi-square and logistic regression	Male partners objection contributed significantly to low uptake (46%) and FP discontinuation (23%) among users	Male partner hinderance and cost of contraceptive or transport are major causes of low FP uptake
13	Etokidem *et al.*, 2017	Family Planning Practices of Rural Community Dwellers in Cross River State, Nigeria	To determine the knowledge of FP and FP preferences and practices of rural community women	Cross River, South South	Quantitative cross-sectional survey	Convenience sampling	Women of reproductive age	SPSS - descriptive statistics, chi-square and binary logistic regression	Only 17% using FP. Religion, culture and male partner objection cited as reason for non-use of FP	Promote joint decision making about FP

15	Bukar *et al*., 2013	Gender attitude to the empowerment of women: An independent right to contraceptive acceptance, choice and practice.	To identify individual attitude towards the empowerment of women to an independent right to accept, choose and utilize a contraceptive method of their choice without recourse to their male partners	Gombe State, North East	Quantitative cross-sectional survey	Convenience sampling	Lay men and women	Descriptive statistics	85% of men and 64% of women rejected women's right to independent contraceptive acceptance, choice and practice. 73% of women felt men should influence contraceptive acceptance by women, despite 88% being educated	Men still exert profound influence on contraceptive acceptance and choice
17	Ezeanolue *et al*., 2015	Impact of male partner’s awareness and support for contraceptives on female intent to use contraceptives in southeast Nigeria	To assess male partner’s awareness and support for contraceptives on female intent to use contraceptives	Enugu, South East	Quantitative cross-sectional survey	Purposive sampling	Men and pregnant female partners	Chi-square and logistic regression model	Over 2/3rd of men who were aware of modern FP supported their spouses to use them if they express desire to do so.	Need for men's involvement in FP programmes to increase uptake

18	Ijadunola *et al.*, 2010	Male involvement in family planning decision making in Ile-Ife, Osun Statee, Nigeria	To determine the extent of male involvement in FP decision making among couples	Osun State, South West	Quantitative cross-sectional survey	Multistage sampling	Men and FP service providers	SPSS - descriptive statistics and multiple logistic regression	89% of men approved of spousal FP use but 65% will not attend the clinic with partners. Poor spousal contraceptive communication and religion barriers to FP	Poor male involvement in FP decision making and patronage of FP services
20	Audu *et al.*, 2008	Polygamy and the use of contraceptives	To compare contraceptive use among women in monogamous and polygamous marriages	Borno State, North East	Quantitative cross-sectional survey	Convenience sampling	Married women	Descriptive statistics and chi-square	74% of women in monogamy and 65% of those in polygamy had never used contraception largely for cultural reasons.	Polygamy influences contraceptive use
21	Fakeye and Babaniyi, 1989	Reasons for non-use of family planning methods at Borin, Nigeria: male opposition and fear of methods.	To explore reasons for non-use of FP by non-pregnant women of reproductive age	Kwara State, North Central	Quantitative cross-sectional survey	Stratified cluster sampling	Women of reproductive age	Descriptive statistics	Male partners objection, fear of side effects, desire for more children, religion cited as reasons for non-use of FP	Develop strategies to improve awareness and combat low FP use

23	Orji, Ojofeitimi and Olanrewaju, 2007	The role of men in family planning decision-making in rural and urban Nigeria.	To determine role of men in FP decision-making in both rural and urban areas of Nigeria	Osun State, South West	Quantitative cross-sectional survey	Systematic sampling	Lay men	Descriptive statistics and chi-square	High level of FP awareness but disapprove due to cultural and religious reasons and concerns about promiscuity; believe in joint decision by spouses regarding FP	Decision about FP should be done jointly by men and women

Appendix III: Quality assessment criteria for qualitative research studies (adapted from McMaster University critical review form)

Study purpose	• A clear statement of the purpose and/or research question
Background	• Is there a comprehensive review of the relevant background literature, with sufficient justification of the need for the study? • How does the study apply to practice and/or to the research question for the review?
Context	• Is the context/setting of the research adequately described to understand the "whole" picture? • Are the circumstances under which the research was carried out reported? • Is there anything missing? How does that influence understanding of the research?
Study design	• Is there clear description of the study design? • Is the selected design appropriate for the study question?
Theoretical perspective	• Is there a clear description of the theoretical or philosophical perspective for the study?
Sampling	• Is there a clear description of sampling method(s) used? • Is the the sampling method appropriate to the study purpose or research question • Was sampling done until redundancy in data was reached? • Are the participants described in adequate detail?

	• Is the sample applicable to practice or research question for the study being carried out? Is it worth continuing?
Data collection method	• Is the method congruent with the philosophical underpinnings and purpose? • Was informed consent obtained?
Procedural rigour	• Was procedural rigour used in data collection strategies?
Data analysis	• Is there a clear description of the data analysis method and process? (should include description of how, and by whom, the analysis was conducted, with audit trail documented) • Where the findings consistent with and reflective of the data? • How were concepts under study clarified and refined, and relationships made clear?
Overall rigour	• Was there evidence that the four components of trustworthiness have been addressed?
Conclusions and Implications	• What did the study conclude? • What were the implications of the findings for practice and research? • What were the main limitations in the study?

Quality assessment criteria for quantitative research studies (adapted from McMaster University critical review form)

Study purpose	• A clear statement of the purpose and/or research question
Background	• Is there a comprehensive review of the relevant background literature, with sufficient justification of the need for the study?

	• How does the study apply to practice and/or to the research question for the review?
Context	• Is the context/setting of the research adequately described to understand the “whole” picture? • Are the circumstances under which the research was carried out reported? • Is there anything missing? How does that influence understanding of the research?
Study design	• Is there clear description of the study design? • Is the selected design appropriate for the study question?
Sampling	• Is there a clear description of sampling method(s) used? • Is the sample described in detail? • Is the sample size justified? • Was informed consent obtained?
Outcomes	• Are the outcome measures reliable and valid?
Intervention	• Was the intervention described in detail? • Were contamination and cointervention avoided?
Results	• Were the results reported in terms of statistical significance? • Were the analysis methods appropriate? • Were dropouts and reason for doing so reported?
Conclusion and Implications	• What did the study conclude? • Were the conclusions appropriate given the study methods and results? • What were the implications of the findings for practice and research?

- What were the main limitations and biases in the study?

Appendix IV: Quality assessment of included studies

Qualitative Studies								
S/N	Reference	Title	Relevance	Credibility	Transferability	Dependability	Confirmability	Overall rating
1	Gwarzo, 2011	Islamic Religious Leaders and Family Planning in Northern Nigeria: A Case Study of Zamfara, Sokoto and Niger States	3	2	3	2	2	2
2	Orisaremi and Alubo, 2012	Gender and the reproductive rights of Tarok women in Central Nigeria	3	3	3	3	2	3
3	Izugbara *et al*., 2010	Gendered interest and poor spousal contraceptive communication in Islamic northern Nigeria	3	3	2	3	2	3
4	Okwor and Olaseha, 2010	Married men's perception about spousal use of modern contraceptives: a qualitative study in Ibadan Northwest Local Government Area, Southwest Nigeria.	3	1	2	1	1	1
5	Ujuju *et al*., 2011	Religion, culture and male involvement in the use of the Standard Days Method: evidence from Enugu and Katsina states of Nigeria.	1	2	2	1	1	1
6	Aransiola, Akinyemi and Fatusi, 2014	Women's perceptions and reflections of male partners and couple dynamics in family planning adoption in selected urban slums in Nigeria: a qualitative exploration.	3	2	2	3	3	3

7	Kana *et al.*, 2016	Prevalence and determinants of contraceptive use in rural Northeastern Nigeria: Results of a mixed qualitative and quantitative assessment	3	2	3	3	2	3
8	Akaba, Ketare and Tile, 2016	A community-based, mixed-methods study of the attitudes and behaviors of men regarding modern family planning in Nigeria.	2	2	1	1	2	2

Quantitative Studies								
S/N	Reference	Title	Relevance	Internal Validity	External Validity or generalisibility	Reliability	Objectivity	Overall rating
9	Adefalu *et al.*, 2018	Awareness and opinions regarding contraception by women of reproductive age in North-West Nigeria	2	2	2	2	2	2
10	Anozie *et al.*, 2017	Barriers to family planning acceptance in Abakaliki, Nigeria	2	1	1	1	1	1
11	Durowade *et al.*, 2017	Barriers to contraceptive uptake among women of reproductive age in a semi-urban community of Ekiti State, Southwest Nigeria	2	2	2	1	2	2
12	Rabiu *et al.*, 2016	Contraceptive choices among grand multiparous women at Murtala Mohammed Specialist Hospital, Kano	1	1	1	1	1	1
13	Okigbo *et al.*, 2018	Gender norms and modern contraceptive use in urban Nigeria: a multilevel longitudinal study	3	3	3	3	2	3
14	Chigbu *et al.*, 2013	Denial of women's rights to contraception in southeastern Nigeria.	2	2	2	2	1	2

15	Balogun *et al.*, 2016	Effect of Male Partner's Support on Spousal Modern Contraception in a Low Resource Setting	2	1	1	1	1	1
16	Etokidem *et al.*, 2017	Family Planning Practices of Rural Community Dwellers in Cross River State, Nigeria	2	2	2	2	2	2
17	Bukar *et al.*, 2013	Gender attitude to the empowerment of women: An independent right to contraceptive acceptance, choice and practice.	3	2	2	2	2	2
18	Ezeanolue *et al.*, 2015	Impact of male partner's awareness and support for contraceptives on female intent to use contraceptives in southeast Nigeria	3	3	2	3	3	3
19	Ijadunola *et al.*, 2010	Male involvement in family planning decision making in Ile-Ife, Osun Statee, Nigeria	3	2	1	2	2	2
20	Audu *et al.*, 2008	Polygamy and the use of contraceptives	2	1	1	1	1	1
21	Fakeye and Babaniyi, 1989	Reasons for non-use of family planning methods at Borin, Nigeria: male opposition and fear of methods.	2	2	1	2	2	2
22	Orji, Ojofeitimi and Olanrewaju, 2007	The role of men in family planning decision-making in rural and urban Nigeria.	3	2	2	2	2	2

Appendix V: Flyers for Recruitment of Study Participants

Participate in a research study on utilization of family planning services in Northern Nigeria

We are seeking participants to contribute to a research on family planning by sharing their beliefs and perceptions about family planning to obtain information that will improve our understanding of how gender roles, cultural practices and religious beliefs affect utilization of modern FP services in northern Nigeria. The study will be conducted in Kano State from June to December 2018.

Who can participate?

Men and women over the age of 18 years who either currently using or not using family planning services are invited to participate.

What to expect?

Information from study participants will be collected through focus group discussions with groups of 6-8 people with similar background and experiences and through individual interviews that will last for approximately 1 hour each.

Participation is voluntary and you can withdraw from the study either before, during or up to 2 weeks after the study, if you change your mind.

Interested?

If you are eligible and interested in hearing more about the study or might wish to take part, please call +2348062289132 or send an e-mail to n.bashir@lancaster.ac.uk.

Appendix VI: Expression of Interest Form

Study Title: Beyond the health care setting: exploring the intersections of gender, culture and religion and their influence on utilization of family planning services in Northern Nigeria

We are conducting a study in Kano State that is aimed at exploring the beliefs and perception of men and women of reproductive age about family planning in order to improve our understanding of how gender roles, cultural practices and religious beliefs affect utilization of modern FP services in northern Nigeria. Information from study participants will be collected through focus group discussions with groups of 6-8 people with similar background and experiences and through individual interviews. These will be conducted between June and December 2018 and are expected to last for approximately 1 hour each.

If you are interested in hearing more about the study and whether you might wish to take part in the study, please contact:

Dr Nasir Muhammad Bashir

Division of Health Research,

Faculty of Health and Medicine, Furness College,

Lancaster University, LA1 4YG

E-mail: n.bashir@lancaster.ac.uk ,

Telephone: +2348062289132

Alternatively, please fill in your details in the form below and a member of the study team will contact you. The information collected on this form will remain confidential and will only be used to set up the focus groups and interviews. Please note that completing this form does not confirm your place, we will contact you with further information regarding participation.

Name:____

Address:____

____

Telephone:____

Email:____

I would prefer to be contacted by: Telephone ☐ E-mail ☐

I am interested in hearing more about your study and I am happy for you to contact me.

Appendix VII: Participant Information Sheet for Male Participants

Study Title: Beyond the health care setting: exploring the intersections of gender, culture and religion and their influence on utilization of family planning services in Northern Nigeria

My name is Dr Nasir Muhammad Bashir and I am conducting this research as a student in PhD Public Health programme at Lancaster University, Lancaster, United Kingdom.

What is the study about?

The purpose of this study is to explore the beliefs and perception of men and women of reproductive age about family planning and to improve our understanding of how gender roles, cultural practices and religious beliefs affect utilization of modern family planning services in northern Nigeria. The findings from the study will contribute towards the design and implementation of programmes aimed at improving access to and utilization of family planning services in Nigeria.

Why have I been approached?

You have been approached because the study requires information from men who may influence decision making regarding utilization of health care services to explore beliefs and perceptions about family planning.

Do I have to take part?

No. It's completely up to you to decide whether to take part or not in this study without giving any reason for your decision. Not taking part will neither affect your care nor your rights to receive care.

What will I be asked to do if I take part?

If you decide you would like to take part, you would be asked to participate in a focused group discussion that will last for about 1 hour. You may also be invited to take part in an interview that will last for about 45 minutes to 1 hour. Both the group discussion and interview will be audio recorded. Everyone will be invited to an end of project workshop to share and discuss the findings from the study with key stakeholders. It is entirely up to you to accept or decline the invitation.

Will my data be Identifiable?

The information you provide during the group discussions and interview is confidential. Data obtained will be anonymized and only summary, pooled data with no participant identifiable information will be made available for dissemination and publication. Even where direct quotes are used, anonymity will be maintained to ensure confidentiality.

The data collected for this study will be stored securely and only the researchers conducting this study will have access to this data:

- Audio recordings will be destroyed and/or deleted from the recorder once they have been securely transferred into a password protected computer.
- Hard copies of consent forms and other documents containing participants' identifiable information will be kept in a locked cabinet until the project has been submitted for publication/examined. At the end of this period, they will be destroyed after they are scanned and saved in a password protected computer.

- All the electronic files related to the study (audio recordings and scanned documents) will be encrypted (that is no-one other than the researcher will be able to access them) and stored in a password protected computer up till the end of the study, after which they will be stored anonymously for 10 years on a secure computer network in United Kingdom.
- The typed version of your interview will be made anonymous by removing any identifying information including your name. Anonymised direct quotations from your interview may be used in the reports/publications from the study, so your name will not be attached to them.
- All your personal data will be confidential and will be kept separately from your interview responses.

There are some limits to confidentiality: if what is said in the interview makes me think that you, or someone else, are at significant risk of harm, either through maltreatment, verbal and physical abuse in health care settings, coercion in choice of FP methods and poor infection prevention practices by health care providers in the FP clinics, I will have to break confidentiality through discussion and written communication with my research supervisors first to determine the most appropriate course of action, and where it is collectively agreed it is appropriate, the information will be shared with the Public Health Directorate of the Kano State Ministry of Health for further action. However, issues relating to domestic abuse will not be flagged up through this study as there are other culturally and legally acceptable platforms in the community.

What will happen to the results?

The results will be summarised and reported in a dissertation/thesis and may be submitted for publication in an academic or professional journal. The results will also be disseminated through conferences, seminars and health facility based group health education forums.

Are there any risks?

There are no risks anticipated with participating in this study. However, if you experience any distress following participation you are encouraged to inform the researcher and contact the resources provided at the end of this sheet.

Are there any benefits to taking part?

Although you may find participating interesting, there are no direct benefits in taking part.

Who has reviewed the project?

This study has been reviewed and approved by the Faculty of Health and Medicine Research Ethics Committee at Lancaster University, UK.

Where can I obtain further information about the study if I need it?

If you have any questions about the study, please contact the main researcher and supervisors:

Dr Nasir Muhammad Bashir

Division of Health Research,

Faculty of Health and Medicine, Furness College,

Lancaster University, LA1 4YG

E-mail: n.bashir@lancaster.ac.uk

Telephone: +2348062289132

Dr Mark Limmer,

Division of Health Research,

Faculty of Health and Medicine, Furness College,

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E-mail: m.limmer@lancaster.ac.uk

Telephone: + 44 (0)1524 593 015

Dr Amanda Bingley

Division of Health Research,

Faculty of Health and Medicine, Furness College,

Lancaster University, LA1 4YG.

E-mail: a.bingley@lancaster.ac.uk

Telephone: + 44 (0)1524 593 015

Complaints

If you wish to make a complaint or raise concerns about any aspect of this study and do not want to speak to the researcher, you can contact:

Professor Jennie Popay,
Director of Public Health and Health Equity Research,
Division of Health Research,
Faculty of Health and Medicine, Furness College,

Lancaster University,

Lancaster, LA1 4YG.

Email: j.popay@lancaster.ac.uk
Telephone: +44 (0)1524 592493

If you wish to speak to someone outside of the Lancaster University Public Health Doctorate Programme, you may also contact:

Professor Roger Pickup
Associate Dean for Research
Division of Biomedical and Life Sciences
Faculty of Health and Medicine, Lancaster University
Lancaster, LA1 4YG.
Email: r.pickup@lancaster.ac.uk
Telephone: +44 (0)1524 593746

Dr Tijjani Hussaini
Director of Public Health and Disease Control,

Department of Public Health and Disease Control,
Kano State Ministry of Health,
Post Office Road,
Kano State, Nigeria

Email: tjhussaini@gmail.com

Telephone: +2347038696060

Thank you for taking the time to read this information sheet.

Resources in the event of distress

Should you feel distressed either as a result of taking part, or in the future, referral will be made to community based organizations (CBOs) supporting reproductive health programmes that have facilities for confidential counselling services or to trained family planning counsellors at the primary health centre within your Local Government Area for support where it is considered appropriate.

Appendix VIII: Participant Information Sheet for Female Participants

Study Title: Beyond the health care setting: exploring the intersections of gender, culture and religion and their influence on utilization of family planning services in Northern Nigeria

My name is Dr Nasir Muhammad Bashir and I am conducting this research as a student in PhD Public Health programme at Lancaster University, Lancaster, United Kingdom.

What is the study about?

The purpose of this study is to explore the beliefs and perception of men and women of reproductive age about family planning and to improve our understanding of how gender roles, cultural practices and religious beliefs affect utilization of modern FP services in northern Nigeria. The findings from the study will contribute towards the design and implementation of programmes aimed at improving access to and utilization of family planning services in Nigeria.

Why have I been approached?

You have been approached because the study requires information from both current female users and non-users of family planning services to explore beliefs and perceptions about family planning.

Do I have to take part?

No. It's completely up to you to decide whether to take part or not in this study without giving any reason for your decision. Not taking part will neither affect your care nor your rights to receive care.

What will I be asked to do if I take part?

If you decide you would like to take part, you would be asked to participate in a focused group discussion that will last for about 1 hour. You may also be invited to take part in an interview that will last for about 45 minutes to 1 hour. Both the group discussion and interview will be audio recorded. Everyone will be invited to an end of project workshop to share and discuss the findings from the study with key stakeholders. It is entirely up to you to accept or decline the invitation.

Will my data be Identifiable?

The information you provide during the group discussions and interview is confidential. Data obtained will be anonymized and only summary, pooled data with no participant identifiable information will be made available for dissemination and publication. Even where direct quotes are used, anonymity will be maintained to ensure confidentiality.

The data collected for this study will be stored securely and only the researchers conducting this study will have access to this data:

- Audio recordings will be destroyed and/or deleted from the recorder once they have been securely transferred into a password protected computer.
- Hard copies of consent forms and other documents containing participants' identifiable information will be kept in a locked cabinet until the project has been submitted for publication/examined. At the end of this period, they will be destroyed after they are scanned and saved in a password protected computer.
- All the electronic files related to the study (audio recordings and scanned documents) will be encrypted (that is no-one other than the researcher will be able to access them)

and stored in a password protected computer up till the end of the study, after which they will be stored anonymously for 10 years on a secure computer network in United Kingdom.

- The typed version of your interview will be made anonymous by removing any identifying information including your name. Anonymised direct quotations from your interview may be used in the reports/publications from the study, so your name will not be attached to them.
- All your personal data will be confidential and will be kept separately from your interview responses.

There are some limits to confidentiality: if what is said in the interview makes me think that you, or someone else, are at significant risk of harm, either through maltreatment, verbal and physical abuse in health care settings, coercion in choice of FP methods and poor infection prevention practices by health care providers in the FP clinics, I will have to break confidentiality through discussion and written communication with my research supervisors first to determine the most appropriate course of action, and where it is collectively agreed it is appropriate, the information will be shared with the Public Health Directorate of the Kano State Ministry of Health for further action. However, issues relating to domestic abuse will not be flagged up through this study as there are other culturally and legally acceptable platforms in the community.

What will happen to the results?

The results will be summarised and reported in a dissertation/thesis and may be submitted for publication in an academic or professional journal. The results will also be disseminated through conferences, seminars and health facility based group health education forums.

Are there any risks?

There are no risks anticipated with participating in this study. However, if you experience any distress following participation you are encouraged to inform the researcher and contact the resources provided at the end of this sheet.

Are there any benefits to taking part?

Although you may find participating interesting, there are no direct benefits in taking part.

Who has reviewed the project?

This study has been reviewed and approved by the Faculty of Health and Medicine Research Ethics Committee at Lancaster University, UK.

Where can I obtain further information about the study if I need it?

If you have any questions about the study, please contact the head of the family planning unit of the health facility in your community where the study will take place, who will make contact with the researcher. You can also contact the main researcher and supervisors, whose contact details are given below, if you prefer to do so:

Dr Nasir Muhammad Bashir

Division of Health Research,

Faculty of Health and Medicine, Furness College,

Lancaster University, LA1 4YG

E-mail: n.bashir@lancaster.ac.uk

Telephone: +2348062289132

Dr Mark Limmer,

Division of Health Research,

Faculty of Health and Medicine, Furness College,

Lancaster University, LA1 4YG

E-mail: m.limmer@lancaster.ac.uk

Telephone: + 44 (0)1524 593 015

Dr Amanda Bingley

Division of Health Research,

Faculty of Health and Medicine, Furness College,

Lancaster University, LA1 4YG.

E-mail: a.bingley@lancaster.ac.uk

Telephone: + 44 (0)1524 593 015

Complaints
If you wish to make a complaint or raise concerns about any aspect of this study and do not

want to speak to the head of the family planning unit of the health facility in your community

or the researcher, you can contact:

Professor Jennie Popay,
Director of Public Health and Health Equity Research,
Division of Health Research,
Faculty of Health and Medicine, Furness College,

Lancaster University,

Lancaster, LA1 4YG.

Email: j.popay@lancaster.ac.uk
Telephone: +44 (0)1524 592493

If you wish to speak to someone outside of the Lancaster University Public Health Doctorate Programme, you may also contact:

Professor Roger Pickup
Associate Dean for Research
Division of Biomedical and Life Sciences
Faculty of Health and Medicine, Lancaster University
Lancaster, LA1 4YG.
Email: r.pickup@lancaster.ac.uk
Telephone: +44 (0)1524 593746

Dr Tijjani Hussaini
Director of Public Health and Disease Control,

Department of Public Health and Disease Control,
Kano State Ministry of Health,
Post Office Road,
Kano State, Nigeria

Email: tjhussaini@gmail.com

Telephone: +2347038696060

Thank you for taking the time to read this information sheet.

Resources in the event of distress

Should you feel distressed either as a result of taking part, or in the future, referral will be made to trained family planning counsellors at the primary health centre within your Local Government Area for support where it is considered appropriate.

Appendix IX: Consent Form

Study Title: Beyond the health care setting: exploring the intersections of gender, culture and religion and their influence on utilization of family planning services in Northern Nigeria

We are asking if you would like to take part in a research project aimed at exploring the beliefs and perception of men and women of reproductive age about family planning in order to improve our understanding of how gender roles, cultural practices and religious beliefs affect utilization of modern FP services in northern Nigeria. Before you consent to participating in the study we ask that you read the participant information sheet and mark each box below with your initials if you agree. If you have any questions or queries before signing the consent form please speak to the principal investigator, Dr Nasir Muhammad Bashir.

Please initial each statement

1	I confirm that I have read the information sheet and fully understand what is expected of me within this study	
2	I confirm that I have had the opportunity to ask any questions and to have them answered.	
3	I understand that information I share through group discussion/interview will be audio recorded and then made into an anonymised written transcript.	
4	I understand that audio recordings will be kept until the research project has been examined.	
5	I understand that my participation is voluntary and that I am free to withdraw at any time before, during and up to 2 weeks after data collection without giving any reason, without my medical care or legal rights being affected.	
6	I understand that once my data have been anonymised and incorporated into themes it might not be possible for it to be withdrawn, though every attempt will be made to extract my data, up to the point of publication.	
7	I understand that the information from the group discussion and interview will be pooled with other participants' responses, anonymized and may be published.	

8	I consent to information and quotations from the group discussion and interview being used in reports, conferences and training events.	
9	I understand that the researcher will discuss data with their supervisor as needed.	
10	I understand that any information I give will remain confidential and anonymous unless it is thought that there is a risk of harm to myself or others, in which case the principal investigator will need to share this information with their research supervisor.	
11	I consent to Lancaster University keeping written transcriptions of the group discussion and interview for 10 years after the study has finished.	
12	I consent to take part in the above study.	

Name of Participant______________________ Signature______________ Date _____________

Name of Researcher _____________________ Signature _____________Date ______________

Appendix X: Focus Group Discussion Guide

Female Users of Family Planning

1. What do people in your community say or feel about using family planning services?

Explore perceptions, beliefs and attitudes

2. What are your own views about family planning? *Explore perceptions, beliefs and attitudes*

3. In your community, who makes decisions in the family about family planning? How are these

decisions made?

In your opinion, who should take the responsibility for the use of family planning methods in the

family?

4. How do women obtain information about family planning?

5. From where do women obtain family planning services?

In your opinion, how are family planning methods selected?

What in your opinion are the reasons that influence a woman's choice of family planning method?

6. Based on your experience, what methods do women use when they want to wait before having another child? What do they use when they don't want to have another child?

7. What are your beliefs and perceptions about these methods of family planning?

8. What is your experience with use of family planning services?

How did you make the decision to use family planning services?

What influences your decision to use family planning services?

9. In your opinion, what are some of the reasons why a woman might not want to use any modern

method of family planning?

10. What in your opinion does the religion you practice recommend about family planning?

Explore perception and understanding of their religious beliefs regarding reversible and permanent methods of family planning

11. In your opinion, in what ways do gender roles and expectations affect utilization of family planning services?

12. In your opinion, how does your culture influence utilization of family planning services?

13. Based on your experience, what other factors influence use of modern family planning methods?

14. What ways will you suggest for improving utilization of family planning services in northern Nigeria?

Female Non-users of Family Planning

1. What do people in your community say or feel about using family planning services?

Explore perceptions, beliefs and attitudes

2. What are your own views about family planning? *Explore perceptions, beliefs and attitudes*

3. In your community, who makes decisions in the family about family planning? How are these decisions made?

In your opinion, who should take the responsibility for the use of family planning methods in the family?

4. How do women obtain information about family planning?

5. From where do women obtain family planning services?

In your opinion, how are family planning methods selected?

What in your opinion are the reasons that influence a woman's choice of family planning method?

6. Based on your experience, what methods do women use when they want to wait before having another child? What do they use when they don't want to have another child?

7. What are your beliefs and perceptions about these methods of family planning?

8. What is your experience, if any, with use of family planning services?

How did you make the decision to not use family planning services?

What influenced your decision not to use family planning services?

9. In your opinion, what are some of the reasons why a woman might not want to use any modern

method of family planning?

10. What in your opinion does the religion you practice recommend about family planning?

Explore perception and understanding of their religious beliefs regarding reversible and permanent methods of family planning

11. In your opinion, in what ways do gender roles and expectations affect utilization of family planning services?

12. In your opinion, how does your culture influence utilization of family planning services?

13. Based on your experience, what other factors influence use of modern family planning methods?

14. What ways will you suggest for improving utilization of family planning services in northern Nigeria?

Men's Group

1. What do people in your community say or feel about using family planning services?

Explore perceptions, beliefs and attitudes

2. What are your own views about family planning? *Explore perceptions, beliefs and attitudes*

3. In your community, who makes decisions in the family about family planning? How are these

decisions made?

In your opinion, who should take the responsibility for the use of family planning methods in the

family?

4. How do you obtain information about family planning?

5. From where do you obtain family planning services?

In your opinion, how are family planning methods selected?

What in your opinion, what are the reasons that influence choice of family planning method?

6. Based on your experience, what methods do women use when they want to wait before having

another child? What do they use when they don't want to have another child?

7. What are your beliefs and perceptions about these methods of family planning?

8. What is your experience with use of family planning services?

What would influence your decision to recommend family planning to your wife, family member or friend?

What are some of the reasons why you would not recommend use of modern method of family planning?

If your wife wants to use family modern planning methods how would you react?

9. In your opinion, what are some of the reasons why a woman might not want to use any modern method of family planning?

10. What in your opinion does the religion you practice recommend about family planning?

Explore perception and understanding of their religious beliefs regarding reversible and permanent methods of family planning

11. In your opinion, in what ways do gender roles and expectations affect utilization of family planning services?

12. In your opinion, how does your culture influence utilization of family planning services?

13. Based on your experience, what other factors influence use of modern family planning methods?

14. What role, if any, do community and religious leaders play in increasing utilization of family planning?

What sort of messages about family planning, if any, do they disseminate during community gatherings/meetings?

15. What ways, if any, will you suggest for improving utilization of family planning services in northern Nigeria?

Appendix XI: Interview Discussion Guide

Community and Religious Leaders

1. What is your role in this community?

   In which situations does the local population ask for your advice?

2. What are your views about family planning?

   Explore beliefs, perception and sources of information

3. In this community, who makes the decisions about family planning in the family?

   How are these decisions made?

4. During community gatherings, do you openly discuss family planning issues? If so:

   What prompts the discussion about family planning? What are the issues discussed?

   At which types of gatherings would you not discuss issues regarding family planning? If any, why?

5. How would you feel about openly discussing family planning at community gatherings?

6. How involved are community and religious leaders in disseminating information about family planning? What roles do they play?

7. What in your opinion does the religion you practice recommend regarding family planning?

   Explore perception and understanding of their religious beliefs regarding reversible and permanent methods of family planning

In your opinion, in what way do religious beliefs in your community affect utilization of family

planning services? *Explore his/her knowledge and understanding about position of Islam and*

Christianity on practice of family planning

8. In your opinion, in what ways do gender roles and expectations affect utilization of family planning Services by men and women?

In your opinion, what specific gender roles assigned to or expected of men and women affect their utilization of family planning services?

9. In your opinion, how does your culture influence utilization of family planning services?

Which cultural practices in your community influence decision making and practice of family planning?

10. Based on your experience, what other factors influence use of modern family planning methods?

11. What ways, if any, will you suggest for improving utilization of family planning services in northern Nigeria?

Lay men and women

1. What are your views about family planning?

Explore beliefs, perception and sources of information

2. In this community, who makes the decisions about family planning in the family?

How are these decisions made?

3. During community gatherings, do you openly discuss family planning issues? If so:

What prompts the discussion about family planning? What are the issues discussed?

At which types of gatherings would you not discuss issues regarding family planning? If any, why?

4. How would you feel about openly discussing family planning at community gatherings?

5. How involved are community and religious leaders in disseminating information about family planning? What roles do they play?

6. What in your opinion does the religion you practice recommend regarding family planning?

Explore perception and understanding of their religious beliefs regarding reversible and permanent methods of family planning

In your opinion, in what way do religious beliefs in your community affect utilization of family

planning services? *Explore his/her knowledge and understanding about position of Islam and*

Christianity on practice of family planning

7. In your opinion, in what ways do gender roles and expectations affect utilization of family planning Services by men and women?

In your opinion, what specific gender roles assigned to or expected of men and women affect their utilization of family planning services?

8. In your opinion, how does your culture influence utilization of family planning services?

Which cultural practices in your community influence decision making and practice of family planning?

9. Based on your experience, what other factors influence use of modern family planning methods?

10. What ways, if any, will you suggest for improving utilization of family planning services in northern Nigeria?