

Planning families in Kaduna: an investigation into the information-behaviours of parents, frontline and religious information providers in northern Nigeria.

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2023

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Planning Families in Kaduna: An Investigation into the Information-Behaviours of Parents, Frontline and Religious Information Providers in Northern Nigeria.

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A thesis submitted in partial fulfilment of the Requirements of the Robert Gordon University for the degree of Doctor of Philosophy (PhD)

August 2023

Declaration

I hereby declare that this thesis:

“Planning Families in Kaduna: An Investigation into the Information-Behaviours of Parents, Frontline and Religious information Providers in Northern Nigeria”.

To the best of my knowledge is my work, and any material used in this work, which can be construed as the work of others is appropriately cited and referenced with full acknowledgement given.

Malatl M. Hellandendu

August 2023.

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Dedication

This thesis is dedicated to my support system given to me by the Almighty God
'my family and friends'.

Abstract

Individual response and reaction to a phenomenon is determined by their inner emotions, feelings and experiences when in contact with information. For this reason, the provision of objective, accurate, and open information in public health initiatives is crucial to knowledge formation and essential for engaging in high-quality decision making on the premise of trust.

Despite efforts put in place by government agencies, National and International organisations, non-governmental organisations and charities to reduce maternal and infant mortality, empower women and improve the socio-economic status of the Nigerian population, through the use of FP, the country remains characterised by high fertility, overpopulation, insecurity, unemployment and high rate of crime, all attributes of overpopulation.

Although studies continue to identify cultural and religious practices, fear-of medical side-effects and the role of men in the Nigerian culture as dominant decision-makers as barriers to the use of FP, little is known about the interplay between the aforementioned factors and the current FP information made accessible to the audience members.

This thesis therefore uses the information seeking and communication model (ISCM), concepts from Chatman's theory of information poverty and Wilsons 1997 model of information behaviour (IB) to investigate and analyse the IB of three crucial groups at the fore front of giving and receiving information-parents/prospective parents, religious and health providers to understand the nature of information flow and its effect on family planning (FP) Utility in Kaduna, Nigeria. Framing analysis was used to analyse a small range of secondary documents to assess the framing intention of FP messages by authors and the possible effect of this framing on the IB of the audience members, while thematic analysis of 35 semi-structured interviews, with 26 audience members, 5 religious leaders and 5 frontline healthcare providers was used to gain in-depth insight to the lived reality of the audience members and information providers. Disparities in the mode of information delivery and the audiences preferred methods; ambiguity in the framing of FP messages; priority given to patriarchy in FP services and information; uncertainty on the essence of FP; and a misalignment between lived reality and proposed benefits of FP and the high dependency of FP initiatives to model institutional practices, while ignoring the continuous nature of context shaped by users social practices , were identified to contribute to distrust, anxiety and amongst the audience members and thus affecting negatively the intended effect of FP information.

The study ends by recommending a number of possible improvements in the development of FP initiatives and communication process, to make FP information more credible, trustworthy and timely enough to contribute to the knowledge formation and social practices within rural communities.

Keyword: Family planning, Information Behaviour, Knowledge formation, Nigeria.

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CHAPTER ONE:

BACKGROUND OF STUDY

1.0 Introduction

The rapid growth between 2006 – 2018¹ of the Nigerian population to an estimated 190,886,311 million (World Bank 2017) has led to an increased focus on promoting family planning (FP) by national and international non-government organisations (NGOs) and charities and in government campaigns and interventions. The government of Nigeria since 2012 has worked with stakeholders to address socio-cultural norms such as a preference for large families, religious beliefs and the absence of women's autonomy in reproductive and sexual issues (Family Planning [FP 2020] 2018). Despite this, the adoption of FP remains slow and low, especially in the northern region of Nigeria (Nigerian Demographic and Health Survey [NDHS] 2013)².

As a developing country, Nigeria is characterised as having a high level of fertility (5.5 births per woman), maternal mortality (576 per 100,000), infant mortality (69 per 1000), unemployment (14.2%-18.8% between 2012 -2017), poverty, hunger and crime (National Bureau of Statistics 2018) with an estimated population of 218,541,212 million as at 2023 (World Bank 2023). Also, Graff and Bremner (2014) affirm that these features are particularly associated with rural areas, attributing them to the low use of modern contraceptives, which has negative implications for the health and development of the country. There are

¹ After the 2006 Census, the National Populations commission reported a population of 140 million and in 2018, an estimated 182 million, which signifies a 30% increase in over a decade.

² The last census conducted in Nigeria was in 2006, and the NDHS information is one of the most accurate data accessed in Nigeria at the moment. However, the National Population Commissions update the site with estimated population figures on yearly basis.

also evident regional variations in these trends, with disproportionately high prominence in Northern Nigeria (NDHS 2013).

Zaria is a Local Government Area in the North-west Region of Nigeria. The dominant language spoken in this area is Hausa, with a high concentration of higher learning institutions. This adds to the diversity of its population, and it is not uncommon to find a fair representation of the Yoruba and Igbo tribes³, who are referred to as groups constituting the three major ethnic groups in Nigeria. Islam is the predominant religion in Zaria, and it is a patriarchal society with men occupying important leadership positions. The area is also characterised by a high population and fertility rate (NDHS 2013; Aliyu et al. 2010; Ejembi 2004). For example, a study conducted in Zaria by Aliyu et al. (2010) revealed that only 12.5 per cent of the women in Zaria were using any method of modern contraceptives thirty years after its introduction, which explains its increasing population.

Lere is a Local government area in Kaduna state created in 1989 (KBS 2020), with a population of 339,740 (NPC 2006). It is situated in the eastern part of Kaduna state and is one of the 23 LGAs within the state. Its climate is suitable for arable crops (Balogun et al. 2021), and the major economic activities of its people are farming, rearing of animals and cattle, bee farming (Abdullahi and Mohammed 2014), fisheries, and civil service (Balogun et al. 2020). Gure, the village of study, is one of the major towns in Lere local government, and the people in this area are believed to be descendants of the Fulani (a group believed to be nomadic). Although they are situated in the eastern part of Kaduna state, their major language is "Gure", which means "The men". Findings in this study show that many members of this community neither understand nor speak Hausa, the core

³ Hausa, Igbo and Yoruba are the major languages spoken in Nigeria.

language of communication for northern Nigerians (Newman 2000), well enough to make relevant sense of FP information communicated in this language. The major religion practised in this area is Neo-Pentecostalism (International Mission Board 2023), and farming is the major economic activity of the people in this community. Gure, as it is popularly called, was a one-time matrilineal society, but it became patriarchal with the coming of Christianity through colonialism (Pikawi 2015). Findings from the pilot study also revealed consistent child mortality⁴ and low use of contraceptives in this area. Gure was selected based on its attribute of an understudied area, as in-depth contemporary information about its people and their socio-economic activity was limited (Pfeffer 2013) and secondly due to the potential of an understudied population to produce rich data reflecting the real experiences of phenomena by a population, significant for policy and practice (Saddiq 2015; Pfeffer 2013; Higgins et al. 2008).

Developing countries are often characterised by their rurally based majorities (Islam and Ahmed 2011; Dutta 2009; Shaik and Hatcher 2005) and the widespread occurrence of poverty, low literacy levels, inadequate services/social amenities and ignorance (Islam and Ahmed 2011; Nwagwu and Ajama 2011; Saleh and Lasisi 2009; Momodu 2002). While these patterns are broadly consistent with those in Nigeria, the country has seen a high percentage of rural-urban migration (45% - 55 %) in recent years (NDHS 2013), suggesting that it is becoming more urbanised (Speizer et al. 2014; NDHS 2013). However, World Bank (2018) reports revealed that about 50 per cent of Nigeria's urban population lives in urban slums, which share similar characteristics with the most populated rural areas (Ezeh et al. 2010). Nonetheless, as the majority of the Nigerian

⁴ Every couple randomly selected to be interviewed had loss one or two children.

population inhabit rural areas, their information needs are shaped by environmental, religious, cultural and socio-economic surroundings that remain distinct, in many respects, from those of urban dwellers – even if their economic circumstances are similar (Duze and Mohammed 2006; Peter et al. 2008).

Family planning, defined as the spacing of childbirths to achieve the desired family size (World Health Organisation [WHO] 2017), has been argued to be pivotal in regulating population growth by reducing fertility levels through the use of modern contraceptives, which is believed to improve health, reduce poverty and stimulate national growth and development (Graff and Bremner 2014).

In an attempt to increase the uptake of FP, previous studies variously focused on the problems associated with accessing services and identifying strategies to solve this problem (Fakeye and Babaniyi 1989; Feyisetan and Ainsworth 1996; Odimegwu 1999), which they believed would increase the adoption of FP. However, findings revealed that other factors, such as lack of education (Duze and Mohammed 2006), the time and costs associated with accessing FP services (Peter et al. 2008), are major causes of low adoption.

More recently, studies have focused on the promotion of FP by identifying the barriers to it as socio-economic (poverty, illiteracy, urban-rural residents and income), culture, religion, and education among rural-urban residents. Studies have also found that higher FP adoption rates tend to occur among wealthy, educated, urban and higher-income earners compared to their poorer, less educated, rural and lower-earning urban counterparts (Ajaero 2016; Mbizvo and Phillips 2014; Ojua et al. 2014; Olayinka *et al.* 2014; Kana 2015; Moronkola et al. 2006; Reed and Mberu 2014; Babalola and Fatusi 2009).

Other studies have focused on the socio-cultural factors determining the adoption of FP in Nigeria, reporting religion (Reed and Mberu 2015) the stigmatisation of infertility (Dimka and Dein 2013), men's autonomy (Okigbo 2015), early marriage (Pasha et al. 2015; Ojua et al. 2014), and the fear of physical or mental side effects (Adeyanju et al. 2017) as factors motivating or, more importantly, inhibiting the adoption of FP.

However, while some studies recommend potential improvements to FP promotion strategies, limited attention has so far been given in the literature to the question of identifying target audiences' preferred information formats/mediums and practical ways of overcoming the more specific barriers that might be preventing or discouraging many parents (and prospective parents) from engaging with existing FP initiatives (Shaik and Hatcher 2004).

Islam and Ahmed (2015) affirm information as a significant resource which contributes to development. They go ahead to emphasise that a knowledgeable community is a product of relevant information acquired. Thus, emphasising that a community's development is intertwined with the information they can access and utilise. Also, Emele (2018) emphasised the presentation of information in culturally and religiously appropriate formats and communicating via accessible sources to promote information utilisation among rural men. Furthermore, Buchanan and Gibb (1998) assert that for a successful implementation of information strategy, a need exists to map information processes and flows by examining the interactions that take place amongst people within a social context and analysing their various communication processes.

However, there have been limited studies in developing countries investigating the information needs and information behaviour (IB) of rural dwellers specifically

(Dutta 2009), with most that have been carried out focusing on professionals (engineers, nurses and students in higher institutions), town or city-dwellers (Fasola and Olabode 2013). Also, the handful of ISB studies focusing on health-related issues have mostly concerned cancer (Dareng et al. 2016; Emele 2018), care-seeking (Bedford and Sharkey 2014; Enwuru 2002) and menopause (Dienye and Ndukwu 2013). A few, if any, focus on reproductive health.

However, while a few studies on information behaviour in rural areas have been identified, they focus on the identification of general information needs of rural communities within specific regions or individual genders (Saleh and Lasisi; Momodu 2002). For example, Momodu's (2002) study focused on identifying the information needs and sources of rural dwellers in the south-south region of Nigeria, while Saleh and Lasisi (2011) focused on the information needs and sources of women in the north-eastern region of Nigeria. However, the influence of these needs on the type of source (s) utilised and its overall impact on rural dweller's information behaviour was not explored. Also, Bakar (2011) points out existing discrepancies in rural women's decision to access various information sources to meet different needs in Malaysia, hence a need to investigate the FP information source preference of men and women in Zaria.

Investigating the low adoption of FP from the perspective of the information behaviour (IB) of the people presents an approach which may provide a better understanding of the trend and pattern of identifying information needs, information-gathering, medium selection and information utilisation by the people in the Zaria community. The identification of these patterns can be used to increase FP adoption.

Hence, this study aimed to understand the family planning information behaviour of rural men and women by identifying the influence of culture, religion, gender and other factors in determining their preference, range and nature of information sources used.

To achieve the set aim, Robson's (2013) Information Seeking and Communication Model (ISCM) methodological framework was utilised as the principal methodological framework. It recognises environmental (work-related, location, culture, finances) and personal factors (self-perception, self-efficacy, cognitive dissonance, perception of risk) as elements which inform the needs, wants, goals and perceptions of an information user or provider (p.184). These factors also may motivate or inhibit a user from seeking and a provider from communicating information. Thus, to understand the family planning information behaviour of men and women in Zaria, the influence of environmental and personal factors in motivating or inhibiting their use of FP information and source preference was investigated.

In addition to the ISCM, close attention was paid to Wilson's model of information behaviour (1997), which emphasises the importance of the *identification* of needs as motivations for seeking information. Wilson identifies various types of information seeking: passive attention (information acquired without intentional search), passive search (finding information coincidentally while searching for other information), active search (purposely searching for the acquired information), and ongoing search (searching to update existing knowledge) – arguing that personal, psychological and source characteristics motivate or inhibit the various forms of information seeking. Therefore, it was necessary first to identify the existing form of information seeking among men and women in Zaria

for deeper insight into their current patterns of FP information behaviour in terms of -information search, use, avoidance, and source preference. In addition, close consideration was given to the influence of environmental and personal factors (Robson and Robinson 2013) on the perceived credibility of FP information sources, drawing on Chatman's (1996) concept of deception, secrecy, and the existence of the twin worlds of "insider" (conformist to societal norms and mores) and "outsider" (non-conformist) – the latter being seen as a likely impediment to information searching, sharing and acquisition of relevant knowledge (p.194).

1.1 Defining Information Behaviour and Information Seeking

Behaviour

Information-seeking behaviour (ISB) is a process of purposeful engagement in information search by humans to change their state of knowledge (Marchionini 1995). Similarly, Wilson (1999) defines ISB as the purposive search of information to satisfy a need. Kuhlthau (1991) defines ISB as a practical effort to interpret information to extend one's knowledge on specific issues. The various definitions of ISB reveal that the discovery of a gap in knowledge prompts information search, which leads to information seeking.

Information behaviour, on the other hand, according to Wilson (2000), can be defined as "the totality of human behaviour about sources and channels of information seeking and information use" (p.49). Similarly, Pettigrew et al. (2001) define IB as the study of "how people seek, give, and use information in a different context, including the workplace and everyday living" (p.44). Bates (2010) also describes information behaviour as the various ways humans interact with information, which include searching and utilisation. On the other hand, Wilson (2000) acknowledges that there are fewer models of information behaviour (IB)

and defines IB as not only an information search process but also concerned with the general behaviours, which include information seeking, search and use, which are sub-categories of information behaviour (p.49).

Considering that FP literature does not point towards a purposeful FP information search by men and women in northern Nigeria, instead, it identifies the existence of information to create awareness and promote the use of FP and the barriers to utilising such information. Hence, it was significant to understand the low use of FP information by men and women in Zaria and Lere Local Government Area (LGA) Nigeria by investigating their FP information behaviour, which involves a totality of their active or passive information search, source selection and preferences (Pettigrew et al. 2001) and its overall impact on their use of FP information (Bates 2010).

1.2 Research Aim

This research examines the information behaviour of men and women- religious leaders and frontline family planning (FP) information providers in Zaria and Lere Local Government Area (LGA) Kaduna state Nigeria, by analysing the range and nature of information sources and advice-givers available to them and the cultural, religious, gender and other dynamics that affect how these sources are accessed and prioritised. This was in order to -understand the low adoption of family planning services in these areas and suggest accessible and appropriate information sources and providers that meet the needs of the target populations in terms of their economic status as well as religious and socio-cultural beliefs to promote better health outcomes for women and children.

1.3 Research Objectives

1. To understand the nature of information behaviour of family planning service providers, users/information seekers and potential users in Zaria and Lere local government areas in Nigeria.
2. To identify the various features guiding/motivating the dissemination of family planning information by the providers and elements motivating its use among parents and potential parents;
3. To determine and evaluate the major information sources of family planning providers and target service users/information seekers;
4. To examine the influence of social, religious, cultural and economic challenges and barriers on the perceptions and utilisation of family planning services in Zaria and Lere Local Government Areas.

1.4 The rationale for the study

Modelling decision-making requires an in-depth understanding of the information-behaviour of the target audience (Madge et al. 2023; Niedzwiedska 2003; Godbold 2006; Meyer 2005; Wilson 1999). This is to ensure that contextually appropriate information sources, formats, language(s) and dissemination processes are selected to promote the use-value and fitness of products and services (Bertrand 1995; Momodu 2002; Dutta 2009; Emele 2018). Achieving this requires an understanding of the IB of the target audience, as well as any competing or conflicting information sources to which they are subjected and any barriers they might encounter in accessing and engaging with the messages promoted. In developing countries, such behaviour has so far been under-studied, particularly

about health issues (Dutta 2009; Lasisi and Saleh 2010), which is the focus of this research.

Despite the variety of studies in family planning (FP) and reproductive health in Nigeria, few studies have focused on the information behaviour of Nigerians, and occasionally, when it is included in studies, it is discussed as a secondary component of health-seeking-behaviour examples of such studies include; (Nwagu 2007; Okeke and Okeibunor 2010; Akinfaderin et al. 2012). According to Mansuri and Rao (2004), community-based interventions have become a popular form of assistance for developing countries to enhance development. However, they argue that most initiatives leave supposed project benefits inaccessible to the people, as projects are managed by elites, making economic inequality evident in the targeting and project quality.

Hence, this study seeks to understand the IB of men and women in Zaria and Lere Kaduna state, to identify sources, channels, products and services that correlate with their information-seeking process and understand their reasons for selecting them, to inform the targeting of this community with FP messages better.

Health information, among many others, has also been revealed to be an essential need among rural dwellers. For instance, Lasisi and Saleh 2010 revealed health to be one of the major information needs of rural women in North-East Nigeria. Similarly, Momodu 2002, in her studies, which were aimed at identifying the information needs and ISB of rural dwellers, identified health information among the major information needs. Momodu (2002) states that the characteristics (age, sex, socio-economic status, occupation) of rural residents and their IB differ according to geographical location but acknowledges a need to understand the IB of communities according to these discrepancies in order to make informed

decisions about appropriate information sources and language to use in communicating information.

Decision-making concerning what information to produce and how to communicate such information requires data from both women and men that can answer questions about couple communication, deliberations and the influence of men on women's fertility, and contraceptive choices and outcomes (Green and Biddlecom 2009) considering that both sexes are involved in reproduction. However, major studies on FP in Nigeria have generally been gender-selective, focusing on men only as barriers to FP (Okigbo et al.2015; Orji et al. 2007; Oyediran et al. 2002; Oni and McCarthy 1991) or Women (Bajoga et al. 2017; Moronkola et al.2006; Okenwa et al.2011; Sedgh 2006).

Greene and Biddlecom (2000) argue that, although the issue of reproduction concerns both men and women, men are usually excluded from FP programmes. It is in this regard that this study views reproductive health as a holistic process involving both men and women and major advisers of FP information. Also, considering the patriarchal nature (men are the primary decision-makers, especially in issues of reproductive health) of Northern Nigeria, it is important to include both sexes in this study to find out the similarities and discrepancies in their IB to enable the better targeting of FP information through appropriate sources and channels. This will give an insight into the development of effective communication strategies to meet their information needs as individuals and as couples as a holistic component by investigating both sexes and not as a single entity. Hence, the importance of incorporating both men and women as the major advice givers to understand the interplay in the interaction between the aforementioned groups "how and why" low FP to have an in-depth understanding of their IB and decisions to utilise separate information sources.

1.5 Research Background

This section provides an overview of the Nigerian setting, the context and the issues in Zaria and Lere LGA. This is significant in providing an in-depth overview of the areas of study.

1.6 Overview of the Nigerian Setting

The research focused on Nigeria, which is a country in West Africa located along the eastern coast of the Gulf of Guinea. It covers an area of 923,768 square kilometres. There are about 250 ethnic groups, and more than 500 languages are spoken in this country. The three dominant ethnic groups are Hausa, Igbo and Yoruba (NDHS 2013).

Nigeria has a population of about 190,886,311 (World Bank 2017), which makes it the most populous country in Africa and the seventh most populated globally, with an annual growth rate of 3.2 annually and a TFR of 5.5, with variations across states and regions (World Bank 2017, NDHS 2013). According to the National Bureau of Statistics, 45.9% of the population are women, while 50.5 % constitute the men and 3.6% are infants. Constitutionally, the country is divided into 36 states and one Federal Capital Territory (FCT), Abuja. These states are further divided into six geopolitical zones⁵, namely, South-East, South-South, South-West, North-Central, North-East, and North-West regions. These zones are not classified based on geopolitical locations but rather grouped based on states with

⁵ List of states in the six geopolitical zones in Nigeria; **North-Central** (Benue, Kogi, Kwara, Nasarawa, Niger, Federal Capital Territory), **North-East**: (Adamawa, Bauchi, Borno, Gombe, Taraba, Yobe), **North-West** (Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto, Zamfara), **South-East** (Abia, Anambra, Ebonyi, Enugu, Imo), **South-South** (Akwa Ibom, Cross River, Bayelsa, Rivers, Delta, Edo), **South-West** (Ekiti, Lagos, Ogun, Ondo, Osun, Oyo).

similar cultures, ethnic groups and a common history (Eze and Ogbodo 2014; NDHS 2013) to ensure efficiency in running the states and adequate provision of social amenities, including health services.

There is a variation in occupations in Nigeria between men and women, with the majority of working women in sales and services and an estimated 70 per cent of the population engaging in agriculture. However, the majority of the men are involved in agriculture. Hence, the predominant occupation in Nigeria is farming (NDHS 2013).

Following the colonisation of Nigeria by the British, English is the official language in Nigeria, which is evident in the use of the language in all government interactions and state-run schools. Unofficially, the country's second language is Hausa. Many non-native Hausa speakers resident in Northern Nigeria speak both Hausa and their native language as compared to other languages. However, some of the individuals living in the North understand and speak only their native language (Nengel 1999). Hausa is the oldest written language in West Africa, dating back to before 1000 CE. Pidgin, a mix of African languages and English, is also a common language in the southern part of Nigeria. Despite all these seeming differences, a similar pattern of behaviour is argued to exist among various ethnic groups influenced by their cultural practices (Nwagu and Ajama 2011). However, language forms a unique feature in this multicultural and diversified country, as various ethnic groups interact and identify each other through the use of language.

In Nigeria, religion remains an indigenous practice, and Christianity, Islam, and the traditional religion (people who believe in deities) are the prominent religious practices. While the majority of the Hausa Natives in the North are Muslims (Hausa-speaking natives), the Yorubas in the southwest of Nigeria are either

Christians or Muslims, while the Igbos in the southeast are mainly Christians and Catholics.

Each state is led by a state governor who influences budgets and wields significant political power. As a result, the implementation of health policies, including family planning, benefits from the support of the state government. Each state is divided into Local Government Areas (LGAs). There are 774 in total, each run by a local government council comprising a chairman and councillors.

Nigeria has three central environmental regions - Savanna, Tropical and Coastal Wetland. These heavily influence regional cultures and occupation breakdowns. For example, the dry open grasslands in the Savanna make cereal farming and herding a way of life for the Hausa and Fulani residing in the Northern region. Zaria and Lere in the North West region are the focus of this study; hence, the preceding sections provide an overview of the geographical location, population culture, governance, health system and issues in Zaria and Lere LGA.

1.7 The Context of Zaria

Zaria is a major city and one of the 23 Local Government areas (LGA) in Kaduna State in the northwest geopolitical zone of Nigeria. It occupies an area of 563 kilometres. It is a metropolitan city with two major LGAs - Zaria and Sabon Gari. These are further subdivided into wards, bounded by Igabi LGA in the South, Sabon Gari in the West and Soba LGA in the East. Zaria LGA has 13 political wards: Dambo, Dutsen Abba, Gyallesu, Kaura, Kufena, Kwarbai "A", Kwarbai "B", Limancin-Kona, Tudun Wada, Tukur Tukur, Ung. Fatika, Ung. Juma, Wucicciri, while Sabon Gari has eleven (11) wards: Basawa Bomo, Chikaji, Dogarawa,

Hanwa, Jama'a, Jushin Waje, Muchia, Samaru, Unguwan Gabas, Zabi. (Onyemelukwe et al. 2018; Aliyu et al. 2013).

1.8 Population and Religion

Zaria is a heterogeneous city with a population of 408,198 (NPC 2006) and a total fertility rate (TFR) of 6.7 (NDHS 2013). In 2013, its population increased to about 1,129 688 (Nigerian Urban Reproductive Health Initiative [NURHI] 2013) and 1.49 million in 2017 (Ahmadu Bello University 2017). Its population currently ranks it as the 10th most populous city in Nigeria, with a Total Fertility Rate of 6.7 (NDHS 2013).

The population of this city is rapidly growing, and its fertility rate is not declining compared to the average fertility rate of the country (5.5).

Lere, on the other hand founded in 1989, has an estimated population of 501,900 and experiences an annual population growth rate of 2.5 percent (Kaduna state Bureau of Statistics 2017). Gure, a small village located within Lere, is distinguished by a high child mortality rate, as identified in this study, and has a population of 48,000 (Joshua Project 2022).

1.8.1 Marriages

Families arrange marriages for their children on some occasions, while others engage in First-world-style dating before marriage. Also, marriages are arranged by parents between relatives such as cousins. This is a preferred practice among Muslims, in particular. It is believed that the man will treat the woman better if she is his relative, and the family will always be there to settle disputes. Islamic law allows a man to marry four wives. Following the Islamic culture, some wives may live in seclusion, only permitted to go out for weddings or medical treatment.

In contrast, the Christians in Zaria practice monogamy, and marriage among relatives is seen as a taboo for Christians.

Pre-marital sex is also frowned upon by both Christian and Muslim parents, and pregnancy before marriage is a taboo. An unmarried pregnant girl may be ostracised in some Christian communities and asked to sit at the back seat in church for a period as a punishment for allowing the devil to lead her to sin and at risk of being disowned by her family and losing her friends as parents see her as a bad influence on their children. This explains why single women and men do not feel comfortable seeking information on family planning from experts, considering that the community is close-knit and anonymity and confidentiality are not guaranteed. Hence, a need to generate information sources that will accommodate the information needs of singles in Zaria.

1.9 Issues in Zaria

1.9.1 Maternal Mortality

Zaria has a maternal mortality ratio of 800/100,000 live births, 115 infant deaths to every 1000 births and an HIV/AIDs prevalence rate of 6 per cent. The prevalence of high maternal mortality in Zaria has been dated as far back as 1985 (Harrison 1985). Despite concerted efforts made to increase awareness of FP, the use of modern contraceptives is still reported to be low among residents, despite an increasing awareness of various modern methods of contraception (Harrison 1997; Ejembi et al. 2004; Madugu et al. 2017).

1.9.2 Poverty

Jacobson (2018) argues that poverty is a debilitating disease which is suffered by two out of every three around the world and is particularly prominent among rural

women involved in agriculture and formal and informal labour markets, and 40.3 per cent are housewives (Ejembi 2004). Considering the principal occupation of women (petty trade) and men (subsistence farming) in Zaria, it suggests the existence of poverty in the area.

1.9.3 Power Supply

Developing countries continue to face enormous problems in the energy sector, which is key to economic and health development. The cause of this problem, among others, includes government policy, societal factors, effective energy management and skilled personnel (Oricha 2009; Ikeme and Obas 2005). This has in no way supported the poverty alleviation programmes, including improving the health status of the people. For example, in Nigeria, where family planning messages are disseminated via the radio, it becomes inaccessible to the target audience if there is no power supply. Furthermore, inadequate supply has stifled the Nigerian economy, especially in rural areas, stunting small industries and businesses and increasing the poverty levels in this community (Ikeme and Obas 2005).

1.9.4 Ethno-Religious Crisis

According to Salawu (2010), ethno-religious crises have been problems for Nigeria since independence in 1960. This is because Nigeria is a multi-ethnic and multi-religious nation, and this has contributed to a climate of ethnic and religious intolerance (P.345). The recurrence of ethno-religious conflicts is especially prominent in Northern states, and Zaria is one of the affected areas (Salawu 2010). Struggle for power, domination, exploitation and bigotry have repeatedly

led to the enormous loss of lives and properties. Again, the Almajir⁶ have been revealed to constitute major participants in these crises in Northern Nigeria (Okunola and Ikuomola 2010). Suggests that children born into families not capable of economic provision sometimes constitute nuisances to society in Northern Nigeria.

1.9.5 Primary Health Care Services and Utilisation (PHC)

The local governments of various areas provide PHC services through health centres and services by nurses, midwives, community extension workers, health technicians and doctors. Despite the even distribution of these facilities in every LGA, Abdulraheem et al. (2013) argue that services of the PHC are underutilised by the people, identifying transportation and communication, dissatisfaction in responses provided by rural health workers to identified problems, illiteracy and distrust for government and some health workers, leading to resistance of accepting new ideas. Similarly, Adegboyga and Abioye (2017) agree that elites in rural areas underutilise PHCs because they do not trust the quality of services to meet the health needs of the enlightened and affluent. Malnutrition in Children Malnutrition was revealed to be prevalent among children in Zaria, as a study conducted by Akuyam and Ogala (2009) revealed the absence of protein-energy to be the primary cause of Kwashiorkor and weight loss suffered by children in this area. This may also be due to a large number of children born into poverty and inadequate social amenities.

1.9.6 Transportation

⁶ Male children are separated from their parents at an early age and sent to neighbouring or distant towns to acquire Islamic knowledge. They survive by begging for alms on the streets.

The transport system in Nigeria is privately owned, with no discounts for the elderly or other travellers. The buses are usually small and overloaded, and the roads are bad and prone to frequent accidents (Aderamo and Magaji 2010). This makes travelling from one point to the other inconvenient for people in rural communities.

In summary, this chapter describes the Zaria setting as well as gives insight into challenges, environmental factors, and other factors which may affect the FP information of Zaria residents. These identified areas of context were also significant in the data collection process and the interpretation and discussion of findings.

1.10 Originality and Significance of the Study

Several studies conducted in the area of FP have identified problems associated with FP accessibility and its adoption (Bajoga et al. 2017; Speizer et al. 2015; Okigbo et al.2015; Orji et al. 2007; Oyediran et al. 2002; Moronkola et al.2006; Okenwa et al.2011; Sedgh 2006; Renne 1996 Oni and McCarthy 1991). However, there is yet to be a study to identify the preferred characteristics and information that motivate the use of information from specific sources, such as religious providers, while deterring end users' use of other sources from an information behavioural perspective.

Again, while studies have been preoccupied with the identification of socio-cultural barriers to demand (Abdi et al. 2020; Ackerson and Zielinski 2017; Renne 1996) and supply (Senderowicz 2020; Schrupf et al. 2020; Dehlendorf et al. 2016; Newbold et al. 2009; Musoke 2007; Gunther 2003) of FP information and its utilisation, leading to the recurring identification of men's autonomy in decision making and issues of patriarchy emerging as barrier to FP use in communities,

there is limited information on the actual modalities and the unfolding of patriarchy in hindering of use of FP in these communities. Where studies (Fuseini et al. 2019) have been found to explore men's autonomy to unveil the actual processes through which it exists and thrives, the focus has been majorly in terms of general household decision-making with several aspects, including reproductive health, highlighted in passing.

The current research is a qualitative study. It, therefore, used a semi-structured in-depth interview (telephone interviews and face-face), in contrast with major quantitative studies in FP, which use questionnaires, structured interviews and data evaluation forms for data collection. Thematic analysis (identifies recurring patterns in a text to understand a phenomenon) was adopted in this study to explore 'Why' (to understand the prioritisation of specific information sources over others) and "How" (the process of information seeking of the target audience) this relationship exists contrary to the salient use of, logistic regression, Chi-square or correlation. In addition, a blend of deductive and inductive techniques was used to collect and analyse the data. Thus the researcher went into the project with some paradigmatic notion of society, using constructs in the ISCM model to structure interviews (Deductive) but allowing data to speak for itself in the analysis process through an inductive method (Hepp 2007).

The use of a different method of research and analysis was adopted to understand the influence of environmental and personal factors in forming the judgement of rural men and women in terms of information relevance and credibility and the impact of these perceptions in their decision to use or ignore specific FP information sources as well as that of information providers within the respective communities.

This study was unique in aiming to understand the low utilisation of FP in Northern Nigeria by investigating the IB and preferred advice-givers among parents – and any discrepancies between men and women - in the Zaria local government area.

In terms of its potential impact, the study aims to recommend ways to improve FP information communication practice(s) to reflect the IB of both rural men and women and to promote increased trust, engagement, and larger-scale take-up by target consumers. It is also applicable to contexts with similar characteristics and emphasises the importance of investigating the IB of the end users as the first point to ensuring success in public health initiatives.

Empirically, this study contributes to the literature on patriarchy and family planning uptake and the general model of information behaviour by including a gender-related lens in the model.

1.11 Research Questions

1. What is the range of advice-givers available to parents and prospective parents in Zaria, and how accessible are they?
2. What are the impacts of the perceived credibility of these individual information sources, and how do these affect source preferences among men and women?
3. When deciding to start a family in Zaria, what is the most preferred source of advice by men or women or both?
4. What, if any, is the relationship between the health information-seeking and more general information-seeking behaviour(s) of Zarian men and women?

5. What are the relative influences of cultural practices, religion, economic and other factors on the ISB(s) and favoured advice-givers/information sources of women and men – including any influence(s) of one gender on the other?

CHAPTER TWO:

LITERATURE REVIEW

2.0 Policy on Family Planning in Nigeria

In mid-2016, Nigeria had a population of 186.5 million people (Population Reference Bureau [PRB] 2016). The country is characterised by high maternal mortality (560-1000), high infant mortality (69-1000) and a total fertility rate of 5.5% (PRB, 2016). Northern Nigeria makes for 60 of the country's overall population, with states in the North West Zone (Kaduna, Jigawa, Katsina, Zamfara, Sokoto, Kebbi, and Kano) making for 40% (PRB, 2016). According to the World Health Organisation (WHO, 2017).

In 1988, a National Policy on Population for development and the National Health Policy aimed at improving the health of Nigerians was ratified by the country's federal government (United States Agency for International Development (USAID) 2013). This was a result of the adverse effect of population growth on national development, evident in increased gender inequality, HIV/AIDS, and poverty (National Populations Commission [NPC] 2015), thus demanding a review of the previous policies, which brought about the National Policy for Sustainable Development and the Revised National Health Policy. Both policies, through a system of active referral, aimed to provide access to primary, secondary, and tertiary health care services. The policy recognised the relationship between socio-economic development and environmental problems and their impact on population growth. Hence, there was a need to improve the living standard of Nigerians by reducing population growth and fertility rate, encouraging child spacing, and reducing juvenile and maternal mortality by encouraging the use of modern contraception. However, in recent times, the country is still characterised

by rapid population increase and the low use of contraceptives, especially in the Northern region.

In a review of maternal and child health interventions in Nigeria from 1990-2014, Kana et al. (2015) attributed the enduring problems with infant and maternal mortality to poor planning and the short duration of reproductive health initiatives. They further argue that major actors do not embark on long-term programmes, which are more likely to bring about sustainable practices. Similarly, Walt and Gilson 1994 recognise that developing countries have stronger societies and weak politics, but community participation is ignored in development initiatives, making such projects unsuccessful, similar to Burnell's report on politics in developing countries (2014). This suggests that for a decline in fertility rate, a need exists to increase the use of FP information. However, to achieve this, the target audiences, information sources, and format preferences need to be examined to improve the policy on FP in Nigeria.

2.1 Media

There has been an increase in the awareness creation and knowledge of the use of family planning by the media. Despite all these, fertility decline and adoption of family planning remain low (NDHS 2013; Ajaero 2016).

Studies have shown a positive relationship between exposure to mass media and engagement with health campaigns, leading to an attitudinal change in the target audience (Ajaero, 2015; Adekunle et al. 2004). A study in six major cities representing Abuja, Ibadan, Benin city, Ilorin, Kaduna, and Zaria established that sexual experiences and the use of modern FP methods were highly dependent on information gained through the media (Bajoga et al. 2015). This echoes the

findings of Okigbo et al. (2015), who demonstrated that men exposed to mass media were more likely to permit their wives to use a modern method of family planning. Aliyu et al. (2010) also found the media to be the most influential source of FP in Zaria.

For sustainable change to emanate from public health campaigns, programmes need to be integrated into and adapted to the dominant/prevailing information-behaviours within cultural contexts.

In the Nigerian context, radio is perceived as an effective medium for health communication (Ajaero 2016; Emele 2018). In assessing the role of the media as a channel for disseminating health information in Nigeria, Brieger (1990) found that men listened to the radio more than women, and people with limited literacy favoured it over newspapers and other platforms disproportionately compared to those with higher-level reading skills. Two-thirds of the population had a clear recall of health messages they had heard on radio or television and could remember the main message. However, for those who did not listen to the radio, the cost of the radio and batteries was shown to be a significant problem, similar to findings in Nigeria by Ajaero (2015) and Adekunle et al. (2004). This study, therefore, set out to assess the validity of these findings in contemporary rural Zaria and identify the people's preferred information sources.

2.2 Primary Health Facilities

According to Feyisetan and Ainsworth (1996), Primary Health Care Services (PHC) constitute a significant source of FP information and services. However, for many people, the cost of transportation to the nearest health facility and the cost of accessing services may regulate an individual's access to this facility. However,

recent data shows that access to family planning services and products is free or at low cost in Nigeria (NDHS 2013) and developing countries (Sedgh et al. 2006). Contrary to this development, which is expected to improve access to FP, Shaik and Hatcher (2004), like Feyisetan and Ainsworth (1996), argue that the cost of transportation to the nearest PHC remains a barrier to rural people's access to Health facilities. Thus, there is a need to investigate the relevance of health facilities in providing FP information, considering the accessibility and availability of products and services in subsequent years/recent times in Nigeria. Hence, one of the objectives of this study.

2.3 Information Needs of Rural Dwellers

Islam and Ahmed (2012) affirm that rural dwellers, regardless of their country and region, share similar information needs depending on socio-economic conditions – placing these in hierarchical order to cut across agriculture, health, political information, education, economy, community development and other areas (Islam and Ahmed 2012; Saleh and Lasisi 2011; Momodu 2002). Despite the similarities in the needs of rural dwellers, they argue that satisfying information needs is location and content-specific.

Also, the information needs of men and women differ. While men are more interested in issues of politics and agriculture (Islam and Ahmed 2011), women have been revealed to develop more interest in health information for the wellbeing of themselves and their children (Manierre 2015; Nwagwu and Ajama 2011; Urquhart and Urquhart 2010).

Bakar (2011) argues that it is not enough to think about strategies to enhance the quality of life for rural dwellers; instead, it is essential to involve them in decisions

about their well-being and develop information and services that adapt to their prevailing IB. Their research also identifies a need for further investigation into the specific areas of information needs and information behaviour to narrow the gaps in information poverty by creating location and content-specific information relevant to the needs of rural communities.

2.4 Patterns of Health Information-Seeking Behaviour among Men and Women in Rural Nigeria

Health-seeking behaviour is any action taken by an individual to find a solution to an identified health challenge (Ojua et al. 2011). According to Shaik and Hatcher (2004 p. 50), men's autonomy, cultural beliefs, socio-economic, physical and financial accessibility to health facilities, combined with the relatively lower literacy levels among women and large family sizes, influence the differential in health-seeking behaviours of men and women in developing countries. Similarly, Omotoso (2010) has outlined the severity of the ailment, cost of treatment, and religious orientation as factors determining the health-seeking behaviour of rural dwellers.

In Nigeria, Ojua et al. (2014) described the effort of rural men and women to find a solution to their health problems as being governed by their cultural and religious practices. This is because the prevention of severity of illnesses is perceived to be associated with moral and religious practices rather than health practices, similar to findings in Ghana (Prilutski 2010). As such, solutions to health problems believed to be punishment for wrongdoing are often religiously and culturally sought through traditional medicine healers and faith-based spiritual healers (Christian and Muslim Clerics).

Okeke and Okeibunor (2010) revealed that Nigerian rural dwellers used traditional remedies to treat diseases, and the medical facilities were more often than not the last alternative considered. In their study aimed at identifying the rural-urban differentials in health-seeking for malaria treatment, it was revealed that traditional remedies and patent medicine stores within the community were the first point of seeking health advice and treatment, emphasising that visit to a modern facility was the last alternative determined by the persistence of the ailment.

Rural men purposefully seek health information using their everyday information-searching activities, which involve authoritative and trusted sources or random encounters with information in the course of formal rural meetings and interaction with friends or family (Fisher et al. 2005). For example, men indicated that they were able to prescribe medication for themselves based on their interaction with information sources in the past. Hence, men seek health information when they are ill, and their friends and family remain their information sources, suggesting they are reactive to health information seeking. (Oleribe and Alasia 2006).

However, Peter et al. (2008) revealed that the practice of delaying visits to a health facility in developing countries and rural areas is associated with poverty. He argues that *"poverty leads to ill health and ill health maintains poverty"* (P.161). This is evident in the responses of the barriers to FP expressed by women later in this study.

Abdulraheem (2007) also noted that the utilisation of modern health facilities was higher among women than men, which he suggested may be due to the higher prevalence of illnesses amongst women and children, which the latter are mostly still responsible for taking to the hospital.

Thus, there is a need to understand the relevance of health facilities in providing information services to rural men and whether a disparity exists in the use of these facilities by gender. This will also contribute to the literature on gender IB and channel preference, which will inform the use of channels accessible to rural dwellers for targeting FP information.

2.5 Information-seeking Behaviour and Information sources of Rural Men and women

According to Marchionini (1997), ISB is the “purposeful” search for information, which is the result of a need to satisfy a goal. This can be either an active or passive process (Robson 2013), which involves information-seeking and activities that change an individual’s state of knowledge (Martzoukou 2006).

The rural dweller is characterised by poverty, disease, low level of literacy, and lack of necessary infrastructure such as roads, good water and health facilities (Nwagu and Ajama 2011; Lasisi and Saleh 2009; Momodu 2002). Information-seeking behaviours among such people can be described as primarily ‘informal’ (Hjortsberg and Mwikisa 2002). Although a few literate adults have been recognised to use formal sources like radio, television, internet and health facilities to gather information (Ojua and Ishor 2013; Nwagwu and Ajama 2011; Saleh and Lasisi 2009; Abdulraheem 2007; Momodu 2002), just as findings in Burkina Faso (Muller et al. 2003) Ghana and Kenya (Burton et al. 2011), many rural dwellers still rely on informal sources for information.

For instance, Njoku (2004) conducted a study into the ISB of rural fishermen in Lagos Nigeria. Relatives, friends and neighbours were identified as the primary information sources, which are informal information sources like findings in the

South-East (Nwagwu and Ajama 2011), South-South (Momodu 2002) and North-East (Saleh and Lasisi 2009) Nigeria. Other studies have emphasised that the majority of rural dwellers who adopt more 'formal' information-seeking behaviours and tend to trust formal sources are people of higher economic, educational and social status (Momodu 2002; Burton 2011).

The IB of rural dwellers is determined by socio-economic status, cultural beliefs, gender, and environmental factors, which are responsible for shaping individual needs, physical, socio-economic, cultural and political factors which determine men and women's choice of information sources (Liu 2017; Islam and Ahmed 2012; Dutta 2009; Shaik and Hatcher 2004). For example, a review of studies on IB in developed and developing countries by Islam and Ahmed (2013) reveal that the ISB and favoured sources of women are shaped by a combination of the cost of transportation to health facilities (Spence 2006) and their culturally conditioned preference for information from their husbands (Steinerova and Susol 2007; Sadaf and Luqman e2006). In contrast, a study in Zaria by Ejembi (2004) revealed that few rural women relied on men for FP information; instead, they relied on friends and family. The women's reason for this choice was not explored further.

Even though few studies have focused on the ISB and official (or formal) information sources available to rural dwellers, there is limited literature with a detailed explanation of the major factors influencing the IB of rural dwellers as well as factors influencing their preference for informal information sources. The impact of source preferences and utilisation on the FP IB of men and women has not been investigated; neither has there been adequate research into rural-dwellers' preferences for individual sources over others.

2.6 Motivation to use Family Planning

Benefits associated with the adoption of FP highlighted by various studies include improved reproductive health, reduced maternal and infant mortality, higher education, gender equality and higher income paying jobs and food security (Ajaero 2016; Moucheraud *et al.* 2016; Muhoza, Rutayisire and Umubyeyi, 2016; Macquarrie 2014; Kabagenyi *et al* 2013; Dutta 2009; Adepaju 2014; Babalola 2016; LaCroix 2013).

In a literature review exploring the motivating factors behind women's use of family planning (FP) in developing countries, particularly in Africa and Nigeria, the following themes emerge based on empirical studies:

Health Benefits and Maternal Mortality Reduction

According to a study conducted by the Guttmacher Institute in Nigeria in 2017, concerns about maternal health significantly motivate women to utilize FP. They view access to modern contraceptive methods as a means to mitigate the health risks associated with high-risk pregnancies and frequent childbirth. Furthermore, research by the World Health Organisation (WHO 2022;2006) in various developing countries, including several in Africa, highlights the pivotal role of FP in reducing maternal mortality by preventing high-risk pregnancies and unsafe abortions. An analysis of FP programs in sub-Saharan Africa, as published in "The Lancet" in 2018, underscores the life-saving potential of FP in reducing maternal deaths by preventing unintended pregnancies and unsafe abortions.

Economic and Educational Empowerment

The International Centre for Research on Women (ICRW) conducted a study in India in 2015, revealing a significant association between FP and women's

increased opportunities for education and employment. This empowerment through FP leads to improved economic prospects for women. Additionally, a study by the Guttmacher Institute in Ghana in 2018 demonstrated that increased access to FP contributes to better educational and economic outcomes for women. Those who can plan their pregnancies are more likely to pursue educational and career goals.

Gender Equality and Autonomy

Research conducted by the United Nations Population Fund (UNFPA) in various developing countries, including those in Africa, consistently indicates that FP empowers women to assert control over their reproductive decisions, thereby contributing to gender equality and autonomy. A study published in "Demography" in 2019, drawing on data from multiple African countries, highlights how FP usage is linked to women's decision-making power within households and communities.

Community-Based Programs and Awareness

The Population Council's research in Kenya in 2018 provides empirical evidence for the effectiveness of community health workers in increasing FP knowledge and uptake. These community-driven initiatives have played a significant role in motivating women to take control of their reproductive health. Similarly, an empirical study published in "Global Health: Science and Practice" in 2016 examined the impact of community-based FP programs in Nigeria. It found that such programs not only increased awareness and knowledge about FP but also led to increased usage.

Religious and cultural acceptance

The Nigerian Urban Reproductive Health Initiative (NURHI) conducted a study in Nigeria in 2016, emphasizing the significance of engaging religious and community leaders to foster greater acceptance of FP practices. The endorsement of FP by these leaders motivates more women to use contraception without fear of social stigma. A cross-country analysis of FP acceptance, as published in "Culture, Health & Sexuality" in 2017, examined data from various African countries, highlighting the role of cultural and religious acceptance in promoting FP usage.

In summary, the motivating factors for women's use of family planning in developing countries, particularly in Africa and Nigeria, encompass health benefits, economic and educational empowerment, gender equality, community-based programs, and religious and cultural acceptance. Empirical studies provide valuable evidence supporting the importance of addressing these factors to promote FP usage, ultimately contributing to improved reproductive health and the well-being of women in these regions.

Free Services

2.7 Barriers to Family Planning

The following sub-sections will be looking at barriers that deter people from taking notice of FP advice.

2.7.1 Socio-economic factors

Key socio-economic factors identified to affect fertility levels and explain variations in developing countries include educational status and environmental context (rural/urban). High-income earners, urban dwellers and people with a higher level

of education are more likely to adopt a method of FP compared to their counterparts in rural areas amidst poverty and low education (Mbizvo and Phillips, 2014; Ojua et al. 2014; Ajaero, 2016; Kana 2015).

Education, poverty and environmental factors have been identified to impact FP attitudes and behaviours (Olayinka *et al.* 2014; Moronkola 2006; National Research Council 1993). There is an increase in FP adoption in developing countries, but this is peculiar to certain countries and sub-regions (Reed and Mberu 2015). For example, in Nigeria, higher adoption of FP is prominent among urban residents with higher income and formal education compared to their rural counterparts. Late marriage among urban residents, which encourages them to obtain an education as well as access to improved health facilities by urban residence, has been suggested as a possible reason for this disparity (Ajaero 2016; Mberu and Reed 2015), similar to the findings in Pakistan (Pasha et al. 2015).

On the contrary, findings in Pakistan (Agha 2010) and Kano North-West Nigeria (Duze and Mohammed 2006) revealed that there was a higher adoption of FP among illiterates.

Economic development and an improvement in economic status are also argued to be among the major factors which increase the uptake of FP (Speizer et al. 2014; Adeyanju 2017; Hagman 2013), and Women who earn higher income are also more likely to gain autonomy in the use of FP lower-income earning compared to their counterparts, similar to findings in Bangladesh (Anderson and Eswaran 2008).

In contrast with the above studies, findings in Rwanda show a significant increase in FP and use of contraception among women in rural areas who were slightly above the poverty level with little or no education, which corresponds with findings in Kano, Northern part of Nigeria (Duze and Mohammed 2006). This success was attributed mainly to adequate planning and strategies employed by major actors in FP and the national government, as well as a focus on the economic sector (Muhoza, Rutayisire and Umubyeyi, 2016).

This suggests that, even in economically impoverished, poorly educated regions such as rural northern Nigeria (52%) (PRB 2016), it is possible to achieve success in FP if providers adopt appropriate strategies adapted to people's patterns of acquiring information. Thus, this study was set to explore the influence of socio-economic factors on the IB of rural dwellers to add to the existing knowledge gap of low FP adoption. As Isiuggo-Abanihe (1994) study on reproductive decision making in Nigeria reveals how male-dominant and patrilineal traditions, supporting large family sizes influence scarcity mindset, where the fear of not having enough resources drives the desire for larger families as a means of economic support and security in old age. This mindset thereby views children as assets for mitigating risks associated with economic uncertainty, enhancing social status and ensuring lineage continuity.

2.7.2 Socio-Cultural Barriers

Religion and culture are intertwined and rooted in the culture of various societies (Graff and Bremner 2014; McQuillan 2014). In Nigeria, Christianity and Islam are believed to influence morality and decision-making, including the non-use of contraceptives (Graff and Bremner 2014). The focus on contraception and abortion by religion is believed to increase low adoption of FP. McQuillan (2004) argues

that religious teachings do not shape behaviour. However, religious values do. The ability of religious institutions to communicate values to members promotes compliance; thus, there is a need to understand how these values influence the IB of rural dwellers.

Culture promotes early marriage and encourages procreation (Abdi et al. 2020; Raj 2010). In some cultures, giving out the girl child in marriage at an early age is perceived as a way of preserving her chastity and securing a better future for her (Ojua 2014; Yusuf 2005). This also improves the family's economic status by obtaining a bride price and relieving the child's financial burden from the parents (Amin 2011; Raj 2010; Ojua 2014; Thackeray 2012). This could impede existing and future education (Raj and Chandra-Mouli 2016; Duze and Mohammed 2006; Yusuf 2005). Gender inequity, which is evident in the practice of patriarchy, is the major factor sustaining this practice in Nigeria (Amin 2011; Raj 2010; Ojua 2014; Thackeray 2012). According to several studies, younger women who marry at an early age are less likely to use any form of contraceptive and rely on the experiences of older women and sometimes their husbands for FP advice (Nobelius 2010; Dairo and Owoyokun). This result is consistent with findings in Pakistan (Pasha *et al.* 2015), Nepal (Acharya et al. 2010), Ethiopia (Haile and Enqueselassie 2016) and Bangladesh (Anderson and Eswaran 2009).

In patrilineal societies such as Northern Nigeria, culture and religion promote gender inequity, giving men more advantage over women both economically and socially. Decision-making in the household and communities, including issues relating to a woman's reproductive health and contraceptive use, are made by men in this area (Makama 2013; Hellandendu 2012; Duze and Mohammed 2006; Yusuf 2005). Fathers also have limited interaction with their daughters and wives

as a result of gender inequity (Yusuf 2005). This is similar to findings in Pennsylvania among African families, which revealed that men (fathers) use indirect speech in addressing issues on sexuality with their daughters (Aker et al. 2010), suggesting gender biases and patriarchy.

However, early studies on the influence of culture on FP have traced a postpartum practice of abstinence for two years to ensure better health for the child and mother (Yusuf 2005; Renne 1996; National Research Council 1993). They also considered the evidence of a significant decline in fertility rate in Muslim-populated countries such as Ethiopia (Haile and Enqueselassie 2016), Pakistan (Ali et al. 2004), and Bangladesh (Murshid 2017) as a result of increased use of FP. Although this is worthy of more in-depth analysis, an examination of the influence of religion in the FP IB of rural men and women in Zaria is necessary for understanding their use or avoidance of FP information.

2.7.2.1 The Role of Men in influencing Family Planning

Men have played a vital role in influencing low FP adoption as research suggests that they are the primary decision-makers about familial practices in most rural areas in developing countries (Kabagenyi et al. 2014; Duze and Mohammed 2006). Women have little or no power to negotiate sex and issues on reproductive health due to gender inequality (Hellandendu, 2012; Orubuloye 1997; Kabagenyi et al. 2014). Men's desire for male children and poor communication among spouses have also been identified as reasons for their negative attitude toward FP (Apanga and Adam 2015; Oni and McCarthy 1991). The number of children a man has serves as proof of his prowess, future wealth (Bride price) and family name continuity (male children) (Apanga and Adam 2015; Aransiola, Akinyemi and Fatusi 2014; Izugbara and Ezeh 2010; NRC 1993). Reports and findings have

shown that recent access to FP services insists on having men's consent before supplying any form of the modern method of FP to women (Tumlinson Okigbo and Speizer 2015), which encourages low adoption. Other researchers have argued that the primary reason for men's negative attitude towards FP has been the gender-specific/female-centred structuring of programmes – and the poor targeting of men (Kabagenyi *et al.* 2014; Okigbo *et al.* 2015). It is, therefore, significant to understand men's IB and their perception of ways to target them better.

In Kenya (Emenike and Dalal 2008) and Bangladesh (Murshid 2017), findings show that women in patriarchal-dominated regions, to gain control over their bodies, health, and future, use family planning in clandestine.

Men claim that they are excluded from family planning programmes - hence their resistance (Greene and Biddlecom, 2000). These suggest that understanding the underlying reasons why men may potentially be preventing their wives from practising a form of contraception – and not doing so themselves - by investigating their IB and the sources they consult (or avoid) may offer important pointers as to how they might be exposed to messages and approaches that will improve their engagement with FP.

2.7.3 Service Providers Biases

Biases of service providers have been found to exist about age, sex and marital status (Tumlinson Okigbo and Speizer 2015; Sidze *et al.* 2014; Hebert 2013). The above studies found that providers are more receptive and more likely to supply contraceptives to single men compared to their female counterparts and to married rather than unmarried clients. Although this was seen to have come from genuine concern, stemming from misconceptions about a side effect and societal

expectation of abstinence by unmarried individuals. This practice has been demonstrated in Nigeria by Oye-Adeniran et al. (2005) to increase unmarried individual's (49.1%) reliance on patent medicine stores for FP information like findings in Ghana (Apanga and Adam 2015) and South-East Nigeria (Ozumba and Ijioma 2005).

Hence, there is a need to re-examine the experiences of rural dwellers (married and unmarried) with health providers, considering that they are among the major formal information source(s) mentioned.

Distrust for government and international donors has been reported to serve as a barrier to FP (Renne 2006; Yahya 2007). For example, a study by Renne revealed the relationship between the rejection of the polio vaccine and FP in Zaria as an attempt to reduce the population. Through information sharing, people believed that the government was aware of the administration of the trial of Trovafloxacin Mesylate, given at no cost during the 1996 cerebrospinal meningitis, without informed consent. This initiative was believed to be internationally sponsored and nationally promoted by the Nigerian Government through the media to reduce the Zarian population. The belief that the government was aware that it was a trial vaccine but failed to exercise due diligence in informing the people before testing this vaccine increased distrust. A recent study in Nigeria reported the existence of this notion currently in circulation among rural dwellers, hence increasing distrust for international donors and the government. Therefore, there is a need to investigate the people's feelings about major FP actors in rural Nigeria to find out how these feelings affect their IB.

In summary, this chapter identified existing literature on the IB of rural dwellers, dominant information sources accessible to them, and the barriers faced in

utilising FP information. The gap revealed based on these reviews shows a preference for informal information sources by rural dwellers and the influence of socio-cultural practices on FP. However, there is limited literature on the influence of these factors on the FP information behaviour of the people and the reasons they prefer informal information sources over formal sources. Again, there is limited literature on the influence of gender on IB; thus, this study set to add knowledge to these identified gaps.

2.8 Reviewing: Public Sphere, Patriarchy and Intersectionality

2.8.1 Habermas' "Public Sphere"

The normative concept of the public sphere is associated with Jurgen Habermas, a German sociologist and philosopher. Habermas' delineation of the public sphere is "a realm of our social life in which something approaching public opinion can be formed with guaranteed access to all citizens. A portion of the public sphere comes into being in every conversation in which private individuals assemble to form a public body "(Habermas 2020 p. 49). Habermas' concept of the public sphere revolves around the idea of a space where private individuals come together to engage in "rational discourse" and deliberation about matters of common/shared concern. In its original conception, Habermas argued that the provision for citizens to assemble freely in an "unrestricted fashion" (P.49), with the assurance of freedom of association, as well as freedom to express and disseminate their opinion on matters of general interest was significant in shaping public opinion and contributing to the democratic discourse of the society. Habermas' vision of the public sphere thereby identifies and associates this group as-private individuals driven by neither specific economic or private agendas, representing the citizens and the public body. He, therefore, presents their ability to engage in

free and open discourse as central to his concept of a vibrant democratic society and reflective of his normative ideal of how public discourse should function within a democratic society.

As conceived by Habermas (2020), core principles and norms form the basis for ensuring the functioning of public opinion within the public sphere as a mediator between the state and society. These three key elements (p. 50) include:

General Accessibility: The public sphere should be accessible to all members of society without discrimination. It implies that individuals from diverse backgrounds and social strata should have the opportunity to participate in public discourse. This principle aims to prevent exclusion and ensure inclusivity in shaping public opinions.

Elimination of All Privileges: In a democratic public sphere, there should be no inherent privileges that give certain individuals or groups undue advantage or authority in shaping public opinion. The elimination of privileges fosters a more equitable and level playing field for all participants.

Discovery of General and Rational Legitimations: Discussions within the public sphere should aim at discovering general and rational legitimations for various ideas, policies, or decisions by engaging in reasoned debate and providing well-supported arguments to justify positions.

According to Habermas, these norms are significant in ensuring public discourse is open, inclusive, fair, and rational, ultimately contributing to informed decision-making and the collective well-being of society.

“They then behave neither like business or professional people transacting private affairs, nor like members of a constitutional order, subject to legal constraints of a state bureaucracy” (p. 49).

There are two domains within the concept of the public sphere, as suggested by Habermas. The first is the Public Sphere itself, described above as a dimension where private individuals come together to engage in rational discourse and deliberation about matters of common concern. This consists of a wide range of topics and discussions, not limited to politics. In this sphere, citizens freely express their viewpoints, leading to the formation of public opinions. “The expression of public opinion refers to the task of criticism and control which a public body of citizens informally and, in periodic elections, formally practice vis-à-vis the ruling structure organising form of a state” (Habermas 1964 p.49).

The second is the ‘political public sphere’-a narrower dimension within the broader public sphere. This specifically deals with discussions and activities connected to the functioning of the state, governance, and political processes. In the political public sphere, the focus is on issues related to the state and its policies, elections, and the role of citizens in political decision-making. However, the function of this ‘political public sphere’ is in contrast to the literary one. According to Habermas, the literary sphere originated during the “Enlightenment” in the eighteenth century, when public discussions focused on objects connected to the state. Within the former domain (literary public sphere), which existed in the eighteenth century, the monarchical and feudal societies that were authority (Habermas 2020) made no distinctions between the state and society or between public and private. The understanding of the term “Public” was rather quite different from Habermas’ re-definition of “public” in relation to the “public sphere”. Prior to the

emergence of the bourgeoisie and the formation of the public sphere, Habermas asserts that authority was typically represented by a lord, who declared authority before the people but whose focus was on asserting their power rather than serving the interest of the governed. The literary public sphere, as argued by Habermas was characterised by the widespread dissemination of written materials, including newspapers, pamphlets, essays and literary works. Intellectual and cultural debates found their platform in public debates in salons and coffee houses, where individuals from various social classes engaged in intellectual and political discourse. Habermas argues that newspapers and pamphlets (the media) were significant in shaping the literary and intellectual discussions in this era, suggesting that they were non-representative of public opinion. However, the collapse of the feudal system in the eighteenth century and its transformation into the "bourgeois public sphere" (Habermas 2006 p. 75) laid the groundwork for the later development of the "political public sphere" (Habermas 1964 p.53).

Building upon the foundation laid by the literary public sphere, the Political Public Sphere came to prominence in the 19th and 20th centuries. It was characterised by a dedicated focus on political deliberation and discussions pertaining to governance and state affairs. This era witnessed the proliferation of newspapers, the emergence of political clubs, and the convening of public meetings as avenues for engaging with political matters. Habermas's comprehensive exploration, particularly in *Between Facts and Norms* (1996), reflects a concern for the health and vitality of the public sphere in contemporary society. While he does not criticize the concept of the public sphere itself, he identifies various challenges and transformations that require critical examination and, in some cases,

remediation to ensure that the public sphere continues to play a constructive role in democratic societies.

(Further discussed in the criticism).

In 'the political public sphere' (bourgeois public sphere), the state authority, as pointed out by Habermas, is often considered a form of public authority; it is not inherently part of the political public sphere itself. Instead, it derives its role and legitimacy from its responsibility to address the well-being of all citizens, a responsibility rooted in the concerns and discussions that arise within the political public sphere. This distinction highlights the relationship between the state and the public sphere, emphasizing that the state serves as the executor of policies and decisions shaped by the discussions and deliberations within the political public sphere, contrary to the literary public sphere, where political leaders asserted power and simply communicated their authority to the people.

By distinguishing between these two domains, Habermas acknowledges that public discourse can encompass a wide spectrum of topics and that the political public sphere is a subset within the larger public sphere dedicated to political matters. This differentiation, as argued by Habermas, helps clarify the scope of discussions and activities when considering the public sphere in its various forms (Habermas 2006).

According to Habermas, the public sphere is, therefore, a vital component of democratic governance - mediating between society and the state and ensuring transparency, accountability, and democratic control over political power. According to this conceptualisation, the principles of the public sphere, particularly the idea of public information and discussions about political power, were not

always present but emerged in the 18th century as the result of historical developments within bourgeois society and the emergence of new forms of democratic control against the secrecy and opacity of monarchies. Once established, it became a cornerstone of oversight of the activities of the state. In democratic societies, the public sphere enables citizens to scrutinize and influence state actions. The specific meaning of the public sphere concepts arises from concrete historical situations; these concepts developed in response to the needs and challenges of their times, reflecting the evolving relationship between citizens, the state, and political power. The emergence of public discussions about the exercise of political power and the institutional guarantee of critical intent in these discussions was closely tied to a specific phase of bourgeois society. This suggests that the public sphere was intricately connected to the development of the bourgeois constitutional state.

The public sphere, therefore, necessitates a need for effective communication of public opinion to the state through a channel that can transmit information and influence those who receive it (Habermas 1964). Traditionally, newspapers and magazines, as well as radio and television, have served as essential media channels in this regard. For example, Beniger (1987) highlights the emergence of the mass media and a gradual shift from interpersonal to mass communication as the basis for societal control and the most important communication technology in historical societies.

Two models, the liberal model of the public sphere and the public sphere in the social welfare state mass democracy, were identified by Habermas (1964 pp 53-54) to have guided the activities of the public sphere in the eighteenth century.

The liberal model of the public sphere: In the liberal model, the public sphere was characterised by principles such as freedom of expression, rational debate, and open discourse. It emphasized the role of informed citizens coming together to engage in reasoned deliberation about matters of common concern. The liberal model is often associated with the Enlightenment ideals of individual rights, limited government, and the free exchange of ideas. This, according to Karl Bucher cited in Habermas (1964 p 53), marked a significant shift in history, and Bucher characterised this great development as follows: "Newspapers changed from mere institutions for the publication of news, into bearers and leaders of public opinion-weapons of party politics". This characterisation aligns with the idea that newspapers, and the media in general, play a crucial role in shaping public discourse and influencing political processes (Habermas 1996). As newspapers became vehicles for expressing and disseminating various viewpoints, they gained the power to sway public sentiment and even align with specific political parties or agendas.

This evolution reflects the broader shift in the media's role from mere information providers to influential actors in shaping public opinion and political outcomes. One of the key concerns addressed by Habermas is the infiltration of commercialisation and commodification into the public sphere, observing how market forces have increasingly encroached upon domains traditionally reserved for public discourse, with the media being a prime example. In this context, he voices a noteworthy critique, highlighting how the dominance of profit motives can distort the public sphere's primary function of fostering rational-critical debate. This intrusion of market-driven interests jeopardizes the integrity of public discourse by prioritizing financial gain over the pursuit of reasoned dialogue.

The function of the media as a crucial source of news, analysis and opinion in societies is identified as significant for the development of modern society (Schudson 2011; Mcquail 2010; Curran 2002; (Habermas 2015;2019); Lippman 1922). According to Habermas, the media plays a significant role in informing the public and fostering critical thinking. Consequently, a channel of communication, preferably the traditional media, is highlighted as an important medium for disseminating decisions and opinions developed within the public sphere.

Public Sphere in the Social Welfare State Mass Democracy: Although the liberal model of the public sphere, characterised by principles like freedom of expression and rational debate, is still relevant today in terms of the normative claim that information should be accessible to the public (Rawls 1971; Sen 1999; Sustain 2007), Habermas suggests the model cannot fully apply to the conditions of an industrially advanced mass democracy organised in the form of the social welfare state, as the social transformation of social preconditions to which the ideological elements of the liberal model were linked have fundamentally transformed over time affecting how the public sphere functions and manifests itself in society. For example, the diffusion of the press and propaganda expanded the public body beyond the boundaries of the bourgeoisie (made up of educated men and wives of elite men within the society) (Calhoun 1992/1993).

The positive impact of the public sphere in democratic societies has been discussed by scholars, and some key points highlighted are discussed below.

The public sphere serves as a forum where citizens can engage in informed discussions and debates about important social and political issues. As Habermas notes, it is a space for "communicative action" where individuals can deliberate and share their views ((Habermas 2015;2019)).

Through public discourse and media scrutiny, the public sphere helps hold governments and institutions accountable for their actions. As Fraser argues, it plays a crucial role in ensuring "participatory parity" and preventing the concentration of power (Fraser 1996). Research has consistently shown that an active public sphere is positively associated with political participation. A study by Verba, Scholzman, and Brady (1995) found that individuals who engage in public deliberation, discuss political issues, and participate in civic groups are more likely to vote and engage in other forms of political activism.

A vibrant public sphere encourages the inclusion of diverse voices and perspectives (Benhabib 1996). Benhabib emphasizes the importance of "communicative ethics", in which all individuals, regardless of their background, can participate in public debates.

Social movements and advocacy efforts often use the public sphere to raise awareness and mobilize public opinion. The civil rights movement in the United States is an example of how public discourse can lead to significant social change (McAdam 1982). Empirical research on social movements and activism demonstrates how the public sphere, both offline and online, serves as a platform for organizing and mobilizing for social change. More recently, movements like #BlackLivesMatter have utilized the digital public sphere to raise awareness and drive action (Updegrave et al. 2020; Fraser 2014).

The public sphere can serve as a space to advocate for and protect human rights. Amnesty International, for instance, utilizes public discourse and media to expose human rights abuses and mobilize support (Mertus 2000).

Another significance of the public sphere, highlighted by Davis (2006), shows that transparency and open government are facilitated by the public sphere. Access to information and public scrutiny help prevent corruption and ensure that government actions align with the public interest. Some scholars have explored how the public sphere holds political leaders and institutions accountable. For example, a study by Besley Burgess and Prat (2002) similar to Chowdhury (2004) in India, examining the impact of media and public information in reducing corruption within the Indian context, shows that a vibrant public sphere with a free press can reduce corruption and improve governance by exposing misconduct. However, Goel and Nelson (2011) argue that studies like Besley et al. (2002) may overstate the role of a free press in reducing corruption. While a free press is undoubtedly important, it is just one element of a broader anti-corruption strategy. Corruption is a complex issue rooted in political, economic, and social contexts. Hence, focusing solely on the freedom of the press may divert attention from other critical factors such as legal reforms, effective law enforcement, and institutional changes that are equally, if not more, important in combating corruption (Goel and Nelson 2011).

This criticism suggests the need for a holistic approach to tackling complex issues, acknowledging that while a free press plays a crucial role, it cannot address the issue in isolation. Comprehensive anti-corruption efforts should consider a wide range of factors and reforms beyond media freedom (Goel & Nelson 2011), suggesting that the significance of free press in the public sphere is over rated, as it does not function independently.

Scholars like Fishkin (1991), in emphasising the importance of rational and informed public deliberation in decision-making processes, point out that the

public sphere provides the ideal environment for such deliberation. For example, Fishkin's (1991) empirical experiment, which was conducted to assess the impact of deliberation within the public sphere, revealed that informed and deliberative discussions lead to more considered and moderate policy preferences.

According to Putnam (2000), public discussions can help bridge divides in society and promote social cohesion. By facilitating dialogue between different groups, the public sphere can contribute to a sense of unity and shared purpose. Research by Putnam (2000) on social capital highlights participation in public activities and civil society organisations revealed strengthened social ties and trust within communities.

The Habermasian concept has been found to be useful by some scholars in various fields and contexts. For example, Willem (2012) asserts that popular culture is a valuable concept for gaining a more comprehensive insight into public spheres within the African context, as it contributes to a deeper and more detailed understanding of how public spheres operate in Africa. However, it emphasizes the need for caution in defining popular culture accurately, suggesting an alternative approach which emphasises the importance of recognising that the historical origins and development of the notions of civil society and the public sphere are intricately intertwined. Fraser (1996) argues that the public sphere plays a crucial role in ensuring participatory parity and preventing the concentration of power, as it helps hold governments and institutions accountable for their actions through public discourse and media scrutiny.

In summary, according to Habermas, the public sphere's significance lies in its role as a space for civic engagement, accountability, inclusivity, social change, human rights advocacy, transparency, deliberative democracy, and social

cohesion. It plays a crucial part in the functioning of democratic societies and the protection of individual and collective interests. However, a common pattern observed in the identification of the contribution and practical application of the public sphere within society by scholars following its original conceptualisation by Habermas is that it needs other elements to function appropriately within society.

2.8.2 Criticisms of Habermas' concept of the "Public Sphere"

Although Habermas' concept of the public sphere has been acknowledged for making a significant contribution to the understanding of public discourse and democracy, his idealised vision of the public sphere has been critiqued on several fronts (Fraser 1990; McLaughlin 1993; Mouffe 2000; 2007; Karppinen 2007; Willems 2012; Morrison 2021).

This review is therefore geared towards conducting an analysis of criticisms directed at the concept of the public sphere, with a specific focus on insights offered by influential scholars who have been instrumental in shaping these critiques/ who have advanced concepts related to the initial critiques of the public sphere. The overarching aim is not only to present these criticisms but also to establish them as foundational perspective for understanding the evolving discourse surrounding this concept.

Gender Bias within the Public Sphere

Nancy Fraser's 1985 critique of Habermas's concept of the public sphere, as articulated in her seminal article titled "What's Critical About Critical Theory? The Case of Habermas and Gender," significantly contributed to the ongoing discourse on the public sphere while challenging its limitations (Kampourakis 2016).

Fraser's (1985) primary critique centres on the inherent gender bias within Habermas's conception of the public sphere. She contends that Habermas' model neglects to acknowledge the historical exclusion of women from the public sphere, especially during the 18th and 19th centuries. Highlighting that women's voices and experiences were systematically marginalized, rendering the public sphere intrinsically exclusionary. Fraser underscores the critical need to recognize the gendered nature of public discourse. Women's historical exclusion illustrates that the idealized Habermasian public sphere was, in practice, exclusive and failed to represent diverse voices. Calhoun (1996) argues that women's voices and concerns are often sidelined in the public sphere, as it is conceptualised by Habermas. Hawkesworth (1997) further critiques Habermas' public sphere for its failure to address how gender relations are constructed and perpetuated within it. She highlights the need to recognize the role of gender in shaping public discourse.

In addition, Fraser argues that the public sphere treats individuals as homogenous, while overlooking the existence of marginalised groups creating what she calls "subaltern counter-publics" in response to this exclusion. Subaltern counter-publics are alternative discursive spaces that develop alongside the official public spheres. They serve as arenas where marginalized social groups create and disseminate counter-discourses to express oppositional interpretations of their identities, interests, and needs. Drawing on the concepts of "subaltern" from Spivak (1988) and "counter-public" from Felski (1989), Fraser argues that counter-publics emerge in response to the exclusions present in dominant public spheres to facilitate the ideal of participatory parity better.

Fraser's critique of Habermas's concept of the public sphere highlights that the traditional public sphere was never fully realized and was marked by significant

exclusions, primarily affecting women and non-proprietary male working-class individuals. These excluded groups attempted to form competing counter-publics, creating a fragmented and antagonistic public sphere.

Fraser identifies a gap between the idealized notion of the public sphere, which retains emancipatory potential, and the critique that it serves as a tool for hegemony and political domination. She focuses her criticism on certain aspects of Habermas's conceptualisation of the public sphere, challenging the assumption that social inequalities can be bracketed in deliberation and emphasizing the need to eliminate systemic social inequality for participatory parity.

Subaltern counter-publics, as conceptualised by Fraser, emerge in response to the exclusions of dominant deliberation, functioning as spaces for discourse and as bases for antagonistic politics. They widen the field of discursive contestation, bringing forth overlooked issues. However, Fraser notes that counter-publics can also be antidemocratic and antiegalitarian, as seen in the rise of far-right movements that exploit the exclusion of certain groups.

Fraser emphasizes that public spheres are not just arenas of discursive contestation but also spaces where social identities are formed and enacted. She argues for the necessity of multiple publics in a diverse and multicultural society to accommodate differences and enable intercultural communication.

The concept of subaltern counter-publics challenges the dominant strand of deliberative democracy, highlighting the limitations of political equality and the need to acknowledge societal inequalities. It also questions the unitary representation of the public sphere in the deliberative paradigm, revealing the presence of hegemonic discourse rooted in structural inequality.

Andrade (2002) notes that women, especially in Africa, have limited access to the public sphere. In her exploration of the role of gender within the African public sphere, the central theme of Andrade's article revolves around the concept of the public sphere in Africa and how gender dynamics shape and are shaped by it. Engaging with the notion of 'the public sphere' as a space of discourse, debate, and participation in the socio-political life of a society through a feminist lens, she examines the complexities of women's engagement with this public sphere, both in writing and in protest. She examines the historical use of "Writing and Rioting" by women in Africa to express and assert their presence and voice within the public sphere. The juxtaposition of 'writing' and 'rioting' highlights the diverse strategies employed by women to engage with social and political issues.

Andrade critically analyses the limitations and challenges faced by African women in their attempts to participate in the public sphere. She acknowledges the gendered nature of power dynamics and how patriarchal structures often restrict women's access to this space. Her examination of the public sphere as a contested terrain, where women's voices are sometimes marginalized or suppressed, provides valuable insights into the complexities of gender and public discourse in Africa. The importance of recognizing the diversity of women's experiences within the public sphere is highlighted in this study. She highlights how women from different backgrounds, ethnicities, and socio-economic statuses may have distinct encounters with the public sphere and face varying degrees of empowerment or marginalisation.

The central theme of Andrade's article revolves around the concept of the public sphere in Africa and how gender dynamics shape and are shaped by it. She engages with the notion of 'the public sphere' as a space of discourse, debate, and

participation in the socio-political life of a society. Through a feminist lens, she delves into the complexities of women's engagement with this public sphere, both in writing and in protest.

One of the notable aspects of Andrade's work is her focus on African women's agency in two distinct realms: writing and rioting. She examines how women in Africa have historically used these forms of expression to assert their presence and voice within the public sphere. The juxtaposition of 'writing' and 'rioting' highlights the diverse strategies employed by women to engage with social and political issues.

Andrade critically analyses the limitations and challenges faced by African women in their attempts to participate in the public sphere. She acknowledges the gendered nature of power dynamics and how patriarchal structures often restrict women's access to this space. Her examination of the public sphere as a contested terrain, where women's voices are sometimes marginalized or suppressed, provides valuable insights into the complexities of gender and public discourse in Africa. Furthermore, Andrade's article underscores the importance of recognizing the diversity of women's experiences within the public sphere. She highlights how women from different backgrounds, ethnicities, and socio-economic statuses may have distinct encounters with the public sphere and face varying degrees of empowerment or marginalisation.

The subaltern counter-publics offer an analytical tool to understand the power dynamics and legitimacy issues within public spheres, particularly in the context of structural inequality and contemporary political crises. They underscore the importance of addressing power inequalities in the production of norms and advocate for a more inclusive and participatory democracy. The concept of

subaltern counter-publics challenges the idea that informal discussions in society are inclusive and lead to fair decisions, as suggested by deliberative democracy. It points out that these discussions often favour the dominant group, which is a result of existing inequalities in society. Moreover, aside from being a useful concept for analysis, subaltern counter-publics also relate to the idea that in an ideal society, we should aim for both social equality and cultural diversity while involving everyone in decision-making processes.

Rational Discourse and Agonistic Pluralism

Fraser and Gordons (1994) argue that by emphasizing abstract, rational discourse, Habermas' public sphere excludes discussions related to social dependency, which disproportionately affects women. Similarly, Mouffe's (2007; 2000) critique of Habermas centres on his disproportionate emphasis on rational discourse and the cultivation of consensus within the realm of the public sphere. She contends that this orientation overlooks the fundamentally discordant and adversarial character inherent to the political arena. In Mouffe's view, politics transcends mere rational deliberation, encompassing the articulation of divergent interests and value systems. The overemphasis on rational discourse and deliberation within the public sphere has also been highlighted by Goodin and Niemeyer (2003) as overlooking the importance of emotional and affective aspects of communication, which can be significant drivers of public opinion and political engagement.

Mouffe's (2007;2000) critique of the public sphere constitutes a significant contribution to contemporary democratic theory, rooted in her broader framework of agonistic democracy. Her analysis exposes several fundamental limitations in the traditional concept of the public sphere, particularly as formulated by Habermas.

One of the central pillars of Mouffe's (2000) critique is her contention that the traditional understanding of the public sphere places excessive emphasis on rational deliberation and consensus-seeking. Thus, it challenges the Habermasian ideal that envisions the public sphere as a realm of rational discourse where all disagreements are resolved through consensus. Mouffe argues that this perspective neglects the inherent role of conflict and disagreement in democratic politics. In her view, limiting democracy to a sanitized space of consensus limits its attribute to accommodate the multifaceted nature of divergent interests and conflicting values essential to political life.

Linked to this critique is Mouffe's (2000) assertion that the conventional concept of the public sphere tends to overlook the constructive role of political conflict, positing that democratic politics should not refrain from acknowledging antagonisms and disagreements, as these are vital components of a vibrant and pluralistic democracy. By suppressing conflict in favour of consensus within the public sphere, there is a risk of fostering a superficial unity that conceals underlying power imbalances and social inequalities (Mouffe 2000 pp 45-47), highlighting the importance of recognizing and embracing political conflict as a productive force in democratic discourse.

Another dimension of Mouffe's (2000) critique relates to the potential homogenizing effect of the idealized public sphere. When "rational argumentation" and consensus-building become the central objectives, diverse voices and alternative perspectives may be marginalized or excluded, consequently resulting in the suppression of minority viewpoints and the reinforcement of dominant norms and values (P.46). Similar to Mouffe, Innes and David (1999) asserting the irrationality of "rational consensus" note it can result in alternative ideas being

shut, thereby defeating the essence of consensus. Inuit and David, therefore, propose the concept of “communicative rationality grounded in dialogue and joint learning among those with interest in an issue, by offering an epistemological and ethical framework for understanding and assessing consensus” (p.413)

An agreement's success is not just about its content but also about the fairness and legitimacy of the process that led to it. A fair, open, and inclusive process can be successful even without a final agreement, as it fosters understanding among participants about the problem and each other's perspectives. On the other hand, a superficial agreement, reached just for the sake of agreement, often fails to resolve underlying conflicts and is not a true success. Consensus is a dynamic, evolving process that typically starts with informal discussions among stakeholders, adapting to new developments and understandings over time.

Mouffe (2007) further serves as a cautionary reminder that the public sphere, in its traditional form, may not adequately accommodate the richness of diverse political expressions and identities. This is similar to Karppinen's (2007) argument of the near impossibility of achieving a pluralistic society. Reaffirming Mouffe's criticism, a study by Morrison (2021) aimed to establish whether a prominent BBC programme fosters a pluralistic public sphere or functions as an exclusive group reinforcing certain perspectives and individuals (elites). The study, therefore, investigated, the diversity in the nature of voices represented on the show, with findings revealing that the choice of pundits on the show was influenced by elite-driven agendas and the dynamics of their interactions. This finding does not align with one of the three core principles of the public sphere - *Elimination of All Privileges* - which focuses on eliminating inherent privileges that give certain individuals or groups undue advantage or authority in shaping public opinion.

Supporting the criticism of Habermas's reliance on normative assumptions of rational discourse and deliberation within the public sphere, Fraser (2014) argues that these assumptions overlook actual power imbalances and social inequalities that influence participation in public discourse. She asserts that Habermas's conceptualisation of the public sphere idealizes a level playing field that is divorced from reality. Following Fraser's (2014) aforementioned argument, it may be important to note the importance of addressing power dynamics, inequalities, and structural barriers that hinder equitable participation within the public sphere.

Mouffe (2000) also places a strong emphasis on the recognition of pluralism in democratic societies. She/He argues that the conventional public sphere often prioritizes a particular set of rational norms and tends to neglect the legitimacy of alternative normative frameworks and identities, highlighting the importance of acknowledging and accommodating the multiplicity of values and identities that exist within democratic societies, challenging the notion that there is a single, universally accepted mode of rationality.

Mouffe (1998), therefore, proposes the concept of "agonistic pluralism." Instead of advocating for consensus-oriented deliberation, she suggests that democratic societies should create spaces for competing political projects and diverse forms of political engagement. Agonistic democracy, according to Mouffe, acknowledges and embraces the existence of conflict and contestation as vital aspects of democratic politics. This approach seeks to create a more robust and inclusive democratic practice that reflects the complex reality of political life. Mouffe's critique of the public sphere raises fundamental questions about the nature of democratic politics and the role of conflict, diversity, and pluralism within it, thus challenging the traditional idealisation of the public sphere as a realm of rational

consensus and underscores the importance of recognizing and embracing political conflict and diversity. Thus, Mouffe points the concept of agonistic pluralism as a pathway towards a more vibrant and inclusive democratic discourse, reimagining the public sphere as a space that accommodates, rather than suppresses, the complexities of contemporary democratic politics.

Naïve Pluralism

Karppinen (2007), building on the work of Mouffe on 'agonistic pluralism', explores the concept of "naïve pluralism" within the realm of media politics and the ramifications of embracing a "radical-pluralist" approach when examining the public sphere. Karppinen highlights the limitations inherent in naïve pluralism while highlighting the necessity for a more sophisticated comprehension of how media shapes the public sphere.

The prevailing notion of naïve pluralism is the celebration of the sheer multitude of voices present in the media landscape, often without a comprehensive examination of the power dynamics and structural disparities that underlie media production and dissemination. He contends that naïve pluralism frequently glosses over the unequal access to media platforms and the concentration of media ownership, factors that can substantially constrain the actual diversity of voices heard in practice.

Demonstrating how naïve pluralism aligns with a simplistic interpretation of the public sphere while prioritizing the quantity of voices over the quality of deliberation, Karppinen critiques Habermas' idealized public sphere concept and introduces the radical-pluralist approach as an alternative perspective designed to address these inadequacies.

According to Karppinen, the limitations of naïve pluralism are structured within the various media dynamics, including gatekeeping, framing, and agenda-setting, which tend to exert significant influence over the formation and operation of the public sphere. Additionally, Karppinen argues that economic interests and political power mould media content and access, and these factors can distort the idealized pluralism celebrated by naïve pluralists.

Karppinen issues a compelling call for a more robust and nuanced comprehension of the public sphere. He acknowledges the imperative to consider the structural inequalities and power imbalances that permeate media politics and emphasizes the necessity for a critical evaluation of the quality and inclusivity of public deliberation.

Another criticism of Habermas' concept of the public sphere is from Sunstein (2017), and concerns the limited relevance of the Public Sphere to contemporary media, especially digital and social media, in shaping public discourse. Sunstein argues that the rise of online platforms has transformed the dynamics of public communication and argues that Habermas' model is less applicable in the digital age.

In examining the influence of social media on the public sphere, various criticisms have emerged. One such concern is the formation of filter bubbles and echo chambers (Kaluzka 2022; Kruse et al. 2018; Zuiderveen et al. 2016). These phenomena are a result of social-media platforms tailoring content to align with users' existing beliefs, potentially limiting exposure to diverse viewpoints. According to Pariser (2011), algorithmic personalisation reinforces users' existing beliefs, posing a significant challenge to the democratic ideal of informed public discourse.

Social media as a public sphere has also been criticised by those concerned that algorithms may prioritize sensational or clickbait content over substantive discussions, potentially undermining the quality of public discourse (Faraj et al., 2018). Tufekci (2018) asserts that algorithms can motivate the spread of sensational content, diverting attention from substantive and reasoned discourse.

Misinformation and disinformation are persistent issues on social-media platforms, which have faced criticism for facilitating the spread of false information. This spread can distort public debates and erode trust in reliable sources. Pennycook and Rand (2018) demonstrate the prevalence of false information on social media, emphasizing the urgent need for platforms to address the effective dissemination of misleading content.

Accountability poses another challenge, as social media companies often face criticism for their lack of transparency and accountability in content moderation. Issues such as hate speech and harassment may not be adequately addressed. Research by Gillespie (2018) investigates transparency concerns surrounding content moderation policies, underscoring the importance of clear and consistent moderation practices.

The commercialisation of discourse also raises questions about whether the profit-driven nature of social-media platforms prioritizes advertising revenue over meaningful public discourse, potentially commodifying information and public attention. This concern is explored by Couldry and Mejias (2019), whose study demonstrates how commercial interests shape online discussions as social-media platforms profit from user-generated content.

Exclusion and the gender digital divide represent other valid concerns, as not everyone has equal access to social-media platforms. This disparity can lead to exclusion and a digital divide, potentially limiting the inclusivity of the digital public sphere. Studies in developing countries evidence this gender digital divide, where women are less likely to have access to information communication technology (ICT) compared to men (Makri 2019; Antonio and Tuffley 2014; Avgerou and Madon 2005). In his study on the gender digital divide in twelve Latin American countries and thirteen African countries, Hilbert (2011) identified the unfavourable conditions of women with respect to employment, education and income as factors limiting women's access to and use of technology.

Traditionally, longstanding inequalities prevent women from accessing ICT. However, once they have access to ICT, this vicious circle created by traditional inequalities can be turned into vicious circle. However, Ojanugua and Gilbert (1992) assert that women in rural communities must become agents of change to improve their situation, arguing that access to income, legal rights, social status and education may prove more important for determining women's access to health rather than technology. ICT represents a concrete and tangible opportunity to tackle longstanding challenges of inequality

Online harassment and toxicity represent serious challenges to any idea of social media providing an expansion of the public sphere, as social media can become a breeding ground for such behaviour. Duggan (2017) argues that this toxicity can deter marginalized individuals from participating in the digital public sphere, hence the need for effective moderation and anti-harassment measures.

In summary, the examination of criticisms surrounding the public sphere, drawing upon the insights of scholars like Karppinen, Mouffe, Fraser, and social media

critics, reveals a multifaceted landscape of challenges and complexities. These criticisms shed light on the evolving nature of the public sphere in contemporary society and highlight key issues that demand thoughtful consideration.

Karppinen's perspective underscores the potential fragmentation of the public sphere in the digital age, where the rapid dissemination of information can hinder in-depth, nuanced discussions. This critique calls for a re-evaluation of how we engage with information in the digital realm.

Mouffe's work challenges the conventional notion of a harmonious and consensus-driven public sphere by emphasizing the importance of acknowledging political conflict and antagonism. Her critique invites a rethink of the role of disagreement and diversity in democratic politics.

Fraser's critique, centred on gender bias and normative assumptions, highlights the historical exclusions and idealized notions within the public sphere concept. Her insights prompt a re-examination of the public sphere's inclusivity and the need for greater gender equity.

Social media critics draw attention to contemporary challenges such as filter bubbles, misinformation, and algorithmic manipulation. These concerns reflect the evolving landscape of digital public discourse and the urgent need for platforms to address these issues effectively.

The criticisms of the public sphere offered by these scholars and social media critics underscore the dynamic nature of public discourse in our digital age. While they illuminate challenges and limitations, they also provide opportunities for reimagining and revitalizing the public sphere as a space for meaningful, diverse, and inclusive civic engagement. These critiques serve as valuable guides for

fostering a more robust and participatory democratic discourse in the study's navigation through the complexities of the contemporary public sphere.

2.8.3 The concept of Patriarchy

The industrial revolution reinforced traditional gender roles, with men working in factories and women expected to fulfil domestic duties (Acker 1989; Offen 1988). Women's movements in the 19th and 20th centuries challenged patriarchal norms, advocating for women's suffrage, legal rights, and gender equality (Flexner, 1996). Contemporary feminist movements, intersectional approaches, and changes in labour markets began challenging traditional patriarchy (Connell, 1987). Globalisation has brought both challenges and opportunities for gender roles, with increased awareness of women's rights and participation in the workforce (Kabeer, 2005). Scholars highlight the existence of multiple patriarchies based on race, class, and other intersecting factors (Hill Collins, 1990).

Contemporary scholarship explores the intersection of patriarchy with other systems of power and the potential for transformative change (hooks, 1981). This literature review provides an overview of the evolving nature of theories of patriarchy, highlighting key historical developments, challenges, and ongoing debates in the study of gender and power dynamics. It underscores the importance of considering patriarchy as a complex and multifaceted phenomenon influenced by various historical and sociocultural factors.

According to Acker (1989), patriarchy served as a pivotal focal point and the foundation for identifying the theoretical subject that spurred the rapid evolution of innovative thoughts regarding the oppression of women. To re-affirm the need for a revolution against the oppression of women, Nassaria (2021) attributes the need for feminism to patriarchy.

Patriarchy has been defined by some authors, emphasising the various forms of oppression women face as a result of male dominance. For instance, Rich's (1977) definition of patriarchy, cited in Bari (2005 p.4), asserts patriarchy as a practice not limited to one aspect of life but as an intricate and pervasive system that influences various spheres of society to maintain male dominance and control over women.

"Patriarchy is the power of the fathers: a familial-social, ideological, political system in which men - by force, direct pressure, or through ritual, tradition, law, and language, customs, etiquette, education, and the division of labour, determine what part women shall or shall not play, and in which the female is everywhere subsumed under the male." (Rich 1977 p.57). Similar to Millet's definition, Lerner's definition of patriarchy in 1986 emphasises how male dominance becomes entrenched and extended from familial structures to broader societal norms and institutions, resulting in gender-based inequalities and disparities in power. "Patriarchy is the institutionalisation of male dominance, initially within the family, and subsequently extended to exert control over women in society at large. It involves the perpetuation of power imbalances where men hold authority over women and children".

Smith (1987) defines patriarchy as a multifaceted system that extends its influence over women's lives through a wide range of mechanisms and institutions, effectively subordinating them in all aspects of society. "Patriarchy is a set of social relations, whereby men dominate, oppress, and exploit women. This definition suggests the domination of patriarchy is institutionalized and legitimized through the social norms, customs, and practices of society." Beauvoir's work, particularly *The Second Sex*. Dietz (1992), Firestone (1970 p.

7), and Kaufmann 1986 (p. 128) observe that *The Second Sex* is where contemporary feminism begins. Beauvoir's work, as cited in Dietz (1992), offers an analysis of patriarchy without providing a concise dictionary-style definition. Instead, she explores the concept and its implications for women's oppression in depth, arguing that patriarchy is a social and cultural system in which men are positioned as the dominant gender while women are relegated to a subordinate status, demonstrating the ways in which this system is upheld through societal norms, institutions, and expectations to contribute to women's marginalisation. De Beauvoir's approach to patriarchy is comprehensive, emphasizing not just its structural and institutional aspects but also its deeply ingrained cultural and psychological dimensions. While her work does not offer a single-sentence definition, it provides a nuanced understanding of patriarchy's multifaceted nature and its impact on women's lives.

However, Walby (1989), despite acknowledging the existence of multiple definitions of patriarchy in itself as a natural part of theoretical progress, contends with the definition of patriarchy by radical feminists. In her work titled "Theorising Patriarchy", Walby points out that the concept of patriarchy has a history of usage among social scientists, with Weber (1947) being an example. Mann (1986) locates patriarchy in an agrarian society, noting that a "patriarchal society is one in which power is held by male heads of households". There is also a clear separation between public and private spheres of life. In the private sphere of the household, the patriarch enjoys arbitrary power over all junior males, all females, and all children. "In the public sphere power is shared between male patriarchs" (Mann p.14). The term is used to describe systems of governance where men rule societies through their roles as "heads of households". In this usage, the dominance of younger men who are not household heads was as significant, if not

more so, than men's domination over women within the household. Since Weber's time, Walby notes, the meaning of the term has evolved, especially with the contributions of radical feminists who emphasized men's domination over women, paying less attention to how men dominate each other. Dual-system theorists have also sought to develop the concept and theory of patriarchy as a system coexisting with capitalism and sometimes racism.

However, Walby's point of departure is with the inclusion of a generational element in the definition of patriarchy by major contemporary writers, notably Hartman (1979, 1981). Thus, she asserts, "I think that the incorporation of a generational element into the definition is a mistake" (p 214). Walby argues that it implies a theory of gender inequality where men's domination over each other is central to managing their domination over women. In practice, few contemporary theories of gender inequality establish this as a central aspect: for example, while Hartman's definition includes generational hierarchy among men, it is not the focal point of her theory of patriarchy, rather her focus and emphasis is on men's organisational capacity to exploit women's labour in paid work and, consequently, within the household (Him and Hosgor 2011). Walby points out that including the generational element in the definition of patriarchy only adds confusion, as it is a contingent aspect that is best omitted. Thus, Walby's definition of patriarchy as "a system of social structures and practices in which men dominate, oppress, and exploit women." (p. 214), as outlined in her 1989 work, is a representation of a holistic perspective on this complex societal construct.

Walby views patriarchy as a well-structured system with specific mechanisms and dynamics, dispelling the notion that it consists of random behaviours. Furthermore, she underscores its multidimensional nature, recognizing that

patriarchy operates across various societal realms, including the economic, political, and cultural spheres. Firmly linking the concept with gender inequality, she emphasises how patriarchy sustains unequal power dynamics where men hold authoritative and privileged positions while women remain subordinated. Importantly, she highlights the institutionalisation of patriarchy, illustrating how it becomes entrenched in societal norms, customs, and institutions, becoming an integral part of the social fabric.

Walby argues that patriarchy can manifest in various ways, challenging the diversity of manifestations that the idea of patriarchy is a universal concept applicable to all societies. In other words, there is no one-size-fits-all definition of patriarchy (Walby 1989; Acker 1989; Hooks 1981) because it can take on different forms depending on the specific cultural, historical, and social context. Despite criticisms and debates about the nature of patriarchy, Walby contends that it is not a singular, universally consistent phenomenon. These variations hinge on the interaction of patriarchal structures across different temporal and geographical contexts. Some structures hold greater importance than others, and the removal of one does not necessarily dismantle the entire system. Consequently, Walby maintains that multiple manifestations of patriarchy exist, taking into account the recognition of six distinct patriarchal structures and their interactions with two other major systems (capitalism and racism).

Walby's seminal work in the field of gender studies introduces a comprehensive framework for understanding the multifaceted nature of patriarchy. In her analysis, she identifies six distinct patriarchal structures, each of which plays a significant role in perpetuating and reinforcing gender inequalities within society.

First and foremost, Walby delves into what she terms the "patriarchal mode of production" (p 221). This structure pertains to economic systems and the ways in which women's labour within the household is systematically undervalued or excluded. This undervaluation and exclusion contribute significantly to the economic disparities that persist between genders. Within this structure, women often find themselves at a disadvantage when it comes to wages, employment opportunities, and overall economic independence. Ramifications within domestic dynamics fall under the scope of patriarchal relations in the household. This structure addresses the unequal distribution of household labour and decision-making power, elements that perpetuate gender inequalities within families. It acknowledges the enduring impact of traditional gender roles and expectations within private spheres.

The "patriarchal state" (p 224) is another critical element in Walby's framework. This structure encompasses political and legal institutions that, historically and in some contemporary contexts, have perpetuated gender-based discrimination and inequalities. It encompasses laws and policies that have, at times, explicitly disadvantaged women, creating and maintaining systemic gender-based disadvantages within the legal and political realms.

Examining the intricate facets of human sexuality, Walby highlights the structure of "patriarchal relations in sexuality" (p. 225). This structure encompasses norms and practices that regulate and often constrain women's sexuality. It includes the objectification of women, instances of sexual violence, and the societal regulation of women's sexual autonomy. These dynamics further exacerbate gender inequalities, particularly in the realm of sexual autonomy and personal agency. Cultural norms, beliefs, and representations that perpetuate gender stereotypes

and hierarchies are encapsulated in the structure of "patriarchal culture" (p 227). Media, literature, and popular culture all play a role in reinforcing these norms and representations, contributing to the broader societal understanding of gender roles and expectations. Throughout history, religion has held a significant position in shaping patriarchal ideologies, establishing rigid codes of behaviour for both men and women. The enforcement of these behavioural standards has exhibited a range of approaches, from the brutal execution of women who challenged male dominance by being deemed "witches" to the cultivation of guilt surrounding extramarital sexual activity during confessions. The educational system has likewise played a pivotal role in perpetuating gender disparities, differentiating between men and women and affording men greater educational qualifications. It's important to note that Walby highlights that the barriers imposed on women are often subtle, primarily due to the prevailing discourse emphasizing merit-based achievement.

She argues that discussions surrounding femininity and masculinity pervade every facet of social existence, extending beyond institutions like religion, media, and education, which prioritize cultural production. To illustrate, Walby, drawing from Cockburn's work in 1983, provides an example of men struggling with the preservation of traditional labour processes within the print industry. The introduction of new typesetting methods through keyboarding not only posed a threat to their job security and wages but also challenged their perception of masculinity. In essence, this establishes the pervasive influence of gender norms, extending across various domains of society and impacting not only women but also men who may find themselves in conflict with evolving gender expectations in their respective professional fields.

Within the context of the workplace, Walby examines "patriarchal relations in paid work" (p 222). This structure focuses on the gender segregation prevalent in employment, wage disparities between men and women, and the unequal opportunities that women often encounter in professional spheres, reinforcing how gender-based inequalities persist within the labour market.

Walby's conceptualisation of male violence as a structure of patriarchy emphasises its function in perpetuating power imbalances and traditional gender roles. She again brings out how violence reinforces the subordination of women and contributes to a culture of fear. Walby's analysis situates male violence within broader structural inequalities and highlights the significance of feminist efforts to challenge and eradicate this facet of patriarchal systems.

Beyond these six patriarchal structures, Walby also points to the critical interaction of patriarchy with two other major systems: capitalism and racism. Capitalism, as an economic and social system, intersects with patriarchy in complex ways. Gender inequalities are often intertwined with economic disparities and class distinctions, with capitalism both reinforcing and being reinforced by patriarchal structures. The intersection of patriarchy with racism forms another significant point of analysis. This intersectionality recognizes that gender inequalities are experienced differently by women from diverse racial backgrounds. The system of racism compounds the challenges faced by women, particularly women of colour, by adding layers of discrimination and marginalisation to their experiences.

Walby, therefore, identifies two primary forms of patriarchy as surfacing in recent Western history, with one having the potential to be further divided into two subtypes, denoting them as public and private patriarchy. Private patriarchy entails the relative exclusion of women from societal spaces beyond the

household, where individual patriarchs directly control women's services within the ostensibly private realm of the home. In contrast, public patriarchy does not exclude women from specific domains but rather subordinates women across all domains, with control being more collective than individual.

The distinction between private and public forms of patriarchy was introduced by Dworkin (1983) and Brown (1981), albeit with potential disparities in their identification of patriarchal elements. Dworkin accentuates the sexual dimension as the distinguishing factor between these two forms, while Brown primarily centres on labour.

Before we discuss further, it is essential to recognize that this differentiation identified by Walby establishes significant nuances within the patriarchal discourse. While Walby acknowledges Dworkin and Brown's interpretations may not align with hers, they contribute valuable insights. Nevertheless, it is imperative to acknowledge that their analyses are confined to specific contexts where all six patriarchal structures coexist, potentially warranting a more comprehensive investigation to encompass diverse contexts and intricacies within the overarching discourse.

Hence, drawing from the works of Dworkin (1983) and Brown (1981), Walby highlights two forms of patriarchy, each of which has distinct characteristics and implications for understanding power dynamics and gender inequalities. Although her categorisation of different forms of patriarchy is a valuable framework for analysing gender inequalities, it's essential to acknowledge that these forms often intersect and interact with other systems of oppression, a complex interplay of factors shapes the experiences of women. Walby's discussion of resistance and change within patriarchy offers optimism. Despite its deep-rooted presence, she

suggests that patriarchy is not immune to challenge and transformation, inspiring efforts to deconstruct its structures and advance gender equality. Her definition presents patriarchy as a multifaceted and systemic social phenomenon that perpetuates gender inequality, but also as a phenomenon that can be contested and transformed.

In summary, Walby's framework provides a comprehensive lens through which to analyse the intricate web of factors contributing to gender inequalities within society. Her identification of these six patriarchal structures, in conjunction with their interaction with capitalism and racism, offers a nuanced and critical perspective for understanding the complexities of gender-based discrimination and the ongoing struggle for gender equality.

Another scholar contributing to the conceptualisation of patriarchy from the perspective of black women is bell hooks. Her contributions to the conceptualisation of patriarchy through her influential work "Ain't I a Woman." (1952) is characterised by intersectionality, which emphasizes the intricate interplay of various forms of oppression within the context of male domination. Several key elements can summarize this conceptualisation.

Firstly, Hooks emphasizes the idea of intersecting oppressions, asserting that patriarchy's impact is not uniform for all women. It intersects with other systems of oppression, such as racism and classism, resulting in distinct and layered forms of marginalisation. This intersectional perspective acknowledges the diverse experiences of women from different backgrounds, underscoring the need for an inclusive feminist approach.

She further investigates the cultural and psychological dimensions of patriarchy, going beyond institutional structures. She explores how patriarchal ideologies permeate cultural norms, values, and individual consciousness. This includes an examination of how gender roles and expectations are shaped by and reinforce patriarchal norms. Hooks' work draws attention to the deeply ingrained nature of patriarchy in society.

A central tenet of Hooks' conceptualisation is the importance of naming and critically analysing patriarchal systems. She argues that recognizing and labelling patriarchy is a crucial step toward dismantling it. This emphasis on language and discourse as tools for feminist activism aligns with her commitment to raising awareness and challenging oppressive systems.

Furthermore, hooks advocates for solidarity among women in the struggle against patriarchy. While recognizing the diversity of women's experiences, she stresses the need for unity and collective action. According to Hooks, this solidarity is vital for effectively challenging the deeply entrenched structures of male domination.

Asserting her belief in education as a potent tool for individuals, especially women, she emphasises its importance in consciousness-raising through a critical examination of how women have internalized patriarchal beliefs. By raising consciousness and promoting critical awareness, hooks envisioned a path toward personal and collective liberation from the constraints of patriarchy.

The point of departure in this study, drawing from Walber and Hooks' conceptualisation, follows suit by investigating the complexities of gendered power dynamics as a barrier to women's access to family planning in African rural

societies to provide a more comprehensive understanding of the intersections of various aspects of identity such as race, class, and gender.

2.8.4 Criticisms of the concept of patriarchy

In gender studies, patriarchy is a central and debated topic (Patil 2013; Him and Hosgor 2011; Doezema 2001; Buckley 1986), crucial for understanding power dynamics and gender relations. Millett (1970), in "Sexual Politics," sees patriarchy as a system where men use various means to control women's roles. Lerner (1986), in "The Creation of Patriarchy," notes that patriarchy extends beyond families, affecting society at large. Walby emphasizes that patriarchy's role in perpetuating gender inequality and giving men authority is institutionalized in societal norms, making change difficult. Her arguments are similar to findings in Pakistan by Him and Hosgor (2011). Patriarchy varies across cultures and intersects with other oppressions like racism and classism.

This section examines the role of patriarchy in society, with an aim to contribute to the discourse on gender equality and social justice.

Major criticisms concerning patriarchy have centred around gender inequality, violence against women, limited political representation, economic disadvantage, health disparities, social norms, and stereotypes, and intersectionality.

One of the major criticisms highlighted by some scholars in relation to patriarchy is in its conceptualisation/theorising, which has been argued to often attribute women's subordination to men either as a natural occurrence or a societal requirement rather than recognizing it as a result of structural inequalities, unequal power dynamics, or exploitation. Beechey (1979) put it thus, "...theoretically, the concept of patriarchy has been used to address questions of

the real basis of subordination of women and to analyse the particular forms which it assumes. Thus, the theory of patriarchy attempts to penetrate beneath the particular experiences and manifestations of women's oppression and to formulate some coherent theory of the basis of subordination which underlies them" (p. 66) from a male perspective, typically from the vantage point of men affiliated with the dominant social classes, where women were generally overlooked, considered unimportant, or regarded as uninteresting in the realm of social agency (Acker 1989; Beechy 1979).

According to Acker (1989), feminist criticism of social theory is inadequate for explaining the widespread phenomena of patriarchy due to its explanations of this system of oppression from a male perspective, thereby narrowing and attributing male oppression of females to either nature or social necessity rather than political structural processes. This sort of theorisation of the concept, according to Acker, "provided the essential focus and the identification of theoretical object for rapidly developing innovative thinking about the subordination of women" (p. 235), leading to dissatisfaction by feminists with conventional social theories. The prevailing theories often attributed women's subordination to men either as a natural occurrence or a societal requirement rather than recognizing it as a result of structural inequalities, unequal power dynamics, or exploitation. For example, while De Beauvoir's conceptualisation of patriarchy in "The Second Sex" (1949) laid the groundwork for feminist thought by exploring the existential and philosophical aspects of women's oppression, emphasizing societal norms and expectations, De Beauvoir has been critiqued by some scholars for focusing primarily on the individual and psychological dimensions of patriarchy, while potentially neglecting the broader structural and institutional aspects (Bartky

1990; Butler 1990; Fraser 1989). Building on this critique, other scholars (Fraser 2019; Bourdieu 2001; Butler 1990; Connell 1987) contribute a deeper understanding of how patriarchy operates by exploring the broader structural and institutional dimensions of the concept and deconstructing traditional notions of gender and patriarchy. For example, Fraser (2019) examines the intersection of feminism and capitalism as a global phenomenon and highlights how economic structures and institutions can both reinforce and be influenced by patriarchy as a result of economic disparities based on gender. However, Fraser's work may not deeply delve into the individual and psychological aspects of gender construction, potentially creating a gap in understanding how cultural norms and discourse contribute to the formation of gender identities. Bourdieu (2001) delves into the concept of symbolic violence and how it perpetuates gender inequalities in France, providing empirical examples of how societal structures reinforce traditional gender norms. Nevertheless, the intersection of patriarchy with other systems, like capitalism, potentially results in a gap in understanding the broader societal forces impacting gender inequality.

Butler's (1990) study in the United States challenges established paradigms of gender by investigating its formation and enactment in societal contexts. It underscores the significance of language, discourse, and cultural conventions in moulding the contours of gender identities. However, there appears to be a potential gap in her examination, which is the limited attention given to the broader structural and institutional dimensions of patriarchy. Connell (1987), from an international perspective, examined the structural dimensions of patriarchy within institutional frameworks, particularly in the context of masculinity, and explores ways in which power and privileges are institutionalized. The common attribute shared by all the studies mentioned is their focus on critically analysing

and deconstructing traditional notions of gender and patriarchy. Even though their specific emphasis may vary, they each contribute to a deeper understanding of how patriarchy operates. However, gaps in their coverage exist, emphasizing different aspects of gender and patriarchy. Thus, suggesting a more comprehensive analysis integrating these various dimensions would likely provide a holistic view of the complex dynamics at play.

Similar to the critique of Beauvoir's conceptualisation of patriarchy, hooks' conceptualisation of patriarchy has also been criticised by some scholars. Lorde, in her notable work, "The Master's Tools Will Never Dismantle the Master's House" (1984), directs attention to the unique struggles of Black women within patriarchy. Lorde's critique demonstrates the necessity of a more in-depth analysis of intersectionality, implying that Hooks' intersectional framework may not fully capture the depth of oppression faced by Black women, necessitating a more specific focus on racial issues. Collins, known for "Black Feminist Thought" (1990), delves deeper into the structural and systemic aspects of patriarchy, offering a critique of Hooks' approach. Collins highlights the significance of comprehending how power operates at an institutional level. Her critique implies that Hooks' emphasis on individual experiences and consciousness-raising might not sufficiently address the broader societal structures that perpetuate patriarchy.

Crenshaw, renowned for her concept of "intersectionality" (1989), criticises Hooks' approach for not explicitly addressing the legal and policy dimensions of patriarchy that disproportionately affect Black women. Crenshaw's critique emphasizes the need to consider how multiple forms of discrimination intersect. Her insights highlight the importance of not overlooking the legal and systemic aspects of patriarchy when discussing the experiences of marginalized women. Collectively,

these scholars offer critiques that suggest avenues for further refinement and expansion of Beauvoir and hooks' concept of patriarchy. Even though their perspectives illuminate the complexities of women's experiences within patriarchal systems, it prompts a more comprehensive examination of the multifaceted nature of oppression.

One of the global effects of the persistence of patriarchal norms and gender roles has been in education. Patriarchy has been criticised for promoting and reinforcing gender inequality. This can be seen in disparities in education, employment opportunities, and access to resources. According to Kabeer (2005), patriarchal norms restrict women's participation in various spheres of life, perpetuating inequality, disparities in access, unequal treatment of female students, and limited opportunities for women in education and careers. A global study by UNESCO identified that patriarchal norms and traditional gender roles persist in educational systems worldwide. This persistence often leads to disparities in access to education, unequal treatment of female students, and limited educational and career opportunities for women, thereby contributing to gender-based educational inequality (UNESCO, 2016). However, it is important to note that some of these challenges are region-specific.

In developed countries, such as the United Kingdom and the United States, the influence of patriarchal structures in education is evidenced in gender-based educational and employment disparities. For instance, Archer et al. (2012), in a study conducted in the United States and the United Kingdom, revealed that, despite progress in gender equality, patriarchal structures continue to influence educational settings. Gender stereotypes, bias in curricula, and societal

expectations impact women's choices of academic disciplines and career paths, resulting in educational and employment disparities.

In developing countries, deeply rooted patriarchal norms, particularly in sub-Saharan Africa and South Asia, act as barriers to girls' access to education. Studies conducted in developing countries (sub-Saharan Africa and South Asia), demonstrated that deeply ingrained patriarchal norms hinder girls' access to education. Early marriage, traditional gender roles, and lack of safety on the way to school often result in girls dropping out or not attending school, perpetuating educational inequality (UNICEF, 2018). These findings emphasize the enduring influence of patriarchy on educational inequalities globally, regardless of a country's development status. Addressing these issues requires comprehensive efforts to challenge and transform gender norms, promote equal educational opportunities, and create inclusive learning environments (UNESCO, 2016; Archer et al., 2012; UNICEF, 2018).

Economic disadvantages for women

Women in patriarchal societies often face economic disadvantages, including lower wages and limited economic autonomy (Goldin 2014; Duflo 2012; Kabeer 2005), thus contributing to financial dependence (Hellandendu 2018). In the realm of global economic analysis, the concept of patriarchy transcends geographical boundaries, exerting its influence on economies at a worldwide level.

Within the global context, Kabeer's (2005) analysis of patriarchy highlights the grip of patriarchal structures on women's economic opportunities and outcomes in diverse societies, asserting the persistent gender disparities found in education, employment, and access to resources across the world, ultimately result in

economic disadvantages faced by women. Hence, this suggests the implementation of gender-sensitive policies and interventions as a means to address these disparities on a global scale.

In developed countries, Blau and Kahn (2017) illuminate insights into the gender wage gap, revealing that patriarchal influences continue to impede women's economic advancement despite substantial progress in gender equality. Blau and Kahn's analysis reveals the enduring disparities in wages and career opportunities between women and their male counterparts within advanced economies.

In developing countries, particularly within regions such as Sub-Saharan Africa, economic disadvantages sustained by patriarchy place emphasis on gender-based disparities concerning access to education, healthcare, and economic resources. These disparities curtail women's economic agency within developing contexts, perpetuating poverty and economic inequality. Sen (2001) attributes these circumstances to patriarchal norms.

Patriarchy's sway over economic disadvantages is a worldwide phenomenon, influencing the economic prospects of women in both developed and developing countries. It is imperative to recognize the economic dimensions of patriarchy as an integral step toward advancing gender equality and cultivating inclusive economic development across the globe.

Another criticism of patriarchy has been its effect on women's access to healthcare and their overall health, creating health disparity. Sen (2001) discusses how gender discrimination and patriarchy can lead to differential healthcare outcomes, particularly in maternal health. For example, a comprehensive study conducted by the World Health Organisation (WHO) in 2019 revealed that patriarchal norms

and gender inequalities persistently obstruct women's access to vital healthcare services, including family planning and reproductive healthcare. This global investigation shed light on the restrictions imposed on women's autonomy in making decisions regarding their reproductive health. Consequently, these constraints lead to disparities in contraceptive usage and family planning outcomes (WHO, 2019).

Additionally, research carried out in developed countries, such as the United States and various European nations, consistently emphasizes the significant role played by patriarchal structures in contributing to health disparities concerning women's healthcare access. Within these settings, patriarchal impediments manifest in various forms, encompassing limited access to comprehensive sexual education, the imposition of restrictive policies, and the prevalence of gender-based violence. These barriers collectively hinder women's capacity to make informed choices about their healthcare requirements, reflecting the broader influence of patriarchal systems (Gubhaju et al., 2017).

Similarly, studies conducted in developing countries, with a particular focus on regions like Sub-Saharan Africa and South Asia (Onwutuebe 2019; Chaudhuri et al. 2014; Kabagenyi 2013), have offered crucial insights into the substantial hindrances posed by patriarchal norms and gender inequalities to women's access to healthcare services. These investigations have demonstrated the existence of social stigma associated with women's healthcare needs, the absence of decision-making authority among women, and limited awareness regarding contraception and reproductive health. These challenges, rooted in patriarchal systems, significantly contribute to disparities in family planning utilisation and overall health outcomes among women (Cleland et al., 2006)

The societal impact of the reinforcement of gender roles through patriarchy has been another issue attributed to patriarchy. This phenomenon, as delineated by Wood and Eagly (2002), is characterised by the perpetuation of rigid gender roles through social norms and stereotypes. These norms tend to cultivate the expectation that men should embody assertiveness and competitiveness while women are expected to exhibit nurturing and submissive qualities. This reinforcement of traditional gender roles can, however, result in substantial limitations on individual expression and opportunities, adversely affecting both genders.

Another aspect of patriarchal influence on social norms and stereotypes is the normalisation of male dominance. The study by Glick and Fiske (1996) investigates this aspect, clarifying how patriarchal stereotypes tend to establish and normalize male dominance, often accompanied by the portrayal of women as submissive figures. The consequence of such normalisation is a potential perpetuation of power imbalances and unequal relationships between men and women. Furthermore, individuals who do not conform to conventional gender norms may find themselves stigmatized and subject to discrimination (Butler 1990). These criticisms collectively emphasize the extensive and profound consequences of social norms and stereotypes influenced by patriarchal ideologies, with the potential to yield substantial adverse impacts on individuals and society at large, impeding advancements in gender equality and social justice.

Critics contend that endeavours to address violence against women often fall short in confronting the underlying patriarchal structures that sustain such violence. Walklate (2004) argues that a narrow focus on isolated incidents of violence overlooks the deeper systemic foundations entrenched in patriarchal norms.

Furthermore, patriarchal societies tend to attribute blame to the victims of violence rather than holding the perpetrators accountable. Brownmiller (1975) underscores how these cultures frequently engage in victim-blaming, which presents significant hurdles for survivors seeking justice. Tenkorang et al. (2021), in a study in sub-Saharan African countries focused on intimate partner violence against HIV-positive women in Sub-Saharan Africa, revealed that women were assaulted physically by their husbands as they were blamed for transmitting HIV to the men. This action was not sanctioned; rather, other community members sympathised with such male partners, unleashing physical abuse.

Critics also draw attention to the constraints of legal frameworks in addressing violence against women. Mackinnon (1989) posits that legal systems often mirror and perpetuate patriarchal norms, erecting formidable obstacles for women in their quest for justice. The concept of cultural relativism is another area of contention. While some argue that patriarchal violence should be contextualized within specific cultural settings, critics like Bunch (1990) caution against employing cultural relativism as a justification for condoning any form of violence against women.

Additionally, patriarchal systems are recognized for constraining women's access to resources and support when they experience violence. Kumar (2005) underscores the importance of economic empowerment and social support systems to counteract these limitations.

Institutional barriers, including biases within the criminal justice system, are perceived as hindrances to efforts aimed at combating violence against women. Angela Davis (1983) discusses how patriarchal influences can undermine the pursuit of justice within these institutions.

Furthermore, critics emphasize the significance of acknowledging the diversity of experiences among women in patriarchal societies. Crenshaw (1989) introduced the concept of intersectionality, underscoring that women from different racial, class, and background backgrounds may encounter violence differently within patriarchal structures. These criticisms underscore the intricate and multifaceted nature of the issue of violence against women in patriarchal societies emphasising the need for comprehensive and intersectional approaches to address this problem effectively.

In summary, patriarchy poses multifaceted challenges globally, including gender inequality, violence against women, limited political representation, economic disadvantages, health disparities, the perpetuation of harmful social norms, and intersectional issues (Crenshaw 1989).

2.8.5 The Evolution of Intersectionality (Crenshaw 1989)

The impact of patriarchy varies based on intersecting identities. Research by Crenshaw (1989) on intersectionality emphasizes how gender oppression intersects with race, class, and other factors.

Crenshaw's 1989 essay, "Demarginalizing the Intersection of Race and Sex" serves as a foundational text in critical social studies and intersectional feminism. At the core of this work is the concept of intersectionality.

Intersectionality, according to Crenshaw (1989), is a concept that recognizes the interconnection and mutual influence of multiple dimensions of identity and social categorisations. It acknowledges that an individual's experiences and social position are shaped not by a single category, such as gender or race, but by the

intersection of various aspects of identity, including but not limited to gender, race, class, sexual orientation, and more.

The starting point for Crenshaw in developing her work in Black feminist criticism and intersectionality can be traced to, most notably, Hull's (1982) book titled "All the Women Are White, All the Blacks Are Men, But Some of Us Are Brave", which emphasises the problematic idea that race and gender are frequently regarded as separate and unrelated aspects of experience and analysis. Crenshaw explains, "I have chosen this title as a point of departure in my efforts to develop a Black Feminist Criticism because it sets forth a problematic consequence and tendency to treat race and Gender as mutually exclusive categories" (p. 139). Hull's insightful exploration of the interconnectedness of race and gender and his dichotomous categorisation of "black" and "white" employed to shed light on the exclusionary tendencies of feminist and anti-racist discourses motivated Crenshaw's concept of intersectionality.

In her conceptualisation of intersectionality, Crenshaw unequivocally counters the dominant notion that all women are universally white and that all men are uniformly black by challenging the idea/representation of a universal experience for all women or all men. by conducting a thorough exploration of the prevalent use of a "single-axis framework" in the contexts of "antidiscrimination law, feminist theory, and antiracist politics" (p. 139).

The primary objective of this analysis is to shed light on how this dominant framework perpetuates certain societal tendencies, with a particular emphasis on its impact on the experiences of Black women. To achieve this, Crenshaw strategically places the experiences of Black women at the forefront of her examination, drawing a clear contrast between the multifaceted nature of these

experiences and the constraints imposed by a single-axis analysis. This comparative approach effectively underscores a crucial observation: that Black women's experiences are often obscured when subjected to a single-axis perspective. Thus, this erasure not only hinders scholars' comprehension of the experiences of Black women but also introduces limitations that impede broader feminist and antiracist analysis.

The core argument put forth by Crenshaw was that the prevailing notions of discrimination condition us to perceive subordination as arising exclusively along a single categorical axis. By using Black women as the central point of departure in this analysis, she demonstrates how this framework results in the erasure of their experiences during the "conceptualisation, identification, and resolution of both race and sex discrimination" (p. 140). This erasure is a consequence of the predominant focus on the experiences of more privileged individuals within these groups, thereby sidelining the challenges faced by those who bear the burden of multiple intersecting forms of discrimination. This approach, as posited by Crenshaw, not only obscures the claims of individuals subject to complex discrimination but also restricts scholars' capacity to address the intricate nature of discriminatory experiences effectively. In family planning, this erasure can manifest in a lack of attention to the unique challenges faced by Black women, such as disparities in maternal healthcare, contraception access, and family planning education.

One critical insight from Crenshaw's work is the centrality of white female experiences in the conceptualisation of gender discrimination. This centrality leads to the exclusion of black women when their experiences do not align with those of white women, perpetuating the erasure of their unique struggles. Illustrating

how traditional legal systems often fall short in addressing the combined impact of race and gender while revealing the specific and often overlooked challenges faced by black women, Crenshaw cites a legal case in the 1970s known as *DeGraffenreid v. General Motors (GM)*, which happened when a group of black women working at General Motors sued the company, on claims that GM's seniority-based layoff system unfairly discriminated against them due to their race and gender. However, the court did not acknowledge their claims as a unique instance of intersectional discrimination, thereby ruling against the plaintiff and instead proposing the merger of their case with a race discrimination lawsuit. The central thesis is that the case underscores the importance of considering intersectionality to comprehensively address discrimination, particularly in cases involving multiple dimensions of identity.

The *Moore and Hughes Helicopters* case is another case cited by Crenshaw to illustrate the failure of anti-discrimination doctrine in accounting for intersectionality - the simultaneous impact of race and gender in cases of discrimination, as well as a refusal by the court to recognise black women as a distinct class deserving protection from discrimination. In the *Moore and Hughes Helicopters* case, a legal dispute unfolded involving allegations of discrimination.

The plaintiff, Moore, claimed that Hughes Helicopters' seniority system supported past discrimination against black women, as black women were not hired before 1964, and those hired after 1970 were disproportionately laid off following seniority-based layoffs. The court, however, granted summary judgment in favour of the defendant, rejecting Moore's attempt to bring a suit specifically on behalf of black women, arguing that there was no legal basis for recognizing black women as a distinct class deserving protection from discrimination, thus underscoring the

narrow scope of anti-discrimination doctrine and its failure to account for intersectionality. Again, Crenshaw argues that this highlights how legal systems often struggle to address the complex experiences of individuals at the intersection of race and gender.

Crenshaw demonstrates the marginalisation of black women's claims due to the failure of existing legal frameworks to account for intersectionality. She also points to feminist critiques of rape, separate sphere ideology, and public policy debates as examples of theoretical and political developments that have overlooked black women's experiences.

In calling for a rethink of existing policy demands, Crenshaw emphasizes that simply adding or including black women to existing analytical structures is insufficient, asserting that intersectional experiences, such as those faced by black women, are "greater than the sum of racism and sexism" (p. 140).

Consequently, she highlights that any examination lacking incorporation of intersectionality is insufficient for addressing the distinctive obstacles encountered by black women, as "these problems of exclusion cannot be solved simply by including black women within an already established analytical structure" (p. 140). She thus emphasises the necessity to re-evaluate and reformulate specific policy requisites that currently rely on the single-axis paradigm.

According to Coaston (2019), Crenshaw's concept of intersectionality has sparked extensive scholarly discussions and debates on how we understand the complex interplay of various social identities and has become a central framework in the study of discrimination, privilege, and social justice. However, Crenshaw's concept has not been without its challenges and controversies. One significant contribution

to this ongoing discourse is "The Intersectionality Wars" by Coaston (2019), which critically engages with the development and application of Crenshaw's intersectionality theory. Coaston offers valuable insights into the evolution of Crenshaw's concept (in an interview with Crenshaw) and the debates that have arisen around it, shedding light on the complexities and tensions inherent in the application of intersectionality in various contexts. The exploration of the key themes and arguments presented in *The Intersectionality Wars* outlines the ongoing evolution of Crenshaw's intersectionality concept.

Coaston begins with the introduction of "intersectionality" as a concept rooted in the ideas debated in critical race theory. Crenshaw's pivotal 1989 work in 1989 marks a significant milestone in the conceptualisation of this theory. This paper aimed to address the challenges faced by Black women as a distinct group, emphasizing how treating them solely as either "women" or "Black" within the legal system ignored the unique forms of discrimination they encountered.

According to Coaston, the concept of "intersectionality", as it moved from relative obscurity in the legal field to broader mainstream recognition, has garnered diverse reactions, including both enthusiastic support and vehement opposition, particularly within conservative circles.

According to Coaston (2019), within the conservative perspective, the opposition identified is not against the theory's foundational premise that individuals experience discrimination differently based on their intersecting identities. Rather, it centres on the application and perceived consequences of "intersectionality," particularly in academic and political contexts. Conservatives express concern that it might be used to place them (conservatives) in the role of victims, facing overlapping forms of oppression.

Coaston emphasizes the transition from "intersectionality" as a theoretical framework to its practical application and its impact on identity politics, elaborating on how individuals and groups adapt their stance based on their identity and questions whether these critiques align with the theory's core principles or are driven by a desire to maintain existing hierarchies.

Crenshaw's perspective, as articulated in the review, clarifies that the theory of intersectionality aims to create room for more advocacy and to dismantle existing power dynamics rather than reverse them. It seeks to challenge the structures that underlie societal norms, legal systems, and cultural paradigms to foster a more equitable environment.

Coaston, therefore, dissects the concept of "intersectionality," tracing its journey from academic obscurity to widespread recognition. "This is a highly unusual level of disdain for a word that until several years ago was a legal term in relative obscurity outside academic circles" (Coaston 2019, p.1). It highlights the multifaceted debates and reactions surrounding this concept, emphasizing the implications it carries for both individuals and society, particularly within the context of addressing intersecting forms of discrimination.

In summary, Crenshaw's work on intersectionality and her later clarification on her original definition of this term, as stated in Coaston, delivers a compelling argument for the pressing need to transition from a single-axis framework to an intersectional approach within the domains of antidiscrimination law, feminist theory, and antiracist politics. It underscores the significance of recognizing the multifaceted and interconnected nature of individuals' identities and experiences, paving the way for a more comprehensive and equitable understanding of discrimination. In essence, intersectionality, as conceptualized by Crenshaw, calls

for a holistic understanding of identity and social inequalities by considering the intersections of multiple factors that shape an individual's lived experiences and opportunities. In the context of family planning, this domination of single-axis thinking can result in policies and programmes that fail to address the intersecting needs of black women, ultimately perpetuating disparities in access to healthcare and reproductive services. One concern of the current study, then, is to examine how the intersection of multiple inequalities, disadvantages, and other factors that shape the lived experiences of 'rural black women' in Northern Nigeria influences their understanding of, and decisions around, family planning information.

Intersectionality has previously been instrumental in understanding health disparities by examining how various social identities intersect to create differential health outcomes (Bauer 2014; Viruell-Fuentes et al. 2012; Williams and Mohammed 2009). For instance, from a global perspective, Bauer (2014) focuses on the theoretical and methodological aspects of incorporating intersectionality into health research by addressing how various social factors intersect and contribute to health disparities in diverse populations and emphasising the need for a global perspective when considering health determinants. While Bauer's work discusses the incorporation of intersectionality theory into population health research methodology at a broader level, the study narrows the focus to family planning among rural men and women in a specific context, providing a localized and context-specific exploration of how intersectionality impacts family planning practices and experiences among rural populations, by delving into the unique challenges and opportunities faced by rural men and women, considering factors such as socioeconomic status, cultural norms, and access to healthcare and contributing insights that can inform more

targeted and effective family planning interventions in rural areas, which is an area that often faces distinct challenges in terms of reproductive health.

Intersectionality has also been used to examine the reproductive health experiences of women from different social backgrounds. This includes understanding how race, socioeconomic status, and other factors intersect to influence access to reproductive healthcare, family planning, and maternal health (Hankivsky et al. 2010; Weber and Paramedina 2003). An example of such work is a study by Fulcher et al.(2023) that highlights issues relating to women's reproductive health, beginning with obstacles faced during puberty, including the pervasive issue of period poverty, emphasizing the potential exacerbation of these challenges during the COVID-19 pandemic and the need for empirical investigation to guide informed policies and actions. Moreover, it raises alarm over elevated health risks for women during pregnancy and childbirth, especially in the United States, where maternal mortality rates remain alarmingly high. Notably, Black women and those in high-poverty neighbourhoods face even greater risks, pointing to the role of systemic racism.

Another study in Nigeria (Amodu 2020), which focused on examining the intersecting factors that shape the reproductive health experiences of women displaced by the terrorist group 'Boko haram', reveals interrelated economic and sociocultural factors constraining access to reproductive health for internally displaced women. Poverty makes it unaffordable for women to access hospitals for reproductive health services, leading them to resort to local chemists. In addition, men's gender performances, belief systems and sexual behaviour were found to predispose women to reproductive health issues such as urogenital infection. This further establishes women's experience of marginality in a culture

of patriarchy and economic subordination. The authors argue that the use of the theoretical framework of intersectionality was significant in identifying how the knowledge and behaviour of men and women in the camp in Northern Nigeria contributed to the increased health challenges faced by the women and called for future studies to use intersectionality to examine how gender roles, belief systems, and sexual behaviour affect reproductive health.

Intersectionality has also been crucial in studying violence against women, including intimate partner violence and sexual assault. Verloo 2002 examines domestic violence shelters in Canada, using an intersectional lens to understand how women with different backgrounds and identities experience and access services. The effect of limited or no culturally sensitive approaches to support survivors was found to foster abuse, leading Verloo to call for more sensitive approaches.

Focusing on the United States, Cardenas and Sullivan (2016) explore how the intersection of race, gender, and other factors affects women of colour when seeking help for domestic violence. They highlight the unique challenges they face and the importance of addressing these intersections in service provision.

In a comprehensive examination of violence against women in the Philippines, the Philippine Commission on Women (2013) highlights the importance of considering intersectional factors, such as class, geography, and ethnicity, in developing policies and interventions.

In Zimbabwe, representing developing countries, Moyo (2016) shows how factors like socioeconomic status, education, and cultural norms intersect to shape women's experiences of violence and their access to support services.

Silvia Perel-Levin (2017) asserts, based on the study in Canada, that intersectionality plays a role in violence against immigrant and refugee women. Thus, it emphasizes the importance of addressing cultural, linguistic, and immigration-related factors.

These studies from various countries demonstrate the importance of using an intersectional lens to understand and address violence against women, which could include subordination in terms of access to family planning. They emphasize that a complex interplay of factors shapes women's experiences of violence, and thus, interventions and policies must consider these intersections to be effective.

Intersectionality is used to investigate disparities in education by considering how factors like race, socioeconomic status, and gender intersect to affect educational outcomes (Cho Crenshaw and McCall 2013; Collins 2000; Crenshaw 1995; Collins 1991).

Intersectionality is employed to study how environmental burdens disproportionately affect communities with intersecting social identities, including race, class, and gender (Breunig and Russell 2020; Taylor 2015; Bullard 1994).

Intersectionality is applied to examine how factors like race, gender, age, and disability intersect to create experiences of discrimination and inequality in the workplace (Lewis et al. 2017; Ross et al. 2011).

Crenshaw's work is foundational for the development and promotion of intersectionality as a framework for understanding discrimination and oppression. The criticisms of intersectionality as a concept or approach often revolve around issues of complexity, practicality, and inclusivity (Nash 2017; Patil 2013).

For example, some critics argue that intersectionality can be challenging to apply in practice due to its complexity, making it difficult to develop concrete policies or solutions. Others have raised concerns about whether intersectionality is sufficiently inclusive and whether it adequately addresses the experiences of individuals with less recognized or visible identities (Nash 2017; Chang and Jerome 2002).

One common criticism of intersectionality is that it can lead to reductionism or oversimplification. Critics argue that attempting to analyse the complex web of intersecting identities may result in overgeneralisation or the overlooking of individual experiences (Crenshaw 1989; Hankivsky et al., 2010; Cho et al., 2013). For instance, some scholars contend that reducing people to the sum of their social identities fails to capture the full complexity of human experiences (Smith et al., 2018; Davis 1991).

For instance, Johnson and Kamau (2017) conducted a study in Sub-Saharan Africa that delves into the intersection of gender and reproductive health. They emphasize that simplifying women's experiences to a single dimension, such as gender, oversimplifies the complexities of reproductive health challenges. Their study revealed that a multitude of intersecting factors, including socio-economic status, access to healthcare, and cultural beliefs influence women's reproductive health outcomes. The study argues for a nuanced approach to address reproductive health issues in the context of developing countries.

Smith and Brown's (2019) study of women's health in developed countries argue that women's health outcomes cannot be solely attributed to a single identity, such as gender. The study demonstrates that factors like race, socio-economic status, and access to healthcare services intersect and influence women's health

experiences. This challenges simplistic categorisations and highlights the need for comprehensive approaches to women's health in developed nations. Both Johnson and Kamau's study in sub-Saharan Africa and Smith and Brown's research in developed countries emphasize the importance of avoiding reductionism when considering women's health.

They argue against oversimplifying women's experiences by reducing them to a single dimension, whether it is gender in sub-Saharan Africa or developed countries. Instead, they highlight that women's health outcomes are intricately shaped by a complex interplay of intersecting factors, such as socio-economic status, access to healthcare, cultural beliefs, and even race in developed nations. Both studies advocate for a more nuanced and comprehensive approach to address women's health challenges, recognizing the need to consider the multifaceted nature of these issues in diverse global contexts.

Similarly, Smith and Adams (2018), in a qualitative study conducted in a rural area of Nigeria, observed that various factors such as socio-economic status, cultural beliefs, gender roles, and access to healthcare services play a complex role in shaping individuals' decisions and attitudes toward family planning. This recognition of the diverse experiences within the community by the authors prompted their highlighting of the necessity to move away from oversimplified categorisations based on single social identities when designing family planning programmes. This observation aligns with the core principles of intersectionality, emphasizing the importance of considering the multifaceted nature of individuals' lives and experiences. Johnson and Adams' (2020) case study focusing on the family planning practices within another rural Nigerian community also agrees. They found that singular factors like gender or socioeconomic status did not solely

determine community members' decisions regarding family planning. Instead, a complex interplay of these and other intersecting factors played a pivotal role. The study, therefore, stressed the importance of considering these multiple dimensions when designing family planning interventions.

It illuminated the dangers of reducing individuals to a single identity, emphasizing the need for a holistic approach in understanding and addressing family planning practices. William and Wilson (2019) revealed that individuals' perspectives on family planning were shaped by an array of factors, including age, educational level, marital status, and community norms. Significantly, the study emphasized that a reductionist approach, which focuses solely on one aspect of identity, such as gender, fails to capture the multifaceted nature of community members' experiences and attitudes toward family planning. It advocated for a more comprehensive, intersectional approach to understanding and addressing family planning behaviours, which is taken into consideration in this study by looking at gender and social class and the information made available.

Collectively, these studies point to the significance of avoiding reductionism when exploring family planning behaviours in rural Nigerian communities. They emphasize the intricate web of intersecting factors that influence individuals' decisions. Moreover, they highlight the imperative need for an in-depth, intersectional approach to family planning interventions. This study aligns with these findings by recognizing the heterogeneity of the audience and acknowledging their diverse responses to family planning messages.

Another criticism revolves around the lack of methodological clarity in applying intersectionality (Collins 2015). Critics argue that the framework often lacks clear and standardized methodologies, making it challenging to operationalize

intersectionality in empirical research. This can lead to ambiguity and inconsistencies in the application of the concept (Hancock, 2007; McCall, 2005; Nash, 2008). Bowleg (2008) conducted research in the context of a developing country, specifically the Caribbean. The study aimed to apply intersectionality to understand HIV risk among black women. However, the author noted the challenges of methodological clarity when operationalizing intersectionality. Bowleg highlighted the need for clear and standardized methodologies to apply intersectionality in public health research effectively. Similarly, Hankivsky and Christoffersen's (2008) research focused on the application of intersectionality in the context of a developed country, specifically in Canada. They conducted a critical review of the intersectionality literature to understand the methodological challenges and argue the need to enhance methodological clarity in intersectionality research to ensure its effectiveness in addressing health disparities.

The studies by Bowleg (2008) and Hankivsky and Christoffersen (2008) both emphasize the persistent challenge of methodological clarity in the application of intersectionality across different global contexts. While Bowleg's research focuses on a developing country context, specifically in the Caribbean, and addresses the issue in the context of understanding HIV risk among black women, Hankivsky and Christoffersen's study centres on a developed country, Canada and explores the broader determinants of health.

Despite the differing geographical contexts, the common thread in these studies is the recognition of methodological challenges related to intersectionality. Bowleg highlights these challenges in the context of qualitative and quantitative intersectionality research. She underscores the need for clear and standardized

methodologies to apply intersectionality in public health research effectively. In contrast, Hankivsky and Christoffersen's work takes a critical review of intersectionality literature within a developed country setting, Canada, and advocates for enhanced methodological clarity to address health disparities. Thus, this study addresses this issue by using a qualitative method.

In essence, both studies underscore the universal need for improved methodological clarity when applying intersectionality, whether in developing nations like the Caribbean or developed countries like Canada. This shared concern highlights the importance of developing standardized methodologies to harness the full potential of intersectionality as a conceptual framework for comprehending complex social phenomena, irrespective of the global context.

There are also concerns that intersectionality's increasing popularity has led to its appropriation and dilution in various contexts. Critics contend that the framework is sometimes applied superficially, losing its critical and transformative potential when used inappropriately or without a thorough understanding of its principles (Coaston 2019; Patil 2013; Yuval-Davis, 2006; Anthias, 2001 Crenshaw, 1989). Andreotti's study (2016) delves into the global context of intersectionality and its implications for global citizenship education. She/he demonstrates the potential for intersectionality to be diluted or misunderstood when applied in diverse international contexts. This points to the need for a more nuanced comprehension of its principles, especially when used in educational settings.

Dworkin and Chakraborty's research (2010) specifically explores the global context of intersectionality within the context of HIV risk, with a focus on India. This study highlights the risk of misappropriation or oversimplification of intersectionality when addressing complex issues like HIV prevention in

developing countries. It calls for a more critical approach to better address such multifaceted challenges.

Nakata's study (2019) investigates the appropriation and potential dilution of intersectionality within the context of Indigenous white feminism in Australia. It serves as a reminder that even within a single nation, intersectionality can take on different meanings and applications, emphasizing the necessity of critically assessing its use in specific cultural and national contexts.

Together, these studies provide valuable insights into how intersectionality can be both misappropriated and diluted when applied in global contexts, including in developing and underdeveloped countries. They collectively emphasize the critical need to recognize and address the complexities and challenges that arise when applying intersectionality internationally.

While intersectionality is valuable in identifying and analysing intersecting forms of oppression, it has been criticized for providing limited practical/pragmatic solutions. Some critics argue that the framework often stops short of offering actionable strategies for addressing discrimination or achieving social justice (Carastathis 2016; Nash 2008; McCall 2005; Anthias 2001). Studies conducted by Hankivsky and Cormier (2009) and Hankivsky (2012) offer valuable insights into the practical applications of intersectionality, particularly concerning its relevance to public policy. These studies collectively advocate for a more proactive utilisation of intersectional frameworks to bridge the gap between academic discussions and real-world change.

Hankivsky and Cormier's study (2009) raises the pivotal issue of the need for practical solutions in intersectionality research and its connection to public policy.

The study points to intersectionality as a potent framework for comprehending complex social issues. However, it emphasizes that its true potential is realized when translated into actionable strategies that can bring about tangible change in the real world. Hankivsky and Cormier emphasize the importance of gleaned lessons from existing models that have effectively integrated intersectionality into public policy. By examining these successful models, researchers and policymakers can gain valuable insights into how to apply intersectional perspectives to address social inequalities effectively.

Hankivsky's study from 2012 further builds upon the idea that intersectionality holds the potential to contribute to actionable strategies, particularly concerning gender and health disparities. She argues that the understanding of how various social identities intersect is not merely an academic exercise but rather holds significant implications for practical solutions in the domain of health and public policy. By acknowledging and considering the multifaceted nature of individuals' identities and experiences, Hankivsky notes that policymakers can develop targeted strategies to reduce health inequities and address disparities. Thus, she advocates for a more inclusive and effective approach to policymaking that leverages intersectionality to create policies and interventions that truly reflect the complexity of individuals' lives. The exploration of ambiguity in response to homogenous messages in family planning was explored to gain practical solutions, thus recommending tailoring family planning messages to better address the diverse needs and experiences of women in the community. This contends with the criticism that intersectionality often lacks pragmatic solutions.

Intersectionality has been criticized for gaining dominance within academic circles while potentially sidelining other important perspectives and approaches. Critics

argue that this academic hegemony can limit the diversity of voices and perspectives within the broader social justice discourse (Nash, 2017; Collins, 2015; Weber, 2010; Cho et al., 2013). Thus, a study by Cho, Crenshaw, and McCall (2013) reinforces the call for diversification in intersectionality studies to counter academic hegemony. They emphasize that while intersectionality is a vital framework, it should not monopolize the discourse on social justice. They argue for the necessity of broadening the scope of intersectionality studies by incorporating various voices and experiences to avoid homogeneity and more accurately reflect the intricate nature of social inequalities.

Furthermore, the authors advocate for an approach that encourages practical application beyond academia. This involves engaging with diverse communities and incorporating their insights into the framework, ensuring that intersectionality remains a dynamic and inclusive perspective. Similarly, Nash (2008) challenges the unintended academic dominance of intersectionality, where it becomes the primary lens for understanding social justice issues. He/She notes the risk of silencing or marginalizing alternative perspectives when intersectionality is overly privileged and urges academics to recognize the limitations of any single framework, advocating for openness to diverse critical perspectives that can enhance understanding of social justice.

These studies collectively highlight the importance of balancing the power of intersectionality in academic discourse and caution against its potential dominance, emphasising the significance of embracing diverse viewpoints and experiences to create a more comprehensive and inclusive understanding of social justice issues. The current study, therefore, examined the importance of considering the specific context of rural Nigerian communities. It demonstrates

that the application of family planning policies should be contextually informed to be effective. This emphasis on the contextual relevance of the findings of this study challenges the notion of intersectionality as an academic hegemony.

Intersectionality has been criticized for inadvertently reinforcing essentialism and universalism. Some argue that the categorisation of individuals into specific identity groups may essentialize those identities and assume that all members of a particular group share the same experiences. This can result in overlooking the diversity within these groups (Hankivsky & Christoffersen, 2008; Collins, 2015; Yuval-Davis, 2006; Weber, 2010). This study, therefore, challenged essentialism and universalism by highlighting the diverse experiences and behaviours related to family planning among men and women in rural Nigeria. By emphasizing the unique factors at play within this specific context, with analysis from an intersectional lens, findings demonstrate that not all individuals within a particular group share the same experiences.

Intersectionality, as a framework, has undeniably made significant contributions to feminist and social justice scholarship. However, it is essential to recognize that it is not without its criticisms and challenges. The criticisms outlined in this literature review reflect ongoing debates within the academic discourse surrounding intersectionality. While these criticisms offer valuable insights, they should not overshadow the framework's continued relevance in addressing the complex issues of social identity, privilege, and discrimination. Therefore, this study engages with these criticisms constructively to refine and improve the application of intersectionality in research and activism.

2.8.6 The place of -public sphere, patriarchy and intersectionality in the study

Understanding Information Ecosystems (Public Sphere)

The public sphere serves as a central stage for the dissemination of information related to family planning in developing countries. This concept denotes the various channels through which information flows, including media, community gatherings, healthcare facilities, and interpersonal communication (Habermas 2015;2019). Analysing information ecosystems within a targeted developing country is crucial to comprehending how family planning discourse is shaped and disseminated. It is essential to identify key stakeholders and influencers within the information ecosystem, such as government authorities, community leaders, and healthcare providers (Fraser 1990).

Gendered Information Access (Patriarchy and Intersectionality):

Patriarchal norms and gender-based power dynamics significantly impact women's access to family planning information within developing countries. These norms can restrict women's participation in public discussions and their ability to seek healthcare services independently (Connell 1987). Furthermore, an intersectional lens must be applied to account for the diverse backgrounds of women, such as those from rural, indigenous, or marginalized communities. Multiple dimensions of identity, including ethnicity, socioeconomic status, and education, intersect with gender to shape information behaviour and access (Crenshaw 1989).

Community Participation and Barriers (Public Sphere and Patriarchy):

In this context, the public sphere plays a pivotal role in determining the extent to which women are permitted to engage in public discourse about family planning. Patriarchal structures within these societies can exert a profound influence on women's involvement in community meetings, health initiatives, and decision-

making processes (Fraser 1990). Identifying specific barriers, such as discriminatory practices, limited educational opportunities, and cultural restrictions, is essential to understanding the impediments to women's participation.

Healthcare and Information Providers (Public Sphere):

Healthcare providers and facilities act as crucial intermediaries in the dissemination of family planning information. The quality of information provided and the inclusivity and respect with which healthcare services are offered significantly affect women's autonomy in making reproductive choices (Habermas 2015;2019). Collaboration with healthcare professionals is instrumental in comprehending their role in promoting family planning and addressing gender-based disparities in information access and service provision.

Media Literacy and Empowerment (Intersectionality and Public Sphere):

Empowering women with media literacy skills is essential to equip them with the capacity to assess family planning information critically. Tailoring these programs to accommodate the diverse identities and backgrounds of women is paramount (Crenshaw 1989). Empowering women through media literacy initiatives enables active participation in public discourse and advocacy for reproductive rights (Fraser 1990).

Policy Advocacy and Recommendations (Public Sphere and Patriarchy):

Utilizing research findings to develop policy recommendations can challenge patriarchal norms and promote gender equity in family planning. Advocating for policies that facilitate women's access to information, healthcare, and decision-

making is crucial (Connell 1987). Engagement with local women's organisations and advocates is vital to amplify the voices of rural women and influence policy changes in favour of reproductive rights and gender equality (Habermas 2015;2019) In conclusion, by intertwining the concepts of the public sphere, patriarchy, and intersectionality, family planning research in developing countries attains a holistic understanding of the intricate factors influencing women's reproductive health and rights. This approach emphasises the critical need for inclusive and informed public discussions, as well as policy changes that challenge patriarchal norms and support women's reproductive autonomy. Understanding how information flows, power dynamics and gender-based norms intersect/converge provides valuable insights into women's decision-making processes regarding family planning.

2.9 Research Conceptual Framework

According to Given Case and Wilson (2023), a prominent scholarly discussion has revolved around the nomenclature employed to denote research concerning individuals' "information behaviour" and their interactions with the information they acquire. The discussion revolves around the use of various terms, such as whether this research should be labelled as "information behaviour, information practice, information experience," or other terms entirely (Given Case & Wilson 2023, p. 1). Nevertheless, Given et al. (2023) point out a common underlying theme in this research area, characterised by a predominant emphasis on the relationship between individuals and the information environment, illuminating how people's lives intersect with the world of information.

In essence, the field of information behaviour explores the multifaceted nature of people's perceptions of the world, how people locate and apply information in

decision-making, and how technologies facilitate finding and using information. It explores the contexts, situations, feelings, physicality, and meanings of people's information landscapes from individuals' interaction with information in various aspects of their lives. Additionally, it delves into individuals' proactive quest (active search) for information and their incidental discovery (passive encountering) of valuable information (Wilson 1997), as well as exploring their decisions on whether to look for information at all or whether to ignore information they find (Robson and Robinson 2013; Meyer 2005; Wilson 1997). Information behaviour also delves into the psychological, social, technological, and contextual dimensions of information seeking and use, shedding light on the complexities of human behaviour through "documenting, describing, explaining, critiquing and unravelling the complexities of people's engagement with information" (Given et al. 2023 p. 2). Therefore, research in information behaviour can be summarised as: researchers following people to investigate how they engage with information in all aspects of their lives, be it information on education, health, religion, social or economic aspects, and their experiences in diverse circumstances and settings across various personal activities and outcome.

2.9.1 The Language in Information Behaviour

Given et al. (2023) define "information behaviour" as a comprehensive term encompassing complex concepts in information sciences. It includes understanding information sources, meeting information needs through browsing or seeking, and recognising the practical utility of information in people's lives. It represents the intersection of individuals and information (p.3).

Although these concepts are sometimes criticised for being repetitive, Given et al. (2023), assert that these terminologies differ in meaning and are unique in exploring and representing the complexities of human experiences.

The open-minded approach by information behavioural researchers to not rigidly define their field but instead value continuous dialogue and exploration about how people interact with information in diverse life situations, reflects the strength of research, aiming for comprehensive and holistic methodologies. According to Given et al. (2023), the strength of the research in information behaviour lies in its continuous striving “for inclusive and holistic approaches to understanding information through a people-focused lens” (p. 3).

While not exhaustive of the list of terminologies in information behaviour, the table below represents key concepts and terminologies that inform discussions and debates in information behavioural research and as applied in the context of this study:

Key Concepts referred to information behaviour Research

	Definitions
Overarching concepts	These are broad, high-level ideas designed to encompass a wide range of actions, emotions, and experiences.
Information Behaviour	This term encompasses purposeful actions like actively seeking information and unintentional behaviours such as coming across or sharing information. It also considers the broader context of how individuals utilize information in their lives, taking into account factors like situations, emotions, culture, and geography, so accounts for the situations, time, effect, culture, geography and other contextual elements in understanding people’s engagement with information.
Information practice	Refers to established sets of actions, socially and culturally, for identifying, seeking, encountering, using, and sharing information from various sources. These practices are often habitual and emphasize the social and situational aspects of interacting with information.

Information Experience	This concept relates to complex and multi-dimensional engagement with information, emphasizing holistic experiences and deriving meaning from daily interactions with information. It places a focus on everyday learning and enhancing educational tools.
Specific Elements	These are instances or categories that fall within the overarching concepts.
Seeking	Involves a conscious effort to obtain information in response to a specific need or knowledge gap, using methods such as reading, conversation, or observation.
Sharing	Encompasses the exchange of information between individuals, whether actively and explicitly or passively and implicitly. Sharing is crucial for collaboration and involves communication with others.
Needs	Refers to the recognition that one's existing knowledge is insufficient to achieve a particular goal or desire. It can also involve unconscious triggers like curiosity.
Use	Describes how individuals engage with the information they acquire through seeking, sharing, encountering, or other means. It involves applying or disregarding information to align with personal goals or contexts and considers the impact of information engagement on thoughts and emotions.
Creation	Involves using information to generate new data, which may include repurposing or adapting existing information. Creation is related to information use and also covers the production of new information.
Encountering	Refers to the accidental acquisition of information through unexpected discovery, which may occur during unrelated information seeking, receiving information, or non-goal-oriented activities like monitoring
Monitoring	Involves regularly observing a specific information source or geographic location to stay informed.
Browsing	Engaging in semi-guided information seeking or casually inspecting a source that might be of interest. This could even be in a specific geographic location.
Avoidance	Making a choice not to seek information or purposefully disregarding potential information sources

Table 1-Key Concepts in Information Behaviour Research. Adapted from Given et al. (2023 p. 4)

In this study, general models of information behaviour (Wilson 1997; Dervin 1992) and models of information-seeking behaviour were examined to identify their suitability in understanding the concept of family planning (FP) practice amongst

people in rural areas in Nigeria. While the former concept is used to understand the people's lived experiences and encounters with information, acting as motivators or inhibitors to FP, the latter is used to identify the nature (development of and communication) and explain the information flow process from the major information systems (Marchionini 1995), represented by the religious and frontline information sources in this context within the communities of study.

2.9.2 Wilson's Model of Information Behaviour

According to Wilson's (1996) model of information behaviour, a need prompts information seeking, and factors that may motivate or inhibit information seeking are grouped into "activating mechanisms" and "intervening variables" (Wilson 1999, p.257). While the former echoes elements of stress theory, risk and reward, and social learning theory, the latter refers to personal and psychological factors. These factors determine the extent to which information is searched or ignored, and the model provides possible explanations for the prioritisation of specific information needs over others.

The various types of information seeking identified by Wilson (1997) include 'passive attention' – where unintentional information search leads to the acquisition of relevant information. "Passive search" is when one finds information in the process of searching for other information. "Active search" is a purposeful and active information search to satisfy a need, and "ongoing search" is a further search to update existing knowledge (p.562).

Over the years, Wilson's model has been extended and adapted to address new research questions and emerging contexts. One significant extension of the model is the incorporation of Kuhlthau's (1991) affective and cognitive factors in the

digital information environment which emphasises the role of the emotional state-anxiety and uncertainty in influencing the search strategies and outcomes of information seeking (Wang Hawk and Tenopir 2000). However, again, this suggests this extension has been in relation to technologically inclined users in supposedly developed and literate groups, re-emphasising the absence of the information behaviour of some groups (Black, low-income, women, and men) in the development of some general models of information behaviour.

Another notable extension of Wilson's model considers the social aspects of information behaviour. This extension emphasizes the influence of social networks, collaboration, and information sharing on information seeking. Savolainen's (2008) social construction of information behaviour, highlights social interactions, norms, and values that shape information seeking. This perspective has been applied to various contexts, including academic information seeking within social networks (Emanuel 2004) and the impact of social media on health information seeking (Moorhead et al. 2013). It is also applicable to the context of this study in the form of counter-publics (Fraser 2014).

In addition to cognitive and social factors, studies have extended Wilson's model to examine cultural dimensions: contexts, values, and beliefs to identify the influence of information-seeking practices across diverse communities and specific groups (Wilson 2016; Barnes et al. 2004; Niedzwiedzka 2003).

Furthermore, Wilson's model has been adapted to explore information behaviour in the context of health and medicine. Case's (2002) model of medical information seeking, for example, extends Wilson's model by focusing on the unique information needs and behaviours of healthcare professionals and patients.

Similar to its extension in the field of library and information science to address the information behaviour of scholars, students, and practitioners (Vakkari 2008).

Although this model was seen to be relevant in exploring the factors influencing rural men and women’s FP information behaviour and information seeking (passive and active), it has been criticised for portraying IB as a logical process contrary to the iterative and non-sequential activities involved in IB (Godbold 2006).

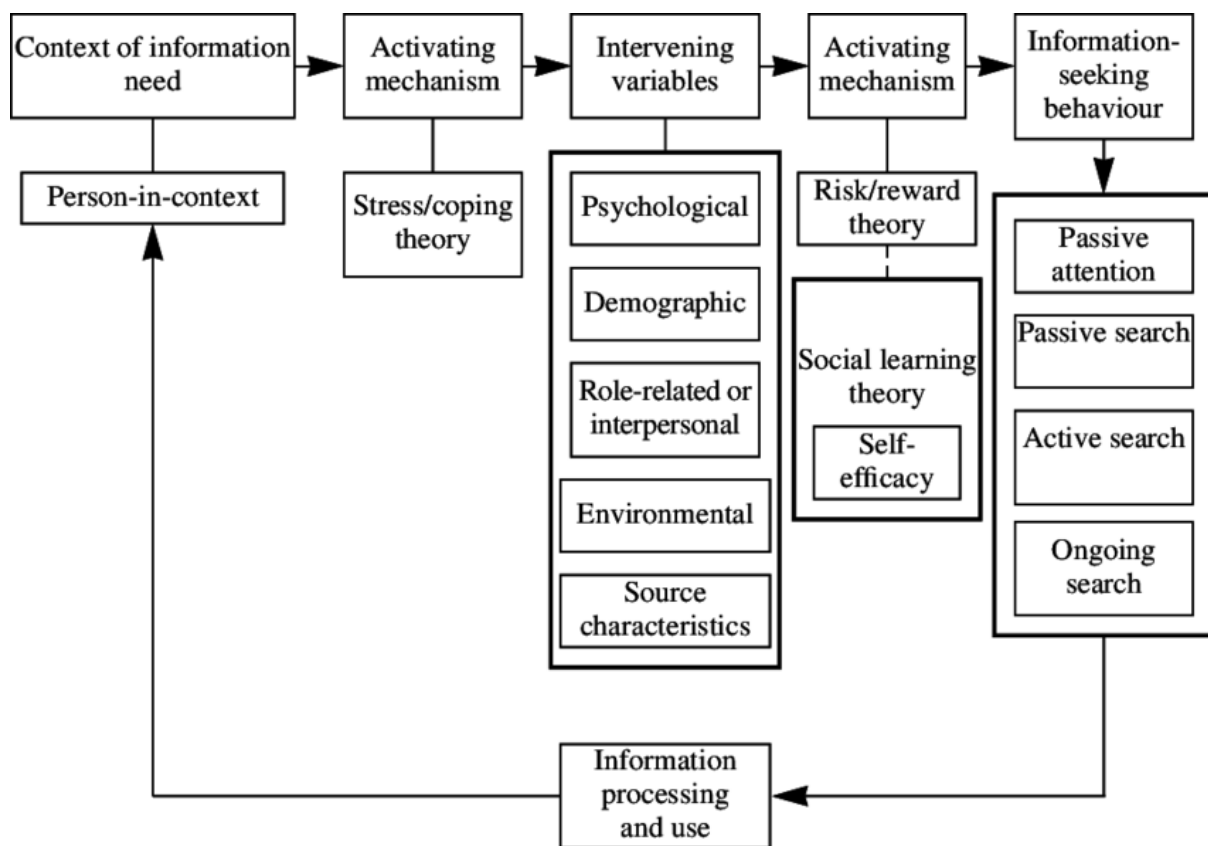


Figure 1- Wilson 1996 Model [Adapted from Wilson (1999), p.257].

This criticism is also evident in Wilson (1997), who describes the model as a simplified process:

“The diagram has been simplified by showing the intervening variables at only one point whereas at least some of the variables may intervene between context and activating mechanisms, between activating mechanisms and information-seeking behaviour, and between information-seeking behaviour and information processing and use” (p. 569).

In contrast to Wilson’s model, FP practices in Northern Nigeria have not been a straightforward process (Green and Biddlecom 2000), as they have been characterised by relatively low rates of adoption – despite the best efforts of various FP campaigns. Thus, the Wilson model on its own (as outlined in Figure 1) has clear limitations as a tool for investigating the complexity of the FP information behaviour of Zaria and Gure men and women.

Another criticism of the model found relevant to this study stems from Niedzwiedzka’s (2003) critical assessment of Wilson’s (1996) model of information behaviour based on research with general managers in Poland. The findings revealed limitations in Wilson’s model to accommodate managers’ information behaviour, particularly because this group acquired information through intermediaries rather than external or computerised services. Addressing this, Niedzwiedzka, though retaining Wilson’s concepts, proposed a modified model, introducing changes with emphasis on ‘redefining context’ to emphasise the continuous influence of context at all stages, as well as introducing personal and intermediary-based information-seeking strategies. However, the proposed model acknowledges its limitations in accounting for all aspects of human behaviour, calling on further research to construct a more comprehensive universal model accounting for the predominant information-seeking behaviour of specific user groups. Considering the findings of this study, which highlights the

influence of gender-related roles (Men) limiting the intended flow and sometimes interpretation of FP information, it is argued that including 'gender role' in information behaviour provides a more inclusive understanding of information behaviour.

2.9.1 Chatman's Theory of Information Poverty

Again, the theory of information poverty propounded by Chatman (1996) focuses on understanding factors limiting information-seeking and sharing among people living in poverty – and how this contributes to information poverty, specifically in the context of janitors, single mothers, and older people.

According to Chatman (1996), the existence of two worlds ("insider" and "outsider") among impoverished groups serves as barriers to information seeking and sharing. "Insiders" are perceived as individuals who share standard cultural, social, and religious practices, conforming to societal norms, while "outsiders" are perceived as deviants to existing societal norms and practices (p.194). The existing belief that only insiders understand the people's lived experiences serves as a hindrance to outsiders penetrating communities with new ideas and information which may be beneficial to them. According to Chatman, this perception becomes evident in the concepts of risk-taking, which involves weighing the relevance of the information to decide whether or not to share. Secrecy is a deliberate attempt to conceal information from an outsider to prevent unwanted exposure. Deception is a deliberate attempt to misinform the listener, and situational relevance is anything valued by the user, such as usefulness, applicability to interest, and growth of new knowledge, which leads to the utilisation of information.

Information inequality derived from Chatman's theory of information poverty has been used in accessing information resources, attributing them to factors like socio-economic status, studies in the digital divide, assessing the disparities in access to digital technologies, fostering information poverty in the digital age and its effect on employment, education, and social inclusion (Zondi 2023; Gibson and Martin 2019; Gebremicheal and Jackson 2006; William and Sligo 2002). It also recognised the marginalisation of certain groups, such as vulnerable populations, from essential information sources (Caidi and Allard 2005; Chatman 2001) and gender-related social exclusion (Jackson 1999).

The model (while relevant) had limitations as an overarching conceptual framework as it focuses on barriers to information sharing, which is only but a part of the overall aim of this study to investigate the information behaviour of Zaria and Gure rural men and women and information systems (in this context local and not computerised information sources).

2.9.2 Kuhlthau's Information Search Process (ISP) Model

Kuhlthau's (1991) ISP model is a cognitive model with a focus on the 'demand side'- searching the complexities of users' information gathering - tasks, problems, and processes - which are labelled essential for understanding the users' information-seeking processes (Kuhlthau 2005). According to Kuhlthau (2005), prior to his research, studies in information seeking had focused more on the "supply side" (information providers) appropriateness in the creation and tailoring of messages to meet the needs of the audience. This oversight, as highlighted by Kuhlthau created a setback in the development of a "constructive process" (p.2) of information seeking. The ISP model is, therefore, an interplay of

theories by Kelly (1963), Taylor (1984), and Belkin (1984) to form a frame of reference for understanding users' experiences in the information search process.

The model identifies three realms of related experiences-“ affective (feelings), cognitive (thoughts) and physical (actions)” (Kuhlthau 2005 p.1) existing in six holistic stages (Initiation, Selection, Exploration, Formulation, Collection, and presentation) serving as a frame for understanding how individuals seek and interact with information in the course of the information-seeking processes (Martzoukou 2006; Kuhlthau 1993).

The three dimensions highlighted as crucial for analysing information seeking are explained below:

Physical dimension

The user's interaction with the system is a crucial part of information seeking. It involves actions (sensorimotor aspect) taken during the search, influenced by thoughts and feelings (cognitive and affective states). While positive emotions are believed to drive persistence and exploration, negative emotions, on the other hand, can lead to dissatisfaction and disorientation. These elements are interconnected, with a lack of knowledge causing uncertainty and shaping the user's search behaviour and outcomes, especially in the initial stages.

The Cognitive Dimension

The cognitive aspect of ISP goes beyond observing external actions during information seeking, focusing on the internal knowledge and structures that guide the search (Belkin 1990). Cognitive processes involve thinking, learning, memory, imagination, and problem-solving, all crucial for information-seeking

effectiveness. Users are argued to create a "mental representation "(Bruce 1999 p.197) as they interact with a system, allowing them to understand how the system works and predict its behaviour (Borgman 1999; Allen 1991). According to Bruce (1999), the construction of a mental model, often shaped by past experiences, perceptions, knowledge, and expectations, is necessary for the effective utilisation of a system or service. However, an incomplete understanding of the system may lead to incorrect mental schemata, resulting in ineffective search patterns. The user's mental model, therefore, depends on their perception of the system's conceptual framework and how the system is presented. Wang et al. (2000), therefore, suggest the development of system-based solutions such as training and guidance or user-based solutions- designing systems consistent with the user's mental model, built to suit cognitive models for a more productive experience.

Affective Dimension

In this dimension of information seeking, the user's emotional state is considered crucial. The affective dimension, therefore, assesses the feelings that arise during information seeking to influence user performance. Similar to the cognitive aspect, the user's emotional characteristics shape their movements, choices, and search tactics, ultimately impacting the search outcomes. Feelings of uncertainty, as noted by Kuhlthau (1993), are believed to govern the initial stages of the process, leading to discomfort and affecting problem expression and judgments of relevance. This uncertainty stems from the user's limited knowledge, known as the Anomalous State of Knowledge (Belkin et al. 1982). However, Kuhlthau states that having relevant materials replaces the feelings of uncertainty with certainty, bringing feelings of satisfaction in later stages. Affective state both influences a

person's performance in an information-retrieval task and can be influenced by task performance (Wang et al. 2000).

Previous research has identified affective elements related to the use of digital information environments, particularly the internet, suggesting that users seeking information on the web aim to recreate the familiar experience of visiting a library (Bruce 1999; Bruce 2004). In the case of this study, this suggests the likelihood of users seeking a connection between the convenience of a new method of information search (internet and other advanced sources) and their existing traditional search methods (oral sources). However, Meyer (2003) argues that "rural people with oral tradition have their peculiar way of handling information", which is closely related to their social and cultural background (P.8). Thus, re-emphasising the identification and skillful use of indigenous communication mechanisms rural people are able to identify with.

The six stages embedded in the three dimensions of the information search process are presented in the table below:

Stage	Affective Aspect	Cognitive aspect	Physical Aspect	Task
Initiation	Feelings of uncertainty, apprehension	Contemplating the problem, comprehending the task, relating to prior experience and knowledge	Discussing possible topics and approaches	Recognize the need for information
Selection	Feelings of uncertainty may shift to optimism after making the selection.	Weighing perspective topics against criteria like personal interest, assignment requirements, available information, and time.	Conferring with others and conducting a preliminary search.	Identify and select the general topic or approach to be pursued
Exploration	Feelings of confusion, uncertainty, and doubt	Becoming oriented and sufficiently informed about the topic to form a focus or a personal point of view	Locating information about the general topic, reading to become informed, and relating new information to what is already known	Investigate information on the general topic to extend personal understanding
Formulation	Turning point with diminished uncertainty	Identifying and selecting ideas in the information from which to form a focused perspective of the topic	Forming a focus from the information encountered	Form a focused perspective of the topic

Collection	Interaction between the user and the information system functions effectively	Defining, extending, and supporting the focus	Gathering information relevant to the focused topic, making detailed notes on that which pertains specifically to the focus	Gather information related to the focused topic
Presentation	Feelings of relief, satisfaction, or disappointment	Culminating the search with a personalized synthesis of the topic or problem	Summary search, noting decreasing relevance and increasing redundancy in the information encountered	Complete the search and prepare to present or use the findings

Table 2- Six stages of the information process (Kuhlthau 1991)

Overall, this model emphasises the significance of including the cognitive and affective aspects or characteristics of human behaviour in the development of the information search process. This model contributed to the researcher's awareness and knowledge of 'anxiety and uncertainty' as a cognitive and affective dimension in the information search process, which could increase based on the user's judgement of information irrelevance and decrease based on relevance. This knowledge was useful in identifying this behaviour in the users on the one hand and identifying the possibility of information alignment or misalignment in the information sources (Systems) based on their (information providers) judgement of information relevance for the users.

Although the ISP model is widely utilized in various information-seeking contexts, including health information seeking, it is not immune to criticism, and it is crucial to acknowledge its limitations (Johnson 2003).

In the specific domain of health information seeking, several concerns have been raised regarding its application. Critics argue that the ISP model oversimplifies the intricate and multifaceted processes involved in health information seeking, as it may not fully capture the dynamic nature of these behaviours (Pickard Shenton and Andrew 2014). The model primarily focuses on cognitive and affective aspects, neglecting the significance of intrapersonal factors like prior health knowledge, beliefs, and attitudes (Adams 2010). Jones (2011) suggests the need for a more explicit integration of these factors. Moreover, the ISP model places significant emphasis on anxiety as a driving factor in information-seeking, which may not be universally applicable to all health information-seeking scenarios (Savolainen 2018; White 2016), considering other emotions and motivations also play pivotal roles (Green 2017).

Health information seeking is profoundly influenced by social and cultural contexts (Anderson 2005; Emele 2018). Critics advocate for a more explicit acknowledgment of how these factors influence behaviour, particularly in the context of health disparities (Clark 2014).

Additionally, health information-seeking often involves non-linear processes, with individuals revisiting and adapting their search strategies as their understanding of their health situation evolves (Vakkari 2001; Robson and Robinson 2013). The model's linear framework may not capture these iterative processes adequately (Kuhlthau 2005) as information behaviour does not follow a sequential process (Given et al. 2023; Godbold 2006), therefore does not provide for a feedback loop, which according to Wilson (1999) "...must exist within all models, since progression towards a goal is hardly ever unproblematic" (P.267), as Dervin argues that all-situation facing cannot be said to be linear and purposive. Davies (1994) argues that the ISP model, in its original form, does not fully address the nuances of health information seeking and may require adaptations or extensions to suit the health information context better (Davis 1994).

Keller Taylor and Brunye (2020), similar to Case (2002), assert 'uncertainty' as the trigger for information seeking; however, they argue that information-seeking activities triggered by uncertainty are yet unknown (P. 1). The ISP model, which emphasises this concept of anxiety and uncertainty does not highlight specific triggers of uncertainty either, rather generalises it under inability of the user to access relevant information.

2.9.3 Marchionini Model

Marchionini (1995) proposes a hybrid cognitive-physical process model of information seeking by combining structured and adaptive/flexible elements, which puts into consideration the dynamic adaptation of the user to modify or develop a new direction in the process of information seeking. Marchionini asserts that a user assumes two different attitudes or moods during the information-seeking process: invitational (open to new ideas and receptive to change) and indicative (relying on existing constructs and rejecting new information). The choice of attitude or mood may vary at different stages of the search, with an invitational mood being more suitable in the early stages and an indicative mood leading to closure and task focus. Although Marchionini (1995) presents a linear model, he takes into account the iterative and repetitive nature of information seeking.

The model highlights internal processes such as recognising and accepting as well as defining and understanding an information problem, however, Marchionini (1995) opines that internal processes are difficult to design suggesting "recognition and acceptance are typically ignored by system designers as they are viewed as user-specific and thus uncontrollable" (p.51). He, however, suggests that "systems that invite interaction and support satisfying engagement lead users to accept information problems more readily" (P. 51), highlighting the importance of easy-to-use engaging systems on responsive attitude towards information-related challenges. He, therefore, highlights that "although information seeking is driven by human needs and behaviours and thus variable, there are several common sub-activities that may be supported by good technical design" (P 207). These sub-activities discussed by Marchionini (1995; 2007) are shown in the table below:

Stages	Description
1. Recognising and accepting an information problem	A user becomes aware of an information problem and accepts rather than suppresses it. The user's acceptance of information challenges is attributed to the interactive and engaging nature of the system.
2. Defining and understanding the problem	The effectiveness of defining and understanding the problem is dependent (highly reliant on information literacy) on the user's understanding of the subject area, influenced by the physical, social, and psychological context of the task. Involving the user's ability to limit (narrow the scope of the problem), label (provide a clear identification), and establish a framework or structure for finding a solution.
3. Selecting a search system	This is guided by selective exposure to- past experiences, cognitive abilities, and familiarity with the systems shaping the user's domain knowledge expectations about the answer, and scope of their personal information and infrastructure.
4. Query Formulation	Relies on semantic mapping, aligning user vocabulary with system vocabulary (what if you do not know the system vocab). Does that mean there is no answer for you? How do you come to know that? Involves mapping user strategies and tactics in system development and features through action mapping.
5. Executing search	Involves physical actions to query an information source.
6. Examining Results	Users' rating of the relevance of information received (like it is a flat world, intersectionality) patriarchy is evident in this type of study, assuming control is for one person, when women actually have to gain consent from men to start the search all over again.
7. Extracting information	Relevance judgement is made in response to information retrieved, based on their manipulation (interpretation) and integration into their existing understanding or domain knowledge. Consequently, relevance is determined by how well the new information aligns or contributes to their existing knowledge.
8. Reflecting/iterating/Stopping	Users' decision on when and how to iterate or modify the search process, depending on the information seeking process.

Table 3- Sub-activities in Marchionini Model (1995)

Although the Marchionini model is detailed with more in-depth stages compared to the Kuhlthau model, Colbert et al. (1997) criticises the model for being fairly abstract, lacking precision in the various activities and actions requiring verifying designers to develop systems to support query formulation better.

Again, based on Seneveratne and Nwala's (2007) exploration of information literacy (IL) in rural areas in Sri Lanka, it was conducted to understand the information needs and the ability of citizens to comprehend information. Findings in her study show that IL is not solely dependent on language or conventional education but also on social factors and their dynamics, with phases and factors changing from person to person. It can, therefore, be stated that the sub-activities highlighted by Marchionini (1995) are more viable in the exploration of the information search process among literate and highly educated users compared to their counterparts in rural settings. This implies that system development may most times unintentionally take into consideration the information behaviour of the bourgeoisie in creating information systems while neglecting the less privileged members of the society who are also expected to be beneficiaries of the developed system (Fraser 2014). Meyer's (2005) exploration of the effective use of information in the development of rural communities practising oral tradition is adapted to further support this argument of the inapplicability of Marchionini's process of information search to rural communities. Based on Meyer's findings, the value of information by rural people is attributed to its feature to alleviate uncertainty, enhance economic growth, and extend the knowledge base. It is dependent on context, adapted to culture-specific needs, dependent on the medium of communication and converted to suit particular situations (These attributes are discussed in detail in Chapter 7- Conclusion). Consequently, the Marchionini model is limited in identifying factors contributing to information relevance among specific or diversified groups.

2.9.4 Dervin's-Sense-Making Model

Dervin's (1992) sense-making model is a cognitive process providing a framework for understanding how 'individuals make sense of their experiences and environment' through active search and processing of information within their context. The model emphasises the dynamic and iterative nature of sense-making, highlighting information seeking as a continuous cycle fostered/sustained by the encounter with new information or evolving situations and perceived differently by each individual. The model recognises the impact of- emotions, expectations, and the existence of previous knowledge in contributing to the subjectivity of an individual's experience in the sense-making process.

Dervin (1992; 2000) argues that a discrepancy (gap) between an individual's understanding of the world and their actual experiences of the world acts as a barrier to the sense-making process. This gap, according to her, plays a dual role in sense-making- acting as a prompt or motivation for action, such as engaging with information, or on the other hand, as a barrier showing the challenges faced by individuals when they are unable to understand or make sense of a situation.

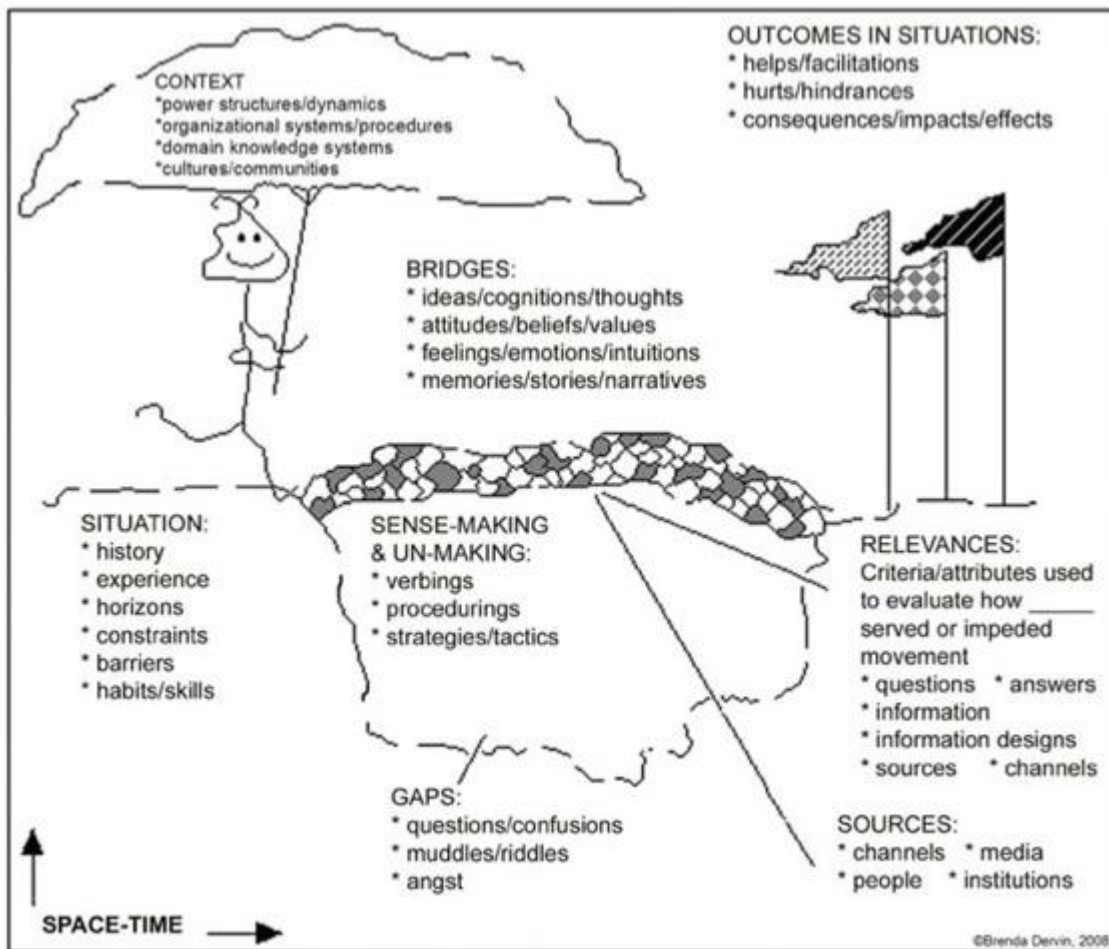


Figure 2- Dervin's sense-making (Dervin 2008)

Overall, the review of Dervin's model within the context of this study was significant in providing the researcher with an understanding of "how" people make meaning of information based on various aspects of their lives. Thereby enabling the researcher to better comprehend and integrate the principle of sense-making in data analysis as a motivating or inhibiting factor to FP information use among the target audience, as well as understand the sense-making process leading to the acceptance/rejection of certain information and its sources.

The Information Seeking and Communication Model

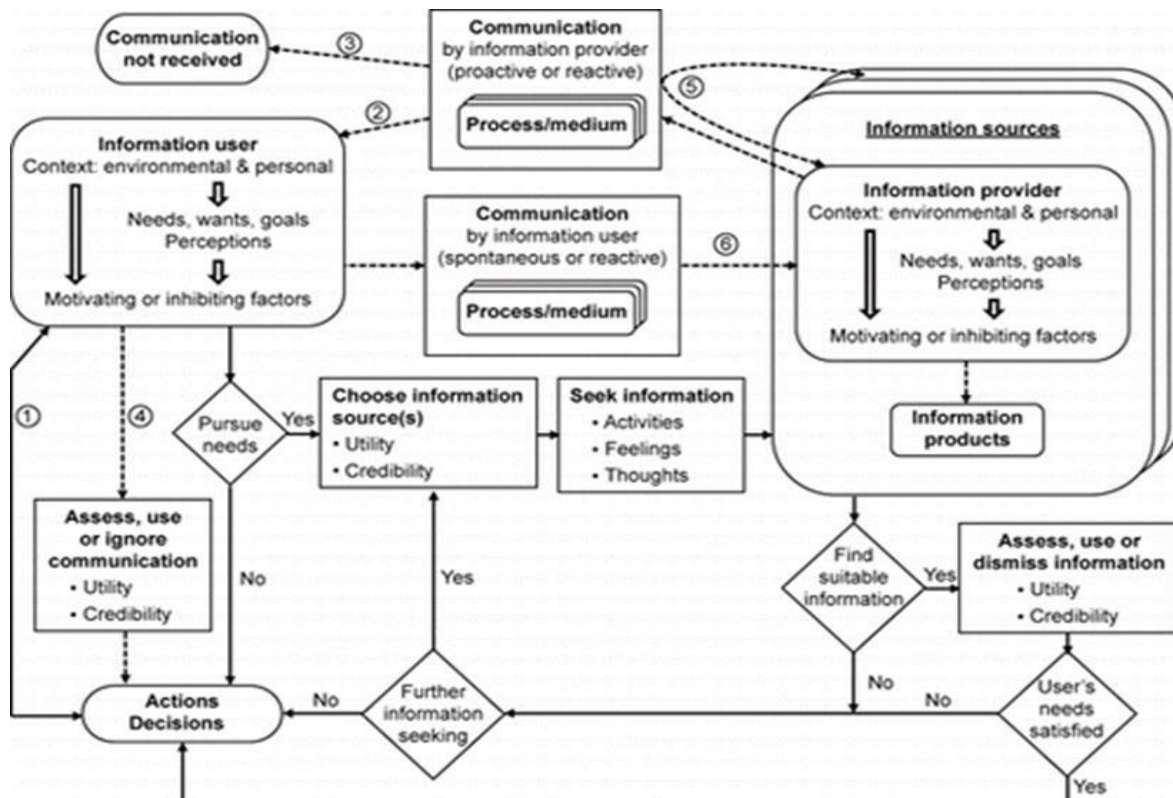


Figure 3- The ISCM Model [Adapted from Robson (2013 p.68)].

Research into communication dates to the 1920s (Laswell 1949), while research into information behaviour dates to the early 1940s (Sherrington 1965, cited in Robson 2013).

Many theories and models in information have been developed and continue to be developed (Fisher et al. 2005; Case 2007). The criticism of many scholars, especially researchers in Library and Information Science (LIS), has been that the scope of theories and models developed in both fields have been minimal, with most models emerging centred on building on existing arguments with little or no new contributions (Case 2007; Vakkari 2008; Mckechnie et al. 2008; Wilson 1999).

The LIS models focus on “the information seeker and information-seeking behaviour” (Wilson 1997; Case 2012), while mass communication models focus

mainly on the “communicator and the effectiveness of communication.” In effective communication, the focus is on the effect of messages on the audience and their response (Robson 2013, p2).

The Information Seeking and Communication Model (ISCM), propounded by Robson (2013), is a blended model developed by examining models from the fields of LIS and Communication. The model is, therefore, a blend of others drawn from communication, information behaviour, and information-seeking behaviour, just as Wilson’s (1997) argues that “the general models of information behaviour should guide analysis of ISB” (p. 552) because they encompass the “totality” of information, including communication (media and other sources), and there is a relationship between information and communication (Wilson 1997; Robson 2013; Robson and Robinson 2015).

The ISCM focuses on information *users*: the activities they get involved with (information searches and use) and the activities in which they engage (including ISB) to produce and communicate information. The continuous arrows in the diagram in Figure 2 show information-seeking and related activities, while the dashed arrows show communication and related activities.

However, the IB of both the user and provider of information is influenced and shaped by environmental context (culture, religion, and place of work) and personal context (knowledge, experience, and psychological). Thus, their needs, wants, goals, and perceptions are informed by these contextual factors, which may motivate or inhibit them from searching for information or communicating it. This suggests that context, environmental and personal factors shape the IB of providers and users of information.

The ISCM demonstrates that the roles of the information user and provider are interchangeable, suggesting that depending on the situation, a provider of information could also be an information user at some point and vice versa (Robson and Robinson 2015). Hence, this makes the model relevant in investigating the common practice of information sharing amongst members in rural communities (Emele 2018), which allows for role interplay and not necessarily an investigation of the IB of professional bodies acting as information providers (communicating) to rural communities (information users). Contrary to other information models where the information user plays a fixed role as a receiver/consumer of information (Ellis's model 1989; Kulthau's Information Search Process 1991; Wilson's model of IB 1996; and Johnson's 1997 Comprehensive model of Information Seeking), the ISCM allows for flexible role interplay, emphasising the interactive nature of IB, which can lead to information sharing.

The model further demonstrates that communication is a two-way process and emphasises the importance of this type of communication in understanding IB- the information provider may communicate with the user of information; information providers may also communicate with each other. Two-way communication, which is interactive and provides feedback opportunities – has been argued to be effective in bringing about positive behavioural change in psychiatric patients (Priebe et al. 2011) and improving knowledge, skills, attitude, and healthcare outcomes in health interventions (Hammarberg et al. 2003). Furthermore, Bahri (2010) argues that feedback in two-way communication is significant in risk assessment and minimisation, crucial for addressing unfavourable patterns of medicine used to develop behaviour change models (Hammarberg et al. 2003). The aim of this research centres around identifying

motivators and inhibitors to the use of FP information sources among rural men and women in Zaria to understand the low FP practice in the area. Thus considering the re-occurring theme of rural dwellers preference for informal information sources (Islam and Ahmed 2012; Saleh and Lasisi 2011; Momodu 2002), the two -way communication was essential to investigate the role of information sharing in motivating or inhibiting the use of FP information sources amongst rural men and women in Zaria.

From the user or information consumer's perspective, utility (perceived usefulness and relevance) and credibility (reliability, accuracy, trustworthiness, authority, completeness, lack of bias) are essential attributes in a source that influence source selection. However, both the user and provider depend on context as a motivating or inhibiting factor to communicate or use the information and information sources. Hence, the theme of source credibility was explored to identify the characteristics of information sources sought by rural men and women in Zaria, which determines their use or avoidance of information.

The central thesis of the ISCM is that a user's needs, wants, goals, perceptions, and information behaviour are influenced by context, which determines the totality of an individual's actions and decision-making.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.0 Introduction

In this chapter, the details of the methods and procedures adopted in the study in narrowing the knowledge gap are discussed. The subsequent sections in the chapter provide details of the methods and techniques adopted in conducting this study.

3.1 The Research Philosophy

Saunders et al. (2009) outline ontology, epistemology, and axiology as the three dimensions of research philosophy.

This study was concerned with identifying the major FP information sources and preferred advice givers of rural dwellers in Zaria, primarily by investigating their IB, but also their epistemologies: the process of understanding reality (Creswell and Poth 2017). This was adopted to understand the activities and challenges faced by men and women in Zaria, which informs their IB and influences their decision to use or ignore FP information. The philosophical approach is summarised in Table 1 below, using the criteria suggested by Creswell and Poth (2018).

Philosophical Assumption	Question	Characteristics	Possible Research Practices
Ontology	What is the nature of reality?	Reality is multiple from a variety of perspectives.	Different perspectives are reported by the researcher, guided by the development of themes.
Epistemology	What is regarded as knowledge? How are knowledge claims justified? What is the relationship between the researcher and the researched?	Subjective evidence is obtained from the participants. The researcher tries to distance himself from the researched.	The researcher spends time with the research subjects and becomes one of them, and quotes are used as evidence in emphasising findings.
Axiology	What is the role of values?	The researcher acknowledges their biases in the study context, being that research is value-weighted.	The researcher discusses values that shape the narrative, including his/her interpretation in relation to that of the participants.
Methodology	What is the research and language process in research?	Inductive logic is used, context guides the topic of study, and a design emerges afterwards.	Generalisation is reliant on the details identified by the researcher in relation to context, and questions are continually revised from field experiences.

Table 4- Philosophical Paradigms (Creswell and Poth P. 20 2018).

3.2 The Research Design

The research design shapes the study from the problem identification stage to the analysis and interpretation of the data collected (Merriam and Tisdell 2015).

The research was motivated by the researcher's observation of the current low adoption of FP in Zaria and the limitation in models of information behaviour (Robson and Robinson 2013; Chatman 1995; Marchonini 1995; Kuhlthau 1991) to address the unique information needs, challenges and behaviour of specific groups (Niedźwiedzka 2003) for the complexities and nuances of the information seeking experiences. In the case of this study, the specific group of Black, low-

income, rurally based women in developing countries, such as Nigeria are not accounted for in the models of information behaviour.

Dutta (2009) argues that relatively few studies have been conducted in the area of ISB in developing countries, and similarly, Wilson (1999) identified a relative paucity of IB models compared to ISB models. No previous study has been identified that addresses the influence of IB on the take-up of FP in Nigeria.

This study combined a blended deductive analysis with an inductive approach through open coding and thematic analysis to allow the data to speak for itself, thereby revealing minute details not identified by other studies. Although this was a deductive study, constructs in the ISCM model guided the development of the interview schedule to make for in-depth and rich data gathering, sufficient enough to achieve the major objectives and answer fundamental questions contributing to the complexities of patriarchy and other gender-related issues acting as barriers to the adoption of family planning amongst women in rural areas.

A qualitative approach using semi-structured in-depth interviews through phone calls (SSII Telephone) and face-to-face interviews as and when required (as the network was poor, especially in Gure, making it difficult for both the interviewer and interviewee to hear each other) was adopted, in contrast to the major quantitative studies in FP, which use questionnaires, structured interviews, and data evaluation forms for data collection (Okigbo et al. 2015; Adeyanju 2017; Babalola and Olubiyi 2015). The thematic analysis, which identifies recurring patterns in the text to understand a phenomenon, was used to understand 'Why and How' low adoption of FP continues to thrive despite several interventions as well as the prioritisation of specific channels over others, contrary to the salient use of logistic regression, chi-square and correlation in FP studies.

3.3 The Rationale for Qualitative Design

The major research methods are - qualitative and quantitative methods. While qualitative research aims at understanding reality, the quantitative method is significant for establishing a relationship between variables (Cresswell and Poth 2018). The table below gives a summary of the characteristics of each method:

Quantitative	Qualitative
The aim of the research is to determine the relationship between a dependent and independent variable.	The aim is to gain a deep understanding of an organisation or event by considering the existing patterns found among participants in a group.
The design is usually descriptive (establishes associations) or experimental (establishes causality) and aligns with the positivist paradigm.	The design is exploratory and aligns with the interpretive paradigm.
Data is collected using structured instruments, e.g., focus group discussions, surveys, mathematical models, and laboratory experiments.	Data is collected using unstructured instruments (Semi-structured interviews, Focus group discussions, participant observation, case study, and participant observation.
The population is studied in isolation by controlling the environment in which data is collected.	The population or events are studied in their natural setting.
Convergent reasoning	Divergent reasoning
Probability sampling is more often adopted, and results are generalizable. Results are based on a large sample size representative of the population.	The non-probability sampling technique (Purposeful sampling) is majorly adopted; hence, small units are studied in-depth, giving details to context but may not be generalisable.
Data is generalisable	Purposeful sampling provides deep insight into the phenomenon of interest and not aimed at empirical generalisation.
Data is analysed statistically and presented in numbers.	Data is analysed analytically and presented in descriptive form using excerpts from interviews or focus group discussions.
Inductive approach	Deductive
The researcher remains objective and separated from the research.	The researcher becomes subjective in the research process as he is not separated from the object of study.
The research design is flexible and may change to accommodate emerging processes;	The research design is fixed and theory-driven.

the theory emerges in the research process. This allows for the adoption of field contingencies.	
Questionnaires and interviews have close-ended questions with predetermined responses. This is to make answers measurable, but explanations providing in-depth understanding are not captured/omitted.	Questions are open-ended and provide the flexibility of probing, thus providing an in-depth understanding of an experienced phenomenon by the participants.

Table 5- Features of Qualitative and Quantitative Research Method (s).

According to Green and Thorogood (2018), qualitative methods are necessary to generate useful knowledge and information concerning how information is accessed, processed, and used. By interviewing individuals, it is also possible to ask them about their reasons for behaving in particular ways – and why they might trust and privilege specific information sources while rejecting others. In contrast with quantitative structured interviews, which require a representative sample to ascertain validity due to the closed-ended nature of the questions (Neuman and Robson 2014; Bryman 2006), the interactive design of the qualitative method makes for in-depth engagement with participants thus, argued to generate rich data for understanding a phenomenon (Creswell and Poth 2018; Green and Thorogood 2018; Iofrida et al. 2018; Silverman 2016; Holloway and Galvin 2015). The aim of qualitative research was also to understand the lived reality and experiences of the studied population (Campbell, Taylor, and McGlade 2016).

For more in-depth insights into the FP information experiences of the target audience, which provides possible explanations for their information behaviour, the qualitative method is recommended to enable the researcher to gain insight into the broader values and background, family, and cultural contexts (Robinson 2013; Wilson 1997; Chatman 1995; Marchonini 1995), as well as gender-related

issues (Berger 2015; Pilcher, Coffey 2018), that influence their choices of advice-givers (, information sources – and determine family planning messages they ignore or avoid (Iofrida et al. 2018 p. 470).

Although the data in qualitative research is not generalizable, smaller samples compared to the quantitative approach are used (Silverman 2000). Qualitative research allows for rich data collection; the findings are also applicable across more extensive populations within similar contexts (Green and Thorogood 2018; Cresswell and Poth 2017; Silverman 2016; Holloway and Galvin 2016).

Chetty et al. (2014) suggest the use of the purposeful sampling technique, which allows the selection of participants who have the characteristics required to achieve the aims and objectives of the study. Similar to the suggestion of the use of a sampling technique as highlighted by Oppong (2013).

Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry. They seek answers to questions that reveal how social experience is created and given meaning. In contrast, quantitative studies emphasise the measurement and analysis of causal relationships between variables, not the detail and complexity of the process itself (Campbell, Taylor, and McGlade 2017).

With qualitative methods, due to the open-ended nature of its data collection instruments and the ability to probe in the course of semi-structured interviews, the participants can be prompted to describe or “narrativize” (Hollway and Jefferson 2012) their various experiences with specific FP products and services (including levels of satisfaction or dissatisfaction). This enables the researcher to understand meanings and associations that might be ascribed to events and

circumstances by his/her research subjects, and which might be relevant to improve the quality of information and channels used in communicating FP initiatives (Soafer 1999; Soafer 2002).

According to Wilson (1999), qualitative research is appropriate for studying human behaviour because quantitative research cannot be used to explore people's lived experiences, as it focuses on measuring patterns, scale, and frequency in phenomena rather than offering insights into how they come about. He adds that the use of quantitative research methods has contributed to the limited development of theory and practical application of research into IB (p. 250). Thus, to make a meaningful contribution to the existing body of knowledge in IB research, a qualitative research method was adopted to understand "how" men's and women's lived experiences affect their levels of engagement with FP information and communication channels in Zaria and Gure.

3.4 Research Strategy

Ethnography studies a culture-sharing group by examining their language, values, and beliefs over a prolonged period and developing patterns that are relevant to providing a complete and elaborate description of the groups studied (Hammersley and Atkinson 2007). It also helps the study of participants within a specified culture, enabling in-depth insights into IB/ISB (Bernard 2017). This suggests that ethnography would be appropriate for examining the cultural patterns influencing the FP attitude of men and women in Zaria. However, in order to adopt this approach effectively, a prolonged period of study would be required using participant observation (Creswell and Poth 2018; Bamkin, Maynard, and Goulding 2016) or an even more immersive approach. Apart from the limitations of time and resources that militated against using a more ethnographic approach,

Kaduna state has been identified as one of the high-risk zones in Nigeria due to the insurgency in Northern Nigeria (Okunola and Ikuomola 2010). Hence, participant observation was not feasible in this study. In addition, the Covid lockdown in 2020 would have limited this type of study.

Narratives focus on the culture, language, social and family values that shape an individual(s) experience through story-telling in order to identify relevant issues and demonstrate the need for action to address them (Clandinin and Conelly 2000). The aim of this study is not to identify the existence of specific issues but to understand *why and how* context informs the IB of individuals and its influence on their decisions to utilise or ignore information from specific sources.

Having reviewed a variety of potential qualitative approaches to inquiry, a phenomenological case study approach was adopted. According to Tight (2010), there is no single model for defining a case study. Instead, it can be described as a case, method, strategy, design, or approach, depending on the range of social research approaches. Yin's (2003) definition of a case study is adopted for this study. This is conceived as "an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not evident" (p. 13).

Case studies can be single or multiple. A multiple case study is a review of several single case studies to identify limitations in order to justify its applicability on a broader scale within the same or similar contexts. According to Yin (2003), there are two approaches to the use of case study: the single case study, described as an exploration of a single entity to expand and generalise analysis and theory (Yin 2003; Yin 2018), and the multiple case study approach focused on studying a larger 'sub-unit' of an entire population. Although this study was not a

comparative analysis, considering the large and diverse population in Kaduna state in terms of language, occupation, religion, and culture, it was important to select multiple case studies for representativeness within the state. Multiple case studies were included to represent the two major religions in the state (Christianity and Islam), Local Government Areas (LGA), and Villages. The three LGAs included in the study to represent Kaduna state are Zaria, Sabon-Gari, and Lere LGA, with Tudun-Jukun selected to represent Zaria LGA and one village (Bomo) to represent Sabon-Gari LGA and another understudied village 'Gure' which according to Nengel had "no written sources ... prior to the conquest and imposition of the colonial rule" (1999, PP. 20-21).

This village was selected to represent Lere LGA and the Christian community, as the inadequacy of traditional methods of data collection continues to foster the lack of inclusion or representation of certain groups that lack access to necessary technology or transportation (Pfeffer 2015; Martinez 2015; Spear et al. 2011). However, Martinez (2015) argues that studying such groups can be significant for identifying nuanced variation within subgroups. Multiple individuals with variations in age, gender, marital status, and education were interviewed in each case, with each village selected representing either the Christian or Muslim members of the state. While individuals in Zaria were selected to represent the Muslim Community, Individuals from Gure Lere LGA were selected to represent the Christian community.

This study focuses on identifying and exploring the factors responsible for the comparatively low adoption of FP in Zaria and Lere by investigating the IB of parents and prospective parents in the region and 'how' the IB of information providers may be influencing this low adoption. Consequently, the case study

investigates a contemporary phenomenon (FP) within its real-life context: a fundamental approach when the boundaries between low adoption of FP advice (the phenomenon) and context (religion, culture, and environment) are not clear. This strategy also enabled the researcher to identify and access representative sub-units of the Zarian and Gure adult population in order to capture the complexity of this phenomenon in the context of more localised or specific contextual conditions (Patton 2005), including the specific range and nature of information sources available to them (both formal and informal) and the influence of these factors in determining their preferred advice-givers and overall information behaviour (Robson 2013). The strategy was therefore chosen to answer the questions of "how and why" individuals and families behaved with regard to FP information in order to provide a better understanding of the nature and complexity of the IB process among rural, low-income earners, especially women in Zaria and Gure, Nigeria.

This strategy was inspired, in part, by Creswell and Poth's (2018) conception of phenomenology as a means of understanding "the recurrent meaning for several individuals of their lived experiences" (p.75). The researcher's concern was to reconstruct and analyse the everyday experiences participants have while encountering a phenomenon (Moustakas 1994). Similarly, Stake (1995) asserts that phenomenological case studies allow people's lived experiences in their natural settings to be investigated. Moreover, by selecting a representative sub-unit, or sub-units, of an overall population, researchers can identify common behavioural patterns (Yin 2018; Eatough and Smith 2006; Bramley and Eatough 2005; Stakes 1995; Parry 2003; Smith, Jarman, and Osborn 1999), and examine how members of society routinely make sense of particular situations using commonly held knowledge and through interaction with peers (Siddique 1990).

In this study, the use of a phenomenological case study assisted in understanding how the people's collective knowledge of culture, religion, and gender roles determine their perceptions of FP information and its influence on their information-seeking, information-taking, information-based actions and more general IB around this issue. Zarian and Gure's parents' experiences of FP information, through passive or active engagement with it (Wilson 1999), and its overall influence on their selection of preferred sources and advice-givers, was the phenomenon under investigation (Moustakas 1994). According to Moustakas (1994), transcendental phenomenology asserts that "all objects of knowledge must conform to experience" (p. 44), and every aspect of existing knowledge is the representation of an object in an individual's consciousness informed by that which appears in the environment. Thus, a relationship exists between the knower and the things he or she comes to know.

Moustakas' (1994) transcendental phenomenology, which focuses on Husserl's (1970) concept of "Epoche" (p. 85), is adopted in this study. "Epoche" is described as invalidating preconceived ideas and judgements about existing things in preparation for the acquisition of new knowledge about the phenomenon under investigation (p. 85). Although existing knowledge about a phenomenon is set aside, the reality of its existence is neither eliminated nor denied. Instead, the focus of the researcher is on the participants' descriptions of their experiences of a phenomenon rather than the researcher's interpretation.

In this study, the researcher endeavoured to eliminate her pre-existing knowledge about people's attitudes towards FP (as the researcher grew up in Zaria and had shared a maternal relationship with the people of Gure) in order to find out from participants themselves how they sought or gained FP knowledge, by asking open-

ended and supplementary questions in the course of the interviews, in preference to the more closed questions common to quantitative research (Creswell and Poth 2017).

The significant concepts that help explain transcendental phenomenology are:

- **Consciousness**

Consciousness is intentional content directed towards an object (Husserl 1965). The process of considering and reconsidering a phenomenon expands and clarifies its meaning, and the act of perceiving is always directed intentionally towards its object. This concept was used to understand the recurrent experiences with FP that currently guide the people's IB.

- **Act**

Quality (judgement, perception) and matter are the characteristics of an object which represents an act. Therefore, an act is a representation of intentional experiences capable of bringing fulfilment to other acts (Moustakas 1994). Through perceiving and reflecting continuously on an act (FP), we come to understand its meaning and how it relates to us through our environmental or personal experiences. This informs our judgement on whether to use or ignore information (p. 52), as is the case with FP.

- **Perception**

According to Husserl (1970), intentions with sensation make up perception, regardless of their authenticity. They are believed to exist if they are made up of ideal possible experiences (Moustakas 1994). It is a continuous process of acquiring knowledge and experiences open to the development of new

perspectives. As with horizons, it depends on the angle from which an issue is viewed. Through reflection and acts of memory, which bring past experiences into the present, and by renewing feelings and images, perception is developed. This concept guided the researcher's interview questions about the subjects' perceptions of FP and related information sources, considering their past and current experiences.

- **Intentional Experience**

Intentional experiences are acts of consciousness guided by perception, which is informed by both memory image and meaning (Moustakas 1994 pp. 55). Memory meanings can be validated through prompt perception, but future meanings cannot. They exist as genuine possibilities, demonstrating that intentional experience includes real and ideal content that guides our thoughts to comprehend life. An object (FP) remains static even though an individual's perception of it will depend on the angle from which it is viewed. Thus, the intentional experience is the thematic consciousness that describes specific attributes that constitute an object and the meanings assigned to it (Moustakas 1994). The context of individuals' gender, environment, religion, and culture was investigated to identify the extent to which their IB about FP depended on these factors to generate meaning.

- **Intersubjective Validity**

In intersubjective validity, establishing the truth about a phenomenon is argued to depend on an individual's perception: it is a test of their understanding or knowledge of an object (Husserl 1970). In this study, the subjects were asked questions about their "perception of family planning and motivation to use specific information sources". Follow-up questions were used to gain more in-depth insight

into the description of their lived experiences with FP and the effect of these experiences on their current perception and FP information behaviour as individuals and as a group (community).

3.5 Data Collection Technique

3.5.1 Piloting the Study

For this research, conducting a pilot study was necessary for the following reasons;

1. To validate the methodological choices.
2. To gain relevant skills and experience in people and time management.
3. To ensure the practical applicability of methodological choices in achieving the set research aim.
4. To evaluate the appropriateness of the data collection instruments.

The pilot study was carried out in Zaria using semi-structured interviews. However, it included individuals from both Zaria and Gure communities. To represent the Gure community, some "Gurawa" residents living in Zaria were chosen. This decision was made because travel during the pilot study was risky due to frequent kidnappings on Nigerian roads, and it would have required significant resources. The participants representing Gure were selected based on their regular visits to Gure, occurring at least once or twice every two months and spending a minimum of one week during these visits.

This ensured that they remained closely connected to the day-to-day practices and family planning views of the Gure community, making their input relevant and representative. The Pilot study for Zaria was, however, conducted using both face-to-face and telephone interviews as Zaria has a diversified population ranging

from highly educated to illiterates who can be found in any area of the town, regardless of its rural or urban setting. Therefore, to have representative data of both educated and non-educated and the influence both have on each other's perception of FP, some of the participants who are actually Zaria residents and have been in Aberdeen for nothing more than 5 years and would have visited Nigeria (Zaria) at least twice within this period to ensure they are still in tune with the happenings in Zaria were included in the pilot sample.

The study was therefore conducted via telephone interviews with participants in Nigeria and face-to-face with Zaria residents in Aberdeen. The researcher reached out to participants through the church community social network (WhatsApp female groups; Nigerian researchers' network of Northern men). Other participants were recruited via referral, as suggested in snowball sampling (Oppong 2013).

Four (4) of the participants were recruited to participate via referral⁷, and the first point of contact was acquaintances of the researcher observed to have given birth to children within a short space of less than two to three years, contrary to the medical advice by WHO (2015).

It was conducted in both English (3) and Hausa (3) language. Interviews in Hausa were translated into English while the recordings were transcribed.

Lessons learned and applied to final studies:

1. The need to place the recorder and the phone in a fixed position for clarity.

During the pilot study, the researcher moved the phone from the table to

⁷ The referral was made from the first contact.

the mouth before asking any question, and sometimes, the questions were unclear as the process of movement interrupted the clarity.

2. The researcher accepted any time convenient for the interviewees to call them during the pilot study. However, it was evident that the 'convenient' time for the individuals was when they were less busy physically, regardless of the interruptions in the markets. Hence, in the course of the final interviews, they were requested to choose a quiet time which would be convenient for them with little or no interruption.

3. The pilot study also identified a need to refine and rephrase some questions. Open-ended questions were found to be particularly useful. For example, "What is your preferred source of information on family planning?"

Amended to; 'When you need information on health issues, who or where do you go to?'

"What are your information needs"?

Amended to *"If someone asks you what type of information you want them to bring to your community, what will you say"?*

Direct question:

'Have you encountered any difficulties in accessing family planning information, and if so, in what ways?' They were reluctant to narrate their experiences.

'Why would you accept or reject family planning advice?'

Some participants felt uneasy and confused when these questions were posed directly to them, particularly when they were in the presence of others during the interviews, even though they initially stated that they were comfortable with others being present, saying, "We have nothing to hide." The fact that a new person was in town asking about family planning

use may have motivated some to assert publicly that they neither used nor supported family planning, even if they had used it in the past or currently used it in secret. This could explain why some participants were willing to have others present during their interviews to prove a point.

Hence, Indirect questioning was adopted.

“Do you know of anyone who has encountered difficulties in accessing family planning or information on family planning before and why?”

“Why would people in this community accept or reject family planning advice?”

Follow-up Questions

Although the suitability of follow-up questions for exploring the phenomena determined the choice of semi-structured interviews, the skill of consciously identifying when follow-up questions were necessary, and the areas where the participants provided a lot of blurry information was only improved after the mistakes were identified in the course of the pilot study.

For example, the participants were observed to make comments like “Even religion permits FP.” In the transcription and analysis of the pilot study, an assumption error by the interviewees that the researcher was aware of what audience members meant by this statement was observed, and the researcher’s inability to identify the need for further probing limited the access to actual information from the participants.

Hence, the follow-up question, *“What is then your knowledge of FP from the religious/cultural/political perspective?”* or the relevant perspective as mentioned by the participant formed the major basis of the follow-up question by the researcher. Consequently, the most popular perspectives

highlighted by individuals in the course of the pilot study were included as probes or follow-up questions in the final interview schedule.

4. The art of follow-up questioning was learned.
5. Prior to the pilot study, the researcher avoided sharing personal experiences related to the participants' responses to allow the phenomenon to be interpreted from the participants' perspective and not that of the researcher, which is significant in the interpretive framework.
6. For professionalism, a need emerged for the researcher to source an FP advice helpline number/flyers, as participants repeatedly asked the researcher about her perception of FP or for help to direct them to the closest family planning centre to their location, where they could maintain anonymity and confidentiality (common among singles).
7. The researcher also identified a need to offer participants a small, non-financial incentive (cooking seasoning and salt). During the pilot study, it was discovered that recruiting participants was difficult as they kept complaining about their busy schedule, as it was farm harvest season in Gure, but with the introduction of the incentive, they were willing to participate, make time to take part in the final study and even referred others, helping the snowball sampling.

3.5.2 In summary, after the pilot study, language, paraphrasing questions and redefining the attributes of the interviewer guided the development of a more effective and streamlined final data-gathering process. Selecting Wards and Participants

Justification for Selecting Study Location

In this study, three villages (Bomo, Tudun-Jukun, and Gure) were selected to represent the major religions practised amongst the population in Northern Nigeria, as religion has been shown in several studies to be associated with the low use of FP (Attoh 2017; Reed and Mberu 2015; Braunstein 2014).

It was, therefore, significant to prioritize religion in the selection of areas to be included in the study. Considering that Zaria is composed of four LGAs—Zaria, Sabon-Gari, Giwa, and Soba LGA, the two most densely populated LGAs in Zaria, namely Zaria and Sabon Gari, were chosen for inclusion. In this major LGAs, which are divided into wards, the researcher opted to choose two urban informal settlements, namely Bomo (Adegboyega, Abioye 2017) and Tudun-Jukun (Saddiq 2015).

These areas have remained relatively unexamined in prior research, and they were deliberately selected to provide valuable insights into the genuine healthcare experiences of individuals living in economically disadvantaged urban informal settings (Saddiq 2015), with a specific focus on family planning services. This includes locations like Tudun-Jukun, as well as rural villages such as Gure.

As the scholars mentioned above argue, data collected from these groups are believed to offer a more accurate reflection of the real-life challenges experienced by a significant portion of the population facing similar circumstances, including poverty, poor health, and high fertility rates due to limited or no access to formal healthcare systems and essential social amenities (Pfeffer, 2015; WHO, 2022; Saddiq, 2015; NBS, 2014; World Bank, 2012).

The purposeful and snowball non-probability sampling techniques were adopted for the inclusion of sub-units of the population in the study.

To achieve the purpose of qualitative research, allowing for rich data collection that is transferable to subjects within similar contexts, Oppong (2013) and Chetty et al. (2014) have suggested using purposeful sampling techniques, which allows for the selection of participants with the relevant characteristics required to answer the research questions and achieve a study's set aim and objectives. Thus, participants were purposefully selected using age, religion, ethnic group, employment status, and area of residence. These demographic characteristics, as highlighted by Robson (2013), have previously proved useful in investigating IB.

However, purposeful sampling was not sufficient to accommodate specific groups, such as the isolated women⁸ in the population, so, as argued by Dudovski (2014), snowballing is a cost-effective technique that could be used to recruit hidden population. Thus, snowball sampling was included to extend the pool of research participants to include as representative an overall cross-section of relevant individuals as possible.

Although potential sampling bias through the expansion of existing networks of participants has been a criticism of snowball sampling(Geddes, Parker, and Scott 2018; Heckathorne and Cameron 2017; Browne 2005), this was mitigated by randomly requesting visitors or customers to participate based on their background contributions during the phone interviews. By adopting this approach for the present study, it was possible to gain access to men who were significant opinion leaders (Makama 2013) within their families and communities as well as the isolated women.

⁸ Women who are not allowed by their husbands to go outside the four walls of their home, except on very special occasions where they are expected to cover themselves completely with only their eyes revealed.

Also, FP has been identified as a sensitive issue, which is sometimes contrary to the religious and cultural practices of the predominant residents of the rural areas (Muslims). Thus, referral played a role in building trust (from interviewees), and they felt safe knowing someone known by trusted community members was interviewing them. Snowball sampling was also significant in identifying directly community members whose personal experiences, past or current sources of family planning information, have influenced their negative information behaviour towards family planning.

3.6 Criteria for Selecting Participants:

1. Women between ages 18 to 49 were included to reflect the NDHS's (2013) declaration of age 18 years as the age of consent and 49 as the age of menopause for women.
2. Men within the age range of 18-53 were recruited following the age of consent and the average age of life expectancy for men in Nigeria (World Health Organisation [WHO] 2018); World Bank (2018).
3. Men and women born or resident in Zaria/ Gure for at least ten years (indigenisation process).
4. Religious information providers, all males considering religious doctrines in Christianity and Islam, encourage male clerics.
5. Frontline information providers who have worked in the capacity of family planning service providers between 2 to 25years. This was to ensure the representativeness of fixed or changing values in the supply of family planning services over time.

3.7 Criteria for Selecting Wards

Zaria is divided into two wards: Zaria City and Sabon-Gari. To represent the Sabon-Gari ward, Samaru was chosen due to its strategic location, hosting the major tertiary institution, Ahmadu Bello University, and a significant health centre. This selection aimed to capture the perspectives of both information providers and receivers within Zaria's rural population. This comprehensive approach included more informed individuals, frontline healthcare providers, and religious figures who served as family planning information sources. The goal was to gain a holistic understanding of their interpretation of family planning, regardless of whether they represented information providers or receivers. Research has demonstrated that individuals with the highest level of education within a community, even if the overall educational level is relatively low, often wield significant influence over public opinion and discourse within their community's public sphere (Hellandendu 2018; Meyer 2005; Innes and David 1999).

Conversely, Zaria City, predominantly inhabited by the native residents of Zaria who practice Islam, was chosen to reflect the firsthand experiences of these indigenous individuals. This approach aimed to achieve a well-rounded representation of the diverse population found in rural areas within the Zaria region.

Gure, as a research focus, presented a compelling opportunity to delve into the multifaceted aspects of family planning within the context of culture, religion, and education. In addition, Gure, having transitioned from a matrilineal to a patrilineal society, provided a unique opportunity to examine whether their ideological perspectives on gender roles, power dynamics, and decision-making processes differed from those of communities that have always been patrilineal. This was

therefore, a relevant element for investigating how embracing and trusting in such a significant change can influence gender roles, power dynamics, and decision-making processes within rural family settings. Jones (2019) highlights the relevance of this historical shift in understanding its impact on rural communities.

Furthermore, the conversion of Gure residents from atheism to Christianity introduces a significant dimension of religious influence on family planning practices. Religion often shapes individuals' beliefs, values, and moral perspectives related to contraception and family size, shaping their reproductive choices (Murshid 2017; Ackerson and Zielinski 2013; Yusuf 2005; Renne 1996). Investigating the intricate interplay between faith and reproductive decisions within this context provides valuable insights into the nuanced relationship between religion and family planning.

The intermarriage of individuals from diverse ethnic backgrounds within the Gure community (Nengel 1999) adds complexity to the study. This interethnic mingling leads to a unique cultural fusion. It is significant for exploring how different ethnic groups bring their distinct norms, values, and traditions related to family size and contraception to these unions, resulting in a fascinating exploration of interethnic dynamics and their influence on reproductive decision-making. Additionally, studying the Gure community's experiences of intermarriage sheds light on the intersection of family planning choices with community cohesion and identity, further enriching our understanding of these complex dynamics.

Ultimately, the research conducted in Gure was envisaged as having the potential to offer comprehensive insights into how culture, religion, and education intersect to shape family planning decisions. This understanding extends beyond the Gure community itself and holds implications for policy and interventions in similar

multicultural settings (Brown 2021; Davis 2018; Smith, 2020). It emphasised the significance of considering diverse cultural, religious, and educational contexts when addressing reproductive health issues and developing effective family planning strategies.

3.8 Sample size

A total of thirty-five interviews were conducted for this study, categorised into two main groups. The first group, referred to as "audience members," included both men and women, both married and unmarried, falling within the age range of 18-65, and practising either Christianity or Islam. The second group, known as "information providers," consisted of ten individuals divided into two subgroups. The first subgroup, "frontline information providers," comprised five individuals, both men and women, primarily responsible for delivering health information and family planning services to community members. In this subgroup, there were four women and one man, as it is common for women to provide family planning services in Northern Nigeria.

The second subgroup, "religious information providers," consisted of men who held significant religious leadership roles in Nigeria, particularly in Northern Nigeria, where male clerics played a prominent role in religious doctrine. According to Baker, Edwards, and Doidge (2012), a small number of interviews can produce a significant study depending on the chosen questions and method of analysis. Similarly, Marshall et al. (2013) recommend a minimum of six and a maximum of 50 interviews, arguing that qualitative research aims to construct meaning by "providing analyses that meet the criteria for set objectives" (Psathas 1994, p. 50) rather than striving to make empirical generalisations (Baker et al. 2015; Galvin 2015). This study is concerned with identifying the appropriate

communication of FP information in formats that correlate with the IB of the residents of Zaria and is not aimed at making generalisations for Nigeria.

In addition, Galvin (2015) demonstrates that there is no finite number of interviews to be conducted in qualitative research because there is a 71.8 per cent probability of the emergence of a prominent theme existing among 10 per cent of the population (representative sample size in quantitative method Krejcie and Morgan (1970) to become evident in thirty-five (35) interviews. Thirty-five interviews were conducted with streamlined questions to increase the probability of gathering rich data representing the views of the Christians and Muslims in Kaduna state.

3.9 Semi-Structured Telephone and face-to-face Interviews

Semi-structured telephone and face-to-face interviews were used as the primary data collection instrument. Brinkman (2014) argues that the flexibility of this instrument allows for open-ended and impromptu questions, which allow for elaborate answers to ascertain participants' understanding of questions. This makes semi-structured interviews a viable instrument for offering a more in-depth understanding of people's lived experiences and how these impact their thinking and decision-making processes (McIntosh and Morse 2015; Irvine et al. 2013).

Despite commonalities in attitude and communication patterns observed among rural residents (Emele, 2018; Yarger et al., 2017; Nwagwu, 2011; Orji et al., 2007; Momodu, 2002), it is essential to note that Zaria, as a metropolitan city with an estimated population of 736,000 (NPC, 2006), and Lere LGA, known for its ethnolinguistic diversity and an estimated population of 338,740 (NPC, 2006), present unique characteristics. The decision to employ a combination of semi-structured face-to-face interviews and telephone interviews was motivated by the

recognition of the multifaceted nature of the study population. While the participants shared a common rural residency in the North Central region, significant differences existed in terms of religion, occupation, culture, and language. Moreover, their accessibility and proficiency with technology varied, with some facing challenges due to poor network reception in their remote locations.

Given this inherent heterogeneity, the utilisation of semi-structured face-to-face interviews became imperative. This approach allowed for a comprehensive exploration of the audience members' perspectives on family planning, accommodating the diverse range of beliefs and practices. It provided the flexibility needed to adapt and contextualize their responses within both the broader literature and the experiences of information providers.

In contrast, a structured interview format, whether conducted in person or over the phone, would have imposed standardized questions and potentially overlooked the individual nuances that could significantly influence family planning decisions. By incorporating both face-to-face and telephone interviews, the research methodology was better equipped to capture the intricate dynamics of the study area. It also accommodated participants' varying levels of technological access and proficiency, ensuring a more inclusive and comprehensive understanding of the factors influencing family planning choices within this diverse and unique context.

Telephone interviews have previously been used effectively to investigate the long-term impact of IB on health issues (Dyregrov, 1999; William et al. 2008). As FP is widely recognised as a health-related issue, this instrument had the potential

to achieve the desired aim of illuminating individuals' preferred information sources and formats in the context of FP.

Zaria is currently categorised under the high-risk zone due to terrorist activities in the Northeast area of Nigeria. Hence, conducting a face-to-face interview in some areas at some particular point in the course of data collection was ruled out. However, Ward, Gott, and Hoare (2015) report that telephone interviews are an important alternative when face-to-face interviews are impossible. Emphasising that participants in telephone interviews report having a positive experience during interviews derived from the relaxed feeling, the ability to build positive rapport, and the elimination of anxiety associated with eye contact during face-to-face interviews. Also, Sturges and Hanrahan (2004) have demonstrated that telephone interviews can be both cost-effective and useful for generating significant information compared to face-to-face interviews.

For example, in their study conducted to investigate the correctional officers and visitors' perceptions of interactions in visiting waiting rooms in county jails in the United States, they compared telephone and face-to-face interviews. Although they found no significant difference in data generated from both instruments, the feature of anonymity from the interviewer in telephone interviews was significant in accessing hard-to-reach respondents who would not otherwise have their views represented. Also, they not having to travel was demonstrated to be cost-effective. Likewise, Mahfoud et al. (2015) revealed no significant difference between results obtained in a face-to-face interview compared to a telephone interview. Hence, a semi-structured telephone interview was necessary and convenient face-to-face interviews as the situation permitted were conducted to understand the phenomenon of family planning information access (demand and

supply) and use in Zaria as well as how the barriers and challenges faced by men and women in this area shape their information behaviour.

3.10 Framing Analysis

The relationship between several connected elements in a text is defined by a frame (Bateson 1972). According to Entman (2009), frames are manifested “by the presence or absence of certain keywords, stock phrases, stereotyped images, sources of information, and sentences that provide thematically reinforcing clusters of facts or judgements.”

Similar to the function of a picture frame, which stands to isolate certain material and draw attention to it, framing in media documents serves similar functions, as shapes and colours of an isolated material, such as a picture or text, suggests a tone and interpretation for the intended audience. The researcher, therefore, capitalises on this to decode the intended meaning of messages and understand better how these messages influence positively or negatively the FP information behaviour of parents and prospective parents, as Gorp (2007) argues that schemata, frame packages (framing and reasoning devices) play a role in framing. Schemata are cognitive groupings of ideas that guide an individual’s processing of information, while a frame package is a cluster of pragmatically organised devices that include both framing and reasoning devices functioning as an identity kit for the frame. Framing devices- choice of words, arguments, metaphorical statements, visuals, and examples, were therefore focused on drawing out frames to decode. In contrast, reasoning devices such as direct and indirect statements that deal with justification, causes and consequences of FP (benefits and side effects of FP) were interpreted to understand the intent of FP authors. Although the presence of frames is subtle, they are core elements of every culture.

Therefore, culture is believed to rely on frames to function the way it does. The relevance and sensitivity to frames, according to Goffman (1981), are dependent on cultural background. However, Janssen (2010) argues that the persistence of frames can create awareness amongst people, while Morrison (2016) argues that culture determines frames, as frames become an “echo-chamber of public opinion” used by influencers that may end in socially divisive communication. Therefore, culture was a frame developed to decode whether the former informed the latter and vice versa and assess the appropriateness of the function it plays in the FP information practices of the parents and prospective parents.

Entman (1993) argues that frames play a role in four locations and four levels of the communication process. These locations are communicators, text, receiver, and culture, with authors of the text majorly described as communicators whose belief system forms their basis for making framing judgements and application of frames. The text contains the actual frame, the receiver (the reader) either perceives or does not perceive the applied frame, and culture determines the outcome of frames as frames are exhibited in the discourse and thinking of people in a social grouping. Although the Authors of these secondary documents were not included in the study, their opinions and interpretations are vicariously represented and verified through interviews with the frontline representatives and religious leaders included in this study.

Framing is significant to understanding the dynamics of social interconnections and cultural behaviour. In this study, framing was used to decode the frame attached to messages and leaflets developed by various authors. The frames developed from these materials were used to draw conclusions on what the author wanted to convey, how it was conveyed, the possible intention for doing that, and

the actual impact of this framing on the overall IB of the audience members was also analysed.

Gorp (2007) argues that a difference exists between framing by the media and framing through the media, while the latter refers to the impact of frame sponsors, which can be interest groups. In the case of this study, FP influencers, such as the government, charities, NGOs, and national and international organisations, refer to the demands explicitly requested by frame sponsors. In this study, the framing through the media is achieved through the frontline information providers and the religious leaders, stating what religion permits or what and how the influencers have requested FP messages be communicated.

Framing analysis was used to analyse the secondary materials of pamphlets, posters, and FP policy documents. However, this was a small sample with materials majorly written in English language despite the diverse and multi-lingual nature of Kaduna state. This was found significant to be included in the study, as it was reflective of the limited commitment of the FP influencers in terms of adapting language and relevant contextual culture to promote positive FP information behaviour amongst audience members. In addition, once a certain way of framing was identified, it was used to understand its actual impact on the audience in the course of the semi-structured interviews. The use of framing analysis enabled the researcher to assess the fears and pains of the community members and crystallize their understanding of FP (Ryan 1991) and a broad cultural understanding of low FP utility in the study area.

Due to the abstract nature of framing (Ryan 1991), it was used in combination with semi-structured interviews. The guidelines for the framing analysis are shown below:

- How language is utilized to depict women of child-bearing age.
- The manner in which language constructs the roles and responsibilities of women in family planning (FP).
- The depiction of pregnancy, its natural aspects, and the purposes of childbearing through language.
- The framing of family planning, including its applications and significance, as either very safe or unsafe.
- The construction of men's roles in the context of family planning and an analysis of whether this construction supports, mitigates, or challenges patriarchal norms.
- The use of diagrams and their phrasing to convey whether the FP process is presented as scientific, natural, or to persuade of its scientific basis is also analysed.
- The presence of logos to indicate a level of confidence in the provided materials.

3.11 Data Analysis

Primary data were thematically analysed using the inductive approach, which is widely used in qualitative data analysis (Campbell et al. 2017).

3.12 Justification for choosing the ISCM

The ISCM model covers a broader scope, which includes IB, ISB, and communication, contrary to Wilson's (1997) model of IB, which places more emphasis on the process of information-seeking and gives more limited priority to the communication process – thereby conceiving of the IB process more simply, when in reality it is more complicated. Applying this model would risk ignoring or downplaying the importance of minute details, which may make for a successful

investigation into complex issues such as FP, where barriers have been identified but not understood. However, the ISCM takes into consideration these elements and breaks them into simplified categories under sub-themes in context (environmental and personal context).

Although it is titled an Information-seeking and Communication Model, Wilson (1999) demonstrates that information-seeking is one part of a holistic process, which is intertwined with broader human communication processes (Robson 2013; Wilson 1999, Chatman 1996). The ISCM highlights the possibility of an information provider becoming an information user and vice versa, making the information provider and user roles interchangeable. The inclusion of Communication, ISB, and IB in this model was appropriate for understanding the FP information, search, gathering, use, or avoidance process amongst Zaria residents.

It also levels the criticism that "LIS models fail to build on previous models" (Robson 2013; Case 2012; Vakkari 2008; Wilson 1999; Chatman 1996). In this study, through the application of the ISCM as an analytical lens, rich data on gender-based IB was revealed, which can be attributed to the blended nature of the model, giving relevance to tiny aspects of context. Through the use of the ISCM as an analytical lens, the context was explored by gender, revealing that the interpretation of FP messages amongst men and women was relative, which informed their preference for specific sources and messages over others. The themes of context and communication in the ISCM were used to explore and investigate in-depth the dynamics of gender, culture, and religion in determining the selection of information sources and information use, which in turn influences IB in general.

The analytical framework demonstrates the required information-seeking and communication process for evaluating past and current activities of the user and the information available by showing the model as a continuum (Robson and Robinson 2013; 2015). Evaluating past and current activities has been argued to be instrumental in achieving sustainable development interventions (Migdal 2001; Besley and Persson 2010), and FP can be categorised as one of such interventions. This means that there is a free flow of information between the user and provider, which allows for feedback, which is described as “effective communication” (McQuail 1994) and can lead to sustainable initiatives.

The themes presented by the ISCM are adaptable components for investigating the reasons for people’s actions and providing explanations by exploring their contextual factors (e.g., environmental, cultural, socioeconomic, psychological) as well as assessing the extent to which the nature of the information at their disposal might itself *influence* their ISB.

Again, the choice of this model is also based on the consideration that major empirical studies centred on testing its validity have been in health-related environments, and its practical application was also in Health care (Robison and Robson, 2015) contrary to the argument by Case (2012 pp. 370-371), where he stated that LIS models lack practicable ability.

For example, Robson and Robinson (2015) used it to test its applicability to the user-centred investigation of IB by researching to examine the information behaviour of physicians, and Robson (2013) also used it to test the IB of physicians as providers of Information. This empirical study also shows its applicability to investigating health issues, and FP is a reproductive health issue. It also reveals that it can be used to investigate IB and ISB concurrently.

This was also evident in this study, considering that while some women went in search of family planning, which entails ISB, some men passively acquired FP information, which is considered an aspect of information behaviour termed "passive attention" (Wilson 1997 p. 562). Health care was chosen to test the model because it has been a major field for the "exploration" of information search (Robson and Robinson p.1044). Information search is viable in healthcare, as both physicians and patients continually search for information to keep up with regular changes in the health sector and the well-being of individuals. Also, the process of creating a health strategy is a continuum. The flexibility of this model is found appropriate as the process can be repeated all over again in the process of strategy formation and information seeking, which makes it applicable for investigating FP IB in Zaria.

3.13 Thematic Analysis

Thematic analysis is an analytical method of classifying information in themes by analysing their patterns and interpreting their meaning (Braun and Clarke 2006).

Thematic analysis is a flexible analytic method that allows for the exploration of patterns across language without restriction placed by a model or framework explaining human behaviour. It searches for meaning in language (Clarke and Braun 2013; Reicher 2000). Thematic analysis is also suggested to be an appropriate method for analysing data in an interpretive study (Guest et al. 2012). This is an interpretive study that seeks to understand the reason for the low uptake of FP despite initiatives. The flexibility of this analytic method minimises the loss and adulteration of relevant information in the process of analysis. This is because data presentation is wordy and not numerical, and no theories or models are guiding the analytical process (Braun and Clarke 2014; Clarke and

Braun 2013). One of the critiques of thematic analysis is its flexibility, which may affect the rigour and quality of the data being analysed (Antaki et al. 2002). However, Braun and Clarke (2006) argue that a detailed explanation of the function it plays and how it is done limits this constraint.

The interviews were transcribed manually. The researcher began the analysis by searching for words related to the topic and questions, then searched for patterns and regularities to support the interpretation of data (Braun and Clarke 2006). Considering the limited literature on information behaviour and communication processes among rural dwellers in Nigeria (and other developing countries), the six-phase framework developed by Braun and Clark was adopted using the interpretive approach to answer the research questions.

3.13.1 Process of Thematic Analysis

Figure 3 shows the six-phase guideline for thematic analysis stated by Braun and Clarke (2006), which was adopted in this study.

Figure 4.2 -Process of Thematic Analysis

The researcher familiarised with the interviews by listening to the recordings several times and transcribing them word for word (Clarke and Braun 2006). Thematic codes were then generated, allowing patterns to be organised into broad themes. Each interview lasted a minimum of 30 minutes and a maximum of 50 minutes. It took the researcher about four hours to transcribe each of the 12 interviews conducted. The majority of the interviews were conducted in Hausa, and a few were in Pidgin English (informal English used for grassroots communication). The researcher translated the interviews into English in the process of transcription.

Phase 1: Familiarisation with Data and Transcriptions

The first step the researcher took in analysing the interviews was reading the transcripts to familiarise them with the content of the interviews, which was useful in developing the participant's perspectives and providing an interpretation of the phenomenon in the process of coding. The researcher also took notes, writing her first impression of answers provided to various questions.

Below is an extract of an early observational note made related to information sources and single women;

"The single women need information on FP, they go to the Pharmaceutical clinics or friends for advice, not because they believe they are the idle information providers, but do so because they will not be interrogated thoroughly and will be judged less by their friends, who may be experiencing a similar phenomenon".

Phase 2: Generating Initial codes

The aim of the study and research questions determined the generation of codes. The data were analysed to address a specific question. Hence, themes/components suggested by the ISCM Model formed the initial codes that were generated. These codes were used to reduce the data into smaller chunks of meaning. However, where interviews transcribed did not fit into any of the themes suggested by the ISCM (Robson 2013), other themes that best describe these experiences were generated.

Context

- i. location,
- ii. social influences

- iii. culture activity
- iv. work-related
- v. environments.

Demographics:

- i. Age
 - ii. sex
 - iii. ethnicity
 - iv. socio-economic status.
- An information user's needs, wants, and goals
 - Motivating and Inhibiting factors
 - Information-Seeking process
 - i. Activities
 - ii. Feelings
 - iii. thoughts
 - Characteristics of the information sources
 - i. Utility
 - ii. Usefulness
 - iii. Relevance
 - iv. Timeliness
 - v. Accessibility
 - vi. Ease of using information source
 - Credibility and Trustworthiness
 - i. Reliability
 - ii. authority
 - iii. lack of bias in the source and information provided.

The ISCM model suggests broad themes, while the sub-themes majorly emerged from capturing interesting quotes that were relevant to the research question. After generating these codes and sub-codes, segments of each transcript were coded based on their relevance to answering the research question and how well they fit the assigned codes.

Phase 3: Searching for Themes

A theme is a broad categorisation of a recurring pattern that captures a significant aspect of the research objective, and there are no rules as to what constitutes a theme (Braun and Clarke 2006). Due to the small scale of interviews, there was an overlap between the generation of initial codes and the search for themes (Maguire and Delahunt 2017). The ISCM model was useful in the generation of broad themes.

Phase 4: Review of Themes

The next step was to review the themes by gathering the data relevant to each theme and re-reading it again. In the process of reviewing themes, the researcher was specific about the following: whether data categorised under a specific theme supported the broad theme and if too much detail was fixed under a specific theme that did not correlate. If there were overlapping themes, there was the presence of emerging themes that had been mixed under sub-themes or themes within themes.

Phase 5: Defining and coding themes

At this phase, the researcher refined themes to understand the relationship and interaction between themes and sub-themes. For example, the participant's expectations of FP information source(s), whether or not the current information

on FP met these expectations, and the influence of their environment and the challenges faced were revealed.

Phase 6: Producing the Report

According to Braun and Clarke (2006), thematic analysis can be an “essentialist or realist method” (p.81) reporting the experiences, realities, and meanings of participants. The findings in this study were interpreted using the themes and sub-themes constructed using the narratives of the participants, which constitute the report in chapters 5 and 6.

3.13.2 Data Management

The categories, patterns, and interpretations given to the data were inductively developed. Voice-note recordings and notes taken in the course of the interviews constituted the primary data, and these interviews were transcribed verbatim.

Also, articles on human behaviour, FP, and rural dwellers in Nigeria published in peer-reviewed journals in Nigeria and internationally were reviewed.

RefWorks was used to manage the Bibliography, which was also useful in synthesising and analysing findings.

3.13.3 Data Quality

According to Saunders et al. (2011), the quality of data includes reliability, validity, and generalisability of the data. Morse et al. (2002) identify verification strategies for establishing validity and reliability in qualitative research, which enables the researcher to identify when to continue, stop, or modify a research process to achieve reliability and validity (p. 17).

Verification strategies adopted in this study were as suggested by Morse et al. (2002 p.18) to include;

1. Sampling must be appropriate; this involves the inclusion of participants who know about the research topic. In this study, purposive sampling and snowball sampling were adopted to ensure that participants knew about family planning. This was done to ensure efficient and effective data was collected to account for all aspects of the phenomenon the study set out to achieve. To ensure the trustworthiness of the data, a non-indigene of Zaria who had lived a significant part of Her life in Zaria was interviewed as a negative case (Stenbacka 2001). The researcher was interested in ensuring that the IB of Northerners was different from that of people from other parts of Nigeria since the uptake of FP is reported to be majorly low in the North (NDHS 2013). Surprisingly, they shared a similar perception about where and how they would search for FP information. Again, with the advent of technology and a little more interaction between rural and urban residents, the researcher believed that the older generation would share a different perception of FP from the younger generation. Hence, a 60-year-old man was interviewed. The majority of his FP perception did not differ from the responses given by interviewees in this study. This was a process adopted to check the validity and ensure that the opinion of the majority of the population was represented and that the sample was appropriate for the study. Saturation from participants' responses was used to verify the completeness and comprehensiveness of responses.

Collecting and analysing data concurrently

Morse et al. (2002) affirm that the iterative process of collecting and analysing data enables interaction between what is known and what is being studied (needs

to be known), which is the essence of attaining validity and reliability. To ensure this, the researcher transcribed interviews after they were being conducted. The transcription was also a process of analysis that was used to compare the researcher's first impression of the participants' responses in the course of the interview and the deeper interpretation of what was deduced in the process of transcription. For the researcher, this process made the reflective process clear and enabled the linking of transcripts to specific persons. This was also used to ensure reliability between recordings and the transcripts as participants were called to verify their responses to specific questions.

Thinking theoretically

The new ideas emerging from the data collected were verified by crosschecking existing data in the literature review in Chapter 2 and peer-reviewed published works.

Theory Development

This study shows a need to develop the ISCM model further to represent important aspects of information behaviour. For example, the model needs to take note of the active and passive seekers of information in investigating IB. It further shows a need to take into account the influence of gender on IB in producing and selecting FP communication sources.

3.14 Methodological Challenges

In the course of the telephone interviews, communication over the phone was not hassle-free. Due to weak network signals, the researcher was sometimes unable to hear the interviewees and vice versa. As a result, the interviewer had to end the call and call back. This sometimes put the interviewee off the mood, and

picking up the conversation from where it ended was not smooth. Purchasing call credit to make international calls was also expensive.

3.14.1 Identified Risk

Due to the Patriarchal nature of Nigeria, especially Northern Nigeria, it was not considered culturally appropriate to involve a married woman in any form of formally recorded conversation without the consent of her husband. Hence, for women who stated this clearly, their husbands were contacted. Some of the men wanted to be interviewed first, probably to understand the nature of the interviews and decide whether they were willing to allow their wives to participate or to influence their wives' responses. These perceptions were revealed in the course of interacting with the men who wanted to verify the researchers' reason for requesting an interview with their wives.

3.14.2 Ethical considerations

Participants were fully informed about the aim and objectives of the research, and it was important to ensure informed consent was obtained by academic best practices and the institutional policies of Robert Gordon University. A consent form was sent to all prospective participants before the interviews, and it was read before the interviews, which followed the verbal agreement of the interviewees on record.

Participants' anonymity and confidentiality were also guaranteed, as well as the right to end the interview at any point. The individual's permission was sought before any form of recording took place. The raw data is securely kept without third-party interference, as stated in the form (Appendix 3). The names used to present and discuss findings in Chapters Five and Six are made for simple data analysis and do not link a reader to the actual participants. Also, there were no

questions aimed at obtaining age-specific data from participants; instead, ranges were used. It is uncommon practice in Nigeria to ask people for their specific ages in research.

The Research Student and Staff Assessment (RESSA) form was completed in conformity with the RGU ethics and governance.

CHAPTER FOUR:

FINDINGS 1 - AUDIENCE MEMBERS

4.0 Introduction

The findings of this study are presented in two chapters. While this chapter presents evidence for the family planning information behaviour of the target audience (TA) – that is, parents and prospective parents in Gure and Zaria - Chapter (5) presents testimony documenting the behaviours and perspectives of the information providers—these range from FP professionals to other information sources, such as religious leaders.

In exploring the experiences of the target audience members, this chapter explores the impact of their personal, communal, cultural, and religious norms and expectations on their information behaviour (IB). Information preferences are identified based on audience members' judgement of relevant messages and information sources, putting into consideration clarity and trust. Hence, the findings presented in this chapter set to crucially evidence the extent to which information providers and target audience members agree and disagree about the benefits, risks, and obstacles to the uptake of FP advice/practices. Hence, where a disconnect was shown between the advantages/risks of FP being promoted by the professional information-givers and those perceived (or not) by the audience members, a problem of communication was noted. If professional advice was being undermined and contradicted by community/religious leaders- especially men, then a problem of trust towards official sources of information was shown and explored as a problem related to distrust for government (e.g., stooges of post-colonial-powers), which was another added layer of complexity to the depth of the problem.

The latter chapter explores the report by the information providers on the nature of FP information provided to parents and prospective parents in both Christian and Muslim-dominated communities, as well as provide in-depth explanations concerning 'why and how' they communicate FP benefits and risks to audience members.

4.1 Demographic Profile of the Participants

Purposive and snowball sampling were used to ensure the diverse population and two major religions practised in both (Zaria and Lere) Local Government Areas (LGA) were represented. Marital status was also a relevant criterion for selecting participants in order to achieve a representative sample of both married and unmarried individuals (within the sexually active age) accounting for the target audience in the FP initiative. Overall, twenty-five individuals, comprising fourteen women and eleven men, were included to represent the audience members, with participants from Gure representing the Christian population and participants from Zaria (Bomo/Tudun-Jukun) representing the Muslim population in the study area (Kaduna state).

- **Age**

There was a discrepancy in the sexually active age range for inclusion between men and women. While the women selected were between the ages of 18 and 65, the men were between the ages of 18 and 58. Although girls in Northern Nigeria start getting married as early as age fifteen, the official age of consent for both men and women in Nigeria is eighteen years (NDHS 2013), which formed the baseline for this study. Again, the age of menopause for women is forty-nine, while that of men is approximately sixty-five (65) NDHS (2013). However, considering that the average life expectancy of Nigerian men is 52.89 (World Bank

Group 2020; World Health Organisation [WHO] 2021), suggesting that many Nigerian men do not live to their menopausal age, the average life expectancy age range was used to define the age of inclusion for men in the current study, with men between 49-58 and women from 40-65, forming the baseline categorised as 'older' population and advise givers within their counter-publics (Fraser 2014).

- **Occupation**

The major occupation of the participants was subsistent farming, and they were shown to be low-income earners, as many of them neither had a fixed source of income nor a specific amount earned on a monthly basis, typical of individuals in rural areas in Nigeria and major subsistent farmers (Kostov and Lingard 2002).

- **Education**

The participants' education level was relatively low, with one MSc and one BSc holder. Many other participants were revealed to be high school graduates, six primary school dropouts, and two participants having Islamic education. The major form of highest education attained among the participants was the diploma certificate in the Nigerian College of Education, with many of the singles currently attending the Federal College of Education (FCE) in lieu of the certificate.

No of participants	Gender	Age	Marital status	Place of Residence	Religion	Educational Qualification	Occupation	No. of Children
Participant 1	Male	40	Married	Bomo-Zaria	Muslim	HND	Civil Servant	9
Participant 2	Male	35	Married	Bomo-Zaria	Muslim	Islamic Education	Casual Staff	6
Participant 3	Male	27	Single	Bomo-Zaria	Muslim	Secondary Education	Student	NA
Participant 4	Female	25	Married	Bomo-Zaria	Muslim	NCE	Petty Business	3
Participant 5	Female	23	Married	Bomo-Zaria	Muslim	Islamic Education	House wife/Seasonal labourer	6
Participant 6	Female	18	Single	Bomo-Zaria	Muslim	Secondary Education	Student	NA
Participant 7	Male	45	Married	Tudun-Jukun	Muslim	Primary Education	Small Scale Business	7
Participant 8	Male	43	Married	Tudun-Jukun	Muslim	MSc Public Admin	Retired Teacher	8
Participant 9	Male	36	Single	Tudun-Jukun	Muslim	Secondary Education	Small scale Business	NA
Participant 10	Female	35	Married	Tudun-Jukun	Muslim	Secondary Education	Petty Trader	7
Participant 11	Female	37	Married	Tudun-Jukun	Muslim	NCE	Small scale Business	5

Participant 12	Female	18	Single	Tudun-Jukun	Muslim	Secondary Education	Student	NA
Participant 13	Female	63	Married	Tudun-Jukun	Muslim	Secondary School	Retiree	5
Participant 14	Male	58	Married	Gure	Christian	Secondary Education	Farmer	5
Participant 15	Male	55	Married	Gure	Christian	Primary	Farmer	7
Participant 16	Male	35	Married	Gure	Christian	Secondary	Farmer	6
Participant 17	Male	21	Single	Gure	Christian	NCE	Farmer/Student	NA
Participant 18	Female	51	Married	Gure	Christian	P4	Farmer	6
Participant 19	Female	40	Married	Gure	Christian	Primary Education	Farmer	7
Participant 20	Female	32	Married	Gure	Christian	P5	Grain Hoarder	6
Participant 21	Female	20	Single	Gure	Christian	Secondary	Student/farmer	NA
Participant 22	Male	25	Single	Gure	Christian	Secondary	Farmer	NA
Participant 23	Female	28	Married	Gure	Christian	P4	Casual labourer farm	6
Participant 24	Female	22	Married	Gure	Christian	FCE	Student	NA
Participant 25	Male	28	Single	Zaria	Christian	BSc	Casual construction staff	NA
Participant X	Female	60	Married	Zaria	Christian	NCE	Retired Teacher	5

4.2 Brief Analysis of Themes Developed from interviews with TA (Men, Women, Singles and Favoured Advice Givers)

Five broad themes emerged from the analysis of this data, with three major and two minor themes. The themes to emerge from the data analysis of this group are as follows:

- Understanding family planning is focused on people's definitions.
- Motivations to use FP (factors encouraging individuals to use and seek FP).
- Factors hindering the search and use of FP information.
- Source credibility and authenticity (characteristic determining trust/distrust, use/non-use of information from a source).
- Major information sources (first detailed and preferred FP information source).

One of the major factors shown to motivate information seeking and use was the people's understanding of FP as a form of spacing- a period of rest between the interval of one birth and the next, and other factors of health benefits, avoiding unintended pregnancies and maintaining husband loyalty amongst others. On the other hand, hindrances to the use of FP were the most discussed issues, with all participants commenting on at least one of the several factors of- child mortality, infertility, promiscuity, the socio-economic value of children, insecurity, and the religious command to procreate identified as obstacles to FP information seeking/use. The last themes focused on identifying major and preferred FP information sources. Attributes sought to determine the credibility and utilisation of the information provided by a source. Attributes of authority, consistency, and information clarity- reflective of the audience member's everyday reality were highlighted as motivations for accessing specific sources, while the absence of the

aforementioned attributes contributed to their non-use of FP information and sources.

The next section and the rest of this chapter explore each one of these key themes in detail to identify and explore the socio-cultural, socio-economic, and religious practices and expectations shaping the IB of the audience members. Important to note is that the narratives in this session are representative of data collected from three rural areas/villages within three Local Government Areas (LGA) in Kaduna State, Nigeria (Lere, Sabon-gari, and Zaria LGA).

4.3 Understanding of family planning

As previously mentioned in Chapter 2, an individual's interpretation of messages received influences their perception, which in turn determines the relevance and value placed on the issue or concept at hand (Narayan and Preljevic 2017; Allen et al. 2007). Considering the low adoption of FP, it was relevant to explore the people's understanding of FP. In this study, findings revealed that the participants' understanding of FP was shaped based on information from frontline providers, an individual's ideal number of children, the type of marriage relationship (monogamy or polygamy), and their religious orientation, with patriarchy exerting its influence in every sphere. The participant's perception of FP was therefore analysed to focus on;

- Child-spacing- Literally interpreted to mean the time between one birth and the next.
- Avoiding unintended pregnancy
- Decision-making- by the patriarch for the economic benefit of his family or as a couple.

- Aversion to control family size
- Natural family planning

Some of the participants had only heard about FP but were yet to conceptualise its meaning; thus, their actual level of understanding was challenging to ascertain as they stated it to mean “having children with some sort of plan” (Participant 8), implying a need to have economic and financial obligation mapped for the children.

In the next section, a detailed understanding of FP based on each of the points highlighted above will be discussed.

4.3.1 Child-Spacing

When parents were asked what they understood by the concept of family planning, many/most associated it with the practice of 'spacing' out pregnancies to ensure that mothers had time to recover between births and that the household was ready to accommodate further children before committing to them.

There was a consensus on FP being a form of the spacing by both men and women, as all participants reported their interpretation of FP to mean a practice allowing a woman to rest for a minimum of 2-3 years between one birth and the next, supporting the WHO (2022) recommendation on child-spacing. In essence, FP was perceived as a practice by a ‘woman’ to prevent/avoid unintended pregnancy within the aforementioned period, as a 37-year-old mother of five with a Nigerian Certificate in Education (NCE) similar to other female participants noted:

“In my opinion Tazaran Haihuwa (Family Planning) is like something you do [a woman] to help your family. Let’s assume I give birth to my first child, and I want him to be up to 3 years before giving birth to another child, I will use FP .”

This is supported by Participant 10, a 35-year-old mother of seven and a petty trader living in Tudun-Jukun, who, in her recollection of FP, noted spacing as not only a medical but cultural practice approved of within the community: *“Women in our culture are encouraged to space ... family planning is giving time, at least 3 years after giving birth to remain well”*.

Although findings revealed that the understanding of FP to mean spacing encouraged FP uptake, ironically, data analysis showed there was no collective meaning of the essence of spacing among the parents. Rather, the meaning was individually constructed based on gender, age, education, and religion to suit personal interests, expectations, and the collective norm of patriarchy within the community.

Thus, the ununified interpretation of “spacing” was shown to focus on two things—either as a method aiding individuals to have a manageable family size or a practice allowing women to space for 3-5 years, maintain good health and have as many children as they desire. The implication of this interpretation was shown to result in different end uses and applications of the FP information received. For example, the unmarried, male and female participants interested in having 3-5 children interpreted “spacing” to mean a check aiding parents to achieve a manageable family size, noted in a quote by a 29-year-old unmarried man and a Muslim: *“For me with spacing one can determine how many children they want to have and when”*, and re-asserted by another unmarried female, a Christian, aged 22 *“with that spacing you can know how many children you want to have”*. The literary meaning of spacing with no consideration for the total number of children, on the other hand, was revealed to motivate some of the married men to allow or consider allowing their wives to use a modern method of FP. This is echoed by one

Muslim married man with Islamic education, *"a lot of men do not have an issue if a woman gives them children after 2-3 years, and you know spacing means the gap between one child and the next... it doesn't say one or two children."*

The perception that it was safe for women to birth as many children as they could but ensure an interval of 3-5 years between births was shown to motivate the patriarchs, especially the relatively well-educated men, also acting as opinion leaders within their respective communities: *"spacing is giving gap between children for health purpose... it's not about having few or a restricted number of children"* (Married man, aged 43, Muslim MSc). The emphasis on FP to mean spacing was further elaborated by another 40-year-old married and relatively well-educated man (HND), a village head (authority), adding that the interpretation of FP by other individuals to mean limiting births was mere misinterpretation and misunderstanding of the concept: *"... the part where some men and people in this community get it wrong is when they think that FP is about having few children or stopping births"*. The various understandings of FP shown amongst the audience members were shown not to be without basis, as its origin was linked to the information provided by the frontline providers and the FP leaflets and pamphlets.

For example, one by Marie Stopes - *"Family planning is the right of couples and individuals to decide the number of children they want to have"* and the other produced by NURHI (2012)", *It is a way of life; an informed decision by an individual or a couple as to when to start having children and how much time in between births"*.

However, this information provided on spacing by the providers was shown to contradict the literature showing a significant relationship between reduced

fertility and reduced risk of maternal mortality and morbidity (Stover and Ross 2013).

The encouragement of spacing by religion (Islam) was also another factor analysed to influence the Muslim individual's perception and acceptance of FP as a form of FP. It was interesting to find that both the educated and less educated Muslim participants showed awareness of the support for spacing as a means of FP in Islam, as both men and women vocalised the importance of this practice as taught by religion. For example, Participant 4, a Muslim married woman, noted, *"Family planning is rest given by God for childbirth spacing for a period of 3-5yrs."* A Muslim married male participant supports this (2) and stated that Islam encourages and could necessitate spacing for the health benefit of the mother and child: *"So Islam says give birth to one child, let him or her be old enough, and at least achieve a certain level of independence between age 2-3 then have another one, or else both the child and mother will suffer."*

Another Muslim married man with limited formal education stated his knowledge of Islam encouraging spacing:

"... by FP, I mean spacing... as a Muslim, I have the mandate to procreate, so it means spacing, not stop giving birth".

This finding resonates with a postpartum cultural practice of abstinence, where a woman, after childbirth, stays with her parents for two years for the purpose of preventing unintended pregnancy (Renne 1996; Winkoff 1983).

Participant 5, a 23-year-old married Muslim woman with Islamic education living in Bomo Zaria, in support of the men, recalls that health information providers teach FP as a means of spacing: *"... even at the hospitals during antenatal, we are*

told to just space, some specifically tell us they are not advising or dictating the number of children we should have". This information is verified by the providers in Chapter 6 and evidenced in the definition of FP, which emphasizes "spacing" (NURHI 2006) as the major importance of FP.

Crucially, FP decisions around spacing seemed to be heavily influenced by patriarchy, as men, not women, self-identified as having the final say on whether it was adopted. This was evident among the men, including well-educated men, as Participant 8, a 43-year-old retired teacher with an MSc in public administration and father of eight, reported:

"I will allow my wife to adopt family planning only when I have the number of children I want, which is 10."

Re-asserting this was Participant 16, a 35-year-old father of six with a secondary school education and a Christian:

"So when one already has the number of children he wants, then he can adopt family planning for spacing, and I'll allow my wife to adopt it when the time comes [when he has the number of children he desires]."

This result re-echoes the findings in sub-Saharan Africa (May 2017), showing that spacing has been widely adopted as a strategy by communities in sub-Saharan Africa to ensure the survival of children while keeping up with the high fertility desires rooted in indigenous cultures and traditions.

Spacing was therefore found to be a factor creating male support for female use of FP while maintaining high fertility desires of the men and supporting male hegemony (Rouchou 2013; Peterson, Prritano and Lampic 2012; Boivin 2008).

Declining egg quality, described by Anderson and Telfer (2018) as a situation where the chances of ovulation resulting in conception lower as a result of age, was highlighted by one female participant (11) with NCE education as a benefit of spacing. According to the participant, with spacing, there will only be a limited number of births a woman is able to achieve before menopause – meaning that she will end up having fewer children than she might otherwise have done. Therefore, the participant states her belief that the appropriate application of interpregnancy interval (two to five years) can control and determine the number of children a woman can have in her lifetime:

“You know the irony about FP and spacing is If someone uses FP as a form of spacing, one will not give birth to so many children in the end because when you calculate the spacing interval of 2-4years with the time of menopause, there is just as many children as you are able to give birth to within this period.”

Now, this can contradict the argument that people take FP as a God to determine the number of children they will have in the course of life.”

4.3.2 Avoid Unintended Pregnancy

The use of FP as a practice to avoid unintended pregnancy was analysed as a strategy adopted by females to reduce socio-economic hardship for the women and children in Gure and Bomo as two female unmarried and two married women reported this:

This unmarried female Participant (24), a 22-year-old schooling away from the village of Gure, stated that the definition of FP as a practice adopted to avoid unintended pregnancy is not an opinion held by herself alone but also amongst some of her peers, which they have deemed necessary for the social wellbeing of the child:

"A friend of mine has also said it before that if she has an impatient man... who would not let her space births, regardless of what he thinks, she will adopt FP. For me, we will not bring children we are unable to take care of. It is unfair and a form of injustice to the children. So, I share the same school of thought as her."

Participant 6, an 18-year-old unmarried woman in Bomo, also re-emphasises the issue of bringing children one is unable to cater for as injustice;

"... to avoid not being able to provide for my children, I may be forced to do the needful and used FP if my husband and I cannot be on the same page."

Two reasons were analysed to motivate the use of FP to avoid unintended pregnancy. At the same time, the lived experiences of women with regard to parental expectation and provision were shown to motivate the use of FP amongst women in Gure *"You need to have children your resources can take care of "* (Participant 23) shown earlier to play a prominent role in providing for the family, the curtailing of extra marital affair was shown to motivate more the women in Zaria. A probable explanation for this could be the practice of polygamy, which could mean the man can be dating another woman in the woman's period of postpartum in preparation for another marriage.

The motivation to use FP amongst parents and prospective parents in the different study areas was reflective of their lived experiences. For example, in Zaria, where the role of provision was well defined as the duty of the man, women were more concerned about considering or adopting a method to keep their husbands away from other women, as noted by Participant 5, a married woman in Zaria *"... mhmmm... some women say with FP after birth you can still be with your husband and not be pregnant if you use FP... I find that aspect good so that he will not look*

outside [look for other women]". Another aspect highlighted in this area was to reduce the economic burden of large families on men, as reported by Participant 4, another married woman living in Bomo: *"FP helps because the father, mother and child will be happy, the father can plan well without pressure"*. On the other hand, in Gure, even though promiscuity amongst men during postpartum was an issue pointed out by women, the perceived added economic responsibility to a woman due to an unintended pregnancy seemed to motivate women to adopt a method of FP.

Evidence of short interpregnancy intervals was reported to be a problematic experience by (among others) Participant 11, a married woman who reported unmet needs among some women leading to unintended pregnancy. *"Some people take in between 10 months to 1 year in fact any month [2 months] after birth for some people."*

4.3.3 Decision-Making

The practice of FP was also understood to mean decision-making by the relatively educated participants in this study. For this group of individuals, men and women are expected to talk about their socio-economic situation and decide on the number of children they intend to have. This understanding was observed among the unmarried between the age range of 18-25, who attributed their source of FP knowledge to school or youth religious groups where the union of marriage is emphasised on the grounds of equality and equity. This assumption is supported by one 25-year-old unmarried man who stated:

"In my own understanding, as taught in civic education, family planning is the decision couples take to help their lives."

Another respondent (Participant 17), an unmarried male, aged 21, a student of FCE in another town, had a similar perspective. Similar to the above participant, the essence of decision-making as a form of FP was for socio-economic benefits:

"...family planning is the situation or process a couple organize and agree on how to put things together during childbearing, especially the spacing so that they are in control."

Similar to the understanding of the unmarried men, the unmarried women were of the opinion that FP should be treated as a joint decision-making process between two supposed equal partners in marriage. However, the analysis revealed a passive recognition of the power of the patriarchy to relegate the woman's opinion in the FP decision-making as asserted in the quote by the 22-year-old unmarried woman with relatively high education living in Gure:

"If it is possible, this could be an agreement between a wife and her husband for the betterment of their family."

This is corroborated by an 18-year-old unmarried woman who put it this way:

"If I marry, I will want to use FP, but I understand my husband may say no."

This attitude can be linked to the social learning theory (Bussey and Bandura 1999), which shows that individual values and stances are shaped by accessible information and practices. In the case of unmarried women, a struggle existed between the stance of formal education on gender equity and equality and the cultural practice of patriarchy, which gives the man the autonomy of decision-making.

A subtle form of patriarchy was, however, observed among some of the unmarried men in Zaria whose understanding of FP, similar to some of the married men, acknowledged FP as a form of decision-making with the man having the autonomy of making this decision, for the socio-economic benefit of the family. Participant 1, the 40-year-old father of 9 children, an FP facilitator, king of the Bomo community and an HND holder, reaffirms this assumption:

"Hmmm! I have an advice. Anyone who does not adopt it, when he eventually does, would have things working easily for him. Family planning to me is a decision by a man to keep the home generally."

A similar perspective is shared by an unmarried man, aged 24 with a high school education:

" A man should tell his wife to adopt FP for their own good."

A relatively educated 25-year-old married woman supports Fp as a practice of decision-making:

"Family planning helps because the father, the mother and the child will be happy. The father can plan well without pressure; the mother is healthy, and the child is taken good care of. But if the children are many, there would be problems."

For Participant 7, the 45-year-old married male living in Tudun-Jukun, a retired teacher with a BSC in Islamic study, while supporting men's autonomy in FP decision for economic sustainability of the family, provided a significant yet controversial perceived difference between FP and birth-spacing:

"Family planning in my understanding..... spacing is different from family planning. While spacing is giving gap in between children, family planning is

having vision and means for the success of your family. I.e., planning a family within your means."

Although some participants were found to perceive FP as a decision-making process, there was a discrepancy in stakeholders involved in this decision-making. While single female participants believed that both men and women were supposed to be stakeholders in this decision, they were found to acknowledge that the power of final decision-making rested on the man. With this knowledge, where a negative response was anticipated, they were willing to take the risk of becoming the sole stakeholders in this decision, therefore using FP clandestinely. The married men were also seen to reaffirm that FP was the decision of a man.

4.3.4 Aversion to control of family size

Earlier on, findings showed the younger and more educated participants believed that FP served as a practice limiting the number of children to suit an individual's economic capacity, as twelve out of the twenty-five participants mentioned this as a benefit. It was, therefore, interesting to find that participants not in favour of modern FP perceived it as a method of determining the number of births. Still, this time, it was interpreted as a form of social control or even dictatorship. Considering the mean household size in Nigeria is eight (Titus et al. 2015; NDHS 2013), women (married or single) who desired to have between three and seven children interpreted FP as a practice to enable parents to meet the socio-economic obligations as contended by a 25-year-old mother of three and a Muslim living in Zaria:

"I have 3 children, but I want to have 6 because of the circumstances of life.... FP helps the children not to be many."

Reflecting on the reason for some women not desiring too many children was an unmarried female participant and a Muslim:

"I want 7 children so I can take care of them. Caring for children is tasking..."

However, some of the individuals interpreted FP as a form of control by international bodies through the Nigerian government, as alluded by an unmarried man, aged 25, with a BSc education:

"They keep asking people to use FP and have few children due to overpopulation... but population leads to economic growth like China."

Another woman, aged 32, re-affirms the belief that FP controls family size and reduces the needed population:

"If a person takes those injections, they stop having children.... that's all it does".

People desiring many children from eight and above interpreted FP to mean a practice of family size control.

4.3.5 Natural Family Planning (NFP)

There was a discrepancy found in the definition of FP between married men in polygamous and monogamous marriages, while men practicing polygamy were revealed to understand FP from the view point of spacing through the use of modern contraceptives, men practicing monogamy were of the opinion that spacing could be achieved through the use of more natural methods of contraception, such as herbs, exclusive breast feeding and other traditional methods- this belief was articulated by some of the men in this study and shown in the vocalisation of a 35-year-old man (participant 2), married to one wife who stated the use of exclusive breast feeding by his wife to achieve spacing for at

least a period of three years *"... for example, my wife, we wean when the child is age 2 then she rests for another 1 year"* this method was considered by these group of men as safe for easy return to fecundity as further elaborated by the participant *"...after that she is pregnant again with no issues"* adding *"so she does not really need modern FP"*.

Findings showed a belief among men in monogamy that the use of modern contraceptives was majorly for the super-fertile woman - women having a 40 per cent or higher chance of getting pregnant on a monthly basis compared to their contemporaries with a 20 per cent chance at age 30 (Murakami et al. 2018; American Society for Reproductive Medicine 2012). This assumption is supported by another 45-year-old married man with one wife: *"...the use of injections and implants is for women who give birth year in year out"*, as he stated that his wife used other natural, effective methods *"there are written qur'anic verses, we put in water, and she drinks it"*, the effectiveness of this method was however not guaranteed as he further elaborated *"it prevents pregnancy for a while"*.

Building on the above statement, Participant 2, another Muslim man, highlighted *"reciting of some qur'anic verses or soaking and drinking"* as a form of NFP, further suggesting its ineffectiveness *"It prevents my wife getting pregnant, dai-dan gwargwado [in the best way it can]"* He however speculated a time when it was ineffective *"... there is an interval of 3-years between all our 7 children, although one is late... we have only 1 child with less than 3 years spacing."*

Regardless of whether or not it was effective, NFP was considered a suitable and safe practice for fertility purposes by men in monogamous marriages.

On the other hand, men in polygamy suggested years of spacing greater than three and showed their support for the use of modern contraceptives, as highlighted by a 40-year-old Muslim man married with four wives: *"Implant or injection, whichever one suits her best is very good... you allow her to rest.... for like 4 years before she gives birth again"* this is similar to the suggestion by another Muslim man aged 43 married to two wives, *"... the woman can be allowed to rest well with the use of implant for four years plus."*

Considering studies show a healthy woman's fertility gradually declines to 20 per cent in her 30s and reduces to less than 5 per cent in her 40s (Murakami et al. 2018; Alkema et al. 2011), a probable explanation for men's preferred FP method can be analysed from this perspective. For example, the uncertainty concerning the safe return of a woman to fertility after using a modern method and the reduced chances of fertility accounted for through the years of spacing may contribute to the anxiety and preference for natural methods by men in monogamy. On the other hand, the presence of many wives for men in polygamy could afford such men the luxury to space out births for individual women since they have more potential mothers and can achieve their desired number of children before menopause for the women. This result corroborates findings in Kenya (Kiura 2014), which revealed the good practice of spacing among polygamous women, who reported they did not have to use FP since it took a while before it was their turn to be with their husbands.

Regardless of the preferred method identified by the men as suitable for achieving spacing, they were observed to shift the sole responsibility of preventing pregnancy to the woman despite the side-effect-free nature of male contraceptives (Him and Hosgor 2011). Overall, patriarchy reinforced by religion

through polygamy and reinstated by the culture of male power to make decisions was a factor shown to sustain this understanding of FP.

4.4 Factors Motivating Information Seeking and Use

When asked about factors that encouraged – or could potentially encourage – the seeking and potential use of FP advice by audience members, the participants (especially women) gave various reasons. The most prominent of these were centred around:

- verifiable health benefits communicated by experts (Doctors and frontline providers)
- the increased cost of raising children
- the subsidized cost of FP services
- Testimonies of FP reducing the negative effect on maternal morbidity by members of the community. These factors were highlighted as significant for promoting seeking and potential use and represented in Figure 4.1

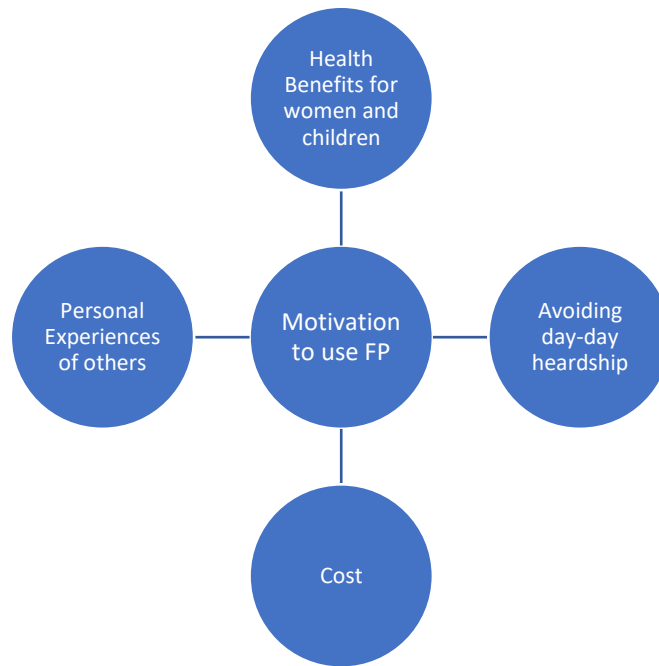


Figure 4.2: Factors Motivating the use and seek FP Motivation to use and seek FP

4.4.1 Health Benefits for Women

It was interesting to find that both men and women highlighted their belief that FP improves the health and well-being of the mother and child when asked about the benefits of FP known to them, which could motivate the search and potential use of FP information and services. This finding was significant as twenty out of the twenty-five participants, including men and women, showed no support for FP due to their belief of an underlying negative motive behind the initiative (discussed in detail in section 4.4.7) for the first time, in a more convinced manner stated their belief that the practice of FP has some health benefits or could be the solution to some health challenges for women. For example, Participant 14, a 58-year-old Christian married man with secondary education, outrightly showed his disapproval for the use of modern contraceptives "... *imagine a practice preventing birth.... family planning is bad*", despite this, the Participant was found to agree that modern contraceptives were useful for solving maternal related morbidity

issues in women such as haemorrhage *"... for me, except for health reasons or conditions, like some women bleed heavily after every birth... it becomes life-threatening."*

This health benefit of FP as a motivation to seek FP advice is supported by another Christian woman (Participant 19) aged 40 and a mother of six with primary school education living in Gure, who also was against the use of modern contraceptives based on religious belief (Section 4.4.4):

"... But when it comes to health issue like there is a problem after childbirth, it then becomes compulsory because of health to look for help."

It was observed, however, that the Christian audience members, even though they had no religious backing supporting this decision (as none of the Christian information providers had a religious stance supporting this), believed, probably based on circular health knowledge, that it was rightful to use this method for improved health, thus supporting the assumption made by one of the frontline information providers (FIP) in Gure Participant 29, who sounding convinced voiced her belief that many of the audience members used religion as a convenient excuse to avoid the use of FP for their own personal desires.

Supporting the experience of ill health likely to cause death to women due to pregnancy-related issues and the potential of modern contraceptives to help the experience of better health for women was Participant 5, a Muslim, married at age thirteen and a mother of six, living in Bomo-Zaria;

"Some women narrowly escape death when pregnant: I know someone who was advised not to get pregnant again, due to severe tear which became life-

threatening”, adding that these complications and modalities are acknowledged by religion: *“even religion permits this... religion is not wicked.”*

The perceived support by Islam for the use of modern contraceptives for health reasons was therefore revealed to motivate its use among Muslims who believe religion permits it. Therefore, Participants 2 (Man) and 5 (woman) noted that persuading Muslim women to consider FP on health grounds was relatively easy, given that the religion was openly supportive of it in such circumstances. In the words of participant 2:

“Religion has spoken or has clear terms concerning such practice, so it’s easy for people in such dilemma to be spoken to or reach a decision.”

The awareness of the support for the use of modern contraceptives was further found among Participants (1 & 4), both Muslims living in Bomo Zaria. As Participant 1, another Muslim man with HND education living in Bomo Zaria, explains this “clear” Islamic stance prioritising the health of the mother over that of the foetus: *“In Islam, the child is yet to come to life, but the mother is alive, and religion will have it that the life of the mother and her health is of greater value.”*

This finding re-echoes those in earlier studies in which participants had emphasised the importance under Islam of protecting the life of the mother over that of an unborn child (Pinter 2016, Abdi et al. 2020). In addition, this finding popular amongst audiences in Bomo is indicative of the probable effect of religious stance communicated within a community influencing the attitude of members of such community as later in chapter 5, one of the Islamic teachers (Participant 33)

from Bomo reported a similar teaching on FP to the Muslims within that community.

Although awareness of the health benefits of FP for women was high among the married women, only one female unmarried participant, an 18-year-old Junior secondary school student⁹ living in Bomo Zaria, mentioned this. Despite her awareness of the health benefits of FP and her motivation to search and use FP, it was intriguing to find in her comment a belief that patriarchal forces could hinder the motivation and use of FP as she commented, *"...but I will want to use it [FP] ..except if my husband refuses..."*

A probable explanation may be this participant's proper analysis and understanding of the patriarchal culture within her community with men preventing women from using FP, her knowledge of the importance of FP being taught in school, and finally, her acceptance of the prevailing gender Ideology in Bomo, supporting the view that men have the final say concerning matters of reproductive health, corroborating the findings of Renne's (1997) in Bomo, showing women's acceptance of male hegemony on issues of reproductive health irrespective of their education. However, the participant mentioned her intention to be involved in covert use of FP to safeguard her health if her prospective husband was against the use of FP, *"But if my health deteriorates, I will use it anyways."*

4.4.2 Health benefits for the child

The well-being of children health-wise was another factor revealed to encourage the audience members, especially the women, to seek or use FP information.

⁹ She states she decided to gain formal education at about age 16, this could be inferred to mean she has a mind of her own, has high Iq and ability to think things deeper and make meaning of it.

Considering the onus of pregnancy, child raising and rearing are the duties of a woman in the Nigerian culture (Finkel and Olswang 1996; Mensah 2023) and other developing countries (Islam and Ahmed 2012). Findings revealed concerns for children's health were the motivation for current FP users and prospective users, evidenced in testimony by a 28-year-old mother who has lost three children due to ill health before age three, with the surviving four suffering from health challenges, *"...I choose to do family planning because ... I have had to bury three children; they were sick, and the four survivors are not so well too".* Although the participant, a primary school dropout, may not have had expert or medical explanations concerning the death and ill health of her children, her layman's perception of the situation shown in her testimony, *"... my children are not very healthy, and I usually get pregnant often. In less than 12 months after a birth or miscarriage"* reveals her to be teachable. This experience, according to her, made her conclude, *"...that's why I said... my body needs rest [decided to use modern contraceptives]"*.

The assumption by mothers in Gure of a relationship between the health of a child and the frequency of birth was an observation put forward by another woman (non-FP supporter), a 51-year-old mother of six, in a narrative she recollected as the experience of her younger sister, *"... my sister decided to do family planning because her children are not very healthy and she usually gets pregnant very well [short-intervals]. She says she told herself one day that her body is tired and needs to rest."*

This mother, although a non-FP supporter, noted the use of FP could be encouraged to achieve improved health for the child, *"If a person decides to do family planning due to issues such as this, then there's no problem."* But if I am able to have one more child to make them six, I do not mind.

These perceptions of the women in Gure show that women believe good pregnancy practices improve the health of a child. However, a blurry knowledge of “Maternal Depletion” (MD) – a term used to define poor maternal and infant health in developing countries as a result of childbearing patterns and inadequate maternal diets (Winkvist 1999; Bhutta et al. 2013) existed. Despite the inadequate knowledge or certainty of this factor, the perception or idea of an existing relationship deduced from their experiences of birthing and living with unhealthy children encouraged them to seek FP advice. Another 40-year-old mother of seven, not in support of modern FP, mentioned health issues experienced amongst her children, but while soliloquising, attributed it to possible poor spacing “....my children too are not very healthy and I usually get pregnant quite often..... [soliloquising] sometimes I think the frequency of pregnancy has contributed”. She, however dismissingly moves on to another point, as she mentioned the belief within the community encouraging FP for the health of the children:

“Some people say when a woman is giving birth to sick children, the person can decide to reduce the number of children she intends to have”. It was observed that although this particular participant was not in support of FP (Modern or NFP), there was an underlying gap yet to be filled. She may not have been willing to fill it as she was analysed to live in denial through information avoidance (Godbold 2006) and. This could be due to inadequate provision of timely relevant information (Meyer 2009), emphasising a relationship between maternal depletion or poor spacing and the health of the child (Molitori et al. 2019; Stover and Ross 2013). Supporting this assumption was Participant 20, a 32-year-old mother of six who, like other women, had lost two children with one sick survivor, she believed a relationship exists between the poor health conditions of their children and their pregnancy practices, yet have not been able to access adequate. This is

shown in her recollection of what she believed was a generic explanation provided by the health practitioners concerning the cause of death and health challenges of her children: “ *I remember when one of my children died, at the hospital, I was just told its fever... the same way they continue to say these other children suffer fever [pointing to the children]”*.

The time to be both physically and emotionally available to support the growth and development of a child for healthy mental and physical development (Deci and Ryan 2000) was revealed to be a motivation among mothers in Zaria to seek and potentially use FP advice. This is shown in a comment by a 35-year-old mother of five, a more educated woman compared to other female participants, who states that mental development in children takes more than three years prior to what parents expect:

“...For example, my three-year-old many times asks for support you think she should have outgrown at three... like being strapped to my back.... She is her little self because I am not looking overly stressed. She is growing well, happy and healthy.” She added that her current use of FP has made this healthy growth and development achievable for her child, “*... without what I put in my arm [implant], maybe I would have been pregnant, and this will interrupt the healthy bond between us and affect her emotional development”*.¹⁰

This is supported by Participant 10, a less educated mother of seven and a petty trader living in Tudun-Jukun, who noted the belief that successive pregnancies and lactations lead to poor maternal and infant health due to nutritional stress

¹⁰ It was observed that the two participants who admitted to using a form of modern contraceptive did not at any point refer to it as ‘implant or injection we currently use’ rather indirect terms or adjectives ‘like that thing I am using’ were terms used to describe the methods they used. This aspect will be explored in later sections.

was a popular perception in her area (Tudun-Jukun)"... *spacing is important... because if you give birth at short intervals, they say it finishes the blood in your body, so the child you are breastfeeding or pregnant for will have no good nutrients, likewise the mother*". According to her, religion and culture which are her source of knowledge, encourage some of NFP practices for the health of the child "... *Islam recommends a period of 30 months for rest and breastfeeding and before another conception... for the health of the child... Culturally and Islamically, giving birth to another child before a growing child or breastfed child is 1.5- 2 years of age is frowned at*". This finding resonates with a postpartum cultural practice of abstinence shown in literature, where a woman, after childbirth, stays with her parents for at least two years for the purpose of preventing unintended pregnancy (Renne 1996; Winkoff 1983). It further fits in the wider literature on the effect of spacing on the inter-pregnancy outcome, which shows pregnancy intervals of less than eighteen months and longer than fifty-nine months are associated with adverse perinatal outcomes of low birth weight, small for gestational age and perinatal infant deaths (Chungkham et al. 2020; Ganatra and Fundes 2016; Conde-Agudelo et al. 2012), while inadequate pregnancy weight gain, anaemia and oedema were among the effects reported for mothers (see also King, 2003; Winkoff, 1983).

4.4.3 Economic and social well-being

The inability of couples to provide for the basic needs of their children, such as food, clothing and shelter due to their large numbers of healthy (Wambui and Alehagen 2009) was a point of concern highlighted majorly by the unmarried

participants¹¹ in this study as a factor likely to encourage their use of FP. As one of the unmarried men aged 27 (Muslim) living in Bomo simply put it, *"I won't want to have many children because of responsibility. Five will be OK."*

Another unmarried 22-year-old woman, a Christian living in Gure in support of the above participant, not only mentioned the inability to provide for the basic needs of children as a motivation to use and access FP information but also termed this act injustice on children as according to her individual are the best assessors of their economic situation:

"... It's injustice!You know, you see your situation, if you are unable to provide, why give birth? Injustice....! [hisses] Why bring children you are unable to cater for?"

A moralistic dimension, transcending the boundaries of religion, was found in this comment and other comments of this kind. This moralistic dimension may be associated with the experience of hunger and malnutrition amongst children in the area, as Bako and Atodo (2017) show malnutrition is associated with 50 per cent of child mortality in Kaduna state. Supporting this moral dimension is Article 27 of the UN Convention on Child Rights, which states, "every child has a right to a standard of living that is good enough to meet their physical and social needs and support their development". This argument is further supported by Stuart (2013) on the immorality of having children, where the author, in an attempt to emphasise the significance of every child being able to access basic needs of food and healthcare and the severity of inaccessibility to the aforementioned

¹¹ As seven out of the eight unmarried participants commented on this point.

necessities she interpreted as children being living dead. Thus, she made a call to people to stop giving birth and rather focus on the needs of these other children. This perspective can be related to the argument on injustice, where scholars, in an attempt to reduce the suffering of unhealthy children, are already making a call on other individuals to stop birthing to save these children brought into the world by parents who may be unable to cater for them. Prevention of birthing children one cannot provide for was also found to be used in the information provided to the audience members by frontline information providers.

In summary, regarding the motivation to use FP to avoid economic hardship, the female unmarried participants in Gure were analysed to be willing to use FP in clandestine if their husbands did not permit it. As a quote by Participant 24, a 22-year-old student of the Federal College of Education evidenced by her representation of discussions with her peer:

"A friend of mine has also said it before, that if she has an impatient man... who would not let her space births, regardless of what he thinks, she will adopt it without letting him know", adding, "A couple of us say it ...we will not bring children we are unable to take care of."

One Participant 6, an 18-year-old unmarried woman in Bomo, also re-emphasises the importance of economic provision likely to result in covert use of FP;

"... to avoid not being able to provide for my children, I may be forced to do the needful and used FP if my husband and I cannot be on the same page."

However, one of the Muslim married men aged 45, living in Tudun-Jukun, stated that an individual's decision to limit births should not be motivated by their economic status as religion does not permit this:

"But we [Religion] don't support it if it is for the issues of poverty alleviation or food. We believe it is God that provides food". The perception of this participant can be connected to the teachings of the Islamic cleric in Tudun-Jukun (Chapter Five), whose teachings were analysed to focus on providence while referring to any form of FP as disobedience to "Allah".

For some of the Participants with more education, especially the women, the opportunity to be able to gain paid employment outside of their homes due to planned pregnancy was likely to motivate their use of FP, as shown in a comment by Participant 11, a mother of six, with more education compared to her contemporaries, living in Zaria, her motivation to use FP was the economic importance attached to the timing of pregnancies and birth, affording her the opportunity to gain employment and financial autonomy:

"... With FP, I can go to work because having a pregnancy limits how much-paid jobs I can do, so I am happy."

Another factor revealed to motivate the use of FP among some audience members was the social dimension related to concerns about children developing anti-social behaviour as defined within the community. This fear was expressed in their concern of possible large numbers of children not giving them enough time amidst their farming occupation to be emotionally and physically available for their children. This perception is represented by an unmarried Christian male (Participant 22) living in Gure:

"...if I have too many children, I am scared that I may be unable to take care of them [and] afford their basic needs. It will be unfair to them, and they may end

up indulging in some bad vices. For instance, a girl child can indulge in prostitution while the males will indulge in alcohol and drugs."

Participant 23, the 28-year-old mother of six, in support of the importance of FP in enabling parents to avail themselves to help the development of moral behaviour in children, commented, "With few children, you can train them well, but if they are plenty, it would be a problem....".

4.4.4 Unintended Pregnancy

The importance of modern contraceptives in achieving planned pregnancies and avoiding unintended pregnancies to prevent socio-economic hardship and reduce poverty was analysed as a benefit motivating the use of FP amongst some two mothers and two unmarried women.

The two reasons motivating the use of FP to prevent unintended pregnancy for the women in Gure were the ability to provide for themselves and their children was their major concern, as noted by Participant 23, a married woman and mother living in Gure, *"It helpsyou need to have children your resources can take care of"*. Considering the onus of providing food for the children in some households becomes the major duty of the woman in this patriarchal society, as shown earlier in this chapter, the lived experiences of women with regard to parental expectation and provision can be said to motivate the women in Gure.

The curtailing of extramarital affairs among men was the second reason shown to motivate the women in Zaria. A probable explanation for this could be the practice of polygamy, which could mean the man can be dating another woman in the woman's period of postpartum in possible anticipation of another marriage, as stated by Participant 5, a Muslim married woman living in Bomo:

"... I hear some women say with FP after birth you can still be with your husband and not be pregnant if you use FP... I find that aspect good so that he will not look outside [look for other women]".

Again, Patriarchy and male hegemony, as well as a double standard of morality, are found in the explanations of women concerning this motivation. Religion, again can be attributed to this factor hence, while the men were allowed to date other women when they felt it convenient like in the case of postpartum, the use of FP was noted by the same men to promote promiscuity amongst women. It was considered promiscuity, and a reason to prevent Considering polygamy is accepted in Islam in preparation for another marriage.

The motivation to use FP amongst parents and prospective parents in the different study areas was reflective of their lived experiences. For example, in Zaria, where the role of provision was well defined as the duty of the man, women were more concerned about considering or adopting a method to keep their husbands away from other women, as noted by Participant 5, a married woman in Zaria *"... some women say with FP after birth you can still be with your husband and not be pregnant if you use FP... I find that aspect good so that he will not look outside [look for other women]"*.

Findings showed that these women perceived the effectiveness of modern contraceptives in preventing unplanned pregnancy in the context of marriage. This unplanned pregnancy was not a strategy adopted by females to reduce socio-economic hardship for the women and children in Gure and Bomo as two unmarried and two married women reported this: The perception of effectiveness of modern contraceptives could be attributed to information from the health care facilities as shown in one of the pamphlets and vocalised by the health providers who state efficiency of modern FP at 99 per cent compared to NFP.

Considering Patriarchy also ascribes a man the total responsibility of economic and financial provision for the family (Makama 2013), they believe that FP was viable in reducing the economic burden of large families was also reported by one man, Participant 1, a father of nine living in Bomo Zaria:

"It helps the family feed, educate, maintain good health and clothe the children. Life will just be easy, and providing will be easy, as it will be one need at a time, not buying similar capital-intensive needs at once." (Babies' milk and Nappies are expensive in Nigeria.)

The above perspective is supported by another married woman (His wife) living in Bomo, "FP helps because the father, mother and child will be happy. The father can plan well without pressure".

For some of the participants, the embarrassment that could come with short intervals between one pregnancy and the next was motivating enough to encourage the use of FP. Participant 11, a married woman living in Zaria, comments on this, *"some people take in between 10 months to 1 year in fact any month [2 months] after birth for some people, people whisper when they pass by..."*.

This is supported by another middle-aged mother living in Tudun-jukun (Participant 13).

"that FP covers shame sometimes It's sometimes embarrassing for women who take in at short intervals. They are forced to isolate themselves sometimes because they are mocked indirectly... as people who live against religious injunction of abstinence."

4.4.5 Free Services

Although this was neither mentioned as an outright motivation nor a barrier, the analysis revealed the free cost of FP services as a practice with the potential of motivating the use of FP even amongst men.

Although frontline providers and some target audience members noted that FP services were nominally free, follow-up questions and data analysis revealed a cost amounting to -about N500 (equivalent to USD 1).

Although this cost was considered unsubstantial by many of the participants, three of the participants noted this point. Participant 5, a 23-year-old married woman who divides her time between being a housewife for much of the year and a seasonal casual worker in the summer months, in support of free service as a potential motivating factor, said. *"...it would have been a huge relief if it was at no cost."* adding that the actual cost paid in reality could constitute a potential barrier to accessing FP for low-income women like herself if they were able to scale through the religious and patriarchal barrier:

" ... But I hear people pay N300- N500... imagine the struggle of a housewife after gaining consent reluctantly from her husband having to ask him for money again [Laughing]."

By contrast, participant 7, the 43-year-old small business owner in Tudun-Jukun Zaria, who was willing to permit his wife to practice FP provided religion permitted this, argued that men would be more likely to support this generally if there was genuinely no financial obligation required of them:

"If it can be ascertained that FP is permitted by religion our pleasure.... let Allah be praised (grinning/smiling, meaning life is made easier)."

Reflecting on the potential of free services motivating men to allow their wives to use FP, Participant 1, an audience member in this study but also an FP facilitator and the village head in his community, recollected how the cost of FP could contribute to men's disapproval " *I have had an FP issue brought to me... I paid the cost of the service and transport fare to the PHC for the woman... the husband was unwilling to pay and not in support... both of them were satisfied with the service afterwards*".

4.4.6 Vicarious experiences

According to Meyer (2009), information sharing is a popular practice amongst indigenous people, with a positive perception of information encouraging its relevance and use within the community and vice versa. Therefore, the sharing of positive experiences across the community encouraged the motivation to seek or use FP as Participants willing to accept FP noted that their vicarious experiences of reduced economic, financial and physical stress served as a motivation for them (women) or their spouses to continue the use of FP.

For the unmarried participants, a major motivation to use family planning was their awareness of the "hard life" experiences of other individuals within their communities, which they attributed to families having too many children. For example, Participant 6, an 18-year-old Muslim from Bomo who belonged to a family of seven children with four surviving siblings¹², said her observation of the difficulty of larger families within her community to provide the basic needs of their children similar to the findings of Cruz and Ahmed (2018) evidenced hardship for larger families:

¹² Significantly, this participant (6) belonged herself to a family of seven, though four of her siblings had died due to ill-health or were still-born.

"..... One of my friends is devastated that there are so many children in their home.... and they are served very little food. She wish they were well taken care of, at least like us now."

In support of the economic hardship experienced amongst larger families compared to smaller ones, another unmarried man from Gure, aged 25 (Participant 22), narrated a similar perception within his community: *"I have seen many people in such situations in this village. Honestly, I think both men and women should be advised on the negative aspects of having too many children, which is not the best way. Parents should be able to have children that they are capable of taking care of."*

This finding was shown to be another moral judgement motivating the importance of spacing.

Overall, participants drawing on the experiences of other families often associated those who had large numbers of children with financial and material hardship – and identified FP as a practice that might have alleviated or prevented this. Relatedly, participants of limited financial means often believed the use of FP contributed to their ability to cope with their families amid economic hardship. These experiences, in turn, informed their desire to use FP in the present or future.

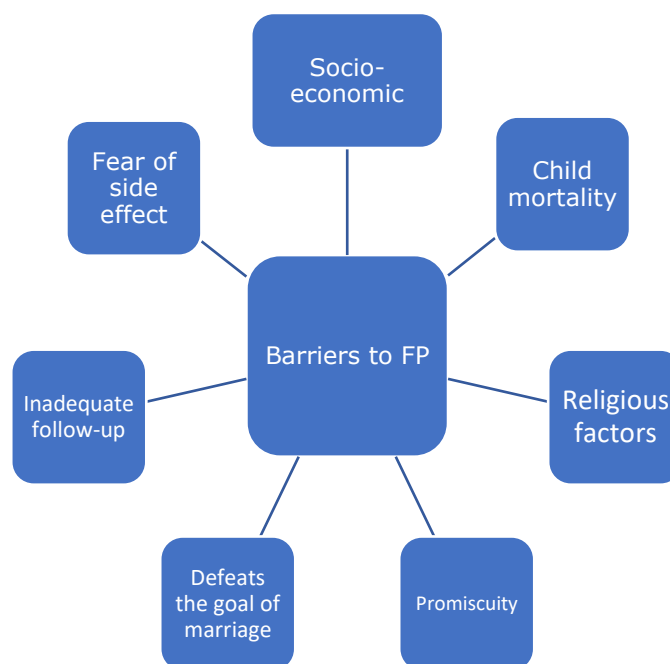
Source Credibility (Theme Continuation)

Consistency, authority, expertise and gender sensitivity were the four qualities most often identified by participants as contributing to the credibility of their sources of FP information.

4.5 Barriers to FP adoption

As previously mentioned, an assessment of inhibitors to health-seeking behaviours is relevant for understanding determinants of health service utilisation (Shaikh and Hatcher 2005). This section, therefore, aims to present in detail the inhibitors to the use of FP information and services amongst the TA in both Zaria and Gure in order to design relevant FP behavioural promotion campaigns for disadvantaged populations (rural residents).

Participants were asked to discuss the relevant issues preventing or likely to prevent or make them hesitant/irresolute to adopt FP. Their responses represent a variety of issues shown in Figure 5.1.



4.5.1 Socio-Economic Value of Children

The desire for more children as a potential means to ending financial hardship and attaining economic empowerment in the future was a recurring motivation for high

fertility and avoidance (or limited use) of FP among married men and women in both Gure and Zaria - reflecting previous findings of Isiugo-Abanihe (1994), among others. Sixteen out of twenty-five of the participants perceived giving birth to many children while they could (before menopause) as a plan with potential benefits for wealth creation, financial empowerment and poverty alleviation for their family and lineage in the future. This is evident in the detailed quote by Participant 2, a 35-year-old father of six and a Muslim resident in Bomo Zaria, who, in the course of the interview, stated his desire to have forty children by getting married to four wives, with each wife bearing at least 10 children:

"I want 10 kids from each wife. That is 40 in total, and if they are up to that, by God's grace, I will have very wealthy ones amongst them. All of them cannot be poor [soliloquising] No! Not all of them will be poor."

His main rationale for desiring this number of children was to increase his chances of wealth acquisition through his offspring, arguing that the higher the number of children, the more likely it would be for some of them to become renowned in their area of interest (perceiving economic sustainability as a game of chance):

".....you see, if they are many, we will have very hardworking ones in every sphere. Some will be hardworking and have a hustling spirit or strong survival skills. Some will be very good academics, businessmen, entrepreneurs, politicians or religious leaders."

With successful children, participant (2) believes he stands a better chance of an early and comfortable retirement, he said in an excited tone with his eyes lightened up,

"Guess the mind-blowing aspect ... You will get to rest before you are worn out and old. It will be them (Children) asking you to rest because they are many and prosperous."

Participant 2, with Islamic education as his highest form of learning, a casual staff working as a cleaner at the university in Zaria, stated the expectation of parents for children to provide them with economic and social security as an entitlement and a child-parent obligation:

"If they are few, you will be old and still be struggling, but you see if they are many ... even if you don't do anything... there will be support from everywhere amongst your children. One does this, the other takes up that, so even if you do not do anything when you are old, the children you have birthed will take care of you."

The imposed duty of children providing socio-economic security for parents when they are of age is further supported by his wife, participant 5, a 23-year-old mother of 6, married at age thirteen (13) with Islamic education:

"It is very important to have like 5-6 children. At least you can have someone to take care of you when you are old."

It was noted, however, that no reference was made to the cost implication nor parental responsibilities required to raise successful children (Adanikin 2019; Isiugo-Abanihe 1994).

Similarly, Participant 14, a 58-year-old Christian from Gure who desired 12 children (but is currently a father of five) also highlighted economic empowerment as a possible benefit of having many children. The participant described childbearing as an act that should be treated as water pouring continuously from a tap and flowing through a garden. While acknowledging it might seem (morally?)

wrong, he argued it was the right thing to do because of the possible end result of gaining long-term support:

"It is important for individuals to keep pouring children to the world just as they come because in life, one ever knows who will take care of him."

However, the economic reason for desiring many children by men in Gure was analysed to refer to a backup plan for financial support in old age rather than a form of payback or entitlement by virtue of being a parent, as reported by participant 1. Further analysis from participant 13 showed an emphasis on the importance of having many children for social and economic security in old age,

"... just give birth, bearing in mind not all will be good, but you will definitely find someone to take care of you when you are old."

Reinforcing the above point was his wife: participant 18, a 51-year-old mother of five with a desire for ten children and a primary school drop-out (P4):

"...but I want 10 because I don't know the one that will help me when I am older."

This fear and uncertainty about social security in old age was analysed to be projected by individuals in their 50s nearly approaching their 60s, which can be defined as old according to Kinsella and Phillip's (2002) definition of old (40 years and above). Further supporting the possible reason for the existing fear is evidence from the literature showing that limited or no clear benefits exist for the elderly/aged in Nigeria after retirement (Agbawodike et al. 2021; Tanyi et al. 2018).

Another intriguing finding was the discrepancy in the *definitions* of economic support as a benefit of having many children applied by men and women. In contrast to women, men emphasised the long-term social benefits of prestige, a

sense of pride, and respect to be accorded them within the community they live as a result of having many successful children bearing their names (Makama 2013) – suggesting that they perceived child-driven prosperity as, above all else, a marker of hierarchical and material status. This is evidenced in the quote by Participant 2, a father of 6 desiring 40 children living in Zaria and a community Imam:

"And guess what: all the achievements of these good and successful children with achievements will be attributed to me in the community (meaning the child will be addressed as his son) ...that's me contributing to the community (His wife agrees with a nod) So they will support me and support the community as well. The community will be the second to benefit after me."

Confirming the analysis on the importance attached by men to the prestige and respect accorded fathers of successful children was Participant 15, a 50-year-old father of seven, desiring 30 children, and a farmer from Gure Lere LGA, further stating his belief on the importance of having many children as a determinant to maintaining the above, descent transmission and the continuation of a successful family lineage (Milazzo 2014; Isiugo-Abanihe 1994):

"..... look at all these lands, (pointing to a large open space facing his home, going down into the bushes with neither farms nor house). We need this land to be filled with houses. We want population as a village, and I need my family to be part of those contributing to the village population; the children will farm on these lands, and we are happy to support those who are unable to."

The women were, on the other hand, analysed to be more kin about the benefits they would enjoy through the division of labour in their day-to-day domestic and farming activities by virtue of being mothers to many children. This assumption is re-affirmed by Participant 19, a 40-year-old mother of 7 children with primary

education living in Gure, desiring 10 children who stated division of labour as her major reason for desiring ten children with a preference for more male than female children:

"I have seven (7) children, so when I have 10, then it is ok..... Because I don't know the one that will help me, and I'm sure I'll get some that will help me out of them. I like male children, but the work of a male differs from that of a female. The male child goes to the farm and works to build the house, while the female child cannot do really such hard work. Girls do wash plates and cook. On the farm, their work is only to plant."

Re-affirming the importance of male children by women was Participant 20, who stated lineage continuation as a major reason for this desire:

"There's only two of us still alive and we're all women. That is why I said I would like to reproduce to have a bloodline."

The desire for male children shown by Participant 19 can be attributed to the patrilineality and patrilocality of Nigerian society (Adanikin, McGrath and Padmadas 2019), where women's fertility desires and child gender preference have been shown to be influenced and dominated by men (Akinyemi, Odimegwu and Clifford 2021). While Bledsoe, Banja and Hill (1998) show that bearing many children, especially sons, not only establishes a woman's security, providing her competitive advantage among co-wives and in-laws but also guarantees her some sort of social security in the event of widowhood.

Reinforcing the importance of domestic assistance as a need promoting the desire for more children by women and discouraging the need for FP was Participant 10, a 35-year-old mother of seven, married at age 19, with secondary-level education and a Muslim living in Tudun-Jukun Zaria. The participant described the

significance of having many children as a mitigating factor or contingency plan in case some of their offspring became unsuccessful or developed a behaviour termed as negative by societal standards. Thereby presenting a child's emotional development like a game of fate, independent of the influence of parental emotional belief, contrary to Castor et al. (2015):

"... You see these children; they are planned by God. If God gives you this gift (referring to children), embrace it. You can never tell who amongst them will take care of you. Some will be very sympathetic of parents' sacrifices for them and will therefore be very caring and supportive towards their parents and the community, while some can be so terrible that they will neither sympathise nor offer any form of assistance to their mothers. This is the exact reason people would rather have many children, to create a higher probability of balance between good and bad attributes in children."

This pattern was also observed to repeat itself in a quote by Participant 18, the 51-year-old mother of six living in Gure and a Christian who re-instated the belief by the community that it is almost impossible for all children born into a household to act according to collective societal standards:

"..... I want 10 children because I don't know the one that will help me, and I'm sure I'll get some that will help me out of them."

The desire for many children for socio-economic support was shown by both men and women. However, while men were shown to desire many children for ego, prestige and financial support in old age, women's desires were woven around everyday domestic assistance for the economic and health benefit of the family. According to Participant 23 a mother of six :

"... they would grow up and be able to help you out with one thing or the other.

4.5.2 Fear of side effects

All twelve (12) female participants (single and married) mentioned at least one or two of the following: fear of continuous bleeding, early menopause, infertility and cancer as side effects instilling fear in them, thereby increasing the likelihood of discontinuation or non-use of FP (Kibira et al., 2015). It is important to note that, while all female participants mentioned side effects, none reported personal experience of any of these aforementioned effects as reports were based on the experiences of others (Diamond-Smith, Campbell and Madan, 2012).

Continuous bleeding was the most widely identified side effect, as all 11 female participants mentioned that they had heard rumours of women who had suffered bleeding resulting from the use of FP – with implants and injectables specifically mentioned as the methods leading to bleeding. This is represented in the comment by Participant 19, a 40-year-old Christian woman with primary school education and a farmer in Gure, quite slender, who clearly stated the fear of bleeding, which she believes causes weight loss, leading to subsequent health challenges has served as a barrier to her non-use of FP and reason for discouraging others:

"....it is the issues associated with it. Like none stop bleeding, some get slim and start visiting the hospital every day afterwards."

Another participant (13), a 63-year-old mother of five children (four girls and one boy) with two of her older daughters married. A retired primary school teacher with a Nigerian Certificate in Education (NCE), living in Tudun-Jukun Zaria, squeezing her eyebrows closely together and keeping a straight face, described weight-loss resulting from the use of FP as an unpleasant side effect which in her

opinion, makes the flesh of the body shrink and dry, thus deteriorating a woman's physical beauty:

"hmmmm... you know, the excessive bleeding as a result of the use of the injection or implant dries up the flesh of women, making them look older than their age and very unattractive."

Another married woman, Participant 11 and an Islamic teacher living in Zaria Tudun-Jukun also stated the fear of bleeding caused by implants as a barrier to FP use amongst women living in the area:

"... many will not adopt any method because of the process and other people's experiences, especially that of ashana (Implant) that causes bleeding."

Talking about the process of inserting the implant, she narrated:

"You know they need to tear or cut the skin to get the implant placed."

Worthy of note is that this is not the process of fixing the Implanon, pointing to the possession of wrong information about the process of getting an implant by some men and women within the community.

Only one male, participant 3, a 27-year-old single Muslim man educated to secondary school level and living in Bomo Zaria, identified bleeding as a side effect of implant based on rumour:

"Honestly, one of my friends who is married told me that family planning (implant) causes bleeding."

The issue of bleeding and its effect on the health and beauty of women was analysed to be more of a woman's concern, with older women/mothers

(Participants 13 & 19) evidently worried about the long-term effect of these methods on younger women/children.

Infertility

The salient belief that the use of modern contraceptives causes infertility and the fear of the devastating social consequence of infertility awaiting women who choose to use FP (before marriage or bearing children) was found to act as a deterrent to the uptake of FP. This fear was common among the unmarried women, prospective mothers-in-laws, and grandmothers in the study.

Infertility was another important side effect which was highlighted to serve as a disincentive to the use and potential use of FP. This notion was found to be popular among the singles (four out of six), older females aged 55-63 (participants 13 & 18) and male participants (3) from ages 35-58.

Participant 21, a single 20-year-old woman with a secondary school education and a Christian living in Gure Lere LGA, gives a detailed narrative explaining the fear connoting the belief that FP could lead to subsequent infertility:

"If a single lady uses FP before ever giving birth and before marriage, then she marries and cannot give birth ... it is most likely the FP. Because FP is like closing the womb."

According to the participant, infertility, as a side effect of FP, is one of the major aspects of FP discussed amongst singles within the community. However, they (singles) are unable to verify this side effect as not much information is made available to them considering their marital status (Kamruzzaman and Hakim 2015):

"We speak about FP amongst our friends. We talk about side effects a lot. Inability to conceive... I don't know much about it, but there is not much information countering it either. No one comes to tell us anything oh as singles."

Participant 7, a 45-year-old married male and a father of seven (7) with primary education running a successful small business in Tudun-Jukun Zaria, stated the emotional concern that could emanate from infertility as a result of FP:

"Toh (an expression of helplessness) we hear stories on FP closing the womb completely, so when the woman wants to have children, she is unable to... that's what we truly do not like... me I want 20 children, if this happens, I will not be happy."

To support the above, participant 15, a 55-year-old father of seven (7) with primary education and a farmer, emphasised what they saw as the social and psychological consequences infertility (Rouchou 2013) can have on a man's ego, *"Anything that causes infertility is not welcomed. I do not want an infertile wife, neither do I want to give out an infertile daughter or, be referred to as the father of the infertile girl. I definitely would not appreciate being given an infertile daughter-in-law. I want a large family, both extended and nuclear."*

Overall, while side effects such as bleeding were mentioned by women with fear of the health implications of this side effect, men were more concerned with the feared side effect of infertility, which can be said to have a direct negative implication on their interest/ desire for more children and by implication continuation on their lineage as supported by patriarchy (Kabagenyi 2013).

Early menopause was another side effect highlighted by the older participant (13). Participant 13, the 63-year-old mother of five from Tudun-Jukun Zaria, stated that early menopause is a secondary form of infertility:

"We have heard stories linked to the use of FP causing women to stop giving birth before the biological age of menopause."

This was an interesting finding because, coincidentally, the participant (13) had a visitor (referred to as Participant X for this finding) who was later identified as her younger sister. The background contribution of Participant X was found relevant to the objective of the study, and her demographic characteristics fit into the criteria of purposive and snowball sampling for the study. Thus, her report was included). Participant X, aged 60, a mother to 5 children and 6 grandchildren (5 girls and 1 boy), a Christian living in the University staff quarters in Zaria, married to a professor with herself a retired Primary school Teacher with NCE as her highest educational qualification noted early menopause as a form of secondary infertility (Larsen 2005), which is seen as a secondary form of barrenness which could lead to humiliation for the woman (Baloyi 2017):

"If you do not know, I will tell you today, when we were much younger, we heard stories of women who experienced menopause before they turned 40 years of age, and they were not ready to stop giving birth. How do you explain this to anyone, please?"

A 32-year-old mother of six (6) from Gure re-asserts that the use of modern contraceptives causes early menopause, noting that this issue has caused couples to divorce in the community where she lives:

"You'll see a young woman give birth to one child, and after then, she takes a break, and when it's time to have another, it becomes a problem. Some get divorced due to these problems."

The fear of contracting cancer as a long-term effect of FP was also mentioned by participants 5 and 13. With the former living in Bomo and the latter in Tudun-Jukun, all in Zaria. Participant 5, the 23-year-old mother of six with Islamic education, noted:

"they say women who use FP are likely to contract that disease with no cure and no cause found yet. So, you see, anything that stops the natural occurrence in the body [referring to modern contraceptives] can cause that sickness(cancer)."

This is supported by the 63-year-old divorcee with a secondary school education and a retiree, formerly working as a clerk in the high court in Zaria. She casually noted:

"... anyway... some people say women using FP are at higher risk of contracting cancer."

Another side effect highlighted by a female Islamic teacher living in Tudun-Jukun Zaria was the issue of weight gain attributed to the use of contraceptives. In her opinion, this made the woman not beautiful:

"hmmm... someone I know put on so much weight after using a form of contraceptive. Sincerely, she was so good-looking afterwards."

Participant 5, the 23-year-old mother of six, quite slender, while supporting the issue of weight gain as an attribute reducing the beauty of a woman, adding that it placed women at a higher risk of being supplanted by other wives – or having

to accept their husbands' taking "co-wives". Hence connoting weight gain as an attribute adding to a woman's insecurity:

"hmmm mhmmmm [an expression cannot afford to be a victim) You will see some women, after using FP, they become very fat... their husbands will now start considering re-marrying by looking outside."

The definition of body beauty being devalued as a result of weight gain echoed the imagery and language used in one of the pamphlets – entitled "Be Beautiful" – which was sponsored by NURHI (2012), in which the acronym "B" in the word beautiful represents "Be your beautiful self! - Regain your pre-pregnancy figure and energy." The pre-pregnancy figure can be argued to be a slimmer figure, as Svensson and Wetterling (2016) argue that pregnancy is accompanied by fat gain.

While women appeared terrified and uncertain about the outcome of using FP, which made them sound genuinely worried with unanswered questions, men were analysed to use side effects as a reaffirmation of their predisposed negative behaviour towards permitting its adoption. In other words, the dominant concern about side effects was to satisfy men's (socio-economic and status-related) desires for many children (Kriel et al., 2019) while neglecting the health benefits for their wives and children.

4.5.3 Child- Mortality

Despite improvement in child health outcomes, infant and child mortality remain significantly high in sub-Saharan Africa (Adedini 2018; UNICEF 2021). Findings in this study also noted child mortality as an active barrier to the use of FP, especially in Gure LGA, as all four married female participants reported personal experience with at least the death of one child. Intriguing was the report by the participant, a 32-year-old mother of six (formerly seven) living in Gure, who lost her first child

while still an infant due to ill health. According to the participant, she would avoid FP and use any given opportunity to advise others not to use it. This predisposition was analysed to be the consequence of her experience with unpredictable child mortality. Justifying her stance, she narrated:

".... My lineage is small..... my mother had 10 children, they died while still young, one after the other myself and my sister are the only survivors..... they were all sick at one point or the other, just give birth... we do not and cannot control who survives."

The uncertainty of child survival was also reflected in a quote by Participant 18, a mother of 5 also living in Gure, who has lost 2 children due to ill health:

"..... I currently have five children, two died, they were sick. "

Participant 5, the 23-year-old mother of six and a Muslim, married at age 13 and living in Bomo-Zaria, also reported she has experienced child mortality resulting from ill health. Although she had six children and reported being happy with them, her quote, as shown below, suggested the fear of child mortality as a motivation to have more children and avoid the use of FP:

"I have 6 children just now....one of my children died at the age of 1.5.... and if it remains like this, I'm okay except if God's will is for me to have more. But sometimes the fact that we do not have control over which child survives gets a little.... but I believe in God's will."

In contrast to the women, however, only one unmarried 21-year-old Christian from Gure identified the risks of child mortality as a possible barrier to FP:

"... Although God controls everything.... the fear of death claiming the lives of children makes people feel it is better you have them plenty, and family planning is believed to stop childbirth."

According to one of the mothers living in Gure, the use of contraceptives has also been rumoured to be associated with infant mortality, further discouraging its use as shown in her explanation:

"If truly this is it, it's not good.... then people should not adopt it. We hear that it can spoil the child because one will adopt it (FP), and the next child you will bear would die because the contraceptives build some substances that are not good for the child's survival. Or it spoils the child after birth, so they still die."

It was interesting to find that another female participant (6), an 18-year-old Junior secondary school student living in Bomo-Zaria, reaffirmed hearing the rumour on FP contributing to maternal mortality:

"We have heard that some children die at birth if the mother involves in family planning."

4.5.4 Religious Factors

Religion was highlighted as a practice acting as a potential hindrance to the adoption of FP amongst married men and women in both Gure and Zaria. Although participants initially seemed to report religion as the major barrier to their uptake of FP, analysis revealed otherwise, instead suggesting that personal conviction came first before religion. This was evident in the report by Participant 2, a 35-year-old Muslim, married with six children, with Islamic education as his highest form of education, living in Bomo Zaria:

".....religion says we should have children. Although the Quran says women should be allowed to rest, it allows you to have as many children as you want if you can provide them with the necessities of life [Food, shelter, good healthcare] ... But if you cannot take care of them, do not give birth."

Although the above participant reported his belief that religion did not encourage FP and described himself as a Muslim to the letter, he stressed that decisions about whether to use FP should be guided by individuals' economic positions – though he also maintained a conviction that God provides these needs regardless: *"But the Quran says that no one is given birth to without the provision of food for him by God. And it depends on the people. So, religion does not stop people. It's based on individual belief."*

However, participant 8 identified a clear tension between religious pressures to procreate in order to increase the Christian/Muslim populations and the popularity of FP as a tool for enabling families to avoid economic hardship. This 43-year-old teacher, with an MSc in Public Admin and a BSc in Islamic education, identified himself as a knowledgeable, modern individual who took time to understand religion and westernisation. He described the tension between religion and economic hardship this way:

"My religion accepts family planning to some extent, like for health issues. We believe it is God that provides food."

This participant's argument was reflective of that of the 70-year-old imam in Tudun-Jukun (participant 9), who had stated that using FP to avoid economic hardship was trying to take the place of God.

This unclear position, pointing to religion as a barrier to FP yet analysis revealing otherwise, was again evident in the quote by Participant 7, a 45-year-old married

man with primary education who stated what he believed to be an unclear religious (Islam) stance in terms of economic wellbeing and the permission to use FP:

"In Islam, honestly, I think there is family planning - but I cannot say how clearly this is defined, so I will just say it's there, it may not be there. It advises and talk on how to get a family within your means that one can cater for."

Hirsch (2008) shows that women actively work to adhere to religious teachings to avail themselves of moral and institutional power. Three out of the eight married female participants stated clearly that they were determined not to adopt FP on the basis of religion. Participant 19, the 40-year-old mother of seven and a Christian living in Gure, noted:

"They do talk about FP in church. They say we should give birth - no one should say he wouldn't. It is God that caters for our needs so we should until God says it's okay. To me, if they say one should stop giving birth, it's not good. God doesn't like that. If anyone tells me my daughter is doing FP, I will punish or reprimand her."

Participant 10, the 35-year-old married female participant living in Tudun-Jukun and a Muslim, said she would not adopt FP for any reason because religion does not support this practice and seeks to be a faithful steward by obeying the command to procreate and add to the Islamic population:

"Well, the prophet of God said we should give birth to show that this religion is more than others. So, religion does not support family planning, and I will not practice it."

The act of individuals feeling a need to increase the population of a specific religion (Christianity or Islam) was also evident in the report by Participant 20, the 32-year-old primary school drop-out, married female, a Christian and catholic by denomination:

"Honestly, if it's the church, they don't gather women. In fact, the church is in support of reproduction. They frown at us, that people come to deceive us to do family planning and all the Hausas (Muslims are majorly Hausas) will outnumber us."

For other participants, practising FP was viewed as disobedience to God in marriage. Participant 11, the 37-year-old NCE holder, stated that, although she used FP, she had sometimes felt guilty that in doing so, she was disobeying God – by prioritising her concerns about economic hardship:

"Toh (an expression showing helplessness) ... some people say FP is an act of disobedience to God. But when one cannot provide adequately for the children they bear, what should they do? God will help us all because it is confusing."

Among the singles, regardless of religion, it was observed that their understanding of the relationship between religion and FP was negative. That is, religious teaching is against the use of FP. Participant 21, a 20-year-old single female living in Gure, notes this:

"...but biblically, if we will follow FP, we won't practice it. The word of God says be fruitful and multiply."

This is supported by Participant 6, a single 18-year-old Muslim woman living in Bomo-Zaria, who said:

"Religion does not talk on family planning ... religion forbids family planning."

From her statement, some form of deception can be interpreted, where a discussion of this topic is deliberately avoided with singles. The 70-year-old Mallam states this (selective exposure/interpretation).

However, Participant 6, the 18-year-old female and Muslim in Bomo, stated what seemed like a religious divide amongst the Islamic clerics, as she noted that some Mallams do not support FP in any way. In contrast, others do, but for her, she would use it:

"Mallams, some like it, some say it's not allowed; we are confused, but for me, I will do what is best for me."

Participant 5, a 23-year-old married woman living in Bomo and a Muslim, also agrees that there is a divide on the issue of FP in Islam:

"... To be honest, the issue is not straightforward; some Mallams say yes to it, others say no.... but overall, I think it's a no because too can use other methods that are not artificial."

Her husband, participant 2, disagreed with her that there is no confusion, rather believed that the Mallams who agree to the use of FP may just not be conversant with the religious ways of practising FP:

"...it is not confusion per se. They just may not know that they can say some prayers or soak sheets from the Quran and drink."

Important to note is that this point was earlier stated by the Islamic clerics, who agree that there is a religious divide on the issue of FP. From the analysis, it was noted that there is also no consensus amongst the people on the take of religion on the use of modern contraceptives.

4.5.5 Perceive FP as undermining the "goal" of marriage

At least one out of the three married men – one or more from each of the villages – argued that children were one of the major purposes of marriage (Izugbara and

Alex 2010). Therefore, any practice perceived to place a limit, reduce or stop births is frowned upon, as vocalised by the 58-year-old farmer from Gure:

“What is the purpose of marriage? It is to give birth.”

In Zaria, two other participants re-asserted that having children was vital in marriage. Since FP is perceived to stop births, then they will not encourage it.

Participant 7, a 45-year-old small-scale business owner and a Muslim from Tudun-Jukun, stated:

“Even religion says we should marry, have children and fill the earth. If a woman and man’s health are intact, why will they not want children? Why did they get married then?”

For one of the female participants, FP was a form of abortion, which she likened to gruesome murder forbidden by her religion. Participant X, a 60-year-old Catholic living in Zaria with an NCE certificate and a retired primary school teacher:

“In church, we are told not to murder, now all the morning after pills and the others, what they do is abort a possibly fertilised egg or killing the sperm that maybe would have fertilised an ova”.

4.5.6 Promiscuity

Promiscuity was a popular barrier preventing men from permitting women’s use of FP in Gure, in the Christian-dominated area of the study. This barrier was reported by both male and female participants. The restriction placed on wives’ use of FP by husbands is often related to their concern that a woman could decide to become “loose” – a term used to denote promiscuity or having multiple sexual partners. According to the participants, the awareness that any evidence of “her” promiscuity in the form of pregnancy is eluded through the use of FP encourages such behaviour, and women were pointed as the more likely partners to engage

in this act (Maharaj 2001; Whitters et al. 2015). This was voiced by Participant 16, the 35-year-old married farmer from Gure:

"Adultery!... That is the problem; sometimes, if women do this family planning, they go out and sleep with other men because they're certain they will not get pregnant, and that's why men don't allow their women."

However, he highlighted his belief that better trust in marriage could mitigate this barrier:

"But if they have self-control, nothing will happen because they know themselves."

Concerns about promiscuity were reinforced by Participant 17, a 21-year-old single man from Gure who is currently a student at the Federal College of Education (FCE). He described the definition of FP by the community as an act synonymous with cheating in marriage:

"...it is the motive behind it that should be checked with the women. For example, in this town, the rumour you hear is that women using any form of FP are most likely to cheat, and the husbands cannot prove it."

Reinforcing the belief on the ulterior motive behind women's use of FP contributing to men's negative attitude toward women's use of FP was Participant 19, the 40-year-old mother of seven from Gure:

"Like I said, some do it (FP) because they don't want to have children immediately. Some go out to sleep with other men. That's because they won't get pregnant."

Some women echoed concerns about female promiscuity. Among these was participant 18, the 51-year-old mother of five, who said:

"Men do not allow their wives because some of them start going out, they claim."

Participant 20, the 32-year-old married female and mother of six, was of the opinion that the rate of promiscuity is high and, therefore, men permitting women to practice FP means promoting promiscuity:

"Isn't that madness? That means he's encouraging her to sleep around. Because if she's given that injection, that means she's also permitted to go around sleeping with other men."

However, while still pointing at promiscuity as a factor promoting men's negative behaviour towards FP, Participant 22 was the 25-year-old blind man from Gure. He argued that, while promiscuity was a genuine concern, women also used FP to delay pregnancy after marriage – in defiance of cultural and religious norms (Baloyi 2017):

"Like I said, some do because they don't want to have children immediately after marriage, while some go out to sleep with other men."

Providing a possible explanation and justification for the allegation of women attempting to delay their first pregnancy after marriage was Participant 13, the 63-year-old divorced mother of 5. The participant, while showing support for this, stated that the avoidance of pregnancy by young women in the early months or years of marriage could be seen as a strategy adopted to prevent women from being victims of divorce (having children before they are divorced as this is believed to make moving on difficult) or having to endure abuse in marriage for fear of raising their children as single mothers:

"With the high rate of divorce, young girls now use FP. I asked why, and they said, if the marriage is good, we take it off (Implant), and if otherwise, we move on. We cannot suffer and do not want anything holding us back."

The use of FP by some women as an insurance policy against single parenthood seems to confound the African view of infertility explored by some African scholars (e.g. Kinothi, 2000:102; Kimathi, 1994:24), who see motherhood itself as a stronger guarantee of safeguarding the woman against divorce or abandonment. As Mbiti (1991:41) has stated: 'If there is not yet a child in marriage, there is no guarantee that the marriage will endure.'

Overall, promiscuity was shown to be a barrier to gaining men's consent for their wives to use a form of FP in Gure Lere LGA.

4.5.7 Procreation needed to protect community security

Another point made by people from Gure was that having children was a social obligation to their local tribe(s) in light of recent attacks by herdsmen in northern Nigeria that might otherwise threaten the community/ies with extinction (a concern echoing the findings of Pikawi, 2015 and others). Participant 14, aged 58, used a rhetorical question to make this point:

"Do you not hear of attacks on small villages and ethnic groups every day....? We have to be prepared; giving birth is one of the ways."

His view was echoed by participant 15, aged 55, who said:

"We need population to secure our land and tribe."

War was another point raised by Participant 18, the 51-year-old female in Gure, a Christian. According to the participants in the international bodies sponsoring FP in Nigeria, it made the country more populated. Thus expressing some form of Neo-colonialism and her distrust for the intentions of the NGOs:

"...our population is suffering a decline. The whites are more than us, oh. Like in Nigeria now, any day the world will declare war, we are finished."

5.4.8 Cost

Although financial cost was not specifically mentioned as a barrier, analysis revealed that, in practice, the cost of FP services did act as a barrier to uptake. According to the frontline providers, FP services were provided free of charge. A number of respondents from the target audience also stated that FP services were free. However, further follow-up questions revealed that, although participants saw the costs as inconsequential (at around N500 – the equivalent of \$1US), one woman from Bomo noted that services were not actually entirely free.

The intriguing part of this analysis is that Participant 1, an FP participant in Bomo, noted that there is some form of misinformation on the cost of FP services, as radio advertisements and FP mobilisers claim that FP services are free in their announcements:

"And the cost they advertised on radio and say it's free, but people pay for test, injection, etc. So another issue is finance as well."

Important to note was that, initially, when this participant was asked if FP services were free, he had this to say:

"Yes! It's given free. They only pay #500 for the injection."

Although he acknowledged having to pay for a woman under his constituency on a certain occasion, as her husband was finally willing to let his wife practice FP, he was unwilling to make any financial commitment. However, he was of the opinion that because FP is for the benefit of the people, paying the aforementioned cost was inconsequential.

However, Participant 7, the 43-year-old small business owner in Tudun-Jukun Zaria, who stated he would permit his wife to practice FP only if religion permits the practice, argued that free FP services could encourage adoption:

"If it can be ascertained that FP is permitted by religion, our pleasure. But our concern will now be improved awareness, to enable people to look for it and... if it's free, it makes it easier for those who want to use it."

4.5.8 Inconsistency and Negligence on the part of providers

Inconsistency and possible negligence were an emerging sub-theme from the analysis. One participant reported an experience of a third party who was currently suffering from partial paralysis of the arm due to the expiration of an Implanon, as the patient did not understand clearly the instruction concerning the removal of the implant, and there was no follow-up (Schwandt et al., 2017):

Although reported by one participant (11), a 35-year-old woman and Islamic teacher living in Tudun-Jukun Zaria, the experience was important to understanding possible deterrents to uptake:

"I know a woman who had an Implanon on one of her arms that was about four years ago, and right now, that arm is partially paralysed as it's weak, and she is unable to carry out house chores with that arm."

Although the participant did not seem to know much about the reason for the paralysis, neither did she realise that the implants have a date of expiration. She concluded after follow-up questions with the researcher by subtly inferring that the providers are more eager to have an individual use FP and afterwards there is no follow-up care because they do not care about individuals' wellbeing:

"... Before you start using any method, they will be disturbing you during antenatal and post-natal.... Just adopt it. They will not ask how you are feeling because they know what they have done."

Deception, Neo-colonialism

For the 58-year-old participant 14, a Christian attending the ECWA church in Gure, who had responded to the question on suggestions to improve FP services within the community with remarks suggesting he strongly disapproved of FP in almost all cases, "health issues" were the only reason it should be considered. "If not, it is cheating and deception", he said dismissively. Moreover, while accepting that health could be a legitimate reason for considering FP, he added that "some women" could also suffer negative health consequences, including "diseases", because of their decision to adopt it.

Similar views were held by 40-year-old participant 19, a member of the Evangelical Church Winning All (ECWA) denomination, who, despite opposing FP on religious grounds, agreed that it could sometimes be permitted due to issues emanating from pregnancy and childbirth:

"To me, if they say one should stop giving birth, it's not good. God doesn't like that. But when it comes to health issue like there is a problem after childbirth, I then become compulsory because of health."

4.6 Major information sources and preferred communication channels.

Family and friends, hospitals, schools, and radio were referred to as the major information sources on FP. For preferred FP information communication channels, word of mouth was identified by all participants. However, while some suggested a gender-based forum (men and women sensitised separately), others were of the opinion that a mixed-gendered approach (targeting both men and women with

the same channels and messages) was likely to produce a more positive outcome in terms of increasing adoption. Favoured advice-givers for such information included health experts, teachers, and family.

Overall, the analysis revealed that the significance attached to an information source, as well as the motivations of information receivers, determined the overall effectiveness of the advice given/received (positive or negative). In addition, the nature and perceived usefulness of FP first encountered by an individual appeared to influence their current and ongoing receptiveness towards FP heavily.

Socio-demographic characteristics were also found to influence the information source and preferences for communication channels among the participants (Ismagilova et al. 2020).

4.6.1 Family and Friends

Family and friends were identified as the most favoured sources of FP information by married participants – both male and female as they were perceived to be trusted. This is commented on by a 37-year-old mother living in Tudun-Jukun:

"My neighbours were my first information source on FP. They are kind people. I trust them."

According to this participant, health information within the community is majorly provided by health facilitators through public announcements or house-house visits (word of mouth). This information is then passed on from one person to another within the community through information sharing (Ezeah et al. 2020; Meyer 2009). This finding corroborates the frontline providers' stated strategy of FP awareness creation through the use of house-to-house visits, and a comment

by the participant also shows frontline health providers are themselves trusted information sources within the community,

"...You know, most health issues we hear them like announcements, E.g., announcement on polio by the health workers who roam or walk around the communities... informing people on immunisation in towns, they use loudspeakers, and sometimes I go to the hospital to verify and get in-depth information sometimes from their announcements."

Another married woman living in Bomo-Zaria with Islamic education attributed her FP awareness to casual discussions with peers – noting that it was often framed in these deliberations as an anti-religious practice, they would invariably conclude that it should not be practised and accessed:

"...we do talk about it (FP) once in a while amongst our family and friends....and we all agree we still prefer the will of God."

In addition, the nature of FP messages (positive or negative) individuals come in contact with was shown to affect their attitude towards FP, where positive contact was likely to bring about a positive attitude and vice-versa. Another female participant (10) aged 35, living in Tudun-Jukun her first source of FP information was on side effects, which she came across during the wedding of a family member and her current attitude towards FP was analysed as negative:

"... ah, I think the first time I heard of FP... it's either I just got married or close to the time I was getting married at my cousin's wedding. They were discussing how the use of FP had made someone we know very sick."

According to male participants, however, FP was not often discussed by men. Participant 7, the 45-year-old Muslim small business owner, from Tudun-Jukun, said: *"Honestly, I and my friends don't talk about FP."*

Participant 9, a 36-year-old single man in Tudun-Jukun who is also a small-scale business owner, agreed, adding:

"No, we don't talk about family planning. It is not our usual topic. I just got home from my shop. I am very busy."

These findings appear to echo those of Jain et al. (2020), who have identified evidence that individuals who spoke out in support of or used FP in certain communities were often stigmatised. It was, therefore, intriguing to find that one of the married men (participant 8), who had an MSc in public administration, claimed to believe in the benefits of FP and encouraged its adoption – though he qualified that he has spoken publicly about FP only on academic grounds and outside the community where he lived. This act points towards some form of communication avoidance on FP among people he was familiar with:

"Yes, I do tell people about family planning for about 15 years now. I've even presented a paper on it at Samarun-kadara and they accepted it. But I've not done it here (where he lives)."

The fear of stigma among individuals showing public support for FP in their discussions with FAF was also echoed by some female participants (both married and single). Participant 11, a married NCE certificate holder and mother of five, admitted being afraid of being stereotyped for encouraging deviance or a deviant herself (Disobedient to God):

"Some will let you know it is God who brings conception and pregnancy and as human beings, you do not have the capacity to stop or alter God's plan... feels like a way of telling you they do not want the conversation or dismissing it like you have chosen your path. So... I avoid it, oh... because some people get genuinely offended when you bring up the topic. They perceive it as unsolicited advice. I don't want to be seen as nosy."

Similarly, another single woman, a 24-year-old FCE student, noted that while FAF was her major source of FP information, whenever she played the role of information source on FP, demographic characteristics (Single, Christian, educated) influenced her decision. Therefore, determining whether she would vocalise her support for FP among FAF is to prevent any cue divulging her interest in future FP adoption:

"I think my knowledge on FP was from friends, maybe because mom never spoke about it.... But I avoid speaking about it with anyone except my peers... mostly they are Christians and my age mates.... So that when you marry, you don't put yourself on the suspicion radar for those using or likely to use FP."

She, therefore, noted that publicly speaking about a woman's interest in the use of FP before marriage could also prevent her from getting married as she can be stereotyped as promiscuous:

"... people's mouth is not shut... and in this village, they say it's prostitutes and women sleeping around who use FP. My talking about it can be interpreted for promiscuity, and no one will want to marry me."

Participant 6, an 18-year-old secondary school student, agreed that discussing FP publicly could sometimes be viewed or treated as shaming.

However, some women identified subtle and resourceful ways in which they had been able to introduce discussion of FP into conversations. Participant 11, the NCE holder, highlighted the following example:

".....but if I coincidentally stumble on someone complaining about childcare or something when the opportunity presents itself, then I just chip the question.... But why will you not adopt FP, and then you instigate a conversation, and most times for me.... I realise they are willing to discuss."

A male participant points to the potential of speaking to men with many children as a strategy for promoting adoption:

"... neither have I told anyone with many children (children one is unable to cater for) anything ... but if I get the chance (meaning all the details)." I will tell them about FP."

Participant 23, a primary school dropout living in Gure, confirms that people keep their use of FP a secret to avoid being stigmatised and stereotyped as promiscuous. Important to note is that the participant did not admit to using FP earlier in the course of the interview:

"...Yes, I use FP. Well, I told my husband so he is aware of it, and we agreed not to let anyone else know about it so that no one will know and gossip about me. Because if they know, some might approach you and say kail! Is this how you are?"

4.6.2 Hospitals

Although only three out of the 25 participants in the study attributed their knowledge of FP to the hospital, all respondents were certain that information on

FP could be accessed from the hospitals, including a 54-year-old man living in Gure who would not give any information on possible ways to promote FP, as his fixed response to strategic questions on improving FP awareness was, *"Men and women should be left alone."* This finding was an indication that people are aware of where to seek FP information.

All other participants were certain that information on FP could be accessed from the hospitals, and the female participants who were interested or showed potential interest noted that timely information from frontline providers regarded as trusted sources could improve adoption:

"...I had issues during childbirth, so when me and my husband went to the hospital, the doctor told us about it. You will get every information you need at the hospital."

This was echoed by another female Christian participant (23) living in Gure, who reflected that information given by health providers during ante-natal visits often translated into the adoption of FP by new mothers:

"Yes, I have. It was at the hospital. I went to get family planning for rest. They used to talk to people about it during ante-natal and post-natal; that's how I heard."

Reflecting on the likelihood of their using FP in the future, both single men and women echoed this confidence that hospitals were useful and trustworthy sources of information. Participant 6, the 18-year-old single Muslim woman living in Bomo-Zaria, reflected:

“When and if I need FP, I will go to the hospital I trust the nurses and doctors: they will know what they are doing.”

Similarly, another unmarried woman re-affirmed her trust in medical practitioners, “They are experts in their field; we see how they carry tests.”

An interesting revelation was made by Participant 24, a 22-year-old single woman from Gure, currently studying FCE. While regarding hospitals as reliable FP information sources, she said health providers carry out a situational analysis before services are rendered to singles in the area as it was unpopular for singles to confidently access these services alone, while noting that parents bring single children to utilise FP services:

“.....It is funny... but if I need FP today as a single lady, I will reluctantly go to the hospital, although they will listen to you... they will only provide you a service if they find your reason good enough.... They help. Parents take their children in clandestine to prevent unwanted pregnancy.”

The case of situational analysis of patients seeking FP information and services resurfaced in a quote by Participant 11, a 37-year-old woman who extolled the benefits of FP. The participant noted that health providers try to find out an individual’s number of children before administering a form of FP to married women:

“When I got married - yes, and I went to the hospital - they asked what I came to do, asked for the number of children, in XYZ hospital.”

This finding contradicts the earlier statement by one of the frontline providers (Participant 26), who stated that service users are treated professionally, devoid of personal biases from service providers.

The participant further stated that the blood is tested for compatibility with a method, corroborating one of the provider's accounts. However, there was a discrepancy in the result of this test. While the providers stated that only methods compatible with an individual's blood are being administered, the quote from Participant 11 shows that the availability of products determines the product administered and sometimes influences frontline providers' biases (Akamike et al. 2020).

"Your blood is tested for compatibility of product, but for government hospital. They just give you what is available."

4.6.3 School

For the singles in the study within the 18-36 age range, including one currently in secondary school and the remaining eight (8) secondary school education graduates. Their major source of information on FP was shown to be their school and, in particular, a class entitled "Civic Education." This was affirmed by Participant 21, a single 20-year-old woman from Gure who graduated from secondary school about two years ago. She added that population control was one of the major benefits of FP emphasised in schools.

This appeared to reinforce the suggestion of some participants critical of FP policy that it is often used to exercise state/societal control of families' reproductive decisions and, by extension, women's bodies – even if this control is at least partly

motivated by benevolent concerns about public health. As the participant put it, *"We hear that FP is good... in school, it's said to avoid more population."*

Although the quotes from the single participants repeatedly identified schools as a (or the) main source of knowledge on FP, there were some suggestions of weaknesses in the information communication process – particularly through the one-way, pedagogical approach applied, which research shows tends to play a passive role in constructing knowledge adopted (Singh 2021). Participants repeatedly recalled that their teachers informed them about general FP information (a popular observation was that "we hear; they say"). This is evident in the quote by 18-year-old Participant 6, a secondary school student living in Bomo. Identifying the school as her major source of detailed FP information and confirming this had influenced her FP information behaviour (Robson and Robinson 2013), she said:

"But we hear of it in school. They tell us how birthing many children can become a financial burden."

Another Bomo-Zaria resident, participant 3, a 27-year-old male, added:

"Honestly, only in school, we hear of family planning. No one gives general awareness on family planning here, not even our parents si, but in school, we have those who give guidance and counselling nowadays."

4.6.4 Radio

Though radio was identified as another source of FP information, particularly among men living in the rural areas of Zaria and Gure (Momodu 2002), levels of attention paid to it appeared to be largely passive. When asked, participants indicated that this was largely because journalists were felt to lack credibility when compared to other, more significant, influencers, such as religious leaders.

Participant 2, the 35-year-old Muslim man from Bomo, claimed that any messages that contradicted Islamic teaching were of little interest or credibility and thus, listening to such messages was perceived to be a waste of time:

"I have heard about FP on radio, but I truly was not interested as what I have been told about it in my religion is sufficient... I don't pay attention."

To clarify this statement, the participant was asked his reason for avoiding FP information on the radio. His response centred around his interpretation that messages on radio encouraged FP, and the presenters' biases in favour of FP were evident in their presentation strategy. Thus, his behavioural response was to avoid messages he feared would confuse or conflict with his religious teachings (principally radio ones), partly in order to prevent himself from facing dilemmas over whether to adopt FP (Higgins et al., 2007; Kreuter and Ricardo 2003):

"It is mostly in form of advice; we do not feel forced in any way by the radio programmes," he explained. *"But note the presenters sometimes put their own personal conviction and try to sway or cajole the crowd to believe what they believe in... exactly why I won't waste my time listening."*

On the whole, avoidance of radio messages did seem to be specific to men more than women. According to one female participant, radio was an ineffective tool to promote FP as some men found it convenient to avoid the information (they have control of their radio):

"... men have negative attitude towards family planning. They even switch off their radio or TV when they hear any information on family planning."

To verify this allegation concerning the low or limited interest of men in receiving FP information on the radio was Participant 15, a 55-year-old married father of seven and subsistent farmer with secondary school-level education. He not only

expressed his agitation with radio programmes promoting practices he judged unacceptable but expressed his belief in self-efficacy to manage many children:

"I do hear of family planning, but I just don't like it..... people need more children; radio is taking FP. If I hear it on radio, I even change the station."

Reflecting the limited exposure to radio indicated by these testimonies, a number of married women mentioned that they were not radio listeners, as they did not own radio sets. While some were able to pick up FP-related programmes when their husbands were at home, this further emphasised their dependency on their husbands to inform them of radio messages. As Participant 5, a 23-year-old mother living in Bomo and a wife to Participant 2, put it:

"I've not heard of family planning on radio because I don't listen to it per se... Sometimes, I hear some information when my husband is listening to his radio or tells me the information, but not on FP."

An interesting finding was the profiling of the radio presenters as outsiders (Chatman 1995)- a perception that adversely affected the perceived credibility of information disseminated through radio and emphasised the principle of homophily (Rogers 2003). Participant 20, a 32-year-old mother and primary school drop-out, said she had heard FP information on the radio but had disregarded it because the presenter was perceived as an outsider (Chatman 1995) from the Hausa tribe (majority of the Hausa speakers are Muslims);

"We had it before it got spoilt. It was then when we used to have one, I hear them discuss about family planning, especially these Hausa tribes."

The lack of respect for messages broadcast by journalists from the Hausa tribe was also highlighted by Participant 22, a male (blind) with a secondary school education and a Christian living in Gure:

"Yes, they discuss family planning on a program through the radio... this Hausa People (In a condescending manner)."

An interesting and consistent finding across all the participants who had listened to FP messages on the radio was their inability to attach a title to a program or provide a specific broadcast time in which such a program was aired. This is represented in a quote by Participant 17, a Christian living in Gure and a student of FCE.

"They talk on how to enjoy a quality family life. It is done on Thursday or Wednesday by 8:00 or 7:00pm, I think, on Unity FM."

She was not the only respondent to raise the issues of media misinformation about the supposed free availability of FP – with at least one information provider also acknowledging that this was a problem. Participant 1, an FP facilitator in Bomo, also noted how radio advertisements and FP mobilisers claimed that FP services are free in their announcements:

"And the cost.....they advertise on radio and say it's free, but people pay just a little for test, injection, etc. So, another issue can be finance as well." Mamnan ABZ pt5

Communication Strategy

Word of Mouth (Most preferred)

Word of mouth has an important impact on consumer behaviour as it is self-serving and drives what people talk about even without their awareness (Berger 2014). Both male and female participants, regardless of their other demographic characteristics, identified word-of-mouth as their preferred source of information.

Participant 7, a 45-year-old married male shop owner educated to primary school level, living in Tudun-Jukun Zaria, said he preferred word-of-mouth as a means of receiving information generally, as it allowed him to multi-task while doing so. According to him, the hectic, time-sensitive nature of his business did not enable him to read written information. He said:

"...let me speak for myself, don't give me written stuff for home. I am in my shop all day... you then give me stuff to read at home where I go to rest... just speak to me when you can see me and I can see you."

For another single male (participant 9), aged 36, with a secondary school education and a small business owner in Tudun-Jukun, his preference for word of mouth was due to the learning opportunity emanating from its interactive nature and face-to-face communication (Berger, 2014): *"It is better to go house to house and not rely on only radio. Although radio is good too. But you know, in life, when you come across people, you learn."*

The people in Gure also believed that word of mouth would be a viable means of communicating FP, as many of the women highlighted that they did not read well enough as they had dropped out early from school. Participant 20, who terminated their formal education at primary level in grade 5 reports this: "I and

my other friends do not read well.... I can almost say I did not go to school as I stopped at primary 5” The challenge of low literacy rates becomes clearer within the context of rural education, where the educational framework suffers due to both insufficient infrastructure and the limited knowledge and qualifications of teachers in these communities (Glewwe and Kremer 2006; MacJessie-Mbewe 2004; Ankrah-Dove 1982).

Language

Language has been identified as a barrier to the quality of information and care provided to patients, leaving health providers with limited resources and information to make important decisions (Kale and Syed 2008). Thus, providers resort to providing solutions that are available but not optimal, as language can serve as a barrier to effective communication. Two male participants were of the opinion that language is likely to determine the audience tuning of FP messages, and this could determine the effect of the message on the target audience (Higgins et al. 2007). The language used to communicate certain information, depending on the disposition of the audience, could be misinterpreted to mean it is designed for specific persons or groups – in turn alienating information-seekers or target audience members from different communities. Moreover, the imprecise nature of translations into tongues familiar to information-seekers can lead to the meaning of messages being distorted. Participant 22, a Christian with secondary education living in Gure, noted:

"...we hear these messages on radio, but they are in Hausa.... Can they not use our own language and our people too on these radio stations to talk about FP... that way, we know it is us talking to us?"

Participant 7, a small-scale business owner in Tudun-Jukun, aged 45, argued that FP pamphlets and articles needed to be written in or translated into languages understood by target audience members. As well as making them understandable to them, he argued that this would make it more likely they would engage with and act on the information the messages contained:

"Write information in our language, with information describing our experiences, Ehen ..then it becomes easier to understand, and you understand better.... if they write it in another tribe when those who read it are conveying the information ... meaning can be lost or distorted."

Both male and female

Participant 8, the 43-year-old father of eight with an MSc degree, was of the opinion that men and women should be sensitized together about FP at the hospitals, as FP was beneficial to both parties:

"People should go to hospital and men and women should be told together because they give birth together."

Also adding that singles should be sensitised early to maximise the potential of early learning contributing to their cultural and social identity development:

"Unmarried people should be told as well as they are the next generation in line for marriage."

Participant 7, a 45-year-old male with primary education and a Muslim, believed the earlier the learning process, the better. He noted that making them unlearn any information behaviour would be more difficult when they grow older:

“Children before they are faced with challenges of life, they should have known about it. It helps how they adapt when it comes and the type of solutions they prefer. This approach or early learning is good for children. So yes, children from 16 should be taught about FP. If you give them when their mindset has been developed, it’s hard to unlearn.”

Participant 9, a 36-year-old single man in Tudun-jukun Zaria and a Muslim who may not have accessed FP information before for cultural reasons, states his belief that knowledge of FP through awareness was important for singles, to prepare them for its use in the future:

“I’ve not sought information about family planning because I’m not yet married. But it is good to educate singles on family planning because it is the knowledge they need to have and it’s good to know and get ready when the time comes.”

For some of the married women, however, it was almost a taboo to teach singles about FP – because of the danger that this knowledge would be “abused” by people keen to use the protection it brought to behave promiscuously without fear of pregnancy. This is noted by Participant X, the 60-year-old married female, a Christian and retired teacher, married to a professor:

“It is not good for singles to be taught on family planning: most of them would abuse it.”

Participants X and 10 recalled how they had argued about whether FP should be taught to singles. In the end, however, they had both agreed that, as parents, they would give consent for this type of teaching – provided an emphasis accompanied the teaching on promoting chastity prior to marriage and only using FP at the appropriate time:

"We will say they can be taught.... But our culture does not permit pre-marital sex. This should be emphasised, so we are sure that our children and grandchildren are not educated to get loose (promiscuous)."

It was interesting, however, to find that concerns about FP being abused outside of wedlock were also shared by some single people. A Christian woman from Gure and a student of FCE said:

"...if it is possible, adults should be enlightened and not singles who are likely to abuse it."

However, such concerns were not universally held. One 63-year-old participant (13), living in Tudun-Jukun, who is a sister to participant x, was optimistic that FP advice could positively influence the sexual behaviour of single people:

"It is good so that when they are married, they would know better."

Conversely, participant 10, an Islamic teacher in Tudun-jukun and a married female believed FP should not be taught to singles, as there might be a risk that preventing pregnancy now could lead to future infertility:

"In my opinion, singles shouldn't be taught. With men, there can be issues, and no one will bother; it is always the woman. So, if the woman marries 1-3 years

with no child, she will be labelled barren, and people say it stops birth... but I can't say it stops it either."

4.7 Source Credibility/Authenticity

As well as identifying participants' favoured sources of FP information, it was important to determine the characteristics judged to make some information sources more credible than others in the target audience. The characteristics of consistency, verifiability, authority, and expertise were found to be the major qualities that made participants trust health information sources.

4.7.1 Consistency

According to the participants, the credibility attached to an information source and individual is a product of the listeners' perceptions of the position, expertise and authenticity of the speaker – as expressed in terms of verbal and non-verbal cues, actions and inactions, oral-aural-visual (Griffin, 1967). One of the key qualities needed to build this trust, according to participants, was consistency in the way a source interacted with their social environment in terms of talking, listening, interpreting, sending and receiving messages. For Participant 7, a male Muslim living in Tudun-Jukun, regardless of the gender of an individual, his level of trust in any information source was influenced by consistency of good listening skills, interpersonal relationships and evident concern for economic well-being. Referring to the friend (or relative?) whose information he most trusted, he said:

"I trust... (calls a name) because, since I have known her, she has cheated no one and when others cheat her, and she is pleaded with on their behalf, to have mercy

and she does.... She is reliable. She genuinely cares about many people in this community, she is selfless."

For Participant 22, a male participant in Gure with secondary education, his teacher's professional expertise was his criteria for measuring credibility. According to him, his teachers' words were evident in the daily experiences within the community, and he saw this as a form of consistency with real-life experiences. Thus, making believable information from this source:

"I believe and agree with my teacher him... for example when he taught about FP and the hardship people can experience when they birth children, they are unable to cater for... I have seen many people in such situation in this community, and that is what makes me agree and believe him."

I have seen many people... unable to cater for their many children community... this has made me come to believe FP is good."

For participant 24, a single female in Gure, a Christian and a student of FCE, the consistency of any information after being tested through fact-checking across multiple sources determines the level of credibility she attaches to a source:

"...for me, I find it difficult to trust, but I trust an information source completely...after going to multiple places to verify the same information.... if it is the same in, then I know it is true. For example, if I go to hospital A and I am told I have a certain ailment, I will go to other hospitals if it's the same... ehnnnn (agreement)."

For Participant 25, a 28-year-old single male economics graduate from Zaria and a Christian, consistency with a negative attitude also reduces the level of trust people have in a particular source. The participant, therefore, stated FP as a

practice promoting and maintaining imperialism through deception (Chatman 1995) and attached no credibility to information sponsored by the government:

"The government always lies to people to enrich themselves. Our government don't have policies of their own; they just accept anything the whites bring to them. Our government only support family planning because they are answerable to the western government."

Consistency in terms of keeping secrets was a yardstick for defining credibility for Participant 5, aged 23 and a Muslim living in Bomo-Zaria. A good example for her was health information given by medical personnel because they have the ability to keep secrets and are honest in their counselling:

"I trust a person is because of their honesty and ability to keep secrets. And yes, that is why I trust medical personals."

For the two single female participants (6 & 24), one a former Muslim from Zaria, the other a Christian living in Gure, notions of credibility related to Chatman's (1996) concept "of insider", as they noted that trust was built through the common experiences they shared with friends, associates and, especially, family:

"My Mother, we understand her better and see her more often...." (Participant 6)

"My mother, I cherish her... my problems, happiness, joy is hers. I believe my mother" (Participant 24)

4.7.2 Authority

A major marker of trust identified by male participants, especially older married men, was the authority, accuracy and relevance of information for achieving their

goals at particular times (Johnson 1997). As participant 14, the 58-year-old married Christian farmer with secondary school-level education put it:

"For any community-related issue or information..... inform the king, to tell his people, we understand his relevance."

The 43-year-old retired teacher (participant 8) also identified religious and traditional rulers as carriers of authority, trusted by men: *"They should speak to religious leaders because we trust them and traditional rulers."*

The younger single male participant in Gure also stated that men in Gure are more likely to listen to the king first before giving the audience expert advice:

"For instance, if there's something you want the public to know about, you will need to book an appointment with the king. Then afterwards he will be responsible for spreading the information to the public. He fixes the time for the meeting. After the king has spoken to the men, then they can be directed to the clinics for expertise advice." This emphasis on the importance attached by men to information emanating from patriarchal heads, such as tribal chiefs and "kings" – society's 'big men' - was echoed by a number of women in reflecting on their responsiveness to messages from traditional and religious leaders. As the 37-year-old married female participant 11 living in Zaria, explained:

"The king can be used to call on a specific group or gender for a meeting which they most times oblige to. With this, they can be spoken to because they (men) are the hard shell to crack, not the women. Women are easily involved in it because they bear the pains of childbearing and up bringing."

According to the participant, considering the patriarchal nature of the northern culture, the information carries more significance when it is the male folk bringing it to the women and not the other way round:

"It is better to tell the male folk to inform their family because most men have negative attitude towards family planning."

However, not all male respondents themselves agreed that the trust they attached to community leaders related to the fact that they were often male. According to participant 17, a single male FCE student from Gure, men were more likely to listen to local religious leaders because their shared common cultural, social and religious experiences defined things that are important and things that are not (Chatman 1996):

"...the people would listen to religious leaders because religion is closer to the people than the traditional leaders, even the health workers."

The notion supporting the belief that 'insiders' are after the interest of other community members and thus more believable was also stated by participant 25, a BSc economics graduate living in Zaria;

"We have our cultural and traditional way of doing things... we should be allowed to stick to these ways."

Reinforcing this statement was Participant 14, the 58-year-old father of six living in Gure, who noted that people who neither shared common social experiences nor culture with them were unable to relate to their lived experiences, as they were outsiders (Chatman 1996). Again, this was seen to reduce the credibility and importance attached to the information such sources provided:

"Only some visitors do come to tell people about family planning once in a while, and some people accept, but others do not and frown at it."

Authority for men, according to participant 11, a female, could be described in terms of wealth or influence an individual has in the community (opinion leader):

"It is the village head or a big man in the village who would summon people to enlighten them on the importance and need for family planning before the medical personals can take over. "

CHAPTER FIVE:

FINDINGS 2 - FAMILY PLANNING INFORMATION PROVIDERS

5.0 Introduction

The presentation of findings in this chapter captures the account of two groups broadly referred to as 'information providers' in this study consisting of- health-care providers (primary healthcare providers; nurses, pharmacists, and private practitioners) who, for this study will be referred to as frontline providers; and religious information providers comprising of religious clerics; Imams (2), Catholic priests (2) and a Pastor from the reformed Baptist (1).

The essence of these accounts is to provide an understanding of the information behaviour (IB) of the major individuals, bodies and institutions involved in influencing the use of family planning (FP) so as to establish similarities and differences between the information behavioural guidelines determining the production and communication of FP information and the IB of the target audience, to provide a better understanding on the issue of low adoption and barriers to the use of family planning in the study area.

This chapter is in two sections: the first covers family planning from the viewpoint of public health providers, the primary contact for those seeking information or services; the second examines religious leaders' perspectives on and communication of family planning. It presents first-hand testimonies from representatives of the two major religions active in Nigeria: Christianity and Islam (Pinter 2016; Sinai et al. 2020; Christopher 2006). The Catholic and Reformed Baptist churches, representing the Christian religion, were chosen for the study

due to their prominent stance on contraception and family planning, as highlighted by Pinter (2016).

Profile of Participants

The demographic profile of the participants in this section plays a significant role in providing context to the information providers' overall choice of communication approach, reflective of the outcome of the interplay between health and religious expectations and individual providers' perception of FP. This provides a better understanding of the influence of health and religious institutions on the diverse views on FP by men and women, as well as how they seek and use information.

Table 5.1: Demographic profile of Participants

Participants	Gender	Age	Organisation and position	Years of service	Highest qualification	Religion	Area
Individuals							
Participant 26	Female	54	PHC Head of Reproductive health unit	27	BSc. Community Health	Christian	Zaria
Participant 27	Female	20	PHC Family planning and immunisation provider.	2	Diploma in Environmental Health	Muslim	Zaria
Participant 28	Female	37	PHC Family planning and routine immunisation provider.	5	Public Health (Virtue) Certificate	Muslim	Zaria
Participant 29	Female	45	PHC Senior in-charge nurse, Maternity, childcare and post-natal unit.	21	High Community Extension Worker	Christian	Gure PHC
Participant 30	Male	35	Private Hospital.	10	Diploma in Community Health	Christian	Gure Priva

			General Healthcare provider.				
Religious							
Participant 31	Male	40	Catholic Church (Marriage counsellor for intending couples)	9	Priest Theology BSc	Christian	Zaria
Participant 32	Male	33	Catholic Church (Marriage counsellor for intending couples)	5	Priest Philosophy and Theology BSc	Christian	Zaria
Participant 33	Male	35	Reformed Baptist church	7	BSc Theology	Christian	
Participant 34	Male	70	Mosque	55	Imam Quranic Scholar	Muslim	Zaria
Participant 35	Male	35	Mosque	16	Mallam Quranic Education	Muslim	Zaria

Four major themes emerged from the data analysis of the interviews with the frontline information providers. The themes to emerge from the data analysis of this group are as follows:

- Understanding of family planning- including perception, importance and goal of FP.
- Strategies for motivating family planning utilisation.
- Challenges in providing family planning services.
- Ensuring relevance amidst challenges.

5.1 Understanding of Family Planning

The literature suggests that the “value” of information is key to engagement in family planning (FP) (Musoke 2007). Health care information providers' understanding of FP, as noted by Musoke, is evident in how they communicate its significance for women's health and community well-being. Consequently, investigating the personal convictions of providers regarding their definition of FP and its importance for women's health and the community's welfare (Akamike et al. 2020; Asekun-Olarinmoye 2013; Newbold and Willinsky 2009) was essential in understanding the persistently low engagement with FP services despite numerous interventions. This theme in the findings chapter delves into two aspects of family planning (FP): it begins by presenting the information providers' understanding of FP, and then it examines the objectives and relevance of FP as communicated to the target audience.

The participants' perception of FP was therefore analysed to focus on,

- Spacing: literally interpreted to mean the time between one birth and the next.

- Decision-making: interpreted to mean joint agreement by a couple to have a set number of children.

On the other hand, the goals and importance of FP were analysed to focus on;

- Saves lives: reducing maternal and Child mortality.
- Provides rest for mother: a crucial time for the mother to restore lost nutrients following pregnancy.
- Socio-economic benefits.
- Adequate childcare: enabling parents to provide adequate care for their children.
- Reduces unintended pregnancy.

Perception of family planning

5.1.1 Spacing

Findings revealed that although WHO's (2022) definition of family planning (FP) as a means to control the number and spacing of children is acknowledged, providers in Nigeria focus on promoting spacing for health and rest post-pregnancy while avoiding discussions on the potential impact of large family size on economic growth (Cruz and Ahmed 2018; Ewugi and Yakubu 2012; Kidanu et al. 2009) and climate change (Bongart 2009;2012; Habumuremyi and Zenawi 2012; Kidanu et al. 2009). The above assertion is reaffirmed by a Muslim female and certified public health provider's definition of FP, *"Family planning is intended as a restful interval, with spacing of at least two to three years between births, not as a means to prevent or cap the number of future pregnancies."*

This approach is seen as respecting the rights and choices of individuals, as stated by a 20-year-old unmarried provider with a Diploma in environmental health

(Participant 27), "*We just advise on spacing, health and rest for the mother, and not dictating a family size*". Frontline providers adopt this method to prevent users from feeling "*controlled*" (Participant 28), as it would infringe upon human rights—a concern highlighted by the participant, who stated, "*...so that nobody accuses us of attempting to control them... you understand that's not permissible.*"

According to the participants, frontline providers are instructed in training to advise in a certain manner to protect themselves from hostility from those who are resistant to family planning. A provider from Zaria, aged 54 with 27 years of work experience in the area, commented on this practice: "*...We are instructed to focus on spacing advise simply...*". She clarified that the guidance to focus solely on spacing comes from government and family planning organisations, including NGOs.

Northern Nigeria's religious tensions, evidenced by events like the 2022 Sokoto student lynching and the 2002 (Tribune Newspaper 2022) "Miss World Riot" (Gold 2022), have created a context where family planning advice is fraught with risk. However, while the strategy was consistent in both Gure and Zaria, the participants cited different reasons for its adoption, influenced by the prevailing religious and cultural beliefs in each community. For Example, in Zaria, while the essence of the cautious approach to FP advice is partly to prevent any feeling of coercion by users, another reason is to navigate the complex religious landscape sensitively to avoid inciting conflict in a region where religious and cultural beliefs deeply intertwine with family life and where past misunderstandings have led to violence (Senderowics 2020). A provider with over two-decades of extensive experience (Participant 26) notes that in this predominantly Muslim area (Zaria), smaller families could be seen as challenging religious dictates, potentially

sparking violent conflicts, "... *religion and culture encourages more children ... if you say stop having children ... it can lead to issues with the community and will certainly cause problems with your organisation.*"

Echoing the previous sentiment, the cautious approach in Gure was to avoid the perception of coercion, as recommending an ideal family size restricts reproductive freedom and infringes on personal choice (Senderowics 2020), a view supported by another seasoned provider who said, "*our advice is limited to spacing for health*", reinforcing that prescribing a family size is coercive, he firmly stated, "*We do not dictate the ideal number of children.*"

Contrary to literature and policy recommendations linking family size to economic means (Kidanu et al. 2009), the data analysis revealed that frontline providers in Gure and Zaria refrain from suggesting a specific number of children. This practice contrasts with FP objectives aimed at fertility reduction and stands out against the national agenda for population control (NPC 2022). Instead, providers focus on the health benefits for mothers and children, sidestepping dialogues on fertility rates and optimal family size.

This practice of prioritising spacing over limiting the number of children in family planning counselling suggests a form of tailored counselling which aligns with cultural traditions and high fertility desires in sub-Saharan Africa (May 2017). However, this practice is synonymous with criticism of social media in the public sphere as a result of social-media tailoring content to align with the users' existing beliefs, which potentially limits exposure to diverse viewpoints (Kruise et al. 2018; Zuiderveen et al. 2016; Pariser 2011).

5.1.2 Decision-making

Some studies in family planning show that in rural households and communities, men typically possess the authority to make decisions (Fuseini 2013; Makama 2013), including those related to family planning and reproductive health, where the dynamics frequently tilt in favour of men. (Okigbo et al. 2015; Speizer et al. 2012; Babalola 2011).

The analysis of quotes from a few frontline providers suggests that while they conceptually link family planning to joint decision-making, the reality often reflects a male-dominated process. Patriarchal norms could compromise this principle. Supporting this assertion, Participant 29, a 45-year-old female with significant community service experience working in Gure, portrays family planning from a more egalitarian perspective; she describes it as "*a decision-making process between couples to know when to have a child.*" suggesting an ideal of shared authority in reproductive decisions proposing a balanced model of decision-making in reproductive matters.

Reflecting on the discrepancy between the ideal and actual practice of family planning, the 45-year-old professional acknowledged the contrast between her personal beliefs and the normative practices. In the context of family planning, the principle of mutual decision-making is often overshadowed by the cultural norm of male-dominated consent, reflecting an intersection of gender dynamics (Crenshaw 1989) with societal expectations (Onwutuebe 2019; Kabagenyi 2013; Fox 1988). "*But you know our people, the husband has to agree, and you know it is difficult,*" one provider remarks, acknowledging the patriarchal barriers that women navigate. Ultimately, she suggests that in the face of these challenges, women may independently make crucial choices as another expression of decision-making,

stating, "so women may do the needful." In the backdrop of a shared stance against the patriarchal constraints within family planning, another frontline provider from Zaria (Participant 28) echoes the need for women to make autonomous health decisions, stating, "... it is a decision to be made by an individual to whom it may concern [the more affected party] to follow the route to quality and food life." It is notable that despite residing in different locations, providers align in their opinion, emphasizing the right to pursue a healthier and more balanced life, a decision-making power essential for those directly involved (women) and hinting at a systemic power imbalance where women's voices may not be equally heard contrary to the concept of the public sphere which proposes all voices should be heard. This similarity in views across different regions highlights a common understanding of the importance of personal choice in the realm of family planning transcending geographical boundaries.

The minimal recognition and communication of decision-making as an essential part of family planning for couples by providers suggest it may be undervalued in their methods, hinting at a broader patriarchal challenge. This supports the views of Him and Hosgor (2011) and Fox (1988), who contend that patriarchy is embedded in societal structures, not necessarily stemming from a natural male inclination for dominance.

However, studies in Tanzania (Mosha et al. 2013) and Mali (Castle 1999) within similar rural settings characterised by male dominance and patriarchal values indicate that clandestine use of family planning is only a short-term solution. While involving men may not be immediately beneficial, recognizing the couple as the unit of intervention is a more appropriate and sustainable approach. Intersectionality in this finding is evident in how gender, cultural norms, and

geographical location intersect to shape the family planning decision-making process, highlighting the complexity of navigating between personal beliefs and the prevailing patriarchal system.

5.1.3 Importance and goal of family planning

The importance of FP highlighted by the respondents centred around eight sub-themes relating to the nature of the benefits FP was perceived to offer. These were:

- Saves lives (reduces infant and maternal mortality)
- Provides rest for the mother
- Socio-economic benefits
- Adequate childcare
- Reduces unintended pregnancy

This theme's sub-themes are divided into two sections: the initial three focus on the primary objectives of family planning and counselling by medical information providers within the community. The remaining sub-themes address the significance of family planning as understood by the providers, who are influenced by both their professional expertise and the socio-cultural dynamics of the community.

5.1.4 Saves Lives (reduces infant and maternal mortality)

Considering that Nigeria, especially the northern part of the country, is characterised by high infant and maternal mortality linked to high-risk pregnancies (Utomo et al. 2021), it is significant that all the frontline providers affirm that family planning as a form of contraception significantly lowers the risk of mortality for both infants and mothers. Participant 27, a young health professional, attests

to this, stating, *"My conviction is it saves lives...as it reduces the risk of complications."*

Corroborating this, Participant 30, with over a decade of work experience in a private clinic in Gure, observes that family planning has noticeably reduced childbirth complications and related deaths in his clinic: *"Overall, in this hospital, our observation...it [FP] minimizes the rate of issues women face during childbirth, reducing death compared to before."* This sentiment is echoed by Participant 26, a seasoned reproductive health head, who notes a marked decrease in maternal deaths with the uptake of family planning: *"With family planning, the rate of maternal mortality has been reduced to the minimum in our clinic and this area."*

Furthermore, the reduction in maternal deaths is paralleled by a decline in infant mortality, supported by the increased use of contraceptives and the resulting decrease in births, as Participant 29 drawing from her over two decades of experience, with significant experience in the field, highlights: *"With family planning, the rate of child mortality has been reduced to the minimum..."*

This view is underpinned by research from Stover and Ross (2010) and Fortney (1987), which suggests that fewer births translate to fewer risks for both mothers and children.

Despite differences in geographical and religious backgrounds, collectively, these insights from frontline providers, both seasoned and new, reveal a consensus on the critical role of family planning in saving lives, underscoring its dual benefit for maternal and child health. It was observed that the veteran frontline providers (experienced providers), in contrast to their younger counterparts, recognize family planning's vital role in preserving the lives of both mothers and their

children. This could be attributed to their extensive exposure to tangible outcomes of such interventions over time.

5.1.5 Provides rest for the mother

“Rest and recuperation” emerged as a crucial aspect of family planning from the frontline provider's testimonies. They collectively view a significant rest period, generally 3-5 years, as vital for a woman's post-childbirth recovery and for the couple to plan subsequent pregnancies. Participant 26, who leads a reproductive health unit, underlines, “...3-5 years rest is very important for the woman to be strong again.”

Echoing this, a colleague (Participant 27) from an antenatal clinic stresses the benefits of this rest for replenishing health: “...a break will be good...so that your body will be strong.” Similarly, Participant 4 emphasizes the recuperative aspect of family planning, offering guidance on health maintenance during this period.

Furthermore, Participant 26 elaborates that this resting phase allows women to control their reproductive health and make decisions about the timing of their contraception, indicating a level of autonomy in these choices: “...you will see people after resting come to remove it.” This autonomy is further affirmed by Participant 29, who has a long tenure in antenatal and postpartum care, reinforcing the message that the timing of rest and resumption of fertility is at the patient's discretion: “We preach the importance of rest... once you are ready to remove it you come, and we remove the implant.”

These perspectives highlight the shared belief in the importance of rest after childbirth, a period which providers advocate for within the framework of family

planning, and also the respect for a woman's autonomy in deciding when she feels ready to either continue or cease family planning methods.

5.1.6 Socio-economic benefits

Family Planning is linked to numerous socio-economic advantages, aiding families in managing their size and resources effectively (Blackstone and Iwelunmor 2017).

Providers note that family planning extends beyond limiting family size; it empowers couples to better provide for their family's nutritional, educational, and health needs within their economic constraints (Doubrapade et al. 2020). Childcare, a demanding responsibility, can be eased with fewer children, allowing parents, especially mothers, more time for activities that enhance the family's economic well-being (Ghebreyesus and Kanem 2018; Molyneaux and Gertler 2004). The patriarchal structure in Nigeria often places women in economic reliance on men, a factor that family planning aims to address by fostering female autonomy and independence (Him and Hosgor 2011). Participant 25, a 54-year-old advocate for women's financial independence, asserts, "*With family planning... we hope to achieve good education for both women and children, and the women should have rest.*" She highlights how family planning can challenge Nigeria's paternalistic norms and support women in becoming self-reliant: "*With family planning... the women will be independent, stand on their own and will not lean on anybody.*"

Participant 29, a widow, mother and frontline provider, personalizes this benefit, sharing how family planning has been instrumental in her ability to provide for her children: "I do family planning to take care of my children, buy food, clothes and school fees." This aligns with the perspective that family planning is crucial for parents to fulfil their personal (education, business) and family aspirations, as

noted by Participant 30, a Male provider in Gure: *"...it guarantees the parents to carry out their personal interest and achieve the goals they have, including women obtaining an education."*

Additionally, some of the participants believe that family planning can help address Nigeria's overpopulation issue. It is seen as a means to manage the rapid population growth by enabling families to make informed choices about their size relative to their resources. Participant 5, a 54-year-old Christian woman with 27 years of frontline provider experience, highlighting family Planning as a primary solution to alleviate familial challenges and minimize harmful rivalry for resources, notes, *"... families need to realise that we all contribute to the struggle for scarce and large population."* Her view is reinforced by Participant 30, a male Christian from Gure, *who* believes that managing overpopulation starts at the family level, *"... each household having only as many children as they can adequately provide for reduces the crowd struggling for everything."* These two statements from the participants support the notion that family planning is not just a personal choice but a strategic approach to alleviating broader socio-economic pressures, corroborating the concept of communicative rationality (Innes and David 1999), which should be included in family planning campaigns.

The findings from this analysis suggest that family planning is valued for its role in economic empowerment and controlling population growth, with an emphasis on enhancing women's decision-making power and independence.

5.1.1 Adequate childcare

In contrast with the negative impact of poverty, service access, and individual factors that increase competition for resources and infant mortality (Stover and Ross 2013), frontline providers' recommended birth spacing is associated with

improved child health and lower mortality risk. Participant 27, a young Muslim woman, highlights the importance of spacing, especially for mothers with many children: *"...we suggest it's time for you to take a break, to nurture them well."* Similarly, Participant 5, a 35-year-old Christian man, supports this, emphasizing family planning's role in enabling parents to provide better care: *"I so much believe in family planning because it helps in child spacing... and enables women to take care of their children."*

These insights from the respondents showcase a consensus on the benefit of family planning as a tool for ensuring parents can provide the necessary attention and resources for their children's well-being.

5.1.2 Reduces unintended pregnancy

The World Health Organisation (2019) reports over 74 million unintended pregnancies in lower-income regions, leading to severe health issues like malnutrition and even mortality. Family planning (FP) emerges as a vital preventive measure against such unintended pregnancies. Participant 29, a seasoned service provider, underscores FP's role in averting unwanted pregnancies:

"...it helps the women avoid pregnancy when they are not ready."

Participant 26 echoes this sentiment, reinforcing the importance of FP in preventing pregnancy that is not planned or desired:

"... with impatient men and those who never use condoms and all sorts, it helps a woman not to take in."

Seasoned service providers, notably those middle-aged with the longest tenure, emphasized family planning as a key strategy to avert unwanted pregnancies, drawing from their extensive experience and comprehensive understanding of its benefits.

5.2 Strategies for motivating family planning utilisation

The study enquires about the approaches adopted by providers to encourage the adoption of family planning methods. Identifying these strategies is essential for understanding their effectiveness in engaging the target population and influencing the success of family planning initiatives within the community. This insight forms a functional component of the research, aiming to enhance the implementation and acceptance of family planning services.

5.2.1 Bridging the educational divide to motivate FP acceptance

The study, set in rural areas, highlighted an educational disparity. This disparity was that information providers were typically higher educated, but their audience often had only primary or secondary education (Musoke 2007). While educational disparities can elevate educated individuals to opinion leaders (Meyer 2005), influencing public discourse in communities (Morrison 2021; Karppinen 2007), they can also hinder communication. For example, when discussing family planning, less educated individuals may believe that the better-educated can secure a better future due to their income, whereas they (the less educated) depend on having more children for future security. This can create a perception that only those with similar educational backgrounds can understand their experiences (Chatman 1996).

Participant 25, a seasoned public health expert with a B.Sc. and additional certifications, consciously omits to mention her educational background. She believes that doing so prevents her from coming across as overly sophisticated or all-knowing, which might dissuade open dialogue or make clients feel their situations are too complex to be grasped as she noted: "...well, I bring myself down to their level and share in their plight", adding "...I neither discuss my qualification nor achievement," she explains. This strategy cultivates a bond by showing real empathy, nurturing trust, and creating a strong relationship. It transforms perception from an impersonal government agent to an empathetic insider. As noted by Chatman (1996), "...they start to see me as one of their own, someone with insight on the matter, which brings us closer together."

Similarly, Participant 26, a young and educated Muslim information provider, shares her experiences of initially being perceived by her audience as lacking empathy, a judgment based on her educational and professional background. She counters their assumptions by questioning the certainty of her children's future despite her qualifications: "... You might say I'm educated, but I can't predict whether my child will be wealthy or not in the future." She emphasizes that the success of children is not assured by their number, whether many or few or the spacing of their births: "...I have no control over my children's future successes; it's all a gamble." She reassures them that she will only have as many children as she can responsibly care for, stating, "I will just do my part." This perspective helps her audience understand that, despite anyone's status and similar to her own beliefs as a Muslim, they all depend on a higher power for their children's futures but must also make responsible choices. Her approach builds common ground, demonstrating that family planning is a relevant and approachable topic for all, thus enhancing her accessibility and effectiveness as an information provider.

Both providers were analysed to utilize what could be termed 'Empathetic Engagement'- to counter the misconception that having more children ensures future prosperity. By aligning with the audience's viewpoints and challenges, it fostered trust and understanding, effectively challenging the idea that family success is a numbers game. This approach was analysed to encourage thoughtful family planning decisions by the frontline providers.

5.2.2 Encouraging family planning for societal well-being

In the context of societal well-being and child-rearing, the frontline providers noted they find success in promoting family planning (FP) by linking it to the upbringing of well-behaved children and societal benefits. Participant 26, a young health professional, notes that smaller families allow for better parenting, leading to children who contribute positively to society: "*...raising children to live up to moral standards becomes challenging with too many children... they could learn and spread bad habits.*"

Participant 30, a 35-year-old Christian male, echoes this, emphasizing the role of family planning in proper child-rearing: "...we show the need and importance of FP for keeping children right." Similarly, Participant 3, a Muslim provider, points out that well-behaved children result from focused parenting, which requires rest and fewer children: "...we need this rest to focus for the task ahead...for your future relaxation in a safe community."

This message also resonates with younger providers, who stress the societal impact of poorly raised children. Participant 30 remarks, "*...children without good training could become societal problems.*" This approach underscores the interconnectedness of individual family choices with the broader community.

Providers use this narrative to foster a sense of unity and shared responsibility. As Participant 26, a young frontline provider, explains: "...*they are made to understand their choices affect everyone, creating a sense of togetherness.*" This leads to some audience members reconsidering their views on family planning, as Participant 28, a Muslim female frontline provider, observes, "... *You instantly observe some people having a rethink in the process... start asking inquisitively.*" while others, according to Participant 30 become more receptive to the concept" ... *some welcome it afterwards.*"

5.2.3 Addressing socio-economic challenges

In Nigeria, which ranked low in the World Bank's Human Capital Index and was confronted with widespread poverty and inequality (World Bank 2020), participants observed that socio-economic hardships are a common experience for many Nigerians, irrespective of education or income. The challenging economic reality in the country is used by some service providers to advocate the benefits of family planning. Participant 28, a Muslim woman aged 37 and mother of four, uses the economic difficulties as a talking point, remarking: "*When encountering couples with 8-9 children, we inquire if they are feeling overwhelmed and could consider having rest, particularly given the current economic challenges.*" Participant 26, another mother of five, a Christian aged 54, echoes this sense of despair, shaped by the country's current state and governmental shortcomings. She reflects on the implications of having many children in such a situation, pausing with a shake of her head and a sigh before adding, "...*we give God the glory.*" Her words, along with her non-verbal expressions, suggest a balance between practical understanding and spiritual reliance. This indicates that while

spirituality is important, practical actions are necessary in certain situations, with faith providing support for handling elements beyond personal control.

Highlighting the strain on resources, including healthcare costs, Participant 28 again notes she points out the unpredictability and financial burden of illnesses: "...*unexpected health issues can arise, necessitating medication purchases...a smaller, well-planned family leads to reduced expenses.*" She expresses a resigned reliance on God, "*We can only trust in God*", a sentiment reflecting despair due to inadequate governmental support. Participant 26 echoes this sense of despair, shaped by the country's current state and governmental shortcomings. She reflects on the implications of having many children in such a situation, pausing with a shake of her head and a sigh before adding, "...*we give God the glory.*" Her words, along with her non-verbal expressions, suggest a balance between practical understanding and spiritual reliance. This indicates that while spirituality is important, practical actions are necessary in certain situations, with faith providing support for handling elements beyond personal control.

The strategy adopted by the above providers highlights the need for self-sufficiency in alleviating poverty advocating for manageable family sizes as they both emphasize their belief that faith in God should complement responsible choices like family planning rather than justifying having more children than one can afford. By sharing these perspectives, they align with their audience. Participant 28 remarks, "... *they are able to understand*", thereby fostering a sense of shared challenges and mutual understanding.

The providers' roles as women, mothers, and professionals in similar societal contexts (rural areas) lead to a unified viewpoint on family planning influencing their perspectives. This illustrates the convergence of personal backgrounds in

professional and public discourse, transcending individual differences of age and religion. Consequently, it highlights the significance of intersectionality and public sphere theory in understanding uniformity in viewpoints.

5.2.4 Adaptability and Resilience

Central to data analysis is the strategy of “Adaptability and Resilience”. This approach emerged as a key element in the efforts of frontline providers to promote family planning. It encapsulates their capacity to skilfully navigate and overcome diverse challenges, ensuring that their advice and services remain effective, relevant, and aligned with the evolving needs of their communities.

This sort of dedication has been shown to be essential for frontline providers to remain the go-to contact for those considering family planning (Senderowics et al. 2021; Ataulajah 2019; Coghlan 1993), significantly contributing to the overall well-being of their communities. The strategy was therefore analysed to focus on:

Person-centred-approach

Frontline providers in this study place significant emphasis on delivering personalized counselling services, a key strategy in promoting family planning. Participant 26 exemplifies this with her nuanced, tailored counselling, aligning her guidance with the common aspirations of couples, particularly those desiring more children. She states, “*I make my explanations on methods to choose individual specific, to suit the needs of individuals based on what I know or can see about them.*” This statement reflects her deep understanding of her client's life situations and aspirations, going beyond generic advice to offer solutions that resonate with their specific circumstances.

For instance, when counselling a woman considering a three-month contraceptive injection, Participant 26 seizes the opportunity to educate her about the implications on fertility. She sensitively advises, "fertility itself takes time to return to normal with this method," showcasing her genuine interest in the client's future family planning goals. Her approach fosters trust and empathy, ensuring the client makes informed choices that align with her long-term family goals, particularly if she adheres to the recommended 2–5-year spacing interval.

Similarly, Participant 29 employs a person-centred approach, focusing on socio-economic challenges as a crucial aspect of her counselling strategy. She targets mothers with malnourished children or those suffering from malnutrition-related illnesses, acknowledging the underlying poverty-related issues in her community. She states, "...for mothers with malnourished children or those suffering illnesses that are malnourishment-related, I use the opportunity to talk about FP." This approach is strategic, leveraging the direct consequences of poverty as a platform to highlight the benefits of family planning, demonstrating an understanding of the socio-economic factors influencing health and family decisions.

By focusing on individual-specific counselling, both providers establish themselves as trusted advisors, going beyond the role of mere healthcare providers. They actively engage with their audience's real-life situations, understanding the complex web of cultural norms, economic challenges, and religious beliefs that influence a woman's decisions about family planning. This personalized approach creates a deeper connection between provider and client, positioning the provider as a preferred source of family planning advice. It is a strategy that respects and empowers the client, acknowledging a woman's autonomy in making family planning decisions. This counselling method challenges traditional patriarchal

norms by empowering women and respecting their autonomy in family planning decisions. Although societal constraints may still hinder the actualisation of these choices, the approach emphasizes the importance of recognizing and supporting women's agency in reproductive health matters. It's a significant step toward shifting societal attitudes and ensuring women's informed participation in family planning decisions.

Cultivating Trust through Genuine Connection

In family planning, the significance of health communication and interpersonal skills is paramount (Dehlendorf et al. 2016). Data analysis revealed the relationship between providers' ability to establish personal connections and the positive reception of family planning. Participant 29, leveraging her 21 years of experience, illustrates this by focusing on being approachable and genuinely interested. She says, "...they listen, show interest and comply on the basis of the informal relationship of understanding we build over time." Her approach extends from prenatal care to postnatal follow-up, nurturing a bond that transforms her from a mere information provider to an almost familial figure.

Participant 26, with her 54 years of experience, reinforces this perspective. She understands that to earn trust, providers must be seen as genuinely concerned, not just fulfilling a contractual duty. She emphasizes, "...consistent in-depth and genuine explanation increases the level of trust, and they begin to understand that I am not just a paid provider, but I care about them."

Further adding to this approach is Participant 29, a widow, who shares her personal journey with family planning to build rapport, stating, "*I use myself as an example...I did family planning while in school, and even now ...I know how*

much cost it has saved me." This method of sharing personal experiences helps in making family planning relatable and positions it as a viable solution for shared socio-economic challenges.

These practices of dialoguing to build rapport enrich the public sphere discussion on family planning, as women's voices and experiences are also integral to the dialogue.

This method of integrating medical expertise with empathy and personal experience exemplifies an effective approach to family planning. It fosters a more inclusive and understanding healthcare environment, crucial for promoting equitable and informed family planning practices, as shown in the concepts of the public sphere and intersectionality.

Expert counselling

The significance of expert counselling in family planning, as identified in this study, reflects a profound approach employed by healthcare providers. This expertise, as reported by participants, involves delivering detailed explanations about family planning methods, their working mechanisms, potential side effects, and how to manage the transition when planning to conceive after using long-acting reversible contraceptives (LARC).

Participant 26, with extensive experience and a BSc. in community health, emphasizes the value of detailed explanations as a means to build trust and promote contraceptive autonomy rather than as coercion: "I do not choose for them, but I explain everything," she asserts. She elaborates on this approach: "...it may take some months for you to be able to get pregnant again if you use XYZ method...have it at the back of your mind." This depth of information,

according to the participant, coupled with guidance on managing fertility, offers a comprehensive view, helping to alleviate concerns and mistrust about family planning, often perceived as a tool of imperialism, particularly in underdeveloped countries.

Participant 28, aged 37, representing a younger generation, reinforces the importance of clear communication and transparency in the administration of modern contraceptives. "...the process involves initial tests to ensure no existing pregnancy and blood pressure checks before presenting various family planning options."

This thorough approach demystifies misconceptions and builds trust by "...emphasizing the healthcare providers' expertise" and commitment to their client's health and well-being.

Participant 2, a 20-year-old professional, highlights the role of assurance in counselling. She notes, "...okay, let's try it first," encouraging women to approach the healthcare team with any issues or concerns. This level of engagement and openness in addressing potential side effects or complications fosters trust and willingness among women to start or continue using family planning methods.

A prominent aspect of expertise in counselling, as highlighted by some of the frontline providers, is the confident advocacy of modern contraceptives as a reliable method of family planning. This confidence is rooted in a firm belief in the effectiveness of modern methods compared to traditional ones, which are often seen as less reliable. Participant 26 encapsulates this sentiment by stating, "...family planning (modern contraceptives) is the best way for spacing in pregnancy with 98% assurance compared to the natural way."

This approach is more than just disseminating information; it's about instilling confidence in the target audience through personal conviction and statistical evidence. For instance, Participant 26 juxtaposes the effectiveness rates of traditional and modern methods: "Why go for 20 per cent when there is 98 per cent to choose from." This method of communication effectively debunks myths and misconceptions surrounding modern contraceptives.

The strategy extends beyond mere advocacy to personal endorsement. Participant 26's practice of exclusively using modern methods lends credibility to her advice: "I have never used the natural method; I believe in the modern way. That's all I advise people on." Similarly, Participant 28, a millennial, emphasizes the importance of conveying a clear, unambiguous message about the use of modern contraceptives to build trust and reduce public resistance.

Participant 2, another millennial, also shares this conviction, asserting her complete belief in family planning: "I believe in family planning 100 per cent. I will do it and advise others as well." This unwavering stance not only demonstrates their expertise but also portrays them as reliable and trustworthy sources of information.

The firm advocacy of modern contraceptives by healthcare providers, supported by personal conviction and statistical evidence, plays a crucial role in building trust and reducing resistance to family planning. This approach, reflecting expertise in counselling, effectively challenges traditional methods and instils confidence in modern contraceptives, contributing significantly to the promotion of family planning. This aspect of healthcare delivery, grounded in confidence and

knowledge, represents a shift in the dynamic of family planning counselling, where providers are not just informers but also influencers, reshaping perceptions and fostering trust in modern contraceptive methods.

This dynamic reflects a shift from a top-down dissemination of information to a more interactive, participatory form of communication, where providers engage with the community to influence their perceptions and decisions regarding family planning. This change in the dynamic of counselling moves towards a more inclusive and participatory approach in the public sphere of healthcare, where different voices, including those of the healthcare providers and the community, contribute to shaping the understanding and acceptance of family planning methods.

5.2.1 Free service

The provision of free family planning services emerged as a key motivator for its adoption in rural communities, as highlighted by some frontline providers. Participant 26, with her extensive experience as a frontline provider, observes a complex attitude towards family planning (FP) in rural communities, particularly among the “Maguzawa”, a group facing discrimination and known for their high fertility rates. Despite a general perception that this group enjoys having large families, as they traditionally give birth to many children, her observations reveal a different reality. She notes that when provided with free FP services and advice, the “Maguzawa” community shows a different inclination. The participant points out, *“It is easy to assume they enjoy giving birth,”* but adds, *“Surprisingly, it is like they really do not want/need as many children as they have.”* This change in attitude becomes evident during outreach programs sponsored by an NGO. *“When we go for this outreach sponsored by the Society for Family Health, Counselling*

and Consumables... everything is free”, she explains, emphasizing the positive response: “... the turnout is good with some adopting a method on the go.” This shift highlights the impact of accessible FP services and the NGO’s support in altering the reproductive behaviour of communities with traditionally high fertility rates.

This sentiment is echoed by Participant 2, who notes that even men, often perceived as barriers to FP, bring their wives to clinics when services are free, *“With the free service, some men bring their wives.”*

However, the availability of these services is not consistent. Frontline providers admit to occasional shortages of FP consumables, leading to practices like inter-facility sharing. Participant 26, heading a unit, describes how they manage supply shortages, *“... we do inter-facility sharing when we are out of supply. So, if one facility doesn’t have, they come to us and vice versa,”* describing the process as *“simple.”*

In Gure LGA, the provision of family planning services faces unique challenges. Participants 29 and 30, both seasoned providers in the area, point out the occasional necessity for clients to purchase family planning products externally due to stock-outs, a situation distinct from the practice of interfacility sharing seen in other locations. Participant 29, with 21 years of service, explicitly states, *“We give the drugs free, but when we don't have, they go to buy from chemist outside and come to us to administer.”* This scenario shows the complexities of ensuring consistent access to family planning supplies in rural areas, highlighting a gap between the ideal of free and accessible services and the ground realities faced by both providers and clients in marginalised communities like Gure. This finding resonates with Crenshaw’s (1989) unwavering focus on dismantling prevailing

power dynamics, which continue to promote inequality among marginalised women, manifest as limited access to contraception in this study.

5.3 Barriers to the use of family planning among the target audience

This theme delves into the myriad challenges users face in adopting family planning, as observed and reported by healthcare providers. Providers offer insights into the complex interplay of cultural, religious, and socio-economic factors that shape individuals' decisions about family planning. They highlight issues such as prevalent traditional beliefs, widespread misinformation, and the obstacles posed by limited healthcare access. Importantly, providers also reflect on how gender dynamics and societal norms impact women's autonomy and decision-making in reproductive health, revealing the intricacies of family planning choices from a user's perspective.

5.3.1 Side effect dilemmas

The fear of side effects emerges as a major barrier to family planning (FP) adoption, aligning with research in Bangladesh and Nigeria (Kamruzzaman and Hakim 2015; Asekun-Olarinmoye 2013). Health providers, like Participant 2 in a Muslim-majority area, report bleeding and menstrual irregularities as key concerns deterring the use of modern contraceptives. "Bleeding, not seeing their period is always one of the things they will always tell you scares them," she notes. Participant 4, from a predominantly Christian village, reinforces this, acknowledging widespread complaints about bleeding.

Participant 26 highlights the discrepancy between her facility and others, particularly regarding patient education about side effects. She identifies a critical issue in many healthcare facilities: the lack of adequate information provided to

patients about the potential side effects of family planning methods. As she articulates, "..... So, some facilities have issues with educating the people and telling them of the side effects." She further emphasizes, "*That is the major problem.*". This observation underlines the importance of comprehensive patient education in healthcare, especially in family planning.

Participant 28 provides a poignant insight into community attitudes towards the side effects of family planning. She references the local expression "*sharo ba shanu,*" which questions the logic of using family planning and thereby invites potential problems like bleeding. The phrase, translated as "grazing without a herd," rhetorically asks why one would choose to endure unnecessary difficulties - in this case, side effects from contraceptives - when they could have children without these complications. This sentiment reflects a deep-seated cultural belief that the natural process of childbirth is preferable and less problematic than using family planning methods. This perspective forms a significant barrier to family planning adoption, underlining the critical need for targeted education and dialogue to address these culturally ingrained views.

Participant 30, working in a Christian-dominated village clinic in Gure, brings a unique perspective on the side effects that cause apprehension towards family planning. He observes a distinct gendered response in his community: He points out that while men express concern for their wives' well-being, "*... family planning is harmful to life... to the working of a woman's reproductive system and even affect foetus development [disabilities]*" women themselves experience heightened anxiety about the long-term health implications of using family planning methods as they believe, "*... it can cause any type of cancer.*"

This concern is not unfounded, as research, including that by Smith et al. (2003), indicates a link between long-term use of hormonal contraceptives and an increased risk of cervical cancer. This complex interplay of community fears and medical evidence presents a significant challenge for healthcare providers, highlighting the critical need for a balanced approach in counselling, where accurate medical information is communicated while empathetically addressing the deep-seated fears and perceptions within the community.

In societies where a woman's worth is closely linked to her fertility, the decision to use family planning is not just a personal health choice for women; it is a decision that can have profound implications on their social standing and marital stability. This patriarchal backdrop makes it challenging for women to make autonomous decisions about their reproductive health, as the fear of infertility, whether founded or unfounded, aligns with the patriarchal narrative that prioritizes childbearing. This situation is further complicated by the intersection of cultural beliefs, gender expectations, and health misconceptions, necessitating tailored family planning education and counselling sensitive to these multifaceted challenges.

5.3.2 Use of non-scientific/traditional methods

The persistence of traditional or folkloric family planning methods, despite their ineffectiveness, is a notable phenomenon, as shown in Sinai et al. (2020). Participant 28, a 37-year-old female, observes that some community members, driven by fears of side effects or societal pressures, still rely on non-orthodox methods "*...some women still use herbs and laya [charms]*" with such methods often approved of as natural methods by "*religious and community elders*", she notes however, "*the traditional methods often fail them*". Her observation is

confirmed by the experiences of those who, after unsuccessful attempts with these methods, seek medical assistance, *"...they come here to complain... that they are pregnant as whatever they used did not work."*

Participant 30, a male provider in Gure, confirms this trend, admitting the usage of herbs in his community, *"They have so many things they use"*, yet unsure of their effectiveness, *"if they work, I am unsure"*. Meanwhile, Participant 26, with 27 years of experience, expresses doubt about these traditional methods, questioning their reliability compared to modern contraceptives: *"... they use all sorts of traditional methods... but why go for 20 per cent assurance when our method offers you higher pregnancy guarantee?"*.

This analysis suggests that while there is an existing openness to preventing or spacing pregnancies, the apprehension about modern contraceptive methods, stemming from the interplay between personal anxieties and cultural pressures, presents a significant barrier and shapes decision-making. This observation points to a complex interplay of cultural norms, personal fears, and misinformation, influencing the family planning choices in these communities.

5.3.3 Religion

The role of religion in family planning decisions presents a nuanced picture. Participant 30, a Christian provider in Gure, acknowledges the influence of religious and cultural beliefs as barriers to family planning adoption: *"Religion affects the use of FP... some people are yet to accept the importance of family planning."*

Participant 29, also from Gure, notes the absence of any explicit stance on family planning (FP) by local churches: *"The church here does not discourage it, but I*

have not heard them talk about it", shedding light on the nuanced role of silence within her community's religious context. This observation highlights a culture of silence prevalent in some Nigerian societies, where the lack of discussion on certain topics can indicate various underlying meanings, including reverence, awe, or the notion that the subject is taboo (Medubi 2010). This silent approach by religious institutions reflects a passive stance on FP by some religious bodies, leaving the community to navigate their beliefs and decisions on FP without explicit guidance from religious authorities.

Participant 28, working in a Muslim-majority area, encounters similar silence attitudes. She counters the religious objections to family planning by highlighting religious teachings supportive of responsible parenting: "...if you cannot cater for your family...there's a need to reduce the number of childbirths."

Interestingly, despite some religious objections, six out of ten providers did not view religion as a major barrier. Suggesting that personal choice, more than religious doctrine, guides family planning decisions. Participant 29's statement that personal preference, rather than cultural or religious norms, predominantly influences decisions on family planning echoes this sentiment: "...their decision is most times personal, not based on culture or religion per se."

Overall, while religion is a factor, it appears to be secondary to individual decision-making in family planning. This finding indicates a shift towards a more personal, individualized public sphere for some individuals where personal choices and beliefs are prioritized over collective religious or cultural norms.

5.3.4 Population shortage in times of war (myth)

The anxiety that the use of FP contributes to a declining population, which could be a disadvantage to the community if war breaks out, was reported as a negative perception held predominantly by men in the community. This was highlighted by Participant 5, a male provider and Christian working in the Gure community, who spoke from personal experience about conversations with men in the community who were anxious about needing to maintain and strengthen their populations to protect their families and community:

"They are scared, especially our men - you know that men and boys are in charge of protecting the community and family...etc."

When asked what the etcetera meant, the participant went further to describe the increased insecurity in the country (Nigeria) and consistent attacks on smaller Christian communities in the state by bandits - and the failure of the government to guarantee security for victims, prospective victims and communities (Omitola 2021; Obia 2020; Oxford Analytica 2021).

Consequently, the people have resorted to providing security for themselves in times of uncertainty and, in doing this, desire to maximise factors they have control over (their fertility) by giving birth to as many children as they can in preparation for the unknown:

"You know there has been consistent attacks on Christian villages in Kaduna state, kidnappings all around. The government does not seem to be saying anything, so the people believe only them can protect themselves, and their army can only be formidable with more children."

This analysis is similar to the situation experienced in Iran after the 1979 Islamic revolution when the policies of the royal family were considered Western and inappropriate – and, shortly afterwards, the country was faced with an unwanted war with Iraq. This incident saw the Iranian government reverse FP programmes while advocating for a large population as a war advantage in their campaigns (Karamouzian 2014).

Analysis here suggests that the need to have women in the community give birth to many children is an action towards satisfying similar affective needs created by the socio-cognitive settings of their living and working environment and the attendant sense of '*insecurity*' (Wilson 1981; Hjørland 2000; Burnkrant 1976). Based on this finding, a desire and perceived need for more children appears to have been identified by the men in this community based on their role as protectors ascribed to them by their patriarchal culture. The antecedents of personal experience further sustain this need (Johnson 1997) based on the attack of smaller neighbouring Christian communities (Wilson 1981), which they believe they are able to protect with a higher population. This need perception serving as a barrier to the uptake of FP was attributed to men, who are a symbol of security and protection for their families and the community in which they live. The Christian male provider in Gure echoes this fear:

"They are scared because family planning can lead to infertility and reduce their population amidst insecurity and in times of wars, etc."

5.3.5 Security concerns: A patriarchal perspective

In the Gure community, Participant 5, a male healthcare provider, brings to light specific anxiety among men regarding family planning (FP). Despite not being a widespread pattern among providers, this concern is significant enough to be

echoed by community members. The men fear that FP could contribute to a population decline, which they perceive as a vulnerability in times of conflict and insecurity: *"They are scared, especially our men... men and boys are in charge of protecting the community and family...etc."* This fear is contextualized by the ongoing security challenges in Nigeria, where Christian villages, including those in Kaduna State, face threats and violence (Omitola 2021; Oxford Analytica 2021; Obia 2020). The government's lack of effective response has led the community to believe that their strength and safety lie in their numbers, thus creating a reluctance towards FP: *"... the people now believe only them can protect themselves, and their army can only be formidable with more children."*

This mindset is deeply ingrained in the patriarchal culture of the community, where men are traditionally seen as protectors. Their apprehension about FP leading to infertility adds to the resistance against its use. In this scenario, the intersectionality of security, cultural roles, and reproductive health choices creates a unique barrier to FP adoption. This belief system, affirmed by the providers' observations, reflects a pattern where men, driven by their role as protectors in a patriarchal society, shape attitudes towards FP based on security concerns and demographic strategies. This situation is reminiscent of Iran's response post-1979, where a larger population was strategically encouraged in the face of war (Karamouzian 2014).

5.3.6 Misguided optimism

In Zaria, Participant 27, a 20-year-old community health professional, reported a complex interplay of socio-economic despair and cultural beliefs influencing FP decisions, shedding light on a peculiar yet profound belief among some community members regarding family planning recalling, *"A prevailing belief in our*

community has always been that having more children could mean greater prosperity later on, with the hope that some, if not all, would achieve wealth and uplift the family." This belief, deeply rooted in poverty and a sense of hopelessness, equates having more children with increased chances of future wealth or political influence. This perspective mirrors the irrational optimism observed in gambling, where, despite understanding the slim odds, individuals continue to participate in hopes of a significant payoff (Rogers 1998). In this context, the act of having more children is seen as a gamble for a better future, driven by a belief that larger families might lead to economic or political gains.

This viewpoint is intensified by the prevalent corruption in Nigeria, where wealth and political power are often intertwined (Omilusi, 2016; Ogundiya, 2009). As a result, some parents perceive having more children as a strategy to elevate their socio-economic status. This approach is symptomatic of a deeper societal issue where hard work is often overshadowed by the perceived benefits of having more dependents as potential sources of income or power.

These participants' insights in communities where the system is seen as failing, and the rewards of hard work are minimal, reliance on chance and numbers becomes a coping mechanism. This understanding is crucial for FP providers as it underscores the need to address underlying socio-economic factors and dispel misconceptions to promote realistic and informed FP choices.

5.3.7 Resistance to Engagement

Participant 28, aged 37, encountered a challenging dynamic in family planning outreach, where certain individuals display a staunch non-receptiveness to any FP-related information. She observes, *"Sometimes some people are non-receptive in nature... they just cannot be bothered about anything concerning FP."* This

reluctance to engage, whether due to recognition of the provider or the mere mention of family planning, often leads to abrupt ends in conversations, creating significant hurdles in initiating meaningful dialogue and imparting crucial FP knowledge. Echoing this, Participant 27, aged 20, also recounts having faced a similar experience. She recounts a man who identified them as FP providers by their uniform and told them they were not allowed to enter his household, "*... when we were doing the door-door visits, we got to a house one day, and the husband was outside, he told us we were not allowed in even before we spoke to him*". Such instances of disinterest underscore the need for innovative approaches in community engagement to bridge the gap in FP awareness effectively. In conclusion, this analysis underscores how complex interplays of socio-cultural factors, security concerns, and patriarchal norms influence community attitudes towards FP, with men's perspectives playing a crucial role in shaping these views.

5.4 Challenges in providing family planning services

This section presents an account of the providers on the various practical barriers preventing the adequate supply of FP products and services to individuals willing to access them. It is important to note that some of these barriers did not recur as direct responses to the question posed on the barriers to the provision of FP. Rather, they emerged as subjects of analysis through the analytical approaches of making interconnections and interlinks (Braun and Clarke 2006). These barriers have been classified to include eligibility bias, husband's consent, marital status bias, and stock-out bias.

5.4.1 Husband's Consent (Patriarchy)

Nigeria is a patriarchal society, with practices determined majorly by culture and religion (Makama 2013), and this can contribute to the marginalisation of women

in education, economic, family and domestic matters (Salaam 2003). In the family unit, this male dominance is visible/evident in the autonomy men have over women and children and their primary, if not sole, control over resources, labour force and reproductive issues within their households (Makama 2013).

Similar to the identification of religion and culture as factors encouraging the practice of patriarchy, 'husband's consent' - as popularly described by the frontline providers - was revealed as a significant socio-cultural practice dictating whether women were able to access contraceptives, and consequently, a major barrier to the provision of FP services in the rural areas. According to Participant 4, a Christian female with 21 years of work experience within the Christian-dominated area of the study (Gure), at the PHC where she worked, long-acting reversible contraceptive (LARC) methods, including intrauterine devices and implants (WHO 2015 and 2022), were only administered to women prior to their gaining consent from their husbands. Although stating that this requirement (husbands' consent) is not stated in the blueprint, it has, over time, become a mandatory practice to ensure that the husband, who is the head of the family and who has equal or more rights when it comes to the woman's reproductive health and activities, also agrees to the procedure. This agreement is acknowledged either by signing a document in the form of a letter of authority, his physical presence at the time of the procedure, or verbally agreeing to it:

"We advise them to come with their husbands or with a written note from them, even though it is not the requirement, we make sure we get that."

According to the participant, considering the existing cultural practices within the community where Christianity sees both the man and woman as one and culture

places a man as the superior party in the marriage relationship (Makama 2013), this is a form granting the husband a “human right”,

“We do it for human rights purposes because we know people’s attitudes in this community.”

The interpretation of this practice as a form of human rights exercise is better understood as a patriarchal socio-cultural practice of the target audience rooted in religion and culture. From the religious perspective (Christianity), in marriage, the woman becomes subject or answerable to the man, as both become one. Although they are one, the man is a symbol of power and authority in this relationship. In Islam, the woman becomes the property of the man (based on the Nigerian tradition) (Odok 2020; Jaiyeola 2020; Stobie 2010). In corroboration with Participant 5 and to support the assumption of women being the lesser parties in marriage relationships, a male private practitioner working in the same area as Participant 4 (Gure) reiterated that the consent of men was always sought, adding that this is also an avenue to show that the medical practice encourages submissiveness of women to their husbands, which promotes the perception of health systems within the community as an institution upholding cultural values and norms rather than enablers of immoral acts:

“... to provide family planning services to women, we do it with consent of the husband, and also so we won't help the women to have avenue to start sleeping around.”

As these testimonies were translated from Hausa to English, some of the expressions and underlying meanings in the use of words were lost in the process of translating the quotes to make meaning in English. However, based on the

interviewer's knowledge of the language, this quote was emphasized to imply that knowing that individuals and community members perceive FP as a practice introduced with no positive intentions, the frontline information providers were keen to correct any inaccurate perceptions about anything concerning FP at any given opportunity.

Hence, considering that in this community, both data from the providers and the target audience themselves show existing issues of married women having multiple sex partners, the practice of attaining husbands' consent is therefore used to promote the impression that although health facilities encourage child spacing, they do not encourage promiscuity. They are still custodians and supporters of cultural values and morality. The statement was interpreted to imply 'We have not come to abolish the culture or encourage immoral behaviour within the community as this is not the essence of FP', not forgetting that people do not see family planning as a practice with good intentions and improve your culture, not rubbish the existing culture, respect and preserve your culture, the question is how does this study separate this practice from depriving women of access?

In this community, as stated by the target audience, it is believed that the issue of promiscuity among married women having multiple sex partners is higher among those practising FP. Thus, the clinic or medical practice insisting on the consent of men is to show that they are not there to encourage or promote community vices, but indeed there to help with the health of the women and not to encourage lawlessness. Thus, stressing the importance of FP in good ways related to health.

In Zaria, although the frontline providers claimed that the husband's consent is not required, as shown in the quote by two participants (1 and 2), with the latter

being the current head of the clinic in Samaru and the former a new employee in the field with 2 years of work experience:

"We do not actually seek for the husbands' consent before administering any method."

"...Nooo we don't ask for husband's consent"

According to them, FP service is a form of human right if and when requested by an adult woman (18 years of age and above) it is provided. However, further analysis of the data showed that, in a situation where the men (husbands) found out that their wives had adopted a form of FP without their consent, they were able to request that such long-acting contraceptives be removed - and this request was honoured by the frontline providers regardless, of the woman's consent or choice. This is to say that, in practice, the decision to continue a method of contraception is dependent on the man, which is an aspect of patriarchy. The dominant feature of patriarchy was still evident in the result of this, as Participant 1, the head of the clinic in Samaru Zaria, narrated her ordeal on how she had to take out an implant from a woman on her husband's orders, as he was not aware of the initial implant and was not in support:

"... since I started working here, it is only once I saw a husband complaining of family planning. He brought the wife back the following day; his consent was not sought, of course, and asked that I remove it. I explained the benefits, yet he insisted."

Sounding helpless, with a sigh, she explained that she had to remove the implant,

"... so, I took her in, removed it."

Elaborating on the action of the man and his reaction, the participant stated that the argument from the husband was that, *"She must give birth to all the children her ovaries can bring or she has."*

At this point of the analysis, it was evident that patriarchy was prevalent not only in the household, but the health workers also experienced it and succumbed to it without being able to defend the women. According to the participant, she did that to prevent further friction, which could escalate into domestic violence. The woman could be sent out of the home or a divorce requested as a result (Miller et al. 2011) of lack of submission.

"... I was not afraid of the man, but you know our people, they can get home and he physically assault her or send her back to her parents... hmmm he could even divorce her for being disrespectful to his orders."

The above argument on the importance of obtaining men's consent before the administration of LARC to women was also reaffirmed by Participant 4, a 45-year-old female with 21 years of experience in Gure, who stated that one of the major challenges to the provision of FP was the restriction of women by men who want the women giving birth to many children:

"... The challenge is restrictions from male who don't want their wives to adopt it because it stops women from having children according to them."

While the issue of husband's consent was presented as a practice to ensure submission and uphold cultural values within the community, for Participant 4, the 45-year-old female in Gure, it was to avoid conflict between the clinic staff, the wives and their husbands:

"We do it for human right purposes because we know people's attitude in this community."

For Participant 5, a male working with the private practice in Gure, men's consent is sought to avoid being charged to court by some community members:

"... we do it to avoid any court case."

In Gure, the providers clearly stated that sometimes they are sued for providing a woman with FP because the women in this community have been said to be promiscuous when they start using FP.

However, participant 4, the female with 21 years of experience, pointed to *"lifesaving"* as the only exception to the rule of husband's consent, that is when the situation is life-threatening.

"... the only exception is when it's to save life."

When asked if this practice of obtaining consent was ethical in relation to the provision of FP, one of the participants stated, while referring to one of the popular leaflets/pamphlets titled *"Be Beautiful"* sponsored by the Nigerian Urban Reproductive Health (NURHI an Initiative funded by Bill and Melinda gates for ten years (10), executed in two phases with each phase running over 5 years between 2015-2020 in six cities with Kaduna state and Zaria inclusive placed at the FP service centres; distributed when possible; and used to counsel individuals interested in adopting a method of FP. According to Participant 28, with a virtue certificate in public health, they are required to apply the acronym "Talk", which states, *"Talk to your partner about child spacing."* (NURHI 2012). This means FP is a decision made by couples. That indirectly encourages patriarchy and

suppresses women's reproductive rights. Thus, patriarchy was pointed out as a barrier affecting the provision of FP services to the target audience by the frontline providers (Attoh 2017).

5.4.2 Marital status bias

In the context of family planning (FP) in Nigeria, a complex interplay of cultural norms, professional obligations, and personal beliefs shapes the availability of FP information, particularly for singles. While all participants claim that FP information is accessible to all, regardless of marital status, data analysis reveals a cognitive dissonance among four out of the five frontline providers in Zaria. Singles report being denied FP information, suggesting a discrepancy between providers' claims and actual practices.

An unexpected interjection by a frontline worker during an interview with Participant 27, a 20-year-old female provider, highlights this tension. She defensively questions the need for singles to have FP information, indicating a prevalent belief that FP is irrelevant for the unmarried: "We educate singles as well, but basically, what do they need it for?"

The interview environment reflects a hesitance among some providers to discuss FP with singles. Participant 27 initially dismisses the notion that singles rely on rumours for FP information, asserting with disbelief "...*lahlai* [*meaning it is untrue*]" that they are already informed. She believes singles' main concern is understanding side effects: "...the only issue they have is that people tell them it's not good."

5.4.1 Rumour influence

5.4.2 Agents of colonialism/sponsorship

In the communities of Gure and Zaria, family planning (FP) service providers are often perceived as enactors of post-colonial agendas, a view shaped by their association with higher education and relatively higher incomes. This perception positions them as 'outsiders' within their communities despite being natives by birth and residence. Participant 27, a young, educated woman, vividly describes encounters with community members who question her sincerity, suspecting her of pushing FP for personal gain: "Sometimes I am faced with people who may think... I am saying all I say to deceive them into accepting what will not benefit them but pay my bills."

This uncertainty extends to the sources sponsoring FP initiatives. Many community members believe these programs are driven by foreign NGOs and organisations, casting a shadow over their legitimacy and intentions. Participant 29 encapsulates this sentiment, noting how FP sponsorship often originates overseas and filters down through federal and local governments: "*... the sponsors are from abroad (overseas) ... they bring it to Abuja. From Abuja to Kaduna then to local government.*" This chain of sponsorship reinforces the perception of FP as an external imposition rather than a community-centred health initiative.

Amidst these narratives, a discrepancy arises in understanding the role of governments versus NGOs in FP sponsorship. While some providers, like Participant 26, emphasize significant governmental involvement in a collaborative effort with NGOs, others perceive NGOs as the primary drivers. This variance in perception highlights a complex web of stakeholders involved in FP initiatives. It adds to the uncertainty and mistrust among community members.

The historical context of colonialism further complicates these perceptions. The legacy of colonialism lingers in the public psyche, influencing how FP advice and services are received and interpreted. Providers are seen not just as healthcare workers but as part of a larger global narrative, where their role is intertwined with historical and current global power dynamics. Such a backdrop profoundly affects how healthcare initiatives, particularly those involving reproductive health and family planning, are perceived and accepted in these communities.

This analysis illustrates the intricate interplay of historical, socio-political, and global factors that shape community attitudes towards FP. The role of service providers is seen through the lens of these overlapping narratives, significantly impacting their ability to effectively deliver healthcare services. It reflects elements of public sphere theory, where public opinion and discourse are influenced by a multitude of intersecting factors beyond immediate health concerns.

5.4.3 Inconsistent supply

Analysing the issue of access and availability of family planning (FP) products, it becomes evident that inconsistent supply is a significant barrier to effective FP utilisation. As pointed out by the frontline service providers, the irregularity in the routine supply of FP products impacts both the providers and the target audience. Participant 26, the head of a clinic in Zaria, succinctly captures this challenge, "*... We wait for them to give. There is neither routine request nor routine supply.*" This statement reflects a systemic issue where the supply chain is neither predictable nor reliable.

Participant 29, in charge of the Gure clinic, highlights another aspect of this problem: the extended intervals between supplies, "*We get supplies every two*

months sometimes." This irregularity leads to stock-outs, contributing to uncertainty and anxiety among both providers and those in need of FP services. The impact of these supply chain issues is not merely logistical but also psychological, potentially shifting the interest and trust of the target audience in the FP program (Schwandt 2017).

The socio-economic context further amplifies the ramifications of this irregular supply. In scenarios where the clinic runs out of supplies, individuals are compelled to purchase FP products themselves, often at a cost that is burdensome considering their income levels. For rural dwellers earning less than \$16 per month, even a seemingly nominal cost of \$0.50 for FP products can be prohibitive. A provider aptly describes this situation: "*We give the drugs free, but when we don't have them, they go to buy from a chemist outside and come to us to administer.*" This statement underscores a crucial aspect of healthcare accessibility – the need for consistent and affordable supply chains, especially in resource-limited settings.

The challenges of inconsistent and unpredictable FP product supply highlight a crucial barrier to FP access and utilisation. This barrier is not just a matter of physical availability but also intersects with economic constraints, thereby affecting the efficacy and reach of FP programs. It calls for a more structured and reliable supply chain mechanism to ensure that FP services are not just available but also accessible to all, particularly those in economically disadvantaged settings.

5.4.4 Follow-up procedures

The data analysis on follow-up procedures in family planning (FP) services reveals a notable gap in the approach of frontline providers. Despite the demonstrated

importance of follow-up as a form of interpersonal care to enhance the clinical effectiveness of FP, as highlighted by Dehlendorf et al. (2016), the providers in this study do not actively engage in routine follow-up processes.

Instead, the responsibility for follow-up is largely shifted to the individuals using FP services. Providers issue cards detailing the next appointment, particularly the date for implant expiration, and expect the clients to self-monitor and return as needed. Participant 29, with 21 years of experience in Gure, encapsulates this approach, "*Once you are ready to remove it, you come, and we remove the implant.*" This statement suggests a passive stance on follow-up, relying on clients to initiate further contact.

5.5 Summary

The data analysis on family planning (FP) service provision highlights several key challenges. First and foremost, community fears around side effects like bleeding and infertility, fuelled by rumours and misinformation, significantly hinder FP acceptance. Cultural norms, particularly the need for a husband's consent, strongly influence women's FP decisions, underscoring the patriarchal nature of these societies. Providers often face doubt due to perceived affiliations with external colonial interests, which affects their credibility in the communities. Additionally, the inconsistent supply of FP products and a lack of proactive follow-up care further complicate service delivery.

These challenges are rooted in an intricate mix of socio-cultural, economic, and patriarchal dynamics. The reluctance to engage with FP information, often driven by cultural and gender-based biases, is particularly notable. To address these multifaceted issues, an integrated approach involving community education, improved healthcare delivery, and a focus on gender equality is essential. This

approach aims not only to improve FP service delivery but also to reshape community perceptions and attitudes towards family planning.

5.6 Religious Information Providers' Perception of FP

The exploration of religious views on family planning (FP) is crucial for understanding its adoption across different faiths. Catholic priests represent the Church's opposition to modern contraceptives and its support for Natural Family Planning (NFP). This stance is vital as the Catholic Church has consistently favoured NFP over other contraceptive methods (Gregus 2019; Kabagengi 2016; Cempron 2021). Similarly, a pastor from the Reformed Baptist Church provides insights into their interpretation of Biblical teachings, known for challenging global ideologies not aligned with scripture (Scroggins 2019; Bingham 2018; Griffiths 2016). Islamic perspectives vary, as shown by two Imams, a conservative 77-year-old and a more liberal 35-year-old. While Islam often encourages larger families, it also recognizes scenarios where contraception is acceptable (Kabagenyi 2016; Wusu 2015; Islam 2018; Bhan and Raj 2021).

These religious leaders' views highlight the influence of faith on FP adoption and the need for FP programs that respect these varied beliefs. Understanding these perspectives is key in designing FP initiatives that are considerate of the diverse religious backgrounds of communities.

5.6.1 Perception of family planning

This theme delves into the definitions of family planning (FP) according to Nigeria's two predominant religions, as explored in various studies (Adedini et al 2018; Wusu 2015; Etokidem 2015; Odimegwu 1999). These insights offer an in-depth understanding of the FP behaviours considered acceptable within these religious

frameworks. The core focus of these definitions is on child spacing and the concept of justice, reflecting the religious teachings and principles that guide FP practices among adherents of these faiths. This analysis provides a comprehensive view of how FP is perceived and practised within these religious contexts, highlighting the importance of spacing for family welfare and the moral implications considered in religious teachings.

5.6.2 Spacing

The analysis of religious leaders' views on family planning (FP) reveals a spectrum of interpretations shaped by faith doctrines and religious teachings. Three out of the five clergy define FP from their religious perspective, often in contrast to secular definitions. A Catholic priest (Participant 31), aged 40 with nine years in service as a priest, views modern family planning as a way of manipulating natural reproductive processes to control childbirth, conflicting with divine will as detailed in Norris (2013). He explains that from the Catholic viewpoint, "FP means practising self-discipline to space children according to natural cycles, without setting a specific number of children, as outlined in "Humanae Vitae, 16".

Participant 33, a Reformed Baptist pastor with a theological background, opposes contraception methods such as the morning-after pill, considering them "*contrary to Christian values*". He emphasizes that "*children are a blessing, and setting a specific number of children is deemed sinful*".

Another Catholic priest (Participant 32), aged 33 and a priest in service for seven years, articulates the church's stance against pre-determining the number of children in a marriage. This approach aims to avoid cognitive dissonance and the potential for abortion, which the church equates with murder. He explains, "... we

discourage the aspect of determining the number of children to avoid the temptation of abortion should in case couples exceed the number they want.”

Emphasizing the belief that children are gifts from God, he suggests that unintended pregnancies following natural family planning should be seen as divine will: “... so if and when unintended pregnancy occurs after following adequately the natural method, then it is God.”

The Reformed Baptist pastor, aged 35, with seven years of pastoral service, reinforces this view, arguing against the notion of setting a specific number of children. He warns, “... we must repent before the Lord if we are driven by the world’s logic and reasoning for limiting or not having children.” This perspective is rooted in the belief that children are blessings, as stated in Psalm (127:3). Thus, the church avoids defining specific family planning practices, particularly those involving contraception that could harm or terminate life at its beginning.

The Islamic cleric (Participant 34), aged 70 and serving in the capacity of an imam for sixty-six years within his community, presents a similar view from the Muslim perspective, emphasizing procreation without spacing, highlighting the religious importance of growing the community of believers through procreation. He quotes the Prophet, stating, “...the prophet says we should give birth and there is no room for spacing. So that God’s followers would be plenty. Give birth till God does not bless you with children.”

These diverse religious insights reveal a common thread: an emphasis on the sanctity of procreation and a general hesitancy to modern contraceptive methods. Their teachings frame family planning within the context of divine will and natural processes. They highlight the challenges in reconciling religious doctrines with

modern FP practices, reflecting a significant influence of religious beliefs on attitudes towards family planning. They also highlight the need for nuanced approaches in FP advocacy that respect diverse religious perspectives.

5.6.3 Perceived injustice

The analysis of religious viewpoints on modern contraceptives reveals concerns about perceived injustice, especially related to women's future fertility. A 35-year-old Muslim cleric with a primary education (Participant 35) articulates a conflict between religion and family planning (FP), particularly with methods like implants and IUDs. The public sphere is again engaged through the religious leaders' influence on public opinion and community norms regarding family planning. Their teachings and interpretations of religious texts contribute to shaping the broader public discourse on family planning in their communities. This is reflected in Participant 35's expression of strong disagreement with any FP method that potentially hinders a woman's ability to conceive when desired, "*...like some, after using them, you start looking to get pregnant, but become unable to.... religion strongly disagrees with this*" labelling it as an act of "cheating" or unfairness. The concerns raised by religious figures about certain contraceptives leading to infertility reflect deep-seated apprehensions about reproductive control, highlighting a fundamental religious objection to any family planning method perceived as infringing upon natural reproductive capabilities.

Similarly, from a Christian viewpoint, a 35-year-old pastor of the Reformed Baptist Church, holding a BSc in Theology, echoes this sentiment, "*We would not specify on certain things, but there would be clear teachings against contraception that literally harms or kills where life begins*" adding, "*We can be as specific on this part.*" This statement reveals the church's stance against any form of

contraception that is perceived to interfere with the beginning of life, reflecting a strong emphasis on the sanctity of life from its inception. The pastor's words indicate a specific opposition to contraceptives that are believed to have post-conception effects, aligning with the church's broader theological views on procreation and the value of human life. This perspective is crucial in understanding the religious and ethical considerations that shape attitudes toward family planning in communities influenced by such teachings.

These perspectives highlight a significant aspect of the religious discourse on FP: the preference for natural over artificial means of controlling fertility. Both the Muslim cleric and the Christian pastor represent a broader apprehension within religious communities about modern contraceptives' impact on natural reproductive functions, viewing them as potential disruptors of a divinely ordained process. The emphasis on avoiding "cheating" or injustice through the use of contraceptives further reveals a patriarchal framework where women's reproductive roles are closely monitored and controlled. This influence extends beyond individual beliefs to affect community norms and public policies related to reproductive health.

This deep-seated belief underscores the complexity of integrating modern FP methods into communities where religious teachings significantly influence perceptions of reproductive health and rights.

5.7 Family Planning methods encouraged by religious institutions

5.7.1 Natural Family Planning (NFP)

The analysis of religious leaders' perspectives on family planning (FP) highlights a divergence between religious teachings and modern contraceptive methods.

Catholic priests, for instance, emphasize the church's support for natural family planning (NFP), considering it the only method that respects the sanctity of marriage and procreation without interfering with natural processes. Participant 31, a 40-year-old Catholic priest, notes, "The Catholic Church supports and approves family planning, but only natural family planning... it does not tamper with nature."

This sentiment is echoed by Participant 32, a 33-year-old Catholic priest, who describes the use of artificial birth control methods as an *"insult on the creator"*. He stresses that life is sacred, and artificial means should not be used to hinder procreation. Similarly, Participant 33, a 35-year-old Reformed Baptist pastor, opposes any contraception that *"harms or terminates life"*, indicating the church's clear teachings against such practices.

The Catholic Church promotes NFP, especially in cases of physical and psychological conditions or external circumstances affecting either spouse. This method, guided by abstinence and the Billings ovulation method (McSweeney 2007 p. 11), is viewed as a way for couples to responsibly space children without infringing on divine principles. Participant 32 reinforces this, stating, *"The Catholic Church insists on self-discipline by the couple in using the natural way of child spacing, which is abstinence."*

Conversely, the perspective of a Reformed Baptist pastor reflects a different Christian approach to NFP. When queried about his church's stance on NFP through abstinence, he seeks clarity on NFP specifics. Based on the explanation of abstinence, he indicated a less definitive position within his denomination on this method, "...It's a hard one because we would not know for sure when a woman is safe enough to not be pregnant."

This highlights a variance in Christian denominational practices regarding FP; the Catholic Church advocates a specific natural method. In contrast, the Reformed Baptist Church appears less prescriptive.

On the other hand, the 70-year-old Imam with Islamic education rejects any form of FP, "*... it is nothing to talk about; we do not welcome such talks here*". This echoes a sentiment that likely influences the behaviour of other community members, particularly men. This attitude can be linked to instances reported by FP providers, where men actively prevented them from entering households for FP outreach. It also resonates with reports from male and female audience members who mentioned turning off radios to avoid FP-related broadcasts. This analysis suggests that the discourse around FP in this rural public sphere is heavily dictated by religious doctrines, with community members likely aligning their views and behaviours with these teachings. As he notes, he teaches solely from the Quran and emphasises the importance of procreation without spacing while focusing on remedies that promote fertility, "*When individuals seek family planning advice, I instead offer fertility guidance. In fact, some remedies I provide are so effective that they might delay menopause or continuously enable childbirth.*"

These perspectives reveal a complex interplay between religious doctrines and FP practices. While the Catholic Church endorses NFP based on principles of self-discipline and respect for natural reproductive cycles, the Reformed Baptist and Islamic teachings focus more on the importance of procreation as a divine command. This divergence highlights the need for nuanced approaches in FP programs, especially in contexts where religious beliefs deeply influence community attitudes towards reproductive health.

5.7.2 Praying and Drinking of Quranic verses

The analysis of the younger Islamic clerics' views on family planning (FP) within the Muslim community in Zaria unveils a unique approach deeply embedded in religious practices. This 35-year-old mallam, who balances his role as a religious leader with a casual position at the university, reveals a lesser-known method of FP. He describes a practice involving the recitation of specific Quranic verses or the consumption of water infused with Quranic script as a means to prevent pregnancy. He cites personal experience, noting its effectiveness in spacing births in his own family, with a slight uncertainty about a single instance of the reduced interval between births, "... *ermm except for the last child the interval is less than 3 years...*" which he attributes to divine will, "... *man proposes, God disposes*".

This method, as per the participant, is not commonly discussed or widely advertised, "*We just don't go about talking about it though*". Access to such knowledge seems to be restricted, often passed through word of mouth in a referral system within the community, representing a form of public sphere where information circulates in controlled, informal networks distinct from mainstream, openly accessible channels (Karppinen 2007). Interestingly, according to him, men are often the ones seeking this information "... *but when births occur annually... and a health concern for their wives, reasons people actively seek information and assistance. Often, it is the men who approach religious leaders for guidance*" because of their communication preference "*they want a man-to-man discussion.*" The control over such crucial information could be influenced by male-dominated structures within the community, where decisions about FP are often influenced by men's perceptions and religious interpretations (Kriel et al. 2019; Harrington et al. 2016; Geleta et al. 2015).

The younger Imam's cautiousness in sharing this information initially and the eventual disclosure upon sensing the interviewer's genuine interest reflects a dynamic of mistrust or wariness towards perceived outsiders. This hesitance aligns with the community's broader apprehensions about external influences on their traditional practices, as noted in the works of Chatman (1996) and Renne (1996). The mallam's approach to FP, deeply intertwined with religious beliefs and practices, highlights the complex interplay of cultural, religious, and gender dynamics in shaping FP methods and attitudes in this community.

5.7.3 Withdrawal

A 35-year-old Imam notes the Islamic acceptance of contraception methods like withdrawal, which prevent pregnancy before conception. He states, "The only type of FP religion agrees with is that type that works or prevents pregnancy before conception" (Musallam, 1981; Wani & Rafique, 2019). In contrast, Catholic teachings, as described by a 38-year-old priest, view these methods as barriers to self-giving in marriage. He explains, "*The selfishness here means using barriers at sexual Intercourse, like condoms*" (McSweeney, 2007). The Catholic Church thus advocates for NFP, such as the Billings ovulation method, to encourage self-discipline and abstinence during ovulation.

The advocacy for Natural Family Planning (NFP) by religious groups profoundly shapes public discourse, particularly in rural areas. It significantly influences attitudes, behaviours, and family planning policies. This impact is highlighted in the study's audience analysis, where women adhering to the Catholic faith expressed a preference for NFP methods over others. This preference shows the influence of religious teachings and perspectives on personal choices and community norms regarding family planning. This further highlights the potential

of religious institutions to play a vital role in providing information and education about NFP methods in areas where healthcare resources are limited.

5.8 Goal for promoting NFP by religious institutions

Religious institutions focus on promoting Natural Family Planning (NFP) to uphold the sanctity of human life and offer socio-economic benefits. This goal, crucial in religious teachings, varies in interpretation among Christian and Muslim clerics. For Christians, the sanctity of life is linked with procreation as a reflection of divine glory, while Muslim clerics view it as a means to increase their faith's followers. These diverse religious interpretations shape the approach and advocacy of NFP in different communities. The data analysis is presented in the sections below.

5.8.1 Promote the sacredness of Life

According to all the clerics who participated in the interview, the overall goal of FP for both religions is to promote the sacredness of life. The sacredness of life was, however, expressed in two different ways: for Christians, it meant procreation and populating the Earth as a mandate to reflect God's Glory through man, while for Muslim clerics, it was about adding more followers to the religion (Iyer 2019).

For the pastor of the reformed Baptist church, the secular overall goal of FP - to limit births - is of no essence to the church, as it is the Lord who determines whatever happens to an individual. He noted that while some individuals are unable to give birth to children and should not be tormented about it, this should also be applied to people who give birth. Their decisions should not be questioned (They should not be blamed for their actions) as it is the lord who gives children:

"It is in the Lord's providence whether He will bless you with a husband, wife and children. In a fallen world, some wombs are closed, and some circumstances do restrict or stop this command being followed, such as health and age."

Therefore, he stated that, rather than limiting births, the goal of the church when teaching about FP, if they decide to teach this, should be focused on encouraging every Christian couple to bear children in the absence of reproductive health issues:

"As a general principle is clear here, it should be the desire of a Christian man and woman to come together and to bear children."

As with Participant 8, participant 9, the 77-year-old Muslim Mallam and Imam, said he encouraged followers to have more children. Reasserting that in Islam it was God who determines what happens to man, rather than FP, he said:

"We believe in God's protection. Everything is from God, whether in good health and safe delivery, or poor health and complicated delivery."

By implication, a perfect life, according to the mallam, is not achievable by human plans, and neither does FP have the potential to influence a perfect plan. Consequently, this suggests that religion should focus on the goal of promoting procreation and teaching followers to live up to this mandate. The goal of FP preached in Islam should be in this context,

"So, you see... only God knows what you need and what will best suit you.... So, trying to control births to avoid suffering is no excuse... we will continue to follow religion and pray."

In support of the sacredness of life, participant 7, the 33-year-old priest, added that because modern contraceptives are believed to act as a barrier to procreation (Gregus 2019), the Church discourages the use of any artificial method which is believed to hinder or tamper with the process of bringing life:

"Life is sacred and a gift from God. No artificial means should be used to stop or divide procreation."

For Participant 6, the 38-year-old priest, the goal of FP taught by the church is to prevent the abuse of the power given to man to produce like offspring by the use of artificial methods to disrupt this process:

"...to enlighten her faithful, teach her to know the expectations of God from humanity based on the natural endowment in man and how it is to be used in other not to end up abusing the gift of nature to man."

In conclusion, participant 7, the 33-year-old catholic priest, noted that as a catholic priest, his major goal is to propagate and promote the information on the sacredness of life to prevent any activity through the use of modern contraceptives which disrupt the natural process of conception and stop the formation/start of life:

"My belief on my role is that I must use available means within my reach in teaching and preparing the gospel of the sacredness of human life and the need for couples to imbibe the culture of abstinence in their family planning."

Supporting the perceived role of the clergy as a medium for promoting the importance of life was Participant 8, the reformed Baptist pastor, who stated that

the church will not relent in its effort to promote proudly the importance of couples to remain “fruitful and multiply”:

“Our promotion of the Biblical blessing of husbands and wives being fruitful and multiplying is something we would teach and rejoice in.”

Participant 9, the 77-year-old Muslim imam, also shares a similar view as the above participants on his role to promote procreation through giving undiluted and unrefined Islamic teachings:

“I will continue to tell them what the prophet says: Give birth till God doesn’t bless you with children.”

According to Participant 7, the 33-year-old catholic priest, he has two major qualities which enable him to achieve the goal of FP, which is promoting the sacredness of life through the use of the only method (NFP) to preserve life according to the church.

5.8.2 Raising Moral families and children

Building a healthy society through families who believe and practice good relationships, love, justice and respect for others was identified as the major essence of teaching FP by 40 per cent of the Catholic priests in this study.

These behavioural characteristics can be categorised under moral standards, as identified by Sharma et al. (2014). In support of this, Participant 7, the 33-year-old priest who has been a pre-marriage and marriage counsellor in times of crisis since his ordination in 2018 (5 years ago), noted that the church views the family as the fundamental starting point for any society. As a result, the church takes upon itself the responsibility to equip the family with adequate information to help

individuals plan births within their capacity to raise God-fearing children (very high moral standards):

"The church calls the family the domestic church. She is the cell of the society. Hence proper education and formation is always taken seriously by the church in making sure families are taught God's ways."

This point is supported by Participant 6, the 38-year-old Catholic priest, who has counselled individuals preparing for marriage as well as married couples for over 9 years. He emphasised that "God" is love, and by virtue of giving birth to children, parents become "co-operators" in creation with God. Therefore, Catholic parents have an obligation to evidence the role of "co-operators" with God by teaching and raising their children to learn and show the love of God, in essence living to the high standard of good behaviour, and FP makes this possible:

"The Second Vatican Council advocates that parents should regard as their proper mission the task of transmitting human life and educating those to whom it has been transmitted. They should realize that they are thereby co-operators with the love of God the Creator and are, so to speak, the interpreters of that love".

5.8.3 Socio-economic benefits /Provision

The capability and ability of parents to provide for the needs of the children they bring to the world was another goal of FP, highlighted by 60 per cent of the participants.

According to Participant 7, the 33-year-old catholic priest, although the church does not promote an ideal family size, it does not encourage couples to determine the number of children they intend to have. However, the encouragement for couples to create intervals between births through NFP is emphasised to

accommodate the Christian parental responsibility of parental provision for children:

"There is not an ideal family size, but the church advises couples to always make sure they can take care of the children they give birth; feeding, watching over their health and educating them."

This echoed the words of the Reformed Baptist pastor, who stated that even though his church would continue to promote biblical teaching on couples in marriage being fruitful and multiplying by giving birth to children, it recognises that this may be difficult in practice:

"Whilst recognising that the practical outworking of that may differ from family to family."

With this understanding, the church, according to the participant, will not be quick to condemn members of the congregation who decide of their own accord to adopt other methods of FP. This decision or action should be made with the sole aim of honouring God (Parents meeting up to their physical responsibilities of provision and good spiritual upbringing) and not causing harm to life (embryo) at any point. He describes this act as an issue of "*conscience*", and the church will not hold it against the individuals,

"..... with the underlying principle being that there is a desire to honour and serve the Lord in decisions made as a matter of conviction and based on conscience."

(Participant

It is important to note that the issue of FP not causing harm to life at any point is the point of fertilisation and conception, as stated by McSweeney (2007). The

author argues that as soon as the head of the sperm enters the egg, fertilisation occurs; “almost at once the centre of one unites with the centre of the other, and this is the time of conception, a new human being is formed” (PP 66-67). This is to say it takes only a few minutes for life to begin (Wilcox 1995).

In support of the issue of conscience, the 35-year-old Imam (Participant 10) reported that in Islam, a father and husband have the obligation to provide three necessities for his family, which are food, health, shelter and clothing. Using the analogy of religion permitting the marriage of four (4) wives by a man, he also describes the adoption of FP as an issue of personal choice determined and defined by the three required necessities:

“Islam says you can marry 2/3/4 wives, not one. However, if you know you are unable to treat them equally, leave the three and marry 1. By treating them equally, it means (clothe them, give them a roof over their head, feed them and take care of their health). These are the three major necessities, and if you can do these three, then they are fairly treated. The same applies to having children. If you are unable to, then give birth to one.”

Consequently, the religion neither encourages nor discourages the use of FP, likely leaving it to be an issue of conscience, as stated by Participant 8, the Christian pastor.:

“But overall... in Islam. The religion does not stop you from adopting Family planning, neither does it force you to adopt it.”

On the contrary, in an attempt to make a convincing argument concerning the socio-economic benefits likely to emanate from having many children was Participant 9. Who has served his community (Zaria) for over 55 years in the

capacity of both Imam and Mallam, with earlier analysis of his teachings shown to oppose FP. Participant 9 again expressed that the Quran clearly shows that *"It is God who gives providence..."*. Therefore, followers are not expected to give birth to a few children 2/3 because they fear the likelihood of defaulting in the area of provision in the long term. He emphasised that wealth, poverty or good health are factors determined by God (Hasna 2003) rather than the number of children:

"...children neither bring nor prevent hardship; it is God who gives providence. Remember, you may have one child you and the husband will cook and be unable to eat due to sickness, or even may struggle to eat despite having one child due to poverty."

Reassessing the point on providence being of God was Participant 10, the 35-year-old Mallam, who had served in this capacity for 5 years, with a primary school certificate as his highest form of formal education. According to Participant 10, the Holy Book (Quran), serving as a guide for Islamic living, states that it is God who gives children, and before any child is born, provision is made for their feeding needs by God (Bonner 2005; Kabagenyi et al. 2016):

"But the Quran says that no one is given birth to (Born) without the provision of food for him by God."

On this note, the participant (10) concludes that the decision to accept FP, in the end, is dependent on the couples or individuals:

"... overall, a family or couples' decision to adopt family planning depends on personal/individual conviction."

This is similar to the earlier mention by Participant 8, the reformed Baptist pastor, on individuals' conscience being the final basis for their decision on whether or not to adopt a method of FP.

Observation: An important thing to note is the mention of a few children stated by Participant 9 (70-year-old Imam), capped at 2-3 by the researcher in the preceding paragraph. This is so because, based on interview notes and observation, the mallam did mention this number while trying hard to know the researcher's opinion on the ideal number of children couples should have. On getting no reply, he concluded, "... *He continues people like you want 2-3 children... that's so small.*" with a look of disgust this time and disapproval in his tone like the researcher should be ashamed of herself, he continued "*that is nothing to talk proudly about.*"

Various studies have shown that high levels of infant and child mortality due to sickness continue to persist in rural areas in Nigeria (Bolu-Steve et al. 2020; Adedini et al. 2015; Kabagenyi et al. 2016; Adetunji 1995; Lawonyi 2001; Harding 1940) and Zaria inclusive (Wammanda et al. 2020).

It was, therefore, not surprising when the issue of sickness and child mortality was raised as a reason to dissuade the use of FP for having fewer children. Participant 9, an Imam in Zaria, emphasised the possibility of children turning out to be socio-economic empowerment rather than burden if they survived. He, therefore, used the mathematics of probability, addition and subtraction, greater than and less than, to describe the importance of having many children if sickness was to cause death amongst them:

"3 and 10... which is better and greater, is ten not better?"

He was keen on couples having 10-12 children, so it was not surprising when he used the number 10 to compare to three. He then stated that in the incidence of death, the family with 10 were more likely to have more surviving children compared to the family with 3:

"You know how sickness, accidents and all....and if you have one child, the one may even die, yet you are still alive. Then, in the case of 2, one may die, and the other one is all you will be left with."

Likewise, he painted a scenario of economic affluence as a result of having many children:

"But if you have 10 children and they get rich... this will bring this and the other that, your days of relaxation will kick in."

He, therefore, concluded his argument by stating that because providence is of God, human beings can only try. Since life in itself is full of uncertainty, the people are better off having as many children as they can (living by the religious command):

"..... in the end, the suffering you are bothered about or stress of many children can still visit you through the death of the few you have."

The increased number of children, according to him (Participant 9 has Islamic education as his highest level of education) rather increases the likelihood of future economic stability:

"Just rely on God is not by the number of children ... on the contrary, they may be good sources of wealth."

Based on this analysis, children were portrayed as a source of future economic liberation and retirement plans for the parents rather than individuals to be taken care of to reach the financially independent age to take care of themselves.

5.9 Strategies for Promoting NFP by religious institutions

The Catholic church was the only religious group in the study area, and literature has shown to actively propagate a form of FP (NFP) (Gregus 2019; Agadjanian 2013) through its teachings and the provision of secondary materials (Pamphlets, books, leaflets).

For the other clerics in this study, the Reformed Baptist pastor and the 70-year-old Imam) stated that their religious teachings do not accommodate the topic of FP in any way. The 35-year-old Imam, based on analysis, had an unclear stance on the use of FP. He asserted that the only available information on other methods of FP that work is the drinking of Quran verses, withdrawal method, and recitation of some Quran verses to active information seekers (Wilson 1997). The analysis and presentation of this theme are solely centred on the communication techniques employed by the Catholic Church to educate its congregation on the significance of Natural Family Planning (NFP) and encourage its acceptance among its members.

5.9.1 Effective communication strategies

The Catholic Church, represented by Participants 31 and 32, highlights the crucial role of parents in communicating the church's teachings on Natural Family Planning (NFP) to their children. Participant 31, a 33-year-old priest, underscores the responsibility of parents to raise their children within the framework of Biblical and Catholic doctrines, emphasizing the importance of emphasizing NFP as the

church's approved method of family planning. He remarks, "Parents should educate their children in the way of God and Western education for responsible household growth."

This education includes instilling the principles of NFP and abstinence, emphasizing the church's strict stance against artificial methods, "*They should be taught to say no to artificial methods involving the use of pills*", noting that this teaching on abstinence is recommended for individuals of age irrespective of marital status, "*Abstinence is the way out for both single and married*". The Catholic Church's teaching on NFP encapsulated in the quote above is analysed as an approach promoting pre-marital abstinence for singles and periodic abstinence for married couples during fertile periods. It reflects the Church's commitment to moral discipline and adherence to religious tenets in managing fertility, both before and within marriage, without relying on artificial contraceptives.

Reflecting the sentiments of the younger priest, a 40-year-old priest reiterated the vital role of parents in educating their children, emphasizing this as a collective directive and responsibility endorsed by the Vatican: "*The Second Vatican Council advocates that parents should regard as their proper mission the task ... of educating their children on the teachings of the Catholic faith.*"

Beyond family-based education, the church also employs organized platforms for disseminating information on family planning. According to the 33-year-old priest, the "Family and Human Life Unit" plays a pivotal role in this educational endeavour. This unit conducts teaching at both the parish and diocesan levels, effectively and proactively bridging the knowledge gap on the church's position regarding family planning. This priest, attuned to modern communication methods and active on social media, advocates for the expanded use of seminars,

workshops, and digital platforms to enhance the reach and effectiveness of the church's teachings on family planning.

5.9.2 Integrating faith and culture

In the Catholic Church, the Bible is a primary guide for developing and disseminating family planning (FP) information, complemented by oral and written cultural traditions. The 33-year-old priest and pre-marriage counsellor emphasizes that *"the church citing the Vatican II document, Catechism of the Catholic Church, and papal encyclicals as key sources"* teaches FP. Another priest, a marriage counsellor (Participant 32), reaffirms the reliance on scripture and tradition for all church teachings, including those on FP.

Additionally, the concept of inculturation is vital in the church's approach. Recognizing humans as inherently cultural beings, especially in Nigeria, the church *"leverages aspects of culture that align with gospel values to communicate the importance of FP"*.

This alignment of cultural and religious values is also evident in Islamic teachings. Participant 34, a 77-year-old Imam in a Muslim-dominated area, underscores this, noting that *"both tradition and the Prophet advocate for procreation"*.

The church capitalizes on cultural norms that resonate with gospel teachings to convey the significance of NFP effectively. This approach is adept in communities where large families are culturally valued, thereby promoting NFP as a method aligned with religious principles without disrupting the natural procreation process.

5.9.3 Educational outreach: age and literacy consideration

In the Catholic Church's approach to family planning (FP), education, age, and literacy play crucial roles. The 33-year-old priest highlights those individuals aged eighteen and above, including teenagers from fourteen experiencing puberty, are deemed appropriate for FP information, "Adults from the ages of 18, though those from 14 can participate also". This approach ensures that teachings start before marriage and continue thereafter, aligning with the church's responsibility to inform society "*as guided by the scriptures*", he noted.

The church's focus on Natural Family Planning (NFP) is viewed as formative, "*it remains an ongoing formation even after marriage*" with early exposure seen as crucial for developing a strong commitment to its practice. "the intention is to ensure that individuals are well-prepared for future marital and reproductive responsibilities, eliminating any claims of ignorance".

Another 40-year-old priest reinforces this, stating that the church's motive in producing FP materials is to "*enlighten faithful individuals about God's expectations regarding natural procreation*". This is in line with the church's view of NFP not just as a method but as a covenant and significant life commitment.

Additionally, the church takes into account literacy and educational qualifications when disseminating FP information, "*registration processes for church groups like the pre-marriage class, CYON, or Catholic Women Organisation help gauge the audience's demographic, ensuring that the level of teaching is adapted appropriately*". This strategy engages with the public sphere, with the church actively engaging in the public discourse on family planning by acknowledging the diverse educational backgrounds of church members, aiming to make FP teachings accessible and comprehensible to all.

5.9.4 Moral authority and influence in FP Education

In the realm of family planning education, the role of a Catholic priest extends beyond mere instruction to embodying a figure of moral authority and influence. The 33-year-old priest underscores this by highlighting his ordained role to “teach the gospel of life and justice”. His office confers upon him a respected position, not just within the Catholic community but also among Protestants and Muslims. This cross-religious respect stems from his commitment to justice and the moral standards he upholds. The priest's teachings on family planning and his respected status in the community place him within the public sphere, particularly in the context of religious and moral education.

The priest's influence is further reinforced by his dedication to embodying the principles of “love and kindness”, central to his teachings. This commitment to living a “Christ-like life” aligns with his calling and elevates the standard of morality he represents. Such a life of integrity and moral rigour makes his teachings on NFP and related issues more credible and trustworthy to his audience, extending beyond the private realm of individual beliefs into the public domain of communal values and practices, thereby engaging in public discourse about family planning and moral conduct.

His approach to teaching is meticulous and well-researched, fostering a sense of reliability and trust among those he advises. The impact of his teachings is evident in the relationships he has built with his congregation, who, according to him, “often seek his counsel and follow his suggestions”. While he humbly refrains from self-assessment, the feedback and actions of his audience speak volumes about the effectiveness and influence of his teachings in the area of family planning. This

scenario illustrates the profound impact that religious figures can have in shaping attitudes and practices related to family planning within their communities.

5.10 Challenges in promoting Natural Family planning

The general challenges faced by the clerics in promoting the religious stance on FP were centred around three major sub-themes: difficulty keeping up with NFP, withholding information, socio-economic downside and poor turnout to events intended to promote religious stance on FP.

5.10.1 Navigating the challenges of NFP

In promoting Natural Family Planning (NFP), the Catholic Church faces a multifaceted challenge. While NFP is the only method sanctioned by the Church, adherents often find its practice demanding. As reported by a 40-year-old priest with extensive experience in marriage counselling, couples frequently express frustration and helplessness with unexpected pregnancies despite following the Billings Method (BM) prescribed by the Church. This complexity is echoed by another priest, who notes that “adherence to NFP is challenging for many due to the intricacies involved in its application”.

The Church's response to these struggles is not one of condemnation but of empathy and encouragement. Priests advocate for “patience, effort, and prayerfulness” to aid congregants in overcoming the difficulties of NFP practice. The Church's consistent stance on NFP, emphasizing its alignment with spiritual salvation, remains a cornerstone of their approach.

However, this stance sometimes leads to a divide within the congregation. Those who find NFP too challenging or opt for modern contraceptives, contrary to Church doctrine, are often seen as “stepping away from core Catholic teachings.” So, they

become like outsiders. A priest highlights that traditional Catholics (insiders) deeply value the teachings on faith and morals, which include adherence to NFP. Thus, those who diverge from this path, relying solely on scientific reasoning, may find themselves at odds with the Church's teachings.

In summary, the Catholic Church's strategy in promoting NFP hinges on consistency in teaching and empathetic encouragement, navigating the complexities of balancing doctrinal adherence with the practical challenges faced by its followers.

5.10.2 Selective information sharing

The findings reveal a complex scenario where selective information sharing, rooted in a blend of secrecy and deception (Mahon 2009), shapes the narrative around family planning (FP) in certain communities. A prominent example is the 70-year-old Mallam, an influential Islamic teacher with over 55 years of experience, who openly avoids discussing FP with his students. His approach is not just a matter of personal preference but a deliberate strategy to keep them uninformed, *"...I deliberately do not talk about it with them", believing that ignorance in this matter is beneficial. He articulates this by stating, "I never even mention family planning to them...they do not need to learn all."* This decision to withhold FP information is driven by his conviction that FP leads to undesirable societal outcomes, as illustrated by his anecdote about a country suffering from an ageing population due to FP practices.

This approach raises significant concerns about the violation of truthful communication, as the Mallam's decision to deliberately keep his students in the dark infringes upon their right to informed choice. Given his extensive influence,

having trained numerous individuals who are now leaders themselves, his ideology on FP likely permeates through various regions, impacting broader societal views.

Interestingly, when asked about alternative methods of promoting FP, the Mallam's response underscores his self-awareness as a key influencer in the community. However, he firmly expresses his stance against FP, reiterating his advocacy for large families: "I am an advocate of giving birth to many children."

In contrast, a younger Mallam, Participant 10, suggests that renowned older religious leaders are pivotal in mobilizing communities for innovation and change, including FP, *"if they say FP is right, then so it is...we believe they are not infiltrated with modernisation, and saying FP is right."* This recommendation reflects a divide among religious figures, where older, more conservative leaders are perceived as unaltered by western influences, thus holding greater sway over public opinion.

These findings highlight the critical role of religious leaders in shaping public discourse (Calhoun 2010) and attitudes towards FP in rural communities. The reluctance of influential figures like the older Mallam to engage in FP discussions points to a significant barrier in advancing FP awareness and adoption, revealing cultural and ideological divides that influence public sphere dynamics.

5.10.3 Socio-economic hurdles

In addressing the complexities of family planning (FP) within a religious context, Participant 8, a pastor with a BSc in Theology, identifies significant socio-economic hurdles. He articulates a perception prevalent in a secular society where children are increasingly seen as "obstacles to personal and career aspirations." According to the pastor, this view contributes to the framing of children as "burdensome", leading to an alarming rise in *"abortion rates and a tendency for families to*

relinquish childcare responsibilities to state institutions". This phenomenon, he argues, is at odds with religious teachings that regard "*children as blessings*". The pastor's insights reveal the tension between modern socio-economic realities and religious values in the realm of FP, highlighting a critical area where religious teachings intersect with contemporary societal challenges. This tension points to the need for an in-depth understanding of FP, one that harmoniously blends religious principles with the practicalities of modern living.

5.10.4 Poor turnout

Another challenge experienced by the church when it comes to teaching NFP is the issue of poor turn-out whenever the church decides to organise seminars and workshops to create awareness on the use of this method and guide them on how to effectively practice it, as stated by Participant 6, the 33-year-old with 5 years of service in the priesthood:

"The challenge is often poor turnout for church teachings."

This chapter has systematically explored the multifaceted dimensions of family planning (FP) adoption and perception across two groups of FP information providers in rural Nigeria, encompassing religious leaders and healthcare providers. A key theme throughout the findings is the intersection of cultural, religious, and socio-economic factors influencing attitudes and behaviours towards FP.

Audience Perceptions and Behavioural Patterns: A recurring observation is the audience's scepticism towards FP, often rooted in socio-cultural norms and religious beliefs. Misconceptions and fears about the side effects of contraceptives, coupled with the legacy of colonialism, shape public attitudes. Many view FP as an

external imposition, conflicting with traditional values around procreation and family structure.

Religious Influences: The influence of religious doctrines, particularly within Christian and Islamic communities, is profound. Catholic teachings emphasize Natural Family Planning (NFP), promoting abstinence and natural methods over artificial contraceptives. This stance, while deeply ingrained, faces practical challenges in adherence. In contrast, conservative Islamic views largely oppose any form of FP, viewing it as contrary to divine will for procreation. Such religious stances create a complex public sphere where FP dialogues often intersect with doctrinal teachings, impacting decision-making processes within families and communities.

Healthcare Providers' Roles and Challenges: Frontline healthcare providers play a critical role in disseminating FP information and services. However, they face challenges like stock-outs of contraceptives, limited access in rural areas, and sometimes resistance from the community. Despite these challenges, the provision of free or subsidized FP services emerges as a significant motivator for adoption among rural populations.

Intersecting Factors and Public Sphere: The dynamics of FP adoption and perception are not isolated but interwoven with broader socio-economic and cultural contexts. Factors like poverty, education, and access to healthcare services intersect with gender and age, forming a complex influence within the rural public sphere. The patriarchal structure of society further adds layers to this complexity, often dictating the flow of information and decision-making processes in families and communities.

In conclusion, the findings of this chapter highlight the refined and layered nature of FP perception and adoption in rural Nigerian communities. Addressing these complexities requires a multifaceted approach that considers cultural sensitivities, religious beliefs, socio-economic realities, and the pivotal role of healthcare providers. This approach should aim for inclusive and respectful dialogues within the public sphere, considering the diverse viewpoints and lived experiences of the community members. The ultimate goal is to foster an environment where informed choices about FP are accessible and respected, contributing to healthier and more empowered communities.

CHAPTER SIX: DISCUSSION OF KEY FINDINGS

6.0 Introduction

An alignment between an appetite for information, the nature of information demanded, and the forms of information delivered can be pivotal in contributing to the likelihood of information being accessed and (potentially) used (Meyer 2009; Cummings 2014). On the other hand, a lack of engagement with available information – or a rejection of information received – can often signal a misalignment between members of target audiences (the information ‘seekers’) and information providers (Choon et al. 2010). As previous studies have noted, a provision of information that does not suit the interest of the target audience or a combination of both has consistently been identified to have a negative impact on information behaviour (Robson and Robinson 2013; Meyer 2009; Godbold 2006; Wilson 1997; Chatman 1996; Dervin 2005). This, in turn, leads to poor relational alignment and an inability to reach strategic goals, like the case of the high total fertility rate (TFR) and overpopulation in Nigeria (NDHS 2013).

In this study, the main factor identified as motivating the use of family planning information and advice by both information providers and target audiences was credibility: whether an information source was trusted and considered reliable in terms of offering consistent, accurate, objective, authoritative, expert and/or practically useful information. Timeliness, accessibility, ease of use and gender sensitivity of information were also identified as positive influences (Robson and Robinson 2013).

This chapter, therefore, moves beyond analysing the key themes to emerge from the findings in order to unpack the key aspects of “agreement” and “disagreement” between the perspectives of family planning information providers and research subjects from their target audiences. In doing so, it attempts to explore how these similarities and disparities might contribute towards improving the effectiveness of FP messaging and intervention strategies.

The four broad headings used to explore and discuss the areas of ‘agreement’ and ‘disagreement’ between the providers and the audience members in this chapter are;

- Factors encouraging positive reception/understanding of FP information
- Factors encouraging family planning uptake
- Obstacles/barriers to FP information behaviour
- Obstacles to FP take-up/adoption

Through these broad headings, the key points identified in this study are likely to lead to attitude change and improved use of FP through the development and dissemination of appropriate FP information that suits the information behaviour of the audience members.

6.1 Factors encouraging reception/understanding of FP information

The factors most commonly cited by both information providers and target audience-members (parents and prospective parents) as promoting engagement and take-up of family planning advice fell into the following categories:

- Ease of access to information (e.g., availability, mode of communication, choice of language).
- Supportiveness and empathy of information providers.

- Perceived knowledge and expertise of professional information provider.
- Level of trust/respect in and/or authority of information source (both official and “informal”).
- Degree of alignment of information provided with accepted social, cultural, community, religious norms, lived reality, and values.
- Societal pressures to produce sustainable/respectable families.

6.1.1 Ease of access

The use of accessible information channels, through word of mouth, was demonstrated by both information providers and the audience members to break FP information into simplistic forms for better understanding. The use of word-of-mouth was necessitated as the form of interaction between contextual users and the outside world (Chatman 1996), shaping the flow and use of the information provided.

How the audience members approach and handle information received was determined by their preferred information source, “word-of-mouth”. The characteristics of clarity and timeliness associated with the use of oral communication made for a better understanding of FP information among women, as women in this study attributed more credibility to health providers than an abstract, impersonal document:

“...I read a pamphlet...I went to the PHC to ask further questions” (Married Woman; Age 37; Muslim).

In a setting where simplicity in communication is essential, both information providers and audience members were found to rely heavily on verbal interactions. This method is not merely a preference; it's a necessity, shaped by the everyday

cultural context of the community and aligning seamlessly with the information-sharing customs of rural users and providers. This finding supports Savolainen's (2008) emphasis on the influence of information sharing on information seeking, as the approach addresses the literacy barrier. Many women in the community not only prefer oral communication over written materials like pamphlets — *"I like the verbal information, I do not read well"* (Participant 18; aged 51; Primary 4 education) — but also recognize it as the primary channel for accessing FP information, either actively or passively. Some participants attributed easier comprehension to oral sources: *"But you know in life, you learn better through conversations"* (Participant 9, Aged 36; Secondary education). This insight highlights the complex interplay between the user's context and information, underscoring the role of demographic factors such as illiteracy and poverty, which can diminish the impact of new information due to a misalignment between individual contextual factors and the medium of communication. This aligns with Ikoja-Ondongo and Mostert's (2006) observations regarding the diminishing effects of poverty, illiteracy, and religion on information impact.

The study also underscores a significant language barrier in the dissemination of family planning (FP) information, echoing Lievrouw's (2001) insights on the challenges posed by communication technologies in certain contexts. Pamphlets and leaflets, primarily in English, inadvertently become more of an obstacle than an aid to the community. This reflects Lievrouw's observation that advanced communication methods can unintentionally act as barriers, particularly in settings with limited literacy or language proficiency.

The community's experiences vividly illustrate this disconnect: A 40-year-old Christian woman's struggle with English materials — *"...When I have papers, I*

cannot read... I wait or look for someone who can read and understands the language” — reveals a wider issue of accessibility. Similarly, a 45-year-old Muslim man's reluctance to discard incomprehensible material, despite not understanding it — *“...if I don't understand, I'll just keep it and not use it”* — points to a missed opportunity in communication.

Collectively, the findings of this study and Lievrouw's work highlight a fundamental mismatch: the medium of information (written, English language material) fails to align with the community's linguistic capabilities and needs, transforming potential enablers of FP understanding into barriers. This not only hinders the effective dissemination of FP information but also raises broader considerations about how language and literacy levels should be factored into information distribution strategies. This insight resonates with Marchionini's (1995) emphasis on the importance of adapting the direction of information seeking to the dynamic adaptation of the user. It's not just about sharing information; it's about creating a connection, building trust, and tailoring messages to resonate with the women's social conditions and lived realities (Crenshaw 1989).

6.1.2 Societal pressures to produce sustainable/respectable families need to raise responsible, moral children

Another key incentive for FP information-seeking that both providers and audience-members identified was the cultural pressure to raise *“well-behaved”* children who would be meaningful contributors to society.

One reason used to encourage audience members to adopt modern FP by the frontline providers and NFP, in most cases by the religious leaders, was the need for parents to produce families characterised by respect and moral citizenship,

believed to be more achievable with sustainably sized families compared to larger ones:

"There is not an ideal family size, but the church advises couples to always make sure they can take care of the children they give birth; feeding, watching over their health and moral upbringing and educating them." (Pastor, Reformed Baptist, aged 35).

"...we reiterate the importance of raising children to live up to moral standards, which can become difficult with many children" (FP provider, aged 45).

The expected outcome of this form of counselling was shown to encourage some of the mothers, including those strongly opposed to FP, to listen and think through information received afterwards, *"... making easier the struggle of bringing up children to good standard remains the most beneficial point I have heard"* (Married woman, aged 35, Christian).

It was intriguing, however, to find that while the surveillance culture encouraged the use of FP among women, some men, in trying to justify their desire for many children, successfully detached parenting impact from attitudinal formation in children, contrary to finding by Deci and Ryan (2000) who show a significant association between the two elements.

"... just give birth bearing in mind not all will be good" (Married man, aged 58, Christian). These individuals fit into Roger's (2003) concept of late innovation "adopters" and "laggards." However, his proposed principle of homophily highlights that similar people like themselves are likely to influence their opinion. This finding re-emphasises the need for the development of FP information involving dialogue between stakeholders in recognition of health expertise.

6.1.3 Ease of access to information

The use of accessible information channels, through word of mouth, was demonstrated by both information providers and the audience members to break FP information into simplistic forms for better understanding. The use of word-of-mouth was necessitated as the form of interaction between contextual users and the outside world, shaping the flow and use of the information provided. Their everyday setting between contexts aligns with the culture of information sharing within the community, thereby encouraging understanding of FP messages.

How the audience members approach and handle information received was determined by their preferred information source, "word-of-mouth." The characteristics of clarity and timeliness associated with the use of oral communication made for a better understanding of FP information among women.

"... I went to the PHC to ask, and my questions were answered and even more information given, so I was not worried" (Married Woman, age 37, Muslim).

Although take-home pamphlets and leaflets were available at the PHCs and could be given out on request, the women stated they preferred word-of-mouth as some of them could not read due to the low level of literacy, evident in the educational qualification of the participants further explained their preference for word of mouth, while some others verbally stated

The low literacy level evident in the educational level of the participants was also shown to contribute to this preference for oral communication and a barrier to their use of written information. As Lievrouw (2001) notes, the use of a more advanced channel of communication, such as IT, amongst indigenous groups can

become a barrier to information practices. The findings in this study, similar to Lievrouw, showed the use of pamphlets and leaflets, most times written in the English language, almost acting as a barrier to FP information and the preference for oral communication as a stress coping mechanism:

"...when I have papers, I cannot read... I wait or look for someone who can read and understands the language" (Married woman, aged 40. Christian).

"...if I don't understand, I'll just keep it and not use it." (Married man, aged 45, Muslim).

Corroborating Olson (1994), findings in this study show that figures of authority such as heads or religious leaders for the men and health providers for the women were attributed more credibility than an abstract, impersonal document.

Men also identified the use of word-of-mouth to encourage the dissemination of FP messages as it aligns with the contextual elements of power structures and hierarchy within the community:

"If anyone has something to say on FP, they should talk to the king or religious leaders, and they will talk to us."

Although the use of word of mouth was shown to encourage the understanding of FP, as credible sources are attributed to credible information, Ikoja-Ondongo and Ochalla (2003) refer to the contextual factors of poverty, illiteracy, and religion shaping the information behaviour of individuals could render newly introduced information less useful. Meyer argues that the extent to which an authority understands the issue at hand can either sanction or reduce the effectiveness of the intended effect.

Based on this finding, the study suggests more time be spent to train health providers to communicate better – for instance, using similar messages to other influential individuals – because repetitive encounters under the same conditions may result in the development of a certain pattern of response (Davenport 1997). It could be viable in the information-sharing culture of the rural residents.

6.1.4 Supportiveness and empathy of information providers

In Nigeria's socio-economic landscape, marked by the challenges outlined in the World Bank's 2020 report, a distinctive approach to family planning (FP) communication emerges from the study. This approach is in the shared socio-economic hardships experienced across different strata of Nigerian society, irrespective of education or income level.

The findings in this study revealed frontline providers, entrenched in these realities, adeptly used these socio-economic challenges as a pivotal talking point in advocating for FP. For instance, Participant 28, a Muslim mother, and Participant 26, a Christian mother, both utilize economic hardships as a lens to discuss the feasibility and practicality of managing smaller family sizes. These conversations often revolve around the intense pressures of providing for large families in a struggling economy. Participant 28's approach to questioning couples with many children about their ability to cope in the current economic climate is not just a counselling strategy; it's a reflection of the lived realities of many Nigerian families.

Interestingly, the providers' narratives intertwine practical understanding with spiritual reliance, a delicate balance reflective of the societal context. Participant 26's mix of despair and faith - shaking her head and sighing before attributing her situation to God's will - encapsulates a prevalent sentiment. This duality of

practicality and spirituality in their discourse suggests that while faith is a cornerstone of their lives, it coexists with the need for pragmatic solutions like FP in challenging times.

This empathetic approach to FP advocacy is not merely about disseminating information; it is about building a rapport based on shared experiences and mutual understanding. The providers' roles as women, mothers, and professionals in similar societal contexts lead to a unified viewpoint on FP.

6.1.5 Level of trust/respect in and/or authority of information source

The study reveals a compelling strategy in family planning (FP) communication: reasoned, evidence-based argumentation. This approach, particularly effective when intelligently presented and backed by medical evidence, has shown potential in overcoming barriers related to religious beliefs or patriarchal norms. It's a critical breakthrough in encouraging the acceptance and understanding of FP.

The use of a religious framework by some Muslim frontline providers has been a game-changer. They cleverly integrate religious teachings into FP discussions, as exemplified by Participant 28, who cites religious doctrine to support the idea of limiting family size for those unable to care for a large family. This tactic resonates deeply in communities where religious leaders often dictate social norms.

Interestingly, frontline providers were revealed to have the ability to play the dual role of health providers as both medical experts and cultural insiders. Their ability to intertwine religious teachings with health advice effectively repositions them within the community's social fabric. This is vividly illustrated by the audience's reaction to silence during these discussions, which, in the Nigerian cultural

context, signifies a range of respectful and cooperative attitudes, as explored by Medubi (2010) and Amuda (2008).

The credibility of these FP messages is further solidified when audience members verify the information against religious texts, like the referenced Quran verse. This not only boosts the provider's authority but also ensures that the FP advice is seen as congruent with religious beliefs.

While these insights primarily emerge from discussions between women, they align with broader patterns observed in the study. Women, in particular, view health providers as authoritative figures, especially when they demonstrate both medical expertise and religious knowledge. This perception of authority, coupled with the cultural significance of silence, suggests a strong sense of acceptance and cooperation from the audience.

Moreover, the study highlights how framing FP within religious contexts can be motivating for individuals whose priorities include health and adequately providing for their children. This strategy taps into deeper cultural and religious values, enhancing the effectiveness of FP communication.

6.1.6 Degree of alignment of information provided

The study's findings offer a nuanced view of family planning (FP) communication, especially in building trust and recognizing authority or expertise, which ties into the concept of utility as defined by Robson and Robinson (2013). They describe utility in terms of usefulness, accessibility, and ease of use. Senderowics et al. (2021) caution against overemphasizing a particular contraceptive method, arguing that it can undermine contraceptive autonomy and introduce bias among health providers. However, this study presents a contrasting perspective,

emphasizing the effectiveness of a metaphorical or relatable approach in communicating FP information.

This approach aligns with Dervin's (1992) argument on the impact of- emotions, expectations, and the existence of previous knowledge in contributing to the subjectivity of an individual's experience in the sense-making process. This finding illustrates that the communication of FP information in a metaphorically rich, contextually relevant, and attuned manner to the lived experiences of the audience fosters a deeper level of trust. It also enhances the recognition of health providers as authorities or experts not just in FP but in the broader context of reproductive health and social well-being by being more attuned to the audience's needs and concerns, significantly increasing the utility of the information provided.

6.2 Factors encouraging FP take-up/adoption

The factors most commonly cited reasons highlighted by both information providers and target audience members (parents and prospective parents) as promoting the take-up of family planning advice were grouped into the following categories:

- Child-spacing.
- Health benefits for mother and child.
- Socio-economic benefits.
- Avoiding unintended pregnancy.
- Maintaining husband loyalty.

6.2.1 Child-spacing

One of the main areas of 'agreement' between parents, religious and health providers related to their views of the benefits of spacing- allowing couples to

attain their desired number of children, if any, and determine the interval between one pregnancy and the next (WHO 2022). Therefore, the motivation to use FP to achieve the interbirth interval of 2-3 years either through the use of modern methods (Implant, injection, or pills) as advised by the frontline providers or through the natural methods of withdrawal, use of herbs or soaking the Quran as advised by one of the Islamic clerics- or through the practice of abstinence using the billings method of cervical mucus observation to identifying the fertile phase of the menstrual cycle (McSweeney) as advised by the Catholic church, whichever the audience members decided on one served as a motivation for the uptake of FP.

The patriarchal benefit of being able to use a form of contraceptive yet achieve a large family size if so desired by the men or matriarchal women was revealed to sustain the motivation for FP. This corroborated the findings in Uganda (Kabagenyi et al. 2013) and Sub-saharan Africa (May 2015), which showed that spacing is adopted as a strategy for improving maternal health to prevent child mortality and maintain the high fertility desires of men. This interpretation of spacing by the audience members did not exist in a vacuum, as findings demonstrated it to be actively encouraged in the definition of FP provided at the point of counselling by the health provider “... we tell them *Family planning is a form of rest following the birth... not for the purpose of not wanting to get pregnant again like I said it is for rest*” and the framing of the messages in the pamphlets “space your births” reasserting the perception of FP among audience members. However, considering the overpopulation in Nigeria, the minimal total fertility rate (TFR) declined from 5.5 in 2013 (NDHS 2013) to 5.3 in 2020 (World Bank 2023), with a TFR of 6.1 accounted for by rural residents compared to the TFR of 4.3 among urban residents and 2.3 healthy TFR proposed by world bank (2023). Tension was found

to exist between the information communicated on spacing in relation to the actual health implications of increased fertility. Considering WHO (2015) demonstrates the risk of maternal morbidity and mortality to be associated with increased fertility and benefits of FP associated with improved maternal and child health and reduced poverty (World Bank 2023; UNFPA 2022; WHO 2022) results pointed to a controversial form of information provision.

This sort of information, according to Dervin (1999), will increase the gap, leading people to more uncertainty as they are unable to link the information they are getting directly with their reality. In the context of this study, the information about spacing fails to align with the user's reality of a better economic or financial life. The findings indicate an unclear purpose or hidden agenda guiding the communication of FP messages, as well as a struggle for FP messages to fit into the patriarchal culture of the people, "...We only tell them about ideal family size... if you say give birth to one or two... you are in trouble" (Frontline provider, age 54). Senderowic et al. (2020), however, justify the adoption of this new approach of fitting in cultural practices to FP intervention as an attempt to correct the misalignment between the historical coercion that existed in the "population control" and the contemporary approach replaced by contraceptive autonomy often referred to as "modern" (PP 161). However, based on findings in this study, this approach fits into Chatman's (1996) notion of deception as incomplete and misleading information is provided.

This finding is significant as the implication of information with no clarity or inclined to deceive, according to Innes and David (1999) leads to unsustainable FP knowledge formation, perception and attitude evidenced in increased suspicion of FP messages due to inability to make sense of it or relate it to their lived

experiences it is then linked to some form of imperialism with no credible explanation "*spacing ... is a bad idea the white man brought it to cheat us, how does spacing help... they are depriving us of having our desired number*" (Male, aged 55, Christian). For other audience members, even though they practised a method of contraception for reasons other than the spacing benefits, unanswered questions emanating from their experience of better socio-economic benefits leave them assuming the actual essence of FP. "*I believe though that if spacing is adhered to adequately, it will limit the total number of births a woman can have before menopause.*" Unclear benefits of an initiative or the realisation that information was deliberately kept away from public health beneficiaries, even if it was for their good, have been shown to stop the utilisation of certain medications or services (Cummings 2015). In support, findings in Turkey (Him and Hosgor 2011) demonstrate that informed decisions resulting from complete and authentic information provided to women have increased and sustained the use of FP amongst current users.

Based on this finding, the study suggests the provision of complete information and a reframing of the concept of FP to reflect the overall health benefit of FP in reducing maternal morbidity and mortality, which is universal. The contextual specifics should be related to the lived experiences of poverty or poor health infrastructures within a given area.

6.2.2 Positive experience

An "agreed" strategy used to promote FP amongst frontline providers and found to encourage uptake of FP was positive information sharing concerning the benefits of FP through information sharing.

The use of oral culture through information sharing was found viable in achieving this success as service providers evidenced the use of this strategy in giving testimonies on the possibility of obtaining an education or being able to cater to the needs of one's children as a benefit of adopting FP. Interesting amongst this illustration was that of one of the providers in Gure (Participant 29, Female, age 45, 3 children), widowed at age 30, *"I use myself as an example to them that I did family planning while in school, I obtained an education.... I became a widow early... although hard, the children were not too many to handle alone, and I know how challenging it gets"*.

Some of the more educated women or those interested in attaining higher levels of education also mentioned the benefit of being able to attain an education and earn higher income as a motivation for their current or potential use of FP. *"I can go to work... unintended pregnancy is not limiting how much paid jobs I can do"* (Female, NCE, Zaria, Muslim, aged 35) and for two men in this study, being able to meet their patriarchal responsibility was the motivation to encourage their wives to use FP *"saying this from experience. I can tell you for sure how FP has helped me financially."* (Participant 1, age 40, HND, Civil servant).

Preference for testimonies of personal experience and its positive effect in improving FP uptake was shown amongst all the participants motivated to adopt this practice, despite the heterogeneity in their level of education, with college graduates (2) and students (2) constituting the majority of the functionally literate (Meyer 2009).

Thus, positive testimonies should be encouraged within the community by both men and women.

Expertise was an area of “disagreement” among the target audience. Health providers revealed the potential of encouraging the uptake of FP among the unmarried participants, considering the unmarried Participants were mostly high school graduates who attributed their first detailed knowledge of FP to school, as taught by their teachers, whom they thought of as experts in terms of their training and knowledge. This group of audience members (unmarried), aware of the societal expectation of abstinence by unmarried individuals, suggested the potential of access to FP information from experts (frontline information providers) to improve their current knowledge formation on FP, with the potential of positively influencing their decision to use FP in marriage. The belief that the frontline providers have a vast knowledge of health issues as well as accurate and detailed explanations of FP based on their position as health providers within the community encouraged the belief that access to direct information from them had the potential of dismissing existing fear by correcting or verifying possible misconceptions on “infertility” guided the perception that they were experts being an adverse side effect of FP and with access to this information source, they were likely to use FP when they marry.

Conversely, some family planning (FP) providers in this study hesitated to share complete and reliable FP information with unmarried individuals due to cultural and religious biases, despite knowing their responsibility to offer FP education to all, including those unmarried, to improve their understanding of FP.

An information provider’s knowledge, education, training, and specialisation in a subject area can motivate the use of information provided to users (Robson and Robinson 2013). reported by the younger participants (18-34) with secondary and college education as a major attribute used by teachers (High school) to

create awareness, develop positive attitudes and encourage the uptake of FP services (When they marry). Expertise was therefore used to educate students concerning reproductive rights, health and economic benefits, and the consequences of non-use of FP. Expertise was thus found to be measured in terms of the replication of the facts taught in school in reality, "... *My teacher taught about the hardship people can experience when they birth many children. I believe and agree with him; the evidence is in this community.*" (Participant 22, Christian, Gure).

However, there was a disagreement on moral grounds found on the use of expertise by the frontline providers to encourage the use of FP amongst the unmarried.

Although information from health workers (experts) was pointed as a potential area for motivating FP use among the younger participants, unwillingness was shown amongst a group of unmarried frontline providers to either authenticate or dismiss fear of side effects to unmarried participants on moral grounds to prevent them from using FP information before marriage. Re-iterating the issue of provider bias based on marital status, as stated by Solo and Festin (2019).

The appropriate use of expertise was found to be an area of "disagreement" between the parents, prospective parents, and the frontline providers. A form of psychosocial barrier was found to exist in this study, where the providers, based on cultural norms, denied the unmarried access to expert information. The findings showed the reliance of the unmarried participants on interpersonal communication amongst peers, "*We speak about FP amongst our friends*" or FP stories within the community as their major source of information, supporting the findings showing the reliance of adolescents on non-expert sources (Cartwright

2019). Findings showed that frontline providers did not utilise their expertise to encourage the uptake of FP either amongst this future group of enthusiasts or amongst older women.

Although expertise was identified of FP by both the information providers and target audience as a technique used to encourage the understanding of FP, the analysis revealed it to be an area of “disagreement” between the two groups due to a clear misalignment/divide/ misunderstanding in the perception and definition of expertise. For example, findings showed that while the experts were found to define expertise to mean professionalism, involving low context interaction detachment from encouraging a certain method even if they thought it suitable for a client as guidelines showed this to be unethical and unprofessional. Contrary to these existing guidelines and ethics, the target audience not only described this as a person-centred approach, which for them reaffirmed the expertise of the service provider, but it contributed to the trust they had for the information providers as it was interpreted to mean genuine concern. From the information behavioural perspective, taking on Chatman’s (1996) concept of “insider and outsider” description of expertise

“... for me it means they know the effect of these things... so when they are asking how many children you have, it is to prevent any method that will make you unable to give birth or from achieving the desired number.”

Findings showed that interpersonal relations, approachability, and genuine concern for the health and life of the woman-built trust. According to some of the providers, this process is built over time by developing a rapport from the point of pregnancy to the early growing years of the child. One of the providers put it this way, “... I am with them all through the ante-natal and post-natal process...I

become like their family but this time providing health advice.” (Frontline provider, aged 54).

“If you preach “have 2 or 5”, some people want 24... you cannot force them. We are told to preach just spacing.” (Head of the FP unit, aged 54).

6.2.3 Avoiding day-day hardship

A moralistic dimension emphasising “provision” as the primary duty of parents to their children and the obligation of a man to his family was a subject ‘agreed’ on by the prospective parents (Unmarried), frontline providers, and religious leaders directly or indirectly to encourage the use of FP.

The unmarried participants in the study highlighted this point as they perceived it as an act of injustice unleashed by parents on children by birthing children they are unable to cater to, supporting the argument by Stuart (2013) on the immorality of having children. This was shown to encourage the uptake of FP amongst the unmarried.

It was interesting to find a point of agreement between religious and secular expectations as both Christianity and Islam and some of the frontline providers encouraged the use of FP (NFP) as an enabler for meeting the expectation of parenthood.

6.2.4 Expertise

Expertise was pointed out as a source of credibility (Pornpitakpan 2004; Hovland, Janis, and Kelley 1953) by the female participants in the study. The training that qualified the individuals to become medical personnel was widely viewed as evidence of their expertise, giving participants confidence that they were capable of making accurate assertions (Pornpitakpan 2004). This echoes the findings of Igbinoghudua (2022) and others, who have argued that professionalism among FP health workers has the potential to improve FP take-up among rural dwellers, while expertise can sustain positive attitudes towards such information sources.

For Participant 11, the 37-year-old NCE-qualified woman, expertise was best demonstrated by the “person-centred” nature of questions asked of individuals by frontline providers – for instance, focusing on the number of children they had and their reasons for desiring FP. According to her, the information-gathering process by the providers not only shows genuine concern but also the use of expertise for situational analysis/need assessment and provision of personalised advice on the appropriate method (s) (Senderowics et al. 2021),

“They asked what I came to do, asked for the number of children I have, then tested my blood to know what to give me...”

When asked how she perceived this client-centred approach, she expressed satisfaction. She indicated her increased likelihood to continue engaging with FP advice in the future (echoing Abdel-Taweb and Roter 2002),

“For me, it means they do not want you to be unable to give birth if you don’t have children. They know the effect of these things so when they are asking how many children you have, it is to prevent any method that will make you unable to

give birth or from achieving the desired number. So they know what they are doing, and they will not harm you."

For the other women, any information received from the hospital is believable, as this was where frontline providers are directly involved in supporting women through pregnancy and birth (Gavin et al. 2014). Participant 5, the 23-year-old housewife with six children, reflected:

".....medical practitioners are important, especially during the post-natal and anti-natal visits. They give us advice for safe pregnancy and delivery, so we will trust the information they provide for FP if we need it."

It was, however, noted that while she tried to project the above importance and reasons defining the source credibility, this participant's husband (Participant 2) vocalised his objection – by arguing that to most people from rural areas like his own (Bomo) community heads and religious leaders were those who most owned people's loyalty, and therefore informed their decisions.

His point emphasised the significance attached to rural leadership compared to advice from health professionals. Building on this argument, he added that providers' expertise stood little chance of influencing the target audience unless consent was first given by local rural leaders (religious leaders and village heads) for FP facilities to be located in their areas. Stating that the aforementioned leaders indirectly owned social amenities, he said:

"...Hospitals are in the hands of the king: if he says no hospital should be built or FP brought or practised in his village, what happens?"

Thereby reemphasising the credibility in terms of authority attached to the traditional and religious leaders and the power they have to influence positive or negative FP behaviour within the community:

"But if the king addresses his people by saying, "We have spoken with the hospital and verified ABCD so you all can go ahead and make use of these services", it becomes easily acceptable. In this culture and religion (Hausa and Islam), the man is the head (Patriarchy). "Mai gida" (Controller of the household, a man) should then be called to a meeting by the religious leaders and king. Once these two speak, they talk to the men, and the men agree and take the information to their wives. That way, if they tell their wives, then they agree."

While vicarious information-gathering from friends and family was important to some married participants, in Zaria and Gure particularly, it appeared to be single women who most needed to rely on these information sources due to barriers they faced in accessing it from expert professionals, echoing findings from work by Cartwright (2019) and others. The 20-year-old participant 21 explained,

"No one comes to tell us anything oh as singles... who has even got our time? Except maybe in Kaduna city when you travel, but in the villages... the side effects... and inability to give birth again is all we hear about. We will really benefit if information is brought on FP for unmarried people like us."

Another single female living in Gure, a 22-year-old FCE student, added:

"It will be a good thing for people to come, especially to educate singles."

For another male married participant aged 45 with primary education living in Tudun-Jukun, after awareness is created among men that religion permits the use

of FP, the next step would be for experts to create awareness amongst men as they may need more awareness:

"Men will benefit a lot from hearing about FP from the health providers themselves so that they can ask any questions."

The 43-year-old retired teacher and a Muslim living in Tudun-Jukun Zaria agrees with the above notion that men are the difficult parties who need more FP awareness to reduce the hardship on women:

"It is better for men to be enlightened because women easily accept it since they suffer more pain during delivery, and even some men don't do the responsibility at home. They leave it for the woman. So, both should be enlightened together, with emphasis on men who are mostly stubborn should be enlightened. "

For Participant 19, the 40-year-old mother of seven, although not a supporter of FP, tests conducted by professionals before administering FP methods were sufficient evidence that they have the knowledge and expertise to make it safe:

"Since most of the times they conduct test before they give any medication. I trust the medical personnel because of the test."

6.2.5 Gender sensitivity

There was no consensus as to how FP information was to be passed to men or women within the community. However, there was a consensus on the necessity for providing FP information to both genders (Hardee, Croce-Galis, and Gay 2017; Schuler, Rottach, and Mukiri 2011).

However, the difference found amongst the participants was in the gender grouping for communicating FP information. While some participants felt that both

genders should be brought together in contexts where FP information was provided, others argued that both the nature of the information provided and the forums for dispensing it should be “gender-sensitive”, that is, that men and women should be informed separately.

For participants who suggested that both genders should be informed together and at the same time, a major factor was the perceived importance of ensuring they were both receiving the same information from the same sources – to avoid conflicting messages and misunderstandings. Participant 1, the FP facilitator in his area, argued:

"Both genders can be enlightened together at the same place since they are all married."

This was supported by a married 23-year-old female participant, who suggested that being encouraged to access information together reduced the risk of multiple meanings being drawn from a single message,

"...I feel everyone, both men and women, should be gathered in same place and spoken to at once for everyone to hear."

However, some married participants argued that men and women should be informed separately, as men were the heads of their families - and the gender most likely to be against the use of FP (Bhatta 2014; Greene 2000). Participant 4, a married female aged 25 living in Bomo, mentioned this:

"Men and women are not to be talked to together. The king should use his messengers to call on specific group for meetings which they must obliged to and

often. It is the men that are talked to because they are the hard shell to crack, not the women."

She also suggested that singles should be enlightened about FP to enhance their knowledge formation and lead to positive FP behaviour when they get married:

"And it is good too and important that singles are enlightened as well before they get married, which will help overcome negative sentiments about it."

Similarly, singles who supported FP awareness noted that this could benefit them in the long term by building knowledge and influencing attitude formation through associative learning by making linkages of mere co-occurrences (Corneille and Stahl 2019; Edwards 1990; Regan and Fazio 1977). By contrast, having to inform oneself and make FP decisions only when the need arises (after marriage) might potentially lead to suboptimal decision-making under stress (Starcke and Brand 2012). This is vocalised by Participant 6, a Muslim and an 18-year-old female living in Bomo Zaria,

"If you don't tell them now, you will have to tell them later, and they will feel cheated that you never told them. Now, the issue of telling them later is they may not see the value because their ideologies may have developed already and may even think they are making a decision under stress. But give them the information young, before they need it, to digest it and not make decisions under duress."

Others who argued for FP information to be communicated in gender-sensitive ways suggested that some people might be shy about asking intimate questions in front of those of another gender. This was stated by 20-year-old participant 21, a Christian living in Gure, who said:

"We want men and women differently because some may be shy to speak if the boys are there."

Youth leaders and trained experts were the preferred sources of those who raised these points, as they were seen to be better at interacting with young people about sensitive issues. They clearly stated their belief that although the King (traditional ruler) would not listen to information to promote FP, he would not coerce community members into not adopting it either. Asked who they saw as the most useful and influential information providers, they added:

"Trained youth leaders... the king..... but the king will not even listen..... parents will allow us because girls keep giving birth out of wedlock here oh! We are not shy when we are all girls... except when we are not use to each other."

Religious leaders and village heads were therefore suggested by both married men and women as good FP information sources. Participant 2, while reiterating the culture of patriarchy and the control of women's reproductive decisions by men, noted that men should be sensitised alone by their preferred information sources (religious leaders and village heads):

"Only the men should be talked to who would relate it to their wives. This combination is perfect ... just these two are enough."

The 63-year-old female participant 13, living in Tudun-Jukun, also noted that men should be spoken to alone, as this allows them to feel a sense of respect with no need to exercise their egos because their wives are there:

"Men and women should be told separately by word of mouth. It is easier to speak to men on issues concerning their wives when the women are not there so that they do not see a need to prove a point by possibly disagreeing."

She concluded by saying that, while information should be tailored and targeted for specific genders, assuming couples agree to use FP, they should be provided with ongoing advice and counselling *together*:

"...after they agree, the man and woman can then be told together before adopting a method or after adopting a method."

One point of disagreement in this area came from some unmarried participants, who suggested that counselling should be provided separately for married people and those who were single. Participant 22, the 25-year-old male living in Gure, argued:

"... men and women should be sensitised together, but married and singles should be separated so that we can express ourselves better and ask questions freely."

6.2.1 Free Services

The provision of free family planning services emerged as a key motivator for its adoption in rural communities, as highlighted by some frontline providers. Participant 26, with her extensive experience as a frontline provider, observes a complex attitude towards family planning (FP) in rural communities, particularly among the “Maguzawa”, a group facing discrimination and known for their high fertility rates. Despite a general perception that this group enjoys having large families, as they traditionally give birth to many children, her observations reveal a different reality. She notes that when provided with free FP services and advice, the “Maguzawa” community shows a different inclination.

The participant points out, *“It is easy to assume they enjoy giving birth”*, but adds, *“Surprisingly, it is like they really do not want/need as many children as they have.”* This change in attitude becomes evident during outreach programs sponsored by an NGO. *“When we go for this outreach sponsored by the Society for Family Health, counselling, and consumables... everything is free,”* she explains, emphasizing the positive response: *“... the turnout is good with some adopting a method on the go.”* This shift highlights the impact of accessible FP services and the NGO’s support in altering the reproductive behaviour of communities with traditionally high fertility rates.

This sentiment is echoed by Participant 2, who notes that even men, often perceived as barriers to FP, bring their wives to clinics when services are free, *“With the free service, some men bring their wives.”*

However, the availability of these services is not consistent. Frontline providers admit to occasional shortages of FP consumables, leading to practices like inter-facility sharing. Participant 26, heading a unit, describes how they manage supply

shortages, "... we do inter-facility sharing when we are out of supply. So, if one facility doesn't have, they come to us and vice versa", describing the process as "simple."

In Gure LGA, the provision of family planning services faces unique challenges. Participants 29 and 30, both seasoned providers in the area, point out the occasional necessity for clients to purchase family planning products externally due to stock-outs, a situation distinct from the practice of interfacility sharing seen in other locations. Participant 29, with 21 years of service, explicitly states, "We give the drugs free, but when we don't have them, they go to buy from chemist outside and come to us to administer." This scenario shows the complexities of ensuring consistent access to family planning supplies in rural areas, highlighting a gap between the ideal of free and accessible services and the ground realities faced by both providers and clients in marginalised communities like Gure. This finding resonates with Crenshaw's (1989) unwavering focus on dismantling prevailing power dynamics that continue to promote inequality among marginalised women, manifest as limited access to contraception in this study.

6.3 Obstacles /barriers to FP information behaviour

In this study, similar contextual and personal factors motivating the reception and understanding of FP information among some individuals were found to act as barriers to FP information among other participants. Individual needs, goals, and wants justified by socio-cultural practices were revealed to determine the end effect of messages received, that is, whether they served as motivators or barriers. The most cited factors by both providers and target audience members (Parents and prospective parents) hindering engagement with FP advice were grouped into the following categories:

- Accessibility
- Ambiguity in information
- Cognitive avoidance
- Maternal surveillance

6.3.1 Authority and Patriarchy

Patriarchy and authority working hand in hand played a significant role in serving as obstacles to the FP behaviour among the women in rural communities. Findings revealed these two factors as hindrances to the IB of women, as FP was pointed as a concern and practice involving women only, corroborating findings in Uganda (Kabagenyi et al., 2014), which showed men disengaged/uninvolved in family planning despite their autonomy and responsibility in making household decisions similar to findings in Ghana (Hagman 2013) Nigeria (Duze and Mohammed 2006) and Kenya (Abdi et al., 20). Patriarchy as an obstacle to FP information behaviour among women was revealed to operate/function at two levels of hierarchy; the first constituting religious and community leaders and the second, the married men (husbands, fathers).

The power of community and religious leaders (invariably also male) and their ability to ultimately determine whether FP information is even made remotely accessible, let alone whether women/families are permitted to use it, was found to be a barrier to information behaviour amongst the target audience:

"...Hospitals are in the hands of the king: if he says no hospital should be built or FP brought or practiced in his village, what happens?". (Participant 2: Male Muslim, Married, Zaria Resident, Casual staff).

The second level of patriarchy limiting women and frontline providers IB was found at the household level, with the husbands preventing the women (Wives) from access to FP services. The practicality of this verbal patriarchal authority is reasserted with the woman being denied access to particularly long-acting reversible contraceptives (LARC) at the health facility due to her inability to provide her "husband's consent" (a written note or the man coming with her to show his approval).

"We advise them to come with their husbands or with a written note from them, even though it is not the requirement [in blue print] we make sure we get that."
(Participant 29: Frontline provider, Female Christian, Gure resident, 21 years work experience).

Although the finding on the need for the husband's consent was peculiar to Gure, inference based on narratives and reports by frontline providers in Zaria shows that a similar practice is maintained in Zaria, as the men are able to overrule the woman's decision to use and a provider's decision to provide a form of FP service.

"...No, we don't ask for husband's consent... But I have had to remove once a woman's implant because her husband's consent was not sought."

The ideologies of rural and indigenous people are rooted in socio-cultural values (Meyer 2009), and these values, based on literature, support high fertility (Kabagenyi et al. 2013). Findings showed religious and cultural leaders in the patriarchal setting act as gatekeepers denying access, use, and supply of FP information among the rural dwellers to support high fertility,

"In this town, culture and religion (Hausa and Islam) matter. The man is the head (Patriarchy). "Mai gida" [Controller of the household a man], he can agree to FP if called to a meeting by the religious leaders and king."

Findings from the framing analysis of FP information revealed that FP messages are tuned to align with the beliefs and desires of this group in relation to FP. For example, despite the overpopulation in Nigeria, FP messages are being framed around the goals of the reproductive rights approach, focusing on the use of contraception and focus on fertility increase or decrease to improve contraceptive autonomy. Justifying this approach, Senderowics et al. (2021) point it as an attempt to avoid the perception of FP information as coercion or non-autonomous to prevent anti-choice groups from closing up complete access to FP. This new approach, therefore, seeks to correct the misalignment between the historical coercion that existed in the "population control" and the contemporary approach that replaced my contraceptive autonomy, often referred to as "modern" (PP 161).

Contrary to Senderowic's suggestions, findings in this study reveal that authority limits expertise and serves as a barrier to FP, thus increasing high fertility amongst rural dwellers. Him and Hosgor opine that interventions are geographical and context-specific, and issues should be addressed with this in mind. Findings in this study support this argument as well as that of Stuart (2011), who argues that research, policies, and campaigns should be targeted to discourage parenthood. However, in the case of this research, it will be to reduce high rates of total fertility as a benefit of FP to curtail the fast-growing population, which should be stated.

Women were thereby only granted access to FP information after information had been cleared (men informed and information accepted) at this level. RURAL In this rural public sphere, the discourse on family planning (FP) is significantly

influenced by religious leaders, such as the 70-year-old Imam with Islamic education. His categorical rejection of FP, as he emphasizes teaching solely from the Quran and focusing on procreation without spacing, shapes the public discourse within the community. His statement, "... it is nothing to talk about. We do not welcome such talks here," not only reflects his stance but also likely affects the attitudes and behaviours of the community members, especially men.

The impact of such religious stances is evident in the actions of community members. Reports from FP providers about men preventing them from conducting household FP outreach and anecdotes of both male and female community members actively avoiding FP-related broadcasts on the radio are manifestations of this influence. These behaviours indicate a shared resistance toward FP. This resistance is intertwined with the religious and cultural fabric of the community.

The Imam's focus on fertility enhancement over FP, as he states, "When individuals seek family planning advice, I instead offer fertility guidance...", further reinforces a procreation-centric viewpoint. This approach not only sidelines FP but also promotes a narrative that prioritizes fertility and continuous childbirth, potentially delaying or even entirely sidelining discussions about FP.

In this context, the public discourse is not just about individual beliefs or medical information; it is deeply entwined with religious teachings and cultural norms. The Imam, by virtue of his religious authority and role, becomes a key influencer in shaping this discourse. His teachings and views on FP contribute to forming a collective mindset within the community, where FP is seen less as a health issue and more as a matter of religious and moral judgment.

Thus, in this rural public sphere, the discourse around FP is heavily dictated by religious doctrines, with community members likely aligning their views and behaviours with these teachings. This scenario underscores the importance of understanding and engaging with these cultural and religious dimensions when addressing FP and reproductive health issues in similar communities.

6.3.2 Maternal Surveillance

The unquestioned hierarchy of gender in terms of Patriarchy was found in this study to act as a barrier to the information behaviour of the women and the frontline providers. Mothers acting as gatekeepers placed restrictions on FP access by younger women.

Patriarchy, compared to education and employment status, among others, was found to be a significant factor limiting women's access to the use of contraceptives. It was intriguing to find that older women acted as barriers to younger women's uptake of FP on patriarchal grounds, similar to findings in Turkey (Him and Hosgor (2011). Older women (Parents 40 and above) functioning as opinion leaders (information providers) and gatekeepers discouraged younger women by emphasizing the cultural and religious importance of women gaining men's consent, "*...the man is the head. It is important for the husband to agree before a wife goes ahead to use FP.*" (Participant X, age 60, Zaria, Retired Teacher) and reiterate their non-support for FP "if I heard my daughter uses FP, I will reprimand her" (Participant 19, age 40). The married older women, regardless of their religion, showed their mild support for patriarchy. This finding demonstrated that older individuals within a society are the custodians of cultural values and are responsible for transferring knowledge from one generation to the next, similar to Godbold (2006). Considering that social networks (Ackerson and

Zielinski 2013) and social learning (Brouwere et al. 2002) are the major sources of knowledge formation in rural areas, the above participants, considering their social role as (mothers) within the community, can be said to be favoured-advise givers (Hellandendu 2019), transferring the knowledge and value of male supremacy and hegemony from one generation to the next. Therefore, the barrier continues.

6.3.3 Information Hiding/Ignoring

The ignoring and hiding of information were a finding among the religious information sources and men. Sulkowski and Grzegors (2020) demonstrate that the use of modern contraceptives is not encouraged by the church, as the church is against the use of any substance that harms life. Modern contraceptives are believed to fall into this category. Hence, the information is considered of no importance to be taught by the church, and the decision on whether or not to use FP is left to the individuals to make based on their conscience (their relationship with God). On the other hand, findings from one of the Muslim clerics showed that although FP is encouraged in Islam, the religious leaders only provided it when they thought it necessary – to save the woman's health, *"We just don't go about talking about it, but Islam encourages spacing between 2-3 years interval between all births.... But provide information on other methods when people seek information."*

It was intriguing to find that Participant 34 (Male, Imam), a respected information source in his area, deliberately hides FP information from the audience;

"So I have got almajirai; they come from all over the north. I never even mention family planning to them. I do not want them to learn all that" (Participant 34; Imam, Zaria)

The essence of this secrecy and deception was to prevent any form of knowledge formation, awareness, and information transfer among teachers of religion (some of the almajiris will become future imams). Considering that information sharing, repetition, and word-of-mouth are the mediums by which information is stored and passed on in rural communities (Meyer 2009), this constitutes a significant barrier, as information could be lost.

6.3.4 Avoidance behaviour

Another form of patriarchy was found to exist in men's attempt to control not only their information sources on FP but also that of their wives. Men as major owners of radio sets based on findings in this study, were shown to switch off their radio sets or tune to another channel on hearing FP broadcast due to non-interest in listening to FP messages from radio personnel;

"...I do hear of family planning, but I just don't like it..... people need more children radio is taking FP. If I hear it on radio, I even change the station." (Participant 15; Christian, Male, Gure, Married, Age 55).

By implication, their wives who rely on their radio sets to access information are denied access, evidenced in a report by Participant 5 (Female, married, Bomo, Muslim), *" ... Sometimes, I hear some information on the radio when my husband is listening to his radio or tells me the information."*

As established in this study, men who perceived FP as a positive practice agreed to allow their wives to use it, with no mention of themselves, showing that men detached themselves from FP. Researchers have argued that the female-centred structuring of FP programs and the targeting of men from the onset have encouraged this behaviour (Kabagenyi et al. 2013; Okigbo et al. 2015).

6.3.5 Inadequate use of Expertise

The underutilisation of knowledge in the provision of FP information to the target audience by the providers was found to act as a barrier to information behaviour in the area of study, especially amongst the unmarried participants. Cognitive inaccessibility to the methods, benefits, and side effects of FP was shown to contribute to the circulation of inaccurate/unverifiable information within the community and contribute to the increased fear of side effects amongst the unmarried participants, similar to findings in Nepal (Sekine et al., 2021).

"We talk about side effects a lot..... I don't know much about it, but No one comes to tell us anything as singles" (Participant 21, female, Gure).

Lack of understanding or knowledge about a phenomenon affects one's emotions towards an event (Nabi 2003). This group (unmarried), shown to be interested in accessing professional information sources, was found to be faced with obstacles of cognitive inaccessibility (lack of knowledge of sources from which to obtain FP information and exposure to messages) and service quality barriers (information on side effects). Although contrary to findings in other studies (Chi et al., 2015; Kiura 2011), this study did not find any report on negative experiences between the providers and unmarried participants in the course of accessing FP services, the likelihood of animosity from FIPs, if unmarried persons attempted accessing expertise information, was shown to exist, based on a remark by participant 27 (FIP, unmarried) *"but what do singles need FP information for?"*. According to the providers, this was to avoid information misuse amongst the unmarried, with consideration to the cultural and religious values of the society, which frowns at pre-marital intercourse. However, knowledge formation starts early, and accessible information defines our stance and values in life (Bussey and Bandura

1999). Based on findings, it can be argued that unwillingness on the part of the FIPs to provide accurate information to correct the misconceptions and provide valid explanations on side effects to unmarried women acts as an obstacle to early positive knowledge formation on FP and is likely to act as a deterrent to a positive attitude toward FP information in the future.

Inadequate information on the side effects was another poor use of expertise acting as a barrier to FP IB. In this study, it was found that where the women especially were willing to access FP information, there was inadequate information on side effects. Although the providers claim they give complete information, it was evident that the post-side effect information delivery approach (information provided following the experience of a side effect), *"if you experience any side effect, come back to us"* and stressing *"do not speak to anyone"*. However, Ackerson and Zielinski (2017), similar to the findings in this study, show other informal information sources with inaccurate information were more likely to be contacted first (Family and friends) prior to experiencing a side effect based on accessibility and proximity before FIPs, thus encouraging the circulation of inaccurate information.

Although complete information was found on several leaflets, written in various languages, including Hausa, to provide information for the rural dwellers, their preference for oral sources, their closest information sources (FAF) when they experience side effects, and the low chances that the health personnel will be the first person contacted concerning the experience on side effect was found to fuel and sustain reliance on "rumour" as the most accessible information source, hence an obstacle to FP IB. However, Nabi (2003) demonstrates that the consistent listening/hearing of information from a group or source brings about a recall from

memory, which influences decisions. Hence, the use of expertise with consistency and complete information is necessary to mitigate this barrier (Senderowics et al. 2020).

6.3.6 Source Credibility

Radio, one of the major information sources for rural dwellers (Emele 2018; Adekunle 2004; Briegwe 1990), was not perceived as a credible source of information in this study. Considering the numerous ethnic groups in Northern Nigeria, different languages with individuals either practising Christianity or Islam, the concept of homophily in radio personnel, language, and information content was revealed to be difficult to achieve improved FP IB. For example, Gure is only 3 hours away from Zaria. Nevertheless, the people in Gure town are mainly Christians, who speak Gure, while Zaria consists mostly of Muslims who speak Hausa. Due to colonisation, Nigeria was divided into four regions, with one language representing each region (Emele 2019). In the case of the northern region, the Hausa language. This difference in language was found to constitute an obstacle to FP behaviour in Gure, as the radio personnel were perceived to share different ideologies and values from the TAs in Gure as they were tagged "Muslims and Hausa".

"Yes, they discuss family planning on a program through the radio..... these Hausa People... [In a condescending manner]."

Studies have demonstrated that the impact of colonialism in framing, describing, and practising global health today is shaped by colonial history. The researchers argue that the conceptualisation of terms loses its meaning in translation, thereby limiting the nuanced effect anticipated (Hommes et al. 2021; Edwards 2008). The people in Gure showed interest in broadcasting in the Gure language. Broadcasting

in Gure, by a Gure native has the potential to improve FP IB through radio, the most accessible broadcast information source to rural dwellers (Bajoga et al. 2015; Ajaero 2015; NDHS 2013).

6.4 Obstacles to FP take-up/adoption

In this section the

6.4.1 The Fear of Side effect

The fear of side effects continues to serve as an obstacle to the use of FP globally. This fear of “valid or invalid” was found to be a major hindrance to men’s approval of FP, and it is used among both married and unmarried women. The major side effects highlighted by both parents and prospective parents, as experienced by some community members and rumoured by others, were:

- Infertility
- Bleeding
- Cancer

6.4.2 Infertility

Another area of either fairly passive or active ‘agreement’ between the providers, parents, and prospective parents was the belief that FP has the potential to cause infertility.

Infertility was one of the most salient beliefs shown to motivate men’s disapproval of FP use by females related to them. They believed its use by their wives could hinder the attainment of a desired number of children, and its use by their female children could make them objects of ridicule within the society and among their in-laws for birthing barren women. Therefore, men attributed their non-

acceptance of FP to the belief of infertility as a means of protecting their wives and daughters from the social consequences of infertility and stigmatisation of bareness,

"Anything that causes infertility is not welcomed. I do not want an infertile wife, neither do I want to give out an infertile daughter or referred to as the father of the infertile woman, neither do I want to be given an infertile daughter-in-law. I want a large family, both extended and nuclear." (Married Male, aged 55, Christian)

The social consequences of women's infertility on men's ego and desire for children were therefore shown to reinforce the use of men's patriarchal power to hinder FP by making the final decisions concerning whether or not women used FP "... the only reason, I may consider allowing my wife to use FP, is because I already have children" (Married man, aged 35, Christian, 6 children).

"... I will allow my wife use FP when I have the 10 children I want to have" (Married Man, aged 43, Muslim).

In the case of one of the Muslim clerics, the perception that a woman who has had children in the past becomes unable to conceive after using a method of FP not only makes the use of modern contraceptives irreversible but also makes it a form of injustice, as women are deprived control of their reproductive rights, with no adequate explanation:

"By this, I mean a situation where, after using any form of FP, one is unable to conceive when they are willing to. If this happens, it is injustice brought upon an individual as a result of artificial family planning. Hence, an unfair practice."

A similar pattern was shown with one of the Christian clerics who not only saw this as an injustice to the unborn but also believed the use of contraceptives to stop births was questionable,

"There are some modes of 'contraception' that are designed to stop births; we will be quick to question the motif" (Pastor, aged 35, reformed Baptist).

The religious ground for opposing FP was shown to be based on the violation of natural law- a rule for reasoning promulgated by God in man's nature to enable man to do good and avoid evil (Norris 2013; Rice 1995). In this case, FP is seen as an act of evil as it is believed to allow men to avoid their responsibility while denying women the dignity and respect of being wives and mothers, as well as denying them their normal cyclic fertility.

Norris (2013), in support of the findings in this study, argues that a true method of contraception, according to the catholic church, should be used to achieve or avoid a pregnancy and not prevent it. This religious stance is further supported by Azmat et al. (2012), arguing the opposition of Islam to promoting any practice that endangers an individual's loss of control over circumstances they ordinarily would be able to control, such as their fertility.

The information providers also agreed that the fear of infertility was a significant factor hindering the effective provision and use of FP services within the communities where they worked, *"some people, especially women, say FP affects the reproductive system and are scared it will lead to infertility"*.

Considering the cultural practice of patriarchy conveniently blames the consequences of infertility on the woman (Sedlander et al. 2022; Rademacher 2018) while ignoring the possibility of the man also being infertile (Daar and Merali 2002), it was not surprising to find both married and unmarried women, as well

as mid-aged women, report their concern and unanswered questions on the possible relationship between the use of modern contraceptives and infertility,

"If a single lady uses FP before ever giving birth or before marriage, then she marries and cannot give birth ... it is most likely the FP." (Participant 21. Gure, Christian, unmarried).

"...the confusing one for me is that they say people who have used FP before they have children will most likely never give birth again, and I have seen some." (Married woman, aged 63, opinion leader, Muslim).

These indirect questions and uncertainties were revealed in this study to be left unanswered, as frontline information providers were revealed to dismiss these perceptions with no in-depth explanation, *"I tell them it doesn't cause infertility"* (Frontline Provider, Christian, aged 45). This dismissive behaviour by the providers was shown to act contrary to Godbold (2012), who demonstrates that although information may not change knowledge, the sense-making path due to exposure to information has the potential to change existing knowledge. Still, findings show that audience members were left with no information.

On the other hand, one health information provider was shown to passively imply the possibility of some methods of FP contributing to infertility, *"For example, if a woman who has just one child says she wants injection for three months, I tell her that fertility itself takes time to return to normal with this method..."* (Frontline providers, 27 in service, Female, HOD)¹³

However, one of the leaflets on FP corroborating the statement by the frontline provider showed it could take *"6 to 12 months before you can get pregnant"* after stopping the use of injectables or any modern method of contraceptive (John

¹³ Although one participant mentioned this, it was significant as it corroborated findings in literature on the association between FP and infertility.

Hopkins 2007). Similarly, a study by Szewczuk (2011) shows an association between age-related infertility and the use of modern contraceptives. In addition, demographers show the postponement of birth by using contraceptives to limit fertility increases the likelihood of infertility with age. Thus, the older one gets, the less likely they are to conceive using natural methods. Thus, Corea (1988) argues that while the use of contraceptives to postpone fertility is viewed as conferring women with reproductive choices, the supported fertility technology as an ongoing project medicalises the female body, perhaps in preparation for further patriarchal oppression. This not only caused fear in prospective users in this study but also prompted women to discontinue or avoid use as treating infertility is capital intensive in Africa (Rouchou 2013). This behaviour resonates with Chatman's (1996) risk assessment concept among the poor, where financial implication in risk assessment determines decision-making. Therefore, if FP were likely to cause infertility, they would rather avoid it than have to deal with the later cause of paying to treat infertility. theory

However, contrary to this finding, Benksim (2018) states that age, duration of marriage, and socio-economic status of both men and women are the main predictive variables that contribute to decreased fertility levels. Irrespective of the category (secondary or primary) of infertility or its cause, FP was the most probable practice linked to the cause of infertility in the communities: *"You'll see a young woman give birth to one child, and after then she takes a break, and when it's time to have another, it becomes a problem, she cannot get pregnant again"* (Married woman, aged 32, trader, Christian), similar to findings in Nigeria (Naab, Lawali and Donkor 2019), Bangladesh (Papreen et al., 2000) and Ethiopia (Bayu et al., 2020). In Ghana, a matrilineal society Kyei et al. (2021) reveal that

a similar fate awaits an infertile man if found by his wife. Thus, infertility is an issue in marriages in developing countries.

It was, however, intriguing to find only limited information in one leaflet (John Hopkins 2007 leaflet) explaining the delayed experience in returning to fertility following the use of injectables, with only one frontline provider asserting she stated this to audience members, despite the rumour on infertility being a side effect of FP and its social consequences on women within the community.

The above findings revealed the communication of incomplete information to audience members, as the benefits of FP are being emphasised, and limited attention is placed on communicating side effects. However, while Senderowics et al. (2011) argue that the provision of complete information needs to include an emphasis on a wide range of choices and information on side effects, Him and Hosgor (2020) show that the provision of complete information to women, including information on side effects increased use of FP amongst Kurdish women, as they were able to make informed choices. Thus, providing complete information on various methods of FP should be given priority in the development of FP messages by authors and communicated by providers.

6.4.3 Bleeding

Problems with menstrual bleeding were identified as barriers to FP uptake by both information providers and members of the primary target audience.

Contraceptive-induced menstrual bleeding (CIMB), not an uncommon side effect of modern contraceptives (Ackerson and Zielinski 2017), was found to act as a barrier to the use of FP (Odwe et al., 2020; Polis et al. 2018). Bleeding as a side effect was mentioned as an expected side effect by providers, and women who have or currently used a method recounted experiencing it. It was, therefore,

surprising to find that misconceptions concerning the consequences of this known side effect existed within the community. The first was the misconception about bleeding leading to continuous ill health and the consequence of having to embark on regular hospital afterwards, *"...Like none stop bleeding, some get slim and start visiting the hospital every day afterwards."* (Married woman, Christian, 7 children, aged 40). Considering that health care in Nigeria is not free (Ogbuabor and Obinna 2019; Okonofua et al. 2011), and even citizens on the National Health Insurance Scheme (NHIS) only access subsidized rate of healthcare services (Adewole and Osungbade 2016), they fear a turnaround situation whereby in an attempt to save the cost of raising many children, one adopts FP, then ends up spending an equal or more amount treating health issues emanating from the use of FP, increasing the fear of FP uptake, thus motivating non-use.

Another misconception concerning the side effect of bleeding was shown to be severe weight loss, which makes a woman look unattractive:

"...you know the excessive bleeding... dries up the flesh of women, making them look older than their age and very unattractive." (Participant X, Married woman, Christian, aged 60)

Weight gain, although not directly linked to bleeding, was a similar deterrent to a woman's beauty, inhibiting the use of FP amongst women, *"... someone I know put on so much weight after using a form of contraceptive, sincerely she was not so good looking afterwards."*

The findings of this study showed that late access to information on FP contributed to the misconceptions and rumours about the side effects of FP, as information is provided after, rather than before, the experience of a side effect. This was shown

as a strategy to prevent information overload and reduce anxiety as the experiences of side effects differed amongst individuals, while some did not experience it:

One Incomplete information at the point of delivering FP services, *"... I tell them to come back to me if they experience any side effect... some of them are already scared, we do not want to give them too much information as some may not experience it at all"* (Frontline provider, Head of PHC, 27 years of experience).

Another key concern identified by a number of women was their insecurities about being considered unattractive (too fat or too slim) by their male partners (Oloruntoba-Oju 2007). This factor was shown to act as a deterrent to the uptake of FP, further underlining the patriarchal drivers influencing FP decision-making amongst women in Nigeria (Rhine 2016; Balogun 2012; Gilbert 2015) and influencing the framing of FP messages as one of the benefits highlighted in the FP leaflets read *"regain your pre-pregnancy figure"* (NURHI 2012). It was, therefore, not surprising to find that women were concerned about the likelihood of having a body size/shape not considered ideal by their male partners (slim or fat) due to their use of FP.

However, Rhodes (2016), from a feminist perspective, argues that our ideal of appearance should be a source of pleasure, not shame. Our appearance should reflect diversity across race, ethnicity, age, and bodysize and not be determined by others. However, the FP authors, based on their tailoring of messages to suit the circumstances and preferences of the intended audience (Kreuter 2003), were shown to communicate an ideal body size subtly.

Considering the high reliance of rural residents on social networks and the high context culture of the Nigerian society (Schuss and Ibrahim 2020; Wright 2019), these women were more likely to contact other women who have experienced similar side effects before the experts (Mbizvo et al. 2013).

Affective response is a process of information flow and acquisition by proxy, especially in rural communities, where women experiencing phenomena are likely to seek advice from other individuals who have had similar experiences within the community. This information-seeking process was therefore revealed to promote the spread of inaccurate FP information within the community, as lack of timely accurate information on side effects at the point of administering a method contributed to mistrust and information avoidance based on negative information received from other community members, the process of negative information sharing is similar to the findings reported amongst women in crisis areas in Sub-Saharan Africa (Ackerson and Zielinski 2017).

Polis et al. (2018), therefore, suggest that adequate counselling on the side effects of bleeding can create better awareness for women and improve their overall experience with FP.

6.4.4 Cancer

Cancer was another side effect stated by both audience members and frontline providers. Participants revealed that the fear of contracting cancer due to the use of a modern contraceptive method deterred their uptake, *"We have heard... that women who use FP are likely to contract that disease with no cure and no cause found yet."*

On the other hand, results showed FIPs dismiss their fears casually and treat them like misconceptions or rumours,

"They say family planning is harmful to life because they have the notion that it affects the reproductive system and can cause any type of cancer." (Participant 30; FIP, Male, Gure).

However, several studies show an association between the use of oral contraceptives (OC) and cancer. For example, Tworoger et al. (2007) reported an increased risk in the use of oral contraceptives (OC) and ovarian cancer five years into use, consistent with reports in Nigeria (Ajah et al., 2015) and Oxford (Vessey and Yeates 2013). However, ovarian cancer has been shown to attenuate twenty years since its last use in all studies mentioned above. Although Vessey and Yeates (2013) found a positive association between the use of OC and cervical cancer, they argue the beneficial effects of its use in protecting against uterine body cancer and ovarian cancer outweigh the adverse effects of cervical cancer. Another study was found to associate a high risk of ovarian cancer with the use of hormonal contraception (Ajah et al. 2015).

Based on these studies, it can be assumed that the use of some methods of contraception increases the likelihood of cancer, even though it may prevent some other forms of cancer. It was, however, intriguing to find that cancer was neither highlighted by the providers (In this case, they too do not have the knowledge) nor shown in the secondary documents analysed as a likely consequence of contraceptive use.

Nabi (2003) further shows that lack of knowledge affects one's emotions. Shafi et al. (2014) argue that interaction with healthcare providers can positively affect

cognition. As argued by Meyer (2009), the information received by rural people is stored in their memory. They use the process of recall to spread this information from one person to another. Hence, there is a need to make available any information on side effects to add authenticity and accuracy to the nature of FP information circulating within the community. Chatman (1996) shows that any negative undisclosed information found later by the audience from sources other than the original source can end information seeking.

6.4.5 Poor follow-up

The PHCs in rural areas are overworked. Poor infrastructure and the lack of state-of-the-art equipment contribute to inefficiency in service provision, and poor follow-up/aftercare was also identified as a barrier to the use of FP. One of the participants reported that poor follow-up by the health providers also led to adverse effects, such as paralysis experienced by some women resulting from expired implants. Again, considering the low literacy level amongst the women in rural areas and their everyday schedule, which involves childcare, it is not uncommon to have women overlook their health to take care of the children and do domestic chores (Ezzati 2002). Hence, rural communities may benefit from improved systems to keep clients' information records.

In conclusion on side effects, although the providers were found to dismiss the fears of the TAs on side effects casually, there is no significant evidence from the literature found dismissing these fears completely. Thus, supporting the report by Schwandt (2017), Solo and Festin (2019) that provider bias often comes from a place of care because healthcare providers in rural areas with limited education (as evidenced in the educational qualification of participants in this study only 1 BSC holder) may not process or understand a certain level of information, or

sometimes they too may have incomplete information as doctors with a higher level of education are prioritised over them. However, the doctors have limited encounters with FP clients.

6.4.6 Child Mortality and Poverty alleviation

Both participants in Zaria and Gure had similar views on child mortality and the use of contraception. Having many children was seen as a mitigating factor in the high prevalence of child mortality. Participants viewed large family sizes as both a coping mechanism for child mortality and achieving improved economic well-being with the help of the children.

Concerns about child mortality were shown to be a major obstacle to the FP-uptake amongst married women in this study, as married women who desired large families (Davidson et al., 2016; Faruta and Mori, 2008) showed no interest in using contraceptives to replace children lost (Mulumba, 2011). Poor infrastructure and health facilities lead to increased maternal and child mortality in rural areas (Hagman 2013), similar to the experiences of women in Gure described by Pikawi (2015).

Child mortality was a common experience amongst the participants, as twelve out of the seventeen married participants had experienced the death of at least one child. There was tension found and a paradoxicality between child mortality and future poverty alleviation for the parents. On the one hand, there was the fear by parents (sometimes born from personal experience) that if they did not have enough children, they would limit their likelihood of having kids that grow up to make money or be successful and be able to provide for the family. On the other hand, by having more and more children while not having much money, they have less money to go around, and there is more likelihood of infant health issues and

even mortality. Therefore, there is less likelihood of children growing up to live long and be healthy and successful.

It was, however, intriguing to find that the frontline providers failed to mention child mortality as a barrier to the use of FP. Rather, it was stated as an obstacle to the use of FP by the information providers.

Findings revealed that while for them this was the point where they acted vulnerable and told the people they could relate, Chatman (1996) argues that an improper context of the social experiences of a people can contribute to information poverty. Similarly, Ikoja-Ondongo and Ocholla (2003) demonstrate that the conditions present in rural communities, such as poverty, lack of infrastructure, and illiteracy, amongst others, influence the IB of rural people. Hence, these conditions can render newly introduced information or services less relevant within a community (Meyer 2009; Hepworth 2007; Courtright 2007); thus, there is a need for the development of infrastructure to reduce mortality in these areas as a mitigating factor to this obstacle.

Major but Significant areas of Disconnect (Providers vs. audience members)

6.4.7 Religion

The permissibility of the use of contraceptives by religion has been a key area of debate (Abdi et al. 2020). A common area of agreement between the two religions in the study showed that religion has never been opposed to FP, as both Christianity and Islam encouraged the use of natural methods of FP to space births, improve maternal health, and promote responsible parenting:

"...the fecundity of marriage and responsible parenthood demand that husband and wife embrace the sacred responsibility of deciding when and the number of children they should have" (Participant 31, priest).

" ... Where birth becomes yearly and a struggle even to the health of the woman, Islam encourages birth spacing" (Participant 34, imam).

The essence of the church's encouragement for the use of FP was to promote responsible parenting through the possible permissible use of Natural Family Planning (NFP) for responsible and planned parenthood. However, interviews with both target audience members and religious information providers demonstrated that endorsement for FP – even based on these justifications – was far from universal among either Islamic or Christian opinion leaders.

For example, while the Catholic church showed its support for FP, the church reported its non-support against any practice perceived to interrupt procreation in marriage. The two Christian denominations (Catholic and reformed Baptist) therefore agreed that the mandate given in the book of Genesis to procreate "go ye into the world and multiply" and the fourth clause of the Lord's prayer found in the book of Mathew "*Thy will be done on earth as it is in heaven*" interpreted as pregnancy and children are God-given.

Modern contraception was therefore perceived by the church as a method preventing the start of life and thus a form of abortion or murder, which is against Christian teachings:

"There would be clear teachings against contraception that literally harms or kills where life begins." (Participant 33, reformed Baptist pastor),

This is supported by another catholic priest,

"The church does not allow the use of pills or birth control drugs in family planning..... Life is sacred and a gift from God. No artificial means should be used in stopping or dividing procreation". (Participant 32, Priest).

This argument is supported by McSweeney (2007) and Wilcox (1995), who show that conception happens a few minutes after fertilisation. The basis of the church's stance on the use of modern contraceptives was therefore revealed to be based on these two standpoints. Thus, NFP was outrightly discussed and encouraged in the catholic church. However, the reformed Baptist was found to avoid speaking about it. They rather left the individuals to decide their non-artificial methods to use.

One of the most visible disconnects between the attitudes of target audience members and religious information providers, however, was that between Catholic Church leaders and parents self-identifying as members of that faith. The participants were found to make no mention of the use of an alternative method (NFP), as mentioned by the church, to space and enable responsible parenting. Rather, religion was used to justify the non-use of FP, while use was described as disobedience to the command *"go to the world and multiply"* (Participant 18; Male, Married, 51years, Christian), abortion *"...we are told not to murder...all the morning after pills and the others, what they do is abort a possibly fertilised egg"* (Participant X; Married, Christian/catholic, age 60, NCE, Retired teacher). *"And one placing trust in himself rather than God for the future of their children. Stopping births...means a person they want to take that position of God"* (Participant 19; Female, Gure, Christian, Age 40).

In the case of Islam, interestingly, the two Islamic scholars in the study were revealed to hold divergent interpretations of Islamic teaching, similar to findings in Kenya (Abdi et al. 2020; Omra 1992). For example, the younger Imam (age 35) revealed his understanding of FP within the Islamic context of marriage to aid with the spacing and timing of births, in which case other more natural methods of FP (withdrawal, drinking of Quran, and Lactational amenorrhea) was permitted/encouraged, he also revealed the permissance of FP use on grounds of health conditions for the woman and due to economic hardship.

The Generation X Islamic cleric (Participant 34; Imam, age 70), on the other hand, was of the opinion that Islam did not permit the use of FP in any form, natural or artificial, *"...the prophet says we should give birth and there is no room for spacing" and condemned the use of FP due to economic hardship as an attempt by man to assume control of things that happen to him. Thus, increased fertility was encouraged based on providence, wealth, health or good health are factors determined by God (Hasna 2003) rather than the number of children," ...children neither bring nor prevent hardship, it is God who gives providence."*

Both Imams, however, agreed that Islamic teachings show that God provides for every child on earth, *"But the Quran says that no one is given birth to (Born) without the provision of food for him by God"*.

Findings show a desire to increase the Muslim population *"...give birth so that Allah's followers would be many on the day of judgement/end of time"* as the sole aim for promoting high fertility, similar to findings in Pakistan (Ataullahjan et al. 2019).

The implication of the divergent ideas between the scholars in Islam was evident in the apparent disconnect between the Muslim participants' knowledge and practices of FP. Those who viewed FP as an unacceptable practice in Islam justified their beliefs through several factors: that every child comes with their own blessing and provision and that the prophet urged his followers to multiply and fill the earth to populate the religion.

In this study, the expectation of procreation in religion was shown to be a concern for all the participants, as they reflected on the need to act in accordance with religious expectations. However, individuals' beliefs, desires, and values were found to motivate the non-use of contraceptives among men and middle-aged women. Thus, selective exposure (Freedman and Sears 1965; Festinger 1962) was observed. For example, men desiring many children to alleviate poverty were found to speak more about religious expectations compared to participants who sought to avert economic crisis. On the other hand, women desiring large families were also found to emphasise the need for the man's support before using a method of FP, "... *Biblically and culturally the man is the head*" (Participant X; age 60; Christian; Female).

"...the man owns the woman and everything in Islam. You have to seek consent before using FP" (Participant 10; age 35, Muslim)

Misconceptions and conflicts in Islamic teachings were therefore found to contribute to the low uptake of FP, similar to findings in Pakistan (Mir and Shaik 2013), while in Christianity, some form of selective exposure was found, as the participants reported not using any form of FP (NFP/modern to space). However, both religions agree that the use of NFP is permitted, and Norris (2013) points out that NFP is efficient and more research by physicians willing to promote this

practice will reduce the obstacle to low FP uptake. In the case of Islam, considering the double standard and exceptions concerning

6.4.8 Neo-colonialism

An interesting revelation, yet an area of discord/tension found between the parents and the providers, was in the area of neo-colonialism acting as an obstacle to the use of FP. The belief by one frontline provider that they (providers) were perceived as agents of imperialism by the TA was mentioned as a barrier to low uptake of FP amongst TA:

"Sometimes I am faced with people who sometimes imply ... I get paid to say all I say, regardless of the actual effect. They say... you have gone to school/have a form of higher education, and thus higher income."

It was, however, interesting to find that, even though the parents perceived FP as an imperialist intervention aimed at taking control of the only thing they felt in control of (no of children they desire to have), *"if family planning was to encourage childbearing I'll like it...but to me, it is to reduce childbearing"*. The FIP was perceived more as beneficiaries rather than agents of colonialism and so still trusted within the community on health matters, *"... I trust health providers generally... but they have money, and do not seem to understand why we want children"*. (Participant 5: Age 23, Zaria, Muslim, Married)

This is to say that, even though they were members of the same community and probably belonged to the same religion, the people's perception of them as educated, with expertise in a formal area, ascribed them to higher socio-economic status. Hence, the difference in socio-economic status/level made the providers "outsiders" while justifying the belief that their desire for many children was unrelatable (Chatman 1996).

Nevertheless, the distrust for the Nigerian government was shown to increase further suspicion of the FP initiative as both an ethnoreligious and neo-colonial agenda similar to the findings by Islam and Ahmed (2006) in Nigeria:

"The government always lies to people to enrich themselves. Our government don't have policies of their own; they just accept anything the whites bring to them. Our government only supports family planning because they are answerable to the Western government."

There was, however, a discrepancy in this perception of FP as a neo-colonial agenda between the people in Zaria and Gure. For the Men in Zaria, the introduction of FP was a neo-colonial attempt to depopulate the Islamic religion, similar to findings in Pakistan (Ataullajan 2019),

"The government always lies to people to enrich themselves. Our government don't have policies of their own; they just accept anything the whites bring to them. Our government only supports family planning because they are answerable to the Western government."

In the case of the Gure people, the FP initiative was another exercise to make them powerless (and extinct their language, which has been demonstrated to be in danger of extinction (Pikawi 2015).

Although the major agenda of the government was not disclosed in this study, previous studies have shown that some have long perceived FP as a neo-colonialist project and, in turn, as justification for the non-adoption of contraception. Renne (2006), in a study in Zaria, reported the non-consensual administration of a trial vaccine, "Trovafloracin Mesylate", against cerebrospinal meningitis administered in Zaria in 1996. The negative effect of this vaccine on the people shortly

generated rumours that it was a depopulation agenda, and the government was demonstrated to be unconcerned about its people. Therefore, modern FP is believed to be the idea of developed nations (Potts and Campbell 2002) and the changes in political institutions in Northern states believed to be influenced by colonialism, migration, political economy, conflict, war, and religion (Ayodele 2021). It can be inferred that these factors continue to characterise Northern society as the people in these areas continue to be suspicious about government interventions, especially with regard to public health.

In addition, the increased insecurity in Nigeria and the negligence of the government in protecting minority rural Christian settlements in the country, especially in Kaduna state, has led to more frequent raiding and killing of the people in these settlements (Gold 2022; Ukoji et al. 2019; Yusuf 2007). It was, therefore, not surprising to find the men in Gure considering their patriarchal responsibility as protectors desiring an increase in population through increased fertility to protect their community:

"Have you not heard of attacks on small villages and ethnic groups every day...? We have to be prepared; giving birth is one of the ways."

There was tension in Gure as the participants reported their inability to make sense of the negligence of the government in providing security for the people, the high child mortality (now accepted as a way of life), yet the prioritisation of FP over all these issues, "...people are talking about more serious things... they are talking FP (Hisses)". It was therefore believed, following historical rumours of Western nations trying to depopulate African countries and take control of their natural resources (Odeh and Otitolaye 2022), to be a form of imperialism or the government trying to achieve its selfish agenda (political/religious) by doing the

work of their masters to get what they want from western nations, as the people strongly believed the government would have a reward from the western world for promoting FP.

Authentic information developed within a cultural context can be used to encourage the use of FP sensitive to the socio-economic and health experiences of the people (Brouwere et al., 2002). This can be done through social networks. Opinion leaders can be valuable in encouraging FP use, similar to the use of traditional birth attendants in rural communities, to increase the use of hospitals to reduce maternal mortality in developing countries (Brouwere et al. 2002). Developing countries were found to use their cultural context to encourage FP. Hence, some of the approaches that are expressed as biased or not objective may be the most applicable to improving FP based on context.

6.4.9 Fear of Promiscuity

The male participants in Gure, regardless of their marital status, age, or education, mentioned the fear of promiscuity as another factor inhibiting men from supporting women's adoption of FP as one male (Participant 16), a 35-year-old farmer in Gure remarked, *"Adultery...That is the problem. Sometimes, if women do this family planning, they go out and sleep with other men they're certain they will not get pregnant."*

Findings show that with the increased economic hardship in Nigeria, some men are gradually willing to support the use of FP by their wives, similar to findings in Ghana (Kwawukume Laar and Abdulai 2022). However, the fear and concern that women may get engaged in adultery was an issue of concern for the men, *"it is the motive behind it that should be checked with the women. For example, in this*

town, the rumour ... is that women using any form of FP are most likely to cheat, and the husbands cannot prove it."

It was, however observed that even though the women in Gure did not completely accept this allegation, the men's belief was not totally unfounded as a middle-aged mother of five reported the possible existence of promiscuity amongst few women, *"Men do not allow their wives ...they say some of them start going out [sleeping with other men] ...in my opinion, there are more faithful women, but I am sure we won't fail to find such women."*

A shocking revelation was the power imbalance that existed between men and women in society, as married women were subjected to their male partners' demands and expectations of children. Despite the patrilineal nature of the Gure society, findings showed that providing for the children's feeding needs was a shared responsibility, showing fecklessness amongst the men in Gure, *"...So, culturally provision for the family is the responsibility of the man, so yes, men farm and bring raw food... but women provide every other thing to make the raw food edible."*

Dependence on men economically was one of the significant factors found to promote promiscuity amongst women in developed (Price, Pound, and Scott 2014), while economic independence arising from education and increased income has been shown to reduce women's dependence on men. Considering the cultural practice in Gure and the low level of education contributing to their low-income jobs, the burden of shared economic responsibilities may be contributing to their expenses, leading to their reliance on other men for financial support.

The possible practice of promiscuity may be understood in terms of the explanation by Singh (2020), who argues that the assumption that women in

matrilineal societies are empowered has often been used to justify the state's/state actors' assertions that the promotion of gender equality in such areas as unnecessary. It was thereby interesting to find that no policies or laws were found protecting the women's decisions to adopt, nor providers' decisions to administer FP; thus constituting a barrier not only to contraceptive use and access for women (Senderowicz 2020 pp. 161) but also to the provision/supply of FP services by frontline providers. Providers in Gure are forced to create a "niche" protecting themselves from being charged to court as accomplices of promiscuity and becoming outsiders (Chatman 1996), contrary to the reproductive rights of women stated in the blueprint. Participant 29, a 45-year-old provider with 21 years of service experience, re-affirms this,

"... we do it with consent of the husband...to prevent being accused of helping the women to have avenue to start sleeping around."

"Personally, I do not have a problem with FP, but it is the motive behind it that should be checked with the women. For example, in this town, the rumour you hear is that women using any form of FP are most likely to cheat, and the husbands cannot prove it."

The fear of female promiscuity was another area in which men attempted to assert control over women, similar to the findings in Uganda (Kabagenyi et al. 2013). However, while men in Uganda prevented their wives from using FP because they believed it makes women remain beautiful, young, and attractive and increases the chances of women abandoning their marriage relationships, In Nigeria, the men thought of promiscuity.

Contrary to the finding in Gure, in Zaria, women were shown to use FP, especially after a live birth, to prevent their husbands from having other sexual relations or

from having another wife, similar to findings amongst displaced people in sub-Saharan Africa (Ackerson and Zelinski (2017) and in Kenya (Abdi et al. 2017).

6.4.10 Cost

Although cost was neither mentioned as a motivation nor deterrent for FP, it was nonetheless identified as a potential barrier. Findings revealed that adverts on radio, information from health providers, and FP campaigns represented services as free, but realistically, FP was not free. Both information providers and the TA affirmed paying what they considered an inconsequential amount to access FP products. This was found to be a potential barrier as two participants (male and female) opined that free services could encourage access and vice versa, as the cost had the potential to increase male autonomy in the practice of FP amongst women. Both participants reported the possible reluctance of men to give their wives money to pay for FP services when they come to terms with permitting them to use it. This finding supports Choi et al. (2016), whose report shows that the cost of a product or service can constitute an access barrier.

6.5 Summary and Conclusion

In summary, this chapter uses four major themes: Factors encouraging FP information behaviour, factors encouraging FP take-up, obstacles to FP behaviour, and obstacles to FP take-up. It discussed the major findings of this study in relation to literature and the secondary documents used for the study.

The findings revealed that FP is not foreign to both the Christian and Muslim rural communities in the study area. However, their social experiences and cultural and religious values shaped their perception of FP, which either translated to use or non-use. Although the participants can be said to be homogenous based on their

geographical location and the culture they are used to over time, the homogeneity was shown to influence majorly their preference for the communication channel “Word-of-mouth”, which is not just peculiar to the rural people, but to the Nigerian society, considering its high-context nature.

Based on the literature, Nigeria is overpopulated, and fertility rates continue to rise, especially among rural communities. The findings show socioeconomic, socio-cultural-patriarchy, insecurity, and the method of delivering FP information (low context, limited repetition and emphasis, and poor follow-up) result in increased fear of side effects. Additionally, female-centred targeting of FP programs and misconceptions and selective exposure concerning religious stances on FP continues to sustain the above issues.

However, findings show that the people are aware of the socio-economic hardship that comes from having many children. Nevertheless, the representation of spacing as the major essence of FP to promote health for the mother and child and beauty for the mother to remain attractive for the patriarch was found to encourage the practice of High fertility, promoting and increasing high levels of poverty.

In conclusion, the findings showed the information behaviour of rural people. These messages and information, although shown to be developed based on the context of culture and religion, were found to be non-representative of the vices suffered in these communities and thus did not motivate in any way better fertility practices. Thus, a call for re-structuring of FP information and programs.

CHAPTER SEVEN:

CONCLUSION

7.0 Summary of Research

This thesis demonstrates the overwhelming influence of patriarchy in almost all aspects of knowledge formation, information behaviour, and decision-making of men and women in the rural target audience/population in Zaria and Gure Lere LGA, Kaduna state, Nigeria. However, patriarchy was shown not to exist in a vacuum, as the ever-changing context of culture, religion, lived experiences (social and economic) of community members, and the pact of trust eroded over many years contributed to the shaping of patriarchal perceptions, decisions and choices on FP initiatives-as well as every other aspect of life for the others-women, children, and any other individual that is not an adult male (Poupart 1994).

Although previous studies identify religion and culture as major deterrents to the acceptance of FP (Abdi et al. 2020; Asgaray and Price 2018; Akerson and Zielinski 2017; Kiura 2014; Furuta and Mori 2008). This thesis adds little more to this walked path by re-identifying and building on the specific practices of patriarchy, distrust for FP initiatives, and fear of side effects acting as deterrents to the uptake of FP within the broader context of religion and culture to provide more detailed explanations on the FP IB of the rural residents, based on their lived experiences and interaction with FP information. Thus adding minute yet significant details to the literature on deterrents to FP use in rural areas, which have been reported in passing in previous studies. These details, as argued by some information behavioural researchers (Narayan and Preljevic 2017; Meyer 2009; Godbold 2006; Wilson 1997; Chatman 1996), are not only significant to promoting acceptance of

new information to indigenous people but serve as guidelines to the development and effective communication¹⁴ of new information to indigenous people, by providing them with accurate information which aligns with their IB and enables them to make informed decisions and sustainable choices. Therefore, using an information behavioural lens to investigate reasons for the low utilisation of FP, the major conclusions drawn out from the findings in this study are:

- Due to the patriarchal nature of the society, the men have the final say on the decision of the women to use and the providers to provide FP information.
- The village heads/other forms of authority, still males, have the final decision on whether or not FP information is made available and accessible within the community. If local community heads do not allow FP facilities to come in, they will not.
- Men are not prepared to engage with FP information passively or actively, and this undermines women's access to freedom of choice as well because men are in charge of the radio, a major mass media source for rural people, and they control the information.
- The influence of patriarchy was shown to go beyond the community level, as its influence was evident in the framing of FP messages by international organisations and NGOs.
- Some men and matriarchs engage in information avoidance
- Although women showed more interest in using FP and limiting childbirths, the decision of men in the end served as a hindrance to the practical use or application of the messages received.

¹⁴ This task includes; selecting credible sources, choosing a message strategy, and selecting optimal channel to deliver information.

- The cultural expectation that women will always want to remain “beautiful” to maintain husband loyalty motivates the creation of FP-endangered messages, adapted to suit the patriarchal culture, obscuring the medical importance of messages in the process.
- The ambiguity in the goal of FP “spacing” was shown to be not only problematic but deceptive and contributed to the people, especially men’s distrust of the initiative.
- Gaslighting, using promiscuity as a possible tactic by men to keep women in their place and under control, as women using FP were now tagged promiscuous.

Due to the patriarchal nature of the society, the men have the final decision on women’s use of FP. Even if women decided to engage in the covert use of FP, the provision of this service was limited by the patriarchal hegemony, as the consent of men was required “... *to provide family planning services to women, we do it with consent of the man*”. (Female provider, aged 45, Christian). Even though frontline providers noted that they could comply by providing this service to women clandestinely if women were found out by their husbands, both providers, especially the women, could suffer consequences for their actions. Providers were likely to face lawsuits (with the local authorities or courts), and women could suffer divorce or physical abuse from their husbands, similar to findings in other studies (Emenike and Dalal 2008, Murshid 2017).

This practice was shown to act as a barrier to FP accessibility in the area of satisfying demand and supply, as no laws were found protecting women and health providers. According to Him and Hosgor (2011), from a feminist viewpoint, this practice imposes a struggle for women’s control of their own bodies.

The village heads and other forms of authority, still males, were also revealed to control FP accessibility within the community, as findings showed that without their permission and approval, FP facilities will not be planted, "*...hospitals are in the hands of the king, if he says no hospital or fP should be brought or practised in his village, it stands.*" (Married man, Muslim, aged 35). This is typical of rural communities where hierarchical structures (headsmen and community leaders) determine information flow and access. Thus, the extent to which information is accepted in rural areas is dependent on the level of acceptance by the figure of authority (Hepworth 2007; Olson 1994). Although studies show that advocacy for FP by involving traditional and religious rulers has improved the acceptance of FP (Abdi et al. 2020; Adongo et al. 2013; Kabagenyi et al. 2013), Meyer (2009) argues that the extent to which authority figures understand incoming information can play a crucial role in sanctioning such information, and may reduce its relevance for example, in Gure, while the village head and men allowed FP to be practised, he perceived the practice to act against their need for the increased population to save the tribe from extinction.

Men in this study were unwilling to engage with FP information and thus controlled women's access by denying them access to this information from expert sources on radio, the major mass media source for rural people (Ajaero et al. 2015): "... I turn off the radio whenever I heard family planning" (Married male, aged 55, Christian). This behaviour resonates with avoidance behaviour in the information behavioural literature, which can be caused by cognitive dissonance (Narayan and Preljevic 2017; Narayan 2012).

Although women showed more interest in using FP and limiting births, the decision of men served as a hindrance to its use, as even unmarried women acknowledged

the likelihood of patriarchal hegemony preventing the use of FP *"... for health benefits, I will want to use FP when I marry, but my future husband may not agree"* (Unmarried woman, aged 18, Bomo).

To further prevent the use of FP among women who had some form of autonomy or were convinced based on their financial or health conditions to use FP, some form of gaslighting was revealed to be used by men to control women. As the practice of FP among married women was associated with promiscuity, again, considering the man, signifying a symbol of authority in the rural community as the originator of such information, it is received as authentic or threatening and thus discourages women from using FP.

The influence of patriarchy was shown to go beyond the community level, as its influence was evident in the framing of FP messages by international organisations and NGOs. The definition of FP known to the community based on the frontline provider's advice and in the framing of FP messages in leaflets and pamphlets were shown to be infiltrated with patriarchal dominance. An undertone of appeal to patriarchal forces was evident, as pictures showing couples portrayed the men leading the conversations on FP with women actively listening. However, in reality, the reverse was the case, as women, compared to men, were more willing to engage in the use of modern contraceptives. In addition, one of the major elements used to encourage women to adopt FP was the use of phrases like *"regain your pre-pregnancy figure."*

The recurrent definition of FP to mean child-spacing was also another patronising aspect of patriarchy by the authors of FP messages, as the authors were more concerned with appealing to the cultural and patriarchal desires of men to have many children, in the process down-playing the significant health relevance of FP

"Family planning saves lives" (Stover and Ross 2013). As shown in Chapter 2, the increased rate of FP use reduces fertility and, by implication, the number of births. Reduction in the number of births for women means reduced maternal morbidity and mortality as women become exposed to less risk of childbirth.

This thesis, therefore, argues that the situating of FP to reflect patriarchy has not only undermined the benefits and medical importance of FP as a public health initiative but has undermined the credibility and trust for the FP initiative, thus enhancing the notion of existing deception (Chatman 1996) in FP initiatives: "... if you follow the spacing advice of 3-5years, you truly will not end up with many children" (Married woman, Muslim, aged 37). Although it can be stated that this pattern of thinking was majorly observed among participants motivated to use FP, this same pattern of thinking was presumed to dissuade the adoption of FP among men with one wife, who were likely to put pressure on women to have children before the age of thirty-five shown to involve a drop in fertility (Murakami et al. 2018; Alkema et al. 2011) this thesis therefore argues the notion of "deception" by FP authors contributing to the low adoption of FP.

As pointed out by Narayan (2012), to prevent new or added information from interrupting individuals' current decisions or thinking, they may engage in information avoidance to prevent attitude change, similar to the attitude of married men in this study. The men, in particular, were found not to be oblivious to the economic situation within the community. It was evident that some form of uncertainty existed within them as they navigated through a complex decision process under the influence of sexuality, personal goals and beliefs, and family and community expectations (Hogson et al. 2016). However, their inability to make sense of the stated goal of FP "spacing" in comparison to their limited

knowledge/perception of the practice (controls fertility) and their current reality of economic hardship was found to contribute to their anxiety and widening of the gap (Godbold 2006), which made them resort to avoidance. In addition, the existence of this unclarity on the goal of FP is further evident in the benefits of FP highlighted by renowned FP influencers:

- FP is a key factor in promoting gender equality, women's empowerment, and reducing poverty (UNFPA 2022).
- FP goal: enhanced quality of life by improving maternal health while reducing maternal and infant mortality and alleviating pressure on the government to meet social and economic needs (World Bank 2023).

This finding attempts to fill the gap identified by Narayan (2012), "a need to understand why people choose to seek certain types of information and avoid others" as ambiguous information and unclear messages were found in this study to contribute to information avoidance, as sources become untrusted. This is used in areas where they have had some experience or previous knowledge.

Finally, one of the factors contributing to men's negative attitude towards FP and claims of being excluded from FP programmes (Greene and Biddlecom 2000) was also identified in this study. The findings revealed men's and women's belief that the sole responsibility to prevent pregnancy lies with the woman "*...I will allow my wife use FP when I have ten children*" (Participant 8, Married Man, aged 43), similar to Hogson et al. (2015). Thus, even men in support of FP were shown to disassociate themselves from the use of any modern methods, such as condoms or even engage with the sorting of male herbs, which may prevent a pregnancy. The basis of this attitude can be attributed to the nature of FP information and services, which focuses on the woman while disengaging the man by merely

portraying him as a support system whose authority is required for the practice of FP. The indirect disengagement of men in the framing of FP messages targeting men "Stand tall- Be successful. Support your spouse, plan your family" (NURHI 2012) and at the point of FP service delivery where the husband's consent is required was shown as contributing to the disengaging attitude in men. Not only were the leaflets shown to start by listing or showing diagrams of modern female contraceptive methods, but they also go on to describe the role of the man in FP as a support system for the woman "Today's Nigerian man is hardworking and resourceful... he provides for his family..." (NURHI 2012).

On the other hand, the woman is portrayed as a subject to authority whose use of FP will not only benefit her but maintain her husband's loyalty:

"Be your beautiful self! -regain your pre-pregnancy figure and energy" (NURHI 2012)

Contrary to the observations in secular leaflets where the man is positioned as a support system to the woman in FP, religious leaflets produced by the Catholic church emphasised FP as a joint practice by couples, "NFP is the choice a married man and his wife make after careful consideration of the wife's body and divine discipline given to the husband to manage their fertility responsibility" (Family and Human life unit). The church emphasises one method, "*Natural methods are the safest*", and unapologetically condemns the use of modern contraceptives, "*Contraception is a sin that removes God from participating in the conjugal love of husband and wife...contraception can fail, and people who use contraception resort to abortion when contraceptives fail*".

This thesis, based on this finding, highlights the accusation of religion fostering inequity and patriarchy (Fuseini et al. 2019; Attoh 2017), arguing that secular organisations also indirectly contribute, if not more, to fostering gender inequity and patriarchy, in the process of fitting health messages into the cultural practices of the people. Ambiguity and questions of motif were not found in the FP information provided by the church, and the nature of this information contributes to the trust audience members have for religious information sources.

To summarize, this study's findings suggest that family planning efforts are shaped by social relations that are often patriarchal and influenced by political and economic contexts. Despite women's ongoing struggles to assert control over their reproductive health, various factors such as gender, social class, and global politics have influenced human reproduction. Men's opposition to modern family planning methods remains a challenge, as there are no policies in place to address this issue (Bandarage 1997, p. 171). Given these findings, the next section aims to provide a detailed account of how this study has achieved some or all of its objectives.

7.1 Reflection on Objectives

This research aimed to investigate the information behaviour of men and women-religious leaders and frontline FP information providers in Zaria and Lere Local Government Area (LGA) to understand the low adoption of family planning services in these areas. This was done in order to suggest accessible and appropriate information sources and providers that meet the needs of the target populations in terms of their economic status as well as religious and socio-cultural beliefs to promote better health outcomes for women and children.

To achieve this, the study sought to achieve the following objectives:

1. To understand the nature of information behaviour of family planning service providers, users/information seekers, and potential users in Zaria and Lere local government areas in Nigeria.
2. To identify the various factors motivating information behaviour in family planning and the components guiding the dissemination of information in the Zaria and Lere areas.
3. To determine and evaluate the major information sources of family planning providers and target service users/information seekers.
4. To examine the influence of social, religious, cultural, and economic challenges and barriers on the perceptions and utilisation of family planning services in Zaria and Lere Local Government Areas.

Objective 1

To understand the nature of the information behaviour of family planning service providers, current and potential users in Zaria and Lere local government areas of Nigeria.

This thesis demonstrates that the family planning IB of the target group is shaped by the socio-cultural experiences of the people and is deeply rooted in their past and current experiences of eroded trust for public health initiatives.

Patriarchy was found to be the major factor determining the ability to access and use FP information in both Zaria and Gure – and the *forms* of FP adopted in cases when women were permitted to use them. This practice was shown not to thrive in isolation, as it was dependent on the existing phenomenon of poverty and insecurity for the elderly in old age. Thus, some form of neoliberal thinking contributed to shaping men's FP information behaviour, with children at the centre of this economic exploitation, viewed as economic units and potential "bread

winners” to raise men’s (Fathers) status through wealth acquisition. This perception, therefore, contributed to men's negative attitude to FP information. On the other hand, the issues of child mortality and fear of side effects discouraged women from seeking and using FP information. Contrary to the suggestion for successful communication of development information, requiring an alignment between the IB of the target audience and that of the information expert, strict guidelines developed by external bodies were revealed to guide and restrict the process of communicating FP advice. For example, providers are not allowed to advise a couple on the importance of limiting births for the health of the woman or advise individuals experiencing financial hardship to limit births, as this was perceived as a form of control.

However, the religious providers operated a method of flexibility, where they were able to relate religious teachings with factual day-to-day changing contextual experiences of the people. All the aforementioned concerns were shown to come together and shape the information behaviour of both providers and audience members.

The participants in this study were shown to be logical thinkers and demonstrated awareness of the current economic hardship experienced within the country despite the generally low levels of education among the majority of the interviewees. However, the ambiguity in the current FP messages, with emphasis made on “spacing, beauty and the health for mother and child”, was shown to create uncertainty and ambivalence, as these new dimensions contradicted the benefits of FP emphasised historically – to promote economic stability and reduce overpopulation (Renne 1996). This, in turn, caused the audience members to question the actual motive of FP. Hence the perception of existing deception in this “so-called” act of charity, which the people believed was the project of the

government or post-colonial influencers, not trusted sources, continues to build resistance for FP initiative and shape the FP behaviour of the people.

Objective 2

To identify the various factors motivating the family planning behaviour among providers and the use of this information by the audience members in Zaria and Lere areas;

Both information providers and the target audience agreed that the use of oral communication through trusted sources, such as men, health providers, and religious leaders, is vital for audience member's access to FP messages.

The health benefits of family planning for the mother and child, socioeconomic benefits, and trust in the source developed through the genuine care shown by a source were highlighted to motivate the use of FP among audience members. The motivation for the religious leaders was majorly to keep the audience members healthy and economically stable by practising the religiously approved methods of contraception.

Objective 3

To determine and evaluate the major information sources of family planning providers and service users/information seekers.

Utility and credibility were shown to guide people's choices of FP information sources, family and friends were shown to be the most trusted, with a preference for interpersonal communication by both men and women. Despite this near-universal preference, there was a clear gender split in perceptions of source credibility and utility. For men and matriarchal women who desired large family sizes, the perceived authority of male leadership figures (e.g., priests, imams, or community heads) afforded them a level of trust beyond that ascribed to most other influencers. Hence, FP information from such individuals tended to be

privileged over that from other sources, especially if it aligned with the individual's susceptibility (e.g., desire for a large family).

By contrast, married women self-identifying as likely to adopt FP methods were found to be more active FP information seekers – open to or relying on information from official FP information providers, including in relation to advice about potential side effects.

With informal knowledge-sharing a widely adopted practice for accessing and utilising FP knowledge within the communities studied, there is a danger that incomplete and unverifiable information continues to circulate within the community and form the basis of knowledge formation for both married and disadvantaged unmarried adults, whose access to FP message is associated with the desire for promiscuity "*... what does an unmarried woman need FP for, it has to be for sleeping around*" and immorality "*... ah we don't talk or ask about FP outside our peers, we are not married*". Unmarried women often reported accessing their FP information passively from older women by eavesdropping or coincidentally being around when married peers are discussing it.

Both information providers and the target audience agreed that trusted sources of information, such as men, health providers, and religious leaders, are essential for audience members to access family planning (FP) messages. Informal information-sharing (particularly through local community-level opinion leaders who are more educated or have forms of authority demanding respect) is the primary method used among people in rural communities to deliberate whether to access and utilize FP advice from official sources. For information shared by a source to be perceived as relevant, both the sender and receiver must hold a similar understanding of the concept of family planning and its relatable benefits. While information providers are motivated to communicate complete FP

information and risk assessment, an information source does not merit consideration if it is perceived to weigh against personal or economic advantage. Therefore, sources that share the same understanding of FP and the ability to fit it into the current situation of individuals or the community are more relatable and attractive to people. However, suspicion was shown to arise where sources focused on communicating only economic and personal advantages, where obvious disadvantages existed, such as larger families struggling to provide basic needs.

For the providers, while the religious teachers used the religious obligation for married couples to 'procreate, multiply and fill the earth' with the Bible and Quran forming the major source of information alongside other doctrinal knowledge and materials, the frontline information providers depended majorly on guidelines provided at their place of work, while a few used information derived from the audience members in the process of counselling to give information.

Objective 4

To examine the influence of social, religious, cultural and economic challenges and barriers on the perceptions and utilisation of family planning services in Zaria and Lere Local Government Areas:

Culture, socioeconomic, religion, ethnoreligious crisis/insecurity, patriarchy, and the fear of side effects were identified as significant barriers to FP information among rural dwellers, especially among women.

Patriarchy as a challenge to FP behaviour was found to be the single most dominant influence impeding the uptake of FP advice/practices – cutting across every aspect shaping the information behaviour of women in the studies communities "... I will want to use FP if my husband allows me" (18-year-old-unmarried woman. In addition, the analysis of the secondary documents revealed

patriarchy was encouraged by the messages on the leaflet, which were not only patronising for the men but also justified the bodily control of a woman through the use of FP to remain appealing to the man. This information is non-reflective of the situational menace caused by high population poverty and child mortality in these areas; thus, this seemingly strategic approach continues to raise questions of motive. It was problematic to find that men had the power to request the discontinuation of FP use against a woman's desire in a health facility if her husband discovered covert use by his wife.

In addition, both Christian and Islamic teachers showed their support for NFP while discouraging the use of modern contraceptives. As procreation is encouraged by both religions, individuals with personal desires for large families were able to stay under the cover of religion to avoid FP information - making selective exposure, information avoidance, or self-censorship of FP advice, *"We do not want information on limiting birth...it may seem unrealistic to just give birth..., but in life one never knows who will take care of him."* (Married man, aged 58).

Economically, a paradox in the economic role of family planning was shown to act as a hindrance to its adoption. The younger participants with relatively low education believed FP was beneficial to enable them to have a few children they are able to take care of. However, for others, the non-use of FP increased an individual's chances of becoming rich if they had more children.

In addition, patriarchy and matriarchy acting as major gatekeepers of information shared within the community and the custodians of cultural practices transferring and demonstrating acceptable and non-acceptable behaviour within the community were shown to constitute hindrances to the use of FP and encouraging male subordination of women *"... it is very important for the husband to agree*

before a wife goes ahead to use FP..... the man is the head culturally and biblically.” (60-year-old, mother of five, Christian).

It can, therefore, be inferred that the knowledge formation of this group of people based on their environmental, cultural, and religious practices and experiences accepts and sustains the practice of patriarchy.

There is a need for culturally appropriate FP content and a need to consider gender and marital status more proactively in FP initiatives and programmes.

7.2 Contributions to the body of knowledge

This study contributes to the existing body of knowledge and positions itself in the literature of information behaviour and library science by exploring the low utilisation of FP among Christian and Muslim rural residents in Northern Nigeria. To the best of the researcher’s knowledge, this is the first study to empirically assess the motivations and barriers to low adoption of FP from an information behavioural perspective. In addition, it is the first to make a linkage between the intertwined nature of heuristics of trust, presentation of medical facts and context as a deterrent to the provision of FP information by the providers, and an obstacle to its use amongst rural residents in Nigeria. Although Meyer (2009) argues that limited empirical studies were identified to focus on information behaviour and FP, there was limited literature on information behaviour to compare the contributions of this study directly.

7.2.1 Theoretical Contribution

Several studies investigating the low utilisation of FP in Nigeria, sub-Saharan Africa, and developing countries have often focused on identifying the socio-

cultural barriers to FP demand (Abdi et al. 2020; Ackerson and Zielinski 2017; Renne 1996) and supply (Senderowicz 2020; Schrupf et al. 2020; Dehlendorf et al. 2016; Newbold et al. 2009; Musoke 2007; Gunther 2003), and men's autonomy in household decision-making has been a recurring barrier. However, the aforementioned studies tell very little about the actual modalities that go on between men and women in their household decision-making and how these interactions influence IB, limiting our understanding of the cultural rule of patriarchy and its stance in FP decisions and practice. As Fuseini et al. (2019) note, an in-depth exploration of decision-making in the household is relevant to understanding men's autonomy.

The few studies that have explored Patriarchy as a deterrent to the use of FP among women have explored this practice as a rule of oppression limiting women's autonomy and socio-economic empowerment (Greno and Saikia 2021; Duze and Mohammed 2006; Izugbara 2004) while describing it as a practice sustained by culture and religion. Nevertheless, Him and Hosgor (2011) focused on exploring patriarchy from a feminist perspective, affirmed reproduction to be immersed in "a wide range of social relations which are patriarchal" (p. 342), but contrary to other studies, argue that this practice is dependent on political-economic contexts. This study, from an information behavioural perspective, explores the existence of the unconstrained power of patriarchy (Waters 1989; Fox 1988) as a barrier to FP, noting that this power is contingent on political-economic and socio-religious context, which makes it thrive. In addition, the political-economic context of FP unfolds in focus by national and international FP supporting agencies in adapting health information to suit patriarchal powers while neglecting its relevance to the actual health of women and children (Stover and Ross 2013), which, according to WHO (2020) is the major goal of FP.

In addition, the negative response to FP, shaping the IB of rural men and women in this study, is demonstrated to be a response to the steadily eroded pact of trust in public health due to poor clarity in the communication of side effects compared to benefits of an initiative- and the existence of a gap due to the inability of audience members to relate their everyday experiences of poverty and high-child mortality to the benefits of spacing.

As Cummings (2015), similar to Kigongo-Bukenya (1999), argues, a successful health initiative goes beyond studies that seek to promote acceptance. Studies should focus on assessing the public's needs and understanding their reasoning to find solutions, signposting experts based on health initiatives and allowing the public to evaluate the benefits (Inhorn and Whittle 2001) rationally.

The researcher also follows the work of Cummings (2014) in emphasising trust as a significant factor contributing to the poor and low practice of FP. Anxiety exists when people do not understand the information given (Cummings 2014). The longer it takes for accurate and relatable information to fill the gap, the larger the distrust it builds.

7.2.2 Towards a new hybrid model of information behaviour

Drawing on the concepts of the public sphere, patriarchy, and intersectionality, as situated in feminist studies, this thesis proposes that the only way to conceptualize the information behaviours of the population accurately examined is to propose a new hybrid model that combines aspects of several existing frameworks with one's unique or particular to this case study. This approach especially gives specific consideration to the information and other intersectional inequalities experienced and articulated by black women living in rural areas in Nigeria – the majority of whom are low earners with limited levels of formal education.

In reviewing and evaluating the merits of five major existing models of information behaviour, the researcher identified significant gaps in relation to their applicability to the study population. These models of information behaviour are reviewed, and gaps are highlighted in the table below.

Model	Strength	Weakness	Aspect accepted	Aspect Rejected	Rationale for accepting /rejecting
Chatman's theory of information poverty	<p>Introduces the concept of information poverty sustained by social and cultural aspects of information access.</p> <p>-Provides an in-depth contextual understanding of marginalised communities' interaction with information based on their lived experiences.</p> <p>-Identifies the existence of two worlds "insider and outsider" as barriers to information seeking and amongst impoverished groups.</p> <ul style="list-style-type: none"> -Brings to light the unequal distribution of information resources leading to challenges in accessing information. 	<p>- Although the theory focuses on marginalised groups, it does not explicitly address information disparities more broadly;</p> <p>It focuses on barriers to information sharing, while neglecting factors motivating information acceptance amongst this group.</p> <ul style="list-style-type: none"> Some argue its impact is limited by its lack of practical solutions for mitigating information poverty. 	<ul style="list-style-type: none"> The existence of two worlds "outsider and insider" Secrecy. Risk-risk taking- despite cultural and religious barrier, there was an identified gap especially among women, willing to accept FP in clandestine if the benefits outweighed the risk of side effects and child-mortality. 	<ul style="list-style-type: none"> Deception (from the user's perspective) 	<ul style="list-style-type: none"> Men dominate decision making acting as "insiders" with significant influence in particularly family planning discourse, where their consent is crucial and their perspectives shape information material. Conversely, women are often "outsiders" whose voices are rendered secondary in FP discourse, often resulting in their clandestine use of FP. T Deception- reluctance by users to discuss or share information was an exception rather than a rule, with

					<p>most participants open about their reasons for not using FP.</p> <ul style="list-style-type: none"> • Deception stems from the disparity between family planning guidance on child spacing and real-life issues like menopause, child mortality, and infertility.
Wilson's general Model	<ul style="list-style-type: none"> • It brings to light information seeking behaviour: passive engagement, passive attention and passive search, active search and ongoing search. • Incorporates context and recognises it changes across different situations. • It recognises the iterative and dynamic nature of information behaviour. • It identifies users' tendency not to follow ideal, optimised or linear routes in information seeking. 	<ul style="list-style-type: none"> • It over simplifies Information behaviour by presenting it as a logical process despite the complexities involved in the process. • It limits the impact of context to only the first stage of information seeking. 	<ul style="list-style-type: none"> • The dynamic nature of context varying from person-person, culture and geographical location. • Various types of Information seekers. • The dynamic and iterative nature of information seeking • Feedback loop 	<ul style="list-style-type: none"> • The oversimplification of the dynamic nature of context and its limited influence in the process. 	<ul style="list-style-type: none"> • The study's oversimplified context and its limitation to a single stage neglect the dynamic, ever-evolving nature of context throughout the information seeking process. This study recognises and acknowledges the evolving nature of context throughout

	<ul style="list-style-type: none"> • The existence of a feedback loop- emphasising the sometimes-problematic nature of information seeking. • Identifies information search may be reversed and includes- dead-end, or abandonment and beginning again. • It has been extended to include the affective dimension. • Used in exploring social interactions and norms. 				information seeking.
Kuhlthau's ISP Model	<ul style="list-style-type: none"> • Structured approach to people's information seeking (six stage process). • Offers insight into the emotional and cognitive factors influencing individual interactions with systems. • Highlights the influence of an individual's emotional state on information search strategies and outcome. • Indicates a user's existing knowledge affects confidence and 	<ul style="list-style-type: none"> • Not fully capturing the complexity of the nuanced process in context especially in health information seeking. • It does not directly consider the influence of socio-cultural factors in information search. 	<ul style="list-style-type: none"> • Users' experiences shaped by cognitive and affective aspects. • Limited Knowledge fosters uncertainty • The impact of the users' emotional state on the search process 	<ul style="list-style-type: none"> • The oversimplification of the information process as it is complex. • The representation of encounter with relevant information always leading to positive outcome (certainty and satisfaction), aligning with the originators aim 	<ul style="list-style-type: none"> • Satisfaction and certainty in the information-seeking process are not always achieved through encounter with relevant information; instead, they may reinforce existing biases, such as fear of infertility or distrust for government as observed in this study. This is acknowledged in

	<p>satisfaction in the information seeking process (reinforcing certainty or causing doubt).</p> <ul style="list-style-type: none"> • Affirms the information search process as fluid and iterative, changing to meet users evolving needs. • Recommends a need for effective system design to account for users emotional and mental needs. 	<ul style="list-style-type: none"> • Simplistic representation of actions can fail to produce accurate result especially in complex activities • It does not examine the root cause of uncertainty in information search, as doing this could lead to solutions. • Limited in reflecting the varied ways in which individuals seek and experience information. 		<p>and meeting the users need.</p>	<p>the proposed model.</p> <ul style="list-style-type: none"> • Perceived deception or mistrust for systems rather than lack of information relevance may cause users to reject information from systems as seen with men viewing health care providers as agents of colonialism. • Ambiguity in information seeking can lead users to prematurely end their search even when systems are designed to accommodate their cognitive and affective profiles. This is ga is accounted for in the proposed model.
Marchonini Model	<ul style="list-style-type: none"> • Emphasises the iterative and dynamic nature of information behaviour 	<ul style="list-style-type: none"> • It is sophisticated and more 	<ul style="list-style-type: none"> • The dynamic nature of 	<ul style="list-style-type: none"> • “Recognising and accepting an information 	<ul style="list-style-type: none"> • Findings in this study highlights the variance in

	<p>(identifying a need, searching for information evaluation information)</p> <ul style="list-style-type: none"> • Interactive systems encourage engagement and promote information acceptance. • Feedback loop- individuals may revisit previous stages or adjust their behaviour based on the outcomes of their information seeking 	<p>applicable among literates and professionals who are able to identify their problems.</p> <ul style="list-style-type: none"> • Fairly abstract, lacking precision in the various activities and actions requiring verifying for designers to develop systems to better support query formulation • Its practical applicability has been questioned 	<p>information behaviour.</p> <ul style="list-style-type: none"> • Significant role of interactive systems in promoting acceptance. 	<p>problem” and “Defining and understanding the problem” - this is a complex stage and more advanced stage presented in a simplified form.</p> <ul style="list-style-type: none"> • Individual knowledge and understanding level is placed at a flat hierarchical level not taking into account the various category of information adopter (Innovators, early adopters early majority, late majority and he laggards) 	<p>individuals' cognitive ability to recognise and accept an information problem especially in health issues, due to diverse knowledge levels, thus this model is sophisticated for users in rural communities. However, the dynamic nature of IB and significant role of interactive systems is adapted.</p> <ul style="list-style-type: none"> • It was going to be applicable for understanding the providers perspective majorly. Adapted to data analysis.
Dervin's sense Making	<ul style="list-style-type: none"> • Practical and applicable in real life situations. • User-centred-emphasises the importance of understanding information seeking from the user's perspective. 	<ul style="list-style-type: none"> • The model fails to cover the various ways individuals interact with information gaps beyond just seeking it. 	<ul style="list-style-type: none"> • Highlight the critical role of understanding and addressing the unique information gaps and seeking behaviour 	<ul style="list-style-type: none"> • Fails to provided alternative strategies for gap. 	<ul style="list-style-type: none"> • The model overlooks the complexity of how people interact with information gaps, missing the varied behaviours beyond seeking, such as

	<ul style="list-style-type: none"> • Dynamic nature of sense-making as an ongoing process. • Highlights the problem-solving nature of information 	<ul style="list-style-type: none"> • Information behaviours like seeking, sharing, or creating can happen independently of a perceived gap. • People might not seek information if the gap's risk seems too high. • Individuals may ignore a gap if it appears insignificant or unrecognized by their community. 	among rural, low-income women in the study		spreading or creating information, and does not fully consider how perceived risk or the community's discourse influences their attitude.
Hybrid model of Information behaviour					
Model	Concepts integrated	Aspects integrated from IB Models	Aspects not Included	Rationale	
Hybrid Model of Information Behaviour	Public sphere Intersectionality Patriarchy Communicative rationality	Information Poverty Insider and outsider	Deception	The selected concepts and integrated aspect contribute to narrowing the gaps highlighted in information behavioural research by some scholars: The findings provided empirical evidence to Godbold's (2006) assertion of the possibility of an existing small gap accounting for -the inability of the individual to justify a gap, or even a community to recognise a gap. Thereby providing a lens to investigate in-depth this information	

	<p>'Selective information evaluators' or 'Confirmation bias seekers'</p>	<p>Uncertainty and certainty in information behaviour (extending certainty)</p> <p>Information relevance</p> <p>Context- gender, socio-cultural</p> <p>Information relevance</p>		<p>behaviour evident amongst rural people, whose limited access to information deprives them the choice of information to update their sense making of the world.</p> <p>It also provides a lens to investigate in-depth amongst diverse groups their assessment or information relevance, thereby attempting to provide better insights to tailored messages</p> <p>This hybrid model attempts to contribute in narrowing the gap to investigating specific user groups, in this context rural, marginalised population.</p> <p>With the concepts also, more detailed sub-activities at each stage of the information behaviour process are identified.</p>
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Table 6- Reviewed Models of Information

Based on the gaps identified from these models in comparison to the findings in this study, specific information-related activities – such as ambiguity in information messages - were found to foster uncertainty among information users (whether they were passive recipients or active seekers), especially among men. These users' existing knowledge and desire for large family sizes trumped any new information to which they were exposed, with some women sharing a similar ideology. Kulhthau's linear notion of users' encounters with relevant information resulting in certainty is further re-examined, as findings in this study contradict this idea by showing a non-linear outcome of encounters with relevant information reinforcing certainty – with individuals often appearing to accept only those aspects of new information that reinforced their existing beliefs or aligned with their existing family planning aim.

Recalling Chatman, the multifaceted issue of family planning in rural areas is characterised by several dimensions of information poverty - including scarcity of comprehensive family planning information and accessibility barriers arising from socio-economic challenges such as child mortality, religious beliefs, and cost. However, while it is true that the desire for large family sizes amongst some women trumped any new FP information, for others, the relationship between healthcare providers and women demonstrates a degree of trust in the recognized FP expertise of providers – helping to bridge the information gap for passive or active seekers open to new information, while engendering a “pause and reflect” response from some users with more negative predispositions towards official FP advice.

The data demonstrated that individual factors can play a significant role in determining the level of 'buy-in' to FP information - with intrinsic attributes like

cognitive ability and social factors like formal education levels affecting information-seeking behaviour. Meanwhile, extrinsic factors like community norms and cultural values also shape decisions about how, whether, and from where to access and make use of information. Perhaps most importantly, decision-making in family planning among the study population is heavily influenced by gender intersectionality and the compounded effects of multiple disadvantages, such as living in rural areas, having relatively low incomes and levels of formal education, and being subject to a specific sociological grouping (rural, low-income, Black Nigerian women) subject to an overarching influence of patriarchy. The process of information behaviour in which these individuals are engaged is, therefore, iterative, reflecting Kuhlthau's concept of information seeking, and involves a feedback loop that accounts for the impact of external influences like community and familial expectations.

In the public sphere to which these women have (limited) access, community narratives and communication channels are also vital. Community discussions and healthcare providers play key roles in shaping the discourse around family planning. Women's limited access to independent media, due to information being mediated by male members of the household, with husbands often controlling the radio, continue to foster women's restricted access to diverse perspectives and information. The patriarchal dynamics within their society pose barriers to women's autonomy and decision-making, with gendered power structures and cultural expectations heavily influencing reproductive choices.

Even information-seeking behaviour has been found to include both active *and* passive approaches. A new category, 'selective information evaluators' or "confirmation bias seekers", has been identified through this research - as

individuals who possess knowledge but are sceptical (largely due to the extent of influence on their attitudes and behaviours of cultural and socioeconomic factors) appear to engage in “information-seeking” only to reaffirm existing beliefs.

Therefore, mindful of the evolving nature of reality as described by Dervin (2000), as well as the potential of big or small gaps to act as barriers to information seeking (Godbold 2009), this study identifies a need to develop dynamic intervention strategies that recognize the need to replace assumptions that “rational consensus” can be achieved within the public sphere with a form of “communication rationality” that can facilitate engagement with counter-publics. This would enable scepticism about public health-driven FP advice to be overcome among some counter-publics while further fostering the appetite to engage with FP noted among other subaltern publics (e.g., women currently discussing FP in ‘secret’ – i.e., without their partners’ knowledge).

In proposing a new FP strategy appropriately targeted at this study population, the principle of parity is seen as fundamental: primarily, no participant, be they ‘insider or outsider’, should be granted undue influence over another, considering the ‘Context’ domain. ‘Insiders’ (men) are those entities or individuals that operate within established information channels and sociocultural norms, possessing the means to influence or even dictate discourse within the (localized) public sphere. Men typically hold positions that afford them direct involvement in the creation or dissemination of information and decision-making processes. In contrast, ‘outsiders’ (women) are those who find themselves on the periphery of these channels – often marginalized due to socioeconomic, cultural, religious, and political barriers and struggling to get their voices heard and concerns addressed within the mainstream discourse. Communication rationality proposed within this

model aims to build emancipatory knowledge through a democratized space where the ability to speak, contribute, or make decisions is not predicated on one's status within the informational hierarchy but rather on the intrinsic value of their contribution to the collective dialogue, as proposed by Innes and David (1999).

However, the model recognizes the expertise of the information providers as a characteristic sought by active users and appreciated by some passive seekers, consequently highlighting the importance of providers utilising this 'expertise' to effectively communicate a need for change in a manner "that honest, careful about claims and disinclined to deceive" (Wilson 1983 P.51). The essence is to minimise the level of misinformation and disinformation concerning side effects (e.g., infertility, irregular cycles, headache, nausea, mood-swings) when individuals' plausibility testing (exploring the truth of outside claims) is conducted because users who have experienced any of these effects were well informed prior to its occurrence (if any). Thus, more accurate information circulates through oral information sharing within communities, and their choices and decisions are guided by emancipatory knowledge.

The desired outcome is informed family planning decisions, achieved through an integrated hybrid model that acknowledges the complexity of intersecting factors. This model aims to provide a comprehensive, culturally sensitive approach to promote informed and empowered family planning decisions in rural settings, with the flexibility to be refined based on empirical data and contextual nuances.

To develop a comprehensive conceptual framework for a hybrid model of information behaviour with a focus on family planning in patriarchal rural settings, the study integrates a blend of theoretical underpinnings and empirical observations. This model is rooted in the realities of a contextually specific public

sphere, the nuances of patriarchy and layers of intersectionality in this context, and the newly identified empirical category of the confirmation seeker. The model is broadly organized into four interconnected concepts - context of information behaviour, the information seeker, the nature of information sought/accessed, and channels of information communication. It addresses the intricacies of human cognition, societal norms, and the intangible, dynamic nature of information. The proposed model addresses four overarching elements of IB: context, information seeker, nature of information sought/accessed and information sources and channels of information communication.

Context

Intersectionality is pivotal in recognizing how the overlapping identities of gender, socio-economic status and (generally low) formal education levels influence family planning information behaviours. Patriarchal dynamics are also acknowledged as key barriers in a context in which traditional gender roles and societal expectations can limit women's agency and access to information. The context is seen as dynamic - with ongoing socio-cultural changes requiring adaptability in information behaviours and strategies. Moreover, this context is shown to have an impact at every stage of information behaviour.

Nature of information sought/accessed:

Ambiguity in family planning messages contributes to a sense of fear and mistrust, often triggering uncertainty - and prompting a need for clear, accurate and culturally sensitive information. The affective responses to information, such as fear of side effects and scepticism regarding the intentions behind family planning

initiatives, are considered. The model takes into account the perceived relevance and credibility of information, as it varies among individuals and over time.

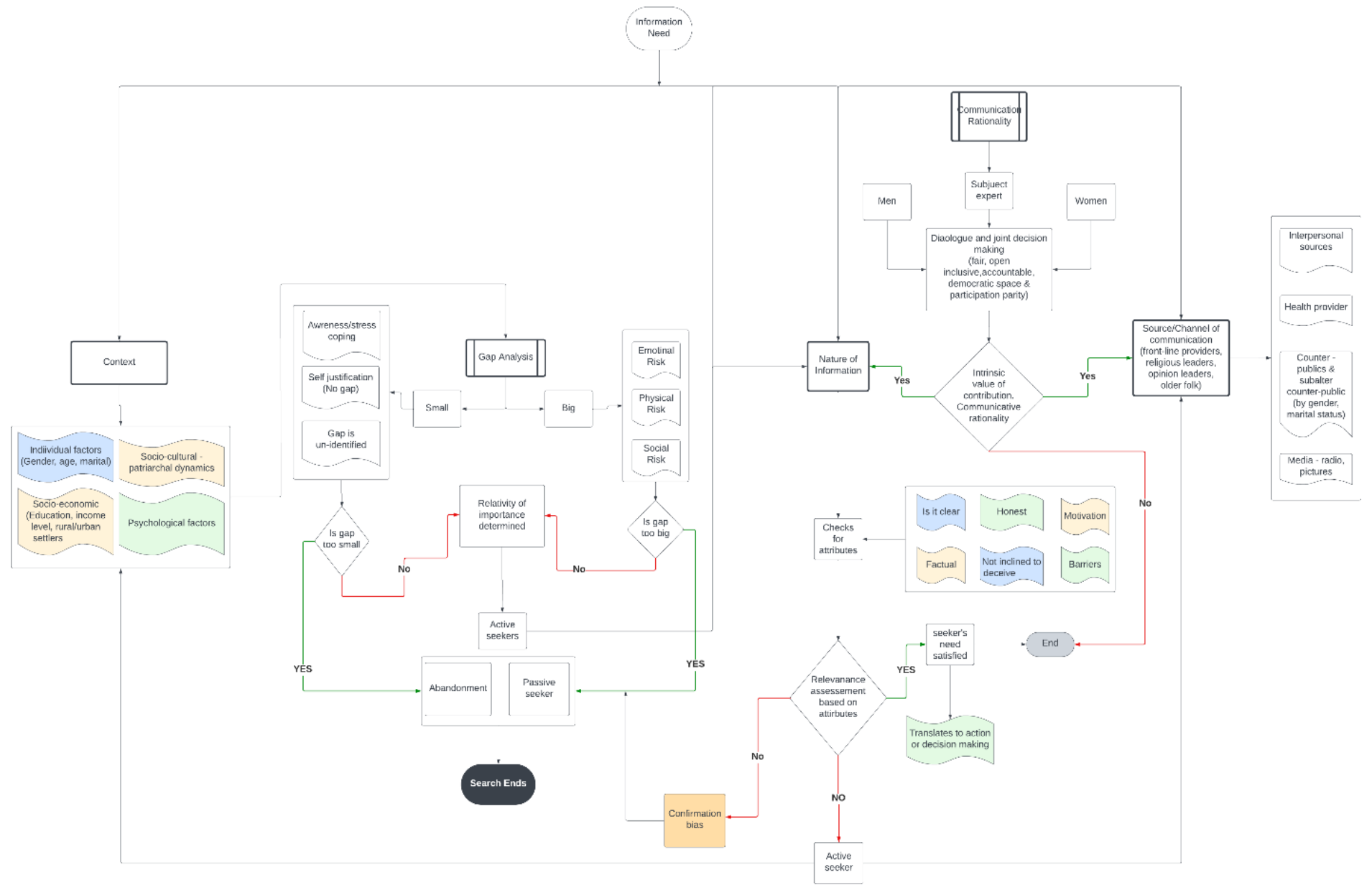
Information-seeker

The model delineates varied patterns of seeking behaviour, identifying the following tentative typology of information “users”: active seekers who proactively search for information; passive recipients who accept information as it comes; passive “seekers” who stumble on information, and active “confirmation seekers”, who selectively engage with information that echoes their preconceived notions. These behaviours are not merely random; they are deeply rooted in cognitive and emotional grounds. For instance, a climate of fear and deception stemming from unclear family planning messages influences the seekers' approach to information. Moreover, the model takes into account the patriarchal authority that often dominates household decision-making, affecting the information practices of all members.

Channels of information communication

In the intricate web of communication, public sphere theory sheds light on the construction and dissemination of family planning discourse within communities. The model evaluates the potency of diverse communication mediums (radio, print, mobile technology) in reaching women in rural locales. In the context of rural family planning information behaviour, it describes a feedback loop that pivots from public discourse back on to the individual “information seeker”: a loop that is crucial to access and engage with in order to tailor future communication tactics in response to community feedback effectively.

In conclusion, the hybrid model proposed in this study is not merely a conceptual framework but a prospective blueprint for systems that resonate with the rhythm of rural life in Nigeria and potentially elsewhere in the Global South, as well as the cultural identities of the communities concerned, and the vital necessity of individuals' agency. It seeks to illuminate the paths of understanding, guiding us toward a future where information is not a barrier but a beacon on the journey of family planning. The diagram of the proposed hybrid model is shown in figure 7.1 below.



The diagram above depicts a framework for analysing family planning information behaviour-for both information users and providers (as they can be used interchangeably)¹⁵ within the complex interplay of the public sphere, patriarchy, and intersectionality and how influential sources like religious leaders, men folk, older women- respected community experts, not necessarily those with formal education, significantly influence the shaping of information in rural settings. It illustrates a non-linear, interconnected web of societal, emotional, and cognitive factors that mutually shape the information behaviours of individuals.

The diagram is intended to visually represent this complexity, highlighting how each aspect of the public sphere, patriarchal norms, and intersecting identities embedded within the context shape the information seeker's environment, contributing to the multifaceted nature of information seeking and usage. It highlights the potential of "communicative rationality" in creating a better experience for rural people with families. The orange shapes in the diagram represent existing concepts and processes in information behaviour, which have been expanded on "redefining the dual effect of encounter with relevant information and the outcome of certainty". In contrast, the blue shape represents the proposed additional type of information seeker, "confirmation bias seeker" or "selective information evaluator" processes and concepts added to the model of information behaviour.

The diagram starts with recognizing the need for information on family planning, and arrows connect this to other steps, indicating FP as the topic being studied. All actions are included in four main ideas/overarching concepts of context,

¹⁵ Information users/seekers sometimes function as information providers based on age, experience with FP use or community acclaimed expertise.

information seeker, nature of the information sought/accessed and channels of communication. Arrows go from context across all sections, showing how context affects every step of information search, whether actively, passively, or selectively.

In the "*Context*" section, personal details like age, gender, and mental states, including emotions and thoughts, impact the setting. Social and economic elements like family power structures, beliefs, family background, rural or urban living, work attitudes, and earnings also shape the environment for both the person seeking information and the one providing it. Between "*Context*" and different types of information seekers, a gap is shown, which can appear big or small, requiring analysis by expert providers. A gap is perceived as big if a person feels they lack time or ways to deal with potential emotional risks like fear of bad news or societal risks such as isolation. It is perceived as small if they deny a gap exists, either because they feel unable to tackle it, they rationalize it away, or it goes unnoticed by their community. They aim to pinpoint where users struggle to grasp their reality with the given information. Users' pre-existing knowledge, influenced by various context factors, shapes this gap, leading them to seek, passively receive, or confirm existing beliefs actively.

The interpretation of relevant information - defined in the context of this study to mean "promoting the use of family planning" varies from person-to-person. Active seekers evaluate the relevance of information based on trust, credibility, clarity, and facts influenced by their current situation or past experiences. If the information checks these boxes, it is deemed relevant to them but may lose relevance or cause ambiguity if it fails to meet these standards. This mismatch can lead to some individuals discontinuing their search for information, while

others might persist in seeking out more suitable data. Passive seekers might not always recognize the importance of the information they find. Biased or selective seekers may ignore new information that does not match their beliefs, stopping their search early. At the heart of how people look for information and how it is communicated lies the idea of communicative rationality, centralised as a mediating/interconnecting factor between the nature of the information sought and the communication channels, which involves creating information through conversations and shared decision-making between users and providers.

At this stage, both users (men and women) have equal information at the hierarchical level, but there is a recognition of subject expertise, and they rely on health experts to effectively communicate factual/accurate information on the need for change. The model suggests clear communication of facts to help people make their own choices. The feedback loop in the diagram (at the bottom, arrow lines) allows anyone, no matter their search outcome or reaction to the information, to reassess and possibly restart their information-seeking process, acknowledging that information is ever-changing and gaps in understanding can re-emerge.

7.2.3 Practical Contribution

Some studies suggest creating tailored messages that consider the specific characteristics and needs of individuals (Kreuter 2003). This approach focuses on understanding the audience's experiences, literacy levels, communication preferences, and cultural beliefs to develop more relevant information. However, this study finds that such tailored messaging, particularly when emphasizing 'spacing' in family planning without addressing its socio-economic implications, is perceived by some, especially patriarchs, as deceptive. This perception stems

from the initial emphasis of family planning messages on population control, influencing current attitudes towards family planning (Higgins et al. 2007; Adaval and Wyer 2004).

This thesis contributes to the field of information behaviour by highlighting the need for health messages to maintain universal medical relevance while allowing socio-economic benefits to be adapted according to individual and geographical differences. This approach ensures message credibility and relevance, potentially reducing information avoidance. The study emphasizes that while medical information should remain constant and universal, cultural terminologies can be used for explanation, ensuring the health implications are clear and standard across cultures. This approach acknowledges that while the impact of diseases may vary, their ultimate consequence is universally understood, and family planning information should be communicated similarly. The thesis argues that the low adoption of family planning is not just due to frontline and religious biases but also due to ambiguous messaging that fails to resonate with the people's realities, leading to distrust and disbelief in family planning initiatives. The study calls for a shift in communication strategies to avoid patronizing or misleading approaches for sustainable family planning advocacy.

7.2.4 Methodological contribution

This study combined a blended deductive analysis with an inductive approach through open coding and thematic analysis to allow the data to speak for itself, thereby revealing minute details not identified by other studies.

Although several studies have investigated the low use of FP, it has been from a singular perspective of major groups. However, this study combines the various groups involved in FP. For example, while some studies focused on assessing the

influence of religious leaders as motivators or hindrances to FP knowledge (Barro and Bado 2021; Guiahi et al. 2020; Egeh et al. 2019; Underwood 2000) other studies have looked at the low-uptake of FP from the bias aspect of health providers (Schrumpf 2020). However, this study includes three major groups - audience members and religious and health providers interacting with FP information- to identify and link the challenges to understanding the low use of FP.

7.3 Recommendations

The study puts forward recommendations that should be considered in developing family planning and health initiatives for rural dwellers in developing countries to improve the health and well-being of women and children while helping men play their patriarchal role of providing for the family more efficiently.

Recommendation 1

Health providers within the community should package information to reflect their lived experiences with language and words they understand, giving deeper and insightful meaning to what is being expressed. Based on the researcher's findings, language, level of education, peer influence, lived experience, and exposure were deterrents to the smooth flow of FP information. For example, in the course of translating the interviews from the Hausa language to English, richness was lost, as some expressions could not be directly translated with the same resonance as they were expressed due to their socially constructed meanings. This is likely to be the case with FP information, as products and services often originate from developed countries and are introduced to users in a developing context where different criteria for trust and information usage apply. In such a case, the users' normative information behaviours may determine how the shaping takes place –

and if the information at hand does not align with their IB, there is likely to be low use or non-use.

Any analysis of ISB must be based upon some general model of IB- located concepts of information need, seeking, exchange and use as the behaviour of an individual faced with information need,

Recommendation 2

Considering that medical research has shown that the majority of maternal deaths are related to maternal morbidity, this implies that the higher the fertility, the higher the chances of maternal mortality. This one central medical message should be communicated across boundaries, and medical benefits should not be contextual, as this was shown to increase distrust for FP initiatives within rural communities. Rather, the economic and social benefits should be contextual to reflect the situation of the people, and they are left to decide whether or not they want to adopt FP. In addition, side effects should be updated on the pamphlets and in the process of interpersonal communication with users or target audience so that an individual makes an informed choice with no feeling of deception or injustice.

Recommendation 3

Feminists should focus on ways to improve fellow women's health within patriarchal settings in rural communities, as these women do not have the same level of exposure, privileges and opportunities as feminists in urban areas or developed communities, and studies show patriarchy as a more significant factor hindering women's autonomy compared to increased education and income. Through socialised knowledge formation over time, rurally based Nigerian women

have often come to accept patriarchy, and living under this patriarchal control feels satisfying, or their happiness seems to find a place in this. It would then be unfair to take this away from them and bring in a culture that is not theirs. It will be seen as another form of imperialism.

Hence, while understanding the importance of the role played by men in rural communities to make decisions, feminists should develop, based on research amongst rural residents' strategies and a better understanding of men's logical reasoning and proffer solutions that align with these issues to reduce maternal morbidity.

Recommendation 4

More medical research should focus on improving the practice of NFP, which is accepted by both religions and argued to have no side effects. Considering that the people clearly do not understand the phenomena of FP as it is not well explained to them, they rely on religion, which posits that some occurrences and commands cannot be explained, but people are expected to obey with no logical explanation. In this case, practising Christians or Muslims are expected to procreate without questioning their economic conditions, as God is believed to provide. This knowledge is formed and agreed on over time, and the people live by it because it has been established or the religion is bold enough to say it.

This, therefore, builds people's trust and confidence in religion as it has maintained this same stance over time, and its motive is not questioned due to this consistency. However, ironically, despite the argument that individuals belonging to any of the religions have the mandate to procreate, both religions agree on the use of NFP to achieve spacing, leaving the unanswered question of whether or not

religion truly supports large families amidst economic hardship or just being protective of individuals from unknown side effects.

To improve the practice of FP in rural areas, more research should be directed towards NFP since it is more likely to gain acceptance.

Recommendation 5

There should be policies protecting the FP providers and users - especially women, who may decide to use FP without the consent of their husbands. In addition, considering that parents are and remain the most trusted or influential information sources for married members of the community (and a more 'passive' information source for unmarried individuals), their recommendations should be taken seriously.

Parents, including middle-aged male and female participants supportive of FP, noted their willingness for FP to be taught to unmarried individuals as a foundation for knowledge formation; however, they generally also stressed the importance of encouraging celibacy and emphasised that this was information primarily to be used in marriage. Based on findings in the study, we point out that this should be taken into consideration as overall processes of knowledge formation play a significant role in decisions about whether to use or ignore information, like in the case of patriarchy. In addition, the government should provide good health infrastructures for these communities, targeted at reducing maternal mortality. Also, treatment for infertility can be subsidized, and security should be provided.

This may help to address and counteract any remaining conspiracy theories surrounding the FP initiative as the people understand that the government and NGOs are also concerned about their welfare, children and safety.

7.4 Limitations of the Study and suggestions for Future Research

This study adopted a qualitative approach to investigate the IB of rural family planning providers and their target audiences within three out of the twenty-three LGAs and three out of the thirty-five wards in Kaduna state. Considering that this study found patriarchy, fear of side effects, and cultural and language differences amongst the population, amongst others, as factors influencing IB, it is non-representative of the population and thus cannot be generalised. Future studies could use similar variables but adopt a quantitative approach to arrive at a more rigorous and generalizable result.

The findings in this study revealed the information providers as passive information seekers communicating information passively, contrary to the findings in rural Uganda, which showed PHC workers as active information seekers able to communicate health value to the recipients (Musoke 2007). The literature on FP IB would benefit from the investigation of the IB of FP providers within similar contexts to find out the actual nature of their IB. This will help with developing solutions that will perhaps make information providers more proactive, engaged and knowledgeable in their field and possibly reduce the level of perceived deception if FP messages become more relatable for both providers and target audience.

Secondly, the knowledge in FP planning literature will benefit from a study investigating the actual IB of the NGOs and other bodies actively sponsoring FP initiatives in the context of developing countries to know their barriers and factors guiding and motivating the development of FP materials distributed in rural areas and the process of communication.

To verify or replicate the findings of this current study, more quantitative research with a larger group can be applied to test the existence of the factors influencing IB in rural areas, and this can contribute to the creation of more structured and practically applicable policies on FP. Studies in IB should also focus on finding the implication of ambiguous health campaigns on cognitive avoidance of conflicting health campaigns. In this study, no question was directly asked to understand the importance of husband-wife communication in the overall FP behaviour of couples, even though a pattern was observed where many of the couples shared similar perspectives. The literature in IB will benefit from a study investigating the influence of spousal interaction on FP behaviour.

In addition, Keller et al. (2020) critique Kuhlthau (1991) for acknowledging but not identifying the triggers of uncertainty in the information-seeking process. They argue that understanding these triggers is crucial for improving this process. Therefore, investigating the causes of uncertainty in family planning information could significantly enhance strategy development to overcome this challenge in the FP literature.

Drawing on prior research, the link between the non-use of contraceptives and religious teachings advocating for procreation has been established (Abdi et al. 2020; Ojua 2014; Raj 2010) . The current study, however, indicates a preference for natural methods of contraception, despite their shared potential to limit family size. This apparent contradiction suggests a complex relationship between contraceptive choices and the underlying motivations for family size. Consequently, it is crucial for future research to investigate and determine whether the desire for larger families influences contraceptive decision or if the selection of contraception methods itself constitutes an obstacle. Understanding

these nuances is essential for the development of more effective family planning policies.

7.5 Conclusion

This thesis highlights the pervasive role of patriarchy in shaping knowledge, information behaviour, and decision-making among both men and women in rural areas of Zaria and Gure Lere LGA, Kaduna State, Nigeria. It reveals how patriarchy, while influential, interacts complexly with culture, religion, and the lived experiences of community members, affecting perceptions and actions regarding family planning (FP) and broader life aspects. Unlike previous research that primarily attributes barriers to FP adoption to religion and culture, this study explores deeper into how patriarchy, mistrust in FP initiatives, and fear of side effects specifically deter FP uptake within these broader contexts. By offering detailed insights into the rural populace's FP information behaviour—rooted in their lived experiences—this thesis enriches the literature on FP deterrents in rural settings.

The findings highlight a systemic patriarchal influence, with men holding ultimate decision-making power over women's use of FP and community access to FP information. This power dynamic extends to the framing of FP messages by international organizations and NGOs, which often do not fully engage men or address their concerns. Despite greater interest from women in using FP to limit childbirths, patriarchal decision-making ultimately restricts their practical application of FP information. The study also identifies a significant gap in FP communication strategies, which tend to focus on women while sidelining men, thereby perpetuating men's disengagement and negative attitudes towards FP.

In conclusion, the thesis proposes a new hybrid model for understanding and addressing the information behaviour of rural populations in Nigeria, particularly focusing on the intersection of gender, patriarchy, and FP. This model aims to facilitate more inclusive, effective FP strategies by acknowledging the complex interplay of societal norms, individual experiences, and the critical role of trust in shaping FP acceptance and utilization. By integrating theoretical perspectives and empirical findings, this work sets the foundation for future interventions that more accurately reflect and respond to the refined realities of rural communities facing family planning challenges.

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Appendices

Appendix A: Interview Guide and Consent Form for participants

Interview Participant Guide

Purpose of the Study

The study specifically seeks to identify family planning information need, motivations and barriers to the use of the information and services as well as identify preferred information sources with a focus on trustworthiness and credibility of the source.

Interview Process and Duration

The investigator plans to conduct an interview with you, anticipated to last no more than one hour. It will be scheduled at your convenience over the phone, ensuring privacy and minimal disruptions. The conversation will be recorded with your prior consent.

Handling of collected information

The information gathered will be meticulously analysed and utilized to draw conclusions that contribute to a deeper understanding of the examined topic, which is part of a doctoral thesis in Information Management. Access to the data, including notes, documents, and recordings, will be restricted to the researcher and possibly their supervisor. The researcher will maintain recorded transcriptions and the research paper with utmost confidentiality. Participants' identities will remain anonymous in any publications, with measures taken to protect their anonymity. After the study concludes, all notes will be disposed of, and recordings deleted.

Participant rights declaration

As a participant in this study, you retain the right to:

Decline answering any question and withdraw from the study at any point, even after completion of the interview or focus group.

Pose additional questions about the research at any time during your participation.

Receive a summary of the study's findings upon its completion.

Who is responsible?

If you have any questions or concerns about the project, either now or in the future, please feel free to contact either:

The Researcher: Malatl Hellandendu m.m.hellandendu@rgu.ac.uk
School of Creative and Cultural Business,
Robert Gordon University,
Garthdee Road, Aberdeen AB10 7QE.

Consent Form for Participants

I have read/ it has been read to me the Participant Information Sheet for this study, and the details of the study explained to me. I am satisfied with the answers to my questions, and I understand that I am free to ask further questions at any point during or after the interview, decide not to answer specific questions or withdraw from the study. I can remove any information I have provided up until the researcher has commenced analysis on my data. I agree to provide information to the researchers under the condition of anonymity and confidentiality as set out in the participant information sheet. I give consent to the recording of my responses by the researcher.

Signed: _____

Name: _____

Date: _____

Researcher Malatl Mary-Anne Hellandendu

Supervisor Dr James Morrison (Reader in information Journalism) and Professor Sarah Pedersen.

Information Management Department,

School of Creative and Cultural Business,

Robert Gordon University,

Garthdee Road, Aberdeen AB10 7QE.

Appendix B: Interview schedule (Users and potential users)

1. What age group do you belong? (individuals were reluctant to say their age, while others were unsure of their ages, so an age range provided better data)

18-25

26- 33

34- 41

42- 49

2. What is your marital status?

3. What is your place of residence and native language?

4. What other language(s) can you speak?

5. What is your religion?

6. What is your occupation?

7. What is your highest level of education?

8. How many children do you have, how many do you intend to have and why?

9. What are your information needs wants and goals and how do you pursue them to get the necessary information?

10. What does your religion say about Family planning?

11. What does family planning mean to you and if you ever need information on FP what will you do?

12. Why would you want to adopt or reject any form of family planning advice or services?

13. Do you ever talk to people about family planning, if yes why and if no why?
14. What are the common information needs men/women show concern about in your community and how do they get information on these areas of interest?
15. When you need information on health issues who do you ask/go to? (Probe: why those sources)?
16. If you have accessed or had need of Family planning information in the past, could you please describe your experience with the sources you approached? (Probe; why did you use/neglect the information from the source)?
17. What are the challenges you face as a man or woman in accessing Family Planning information?
18. What are the problems that hinder you from seeking FP information in this community?
19. How often do you receive FP information in this community, and what is the process (Probe: do health workers visit this community at all)?
20. If a health provider/someone/ government wanted to disseminate information on family planning in your community, how would you suggest they go about it? (Probe: why)?
21. If someone wants to provide FP information to all the men and women in this community, what medium will you suggest and would you suggest using the same medium in terms of gender and marital status? (Probe: If YES why; if no why)?

22. In your opinion do people look for information on family planning? If YES when if NO why? and how do they go about sourcing this information (Probe: What are the attributes your source must have)?
23. What will make you reject or accept information on family planning/ any health information (Probe: How do you decide the relevance of the information to you)?
24. Which of the following electronic devices (e.g. Radio, Television and Mobile Phone) do you have, and which of these media will you suggest for communicating FP and a preferential timing?
25. Is the information you receive on family planning usually in the language you understand? If no what do you do and how far will you go to understand such information?
26. What determines your decision to utilise family planning information source? (language or belief, accessibility or personality or have you got preference Probe: why)?
27. If you receive information that does not support or is contrary to your belief, what do you do (Probe: why)?
28. How do you think information and services can be packaged to make it understandable, acceptable and more useful to encourage adoption of Family Planning in your community?
29. What type of information about family planning can you recall listening to on radio, TV or any place (Probe: did you understand/believe it, and why)?
30. Does providing information through the community leaders, radio, TV or any other means make any difference on the value of the information (Probe: what difference)?

31. Have you looked for information about family planning in the past (Probe: what was the prompt/ was there any difficulty accessing it and why, what can be improved)?
32. In what modes or formats did you get it (Probe: Was the information understandable and what better ways would you suggest if NO)?
33. If you want to get married/ when you wanted to get married who did you talk to first/ (Probe: Why?)

Appendix C: Interview schedule frontline information Providers

Demographic Characteristics

1. How old are you?
2. What is your educational qualification?
3. What is your career interest/specialisation have you undergone any form of training to improve your area of interest/current area of specialisation?
4. What is the stage of your career?

Psychological factors

5. What is your belief about your role as a family planning information provider?
(self-perception)
6. What strengths/ability/characteristics do you believe you possess to promote or dissuade the use of family planning in your area? Self-efficacy

7. What is your belief about the people you are providing this information to? Do you believe the information and services you provide will be genuinely utilised if they are sensitised? (How and why)
8. There is knowledge gap between you and the people you are informing (Illiteracy, specialisation knowledge, experience) what is your belief about the level of this gap and what do you do to make any user or prospective user understand what you are trying to propagate in the media or in the course of your face-to-face contact with them?
9. How do you come about what to communicate, and how to communicate?
10. What factors are considered in preparing information to be communicated?
11. What is the overall goal of every FP information/counselling and service provided and are these services free or at a cost?
12. Are these sponsored? Who sponsors them?
13. What type of information is provided to the users, and at what point are these messages communicated? (Passive/active) (after birth, when complications arise, at any given opportunity in gatherings men and women. How often do people come to seek FP counselling and what's the prompt in most cases?
14. How would you describe the attitude of men and women towards these services and information provided by your team?
15. What are the major challenges experienced in disseminating these information and services?

16. What suggestions do you have as improvement mechanisms towards the provision of better FP information and services?

17. What is Family planning and what does Ministry of health/sponsor, church, culture say about FP? And are there other non-scientific methods of FP practiced, is there an ideal family size and what is this size and why?

18. What other channels does the team use in disseminating FP services and what is your take on the efficiency of these other mediums, what another medium do you believe will be important to explore?

19. Do you believe the users belief/culture/economic status has an effect on the sources accessed to gain information? (How does your organisation try to remain relevance and be that choice as a source)?

20. What has been the major motivators or inhibitors of the users to accessing FP information from your organisation?

Appendix B: Interview Schedule religious information providers

1. Where is your Parish located? (What Influenced this location)
2. How old are you (a range is acceptable) and what is your highest educational qualification?
3. How long have you been a priest for and have you taught or given counselling on family planning? (If yes how long?)
4. What is your career interest/specialisation have you undergone any form of training to improve your area of interest/current area of specialisation, is there training provided for Family planning counsellors by the church?
5. What is Family planning and what does the church/Islam say about FP?

6. What type of FP does the church encourage and why?
7. Does the church/Islam encourage family planning?
8. Has the church/have you been faced with situations where your recommendation of natural family planning failed certain individuals?
9. If yes, what was the sister/brother's reaction? How did the church handle such situation?
10. What is your belief about your role as a family planning information provider to the members of your congregation?
11. What strengths/ability/characteristics do you believe you possess to promote or dissuade the use of family planning methods not accepted by your religion? Probe: What qualities makes you influential? Are you able to build good interpersonal relationships, trust. Are consistent in your teachings?
12. What is your belief about the people you are providing this information to? Do you believe the information and services you provide will be utilized? (How and why)
13. There is knowledge gap (specialisation, experience, may not have proper understanding of the Bible or Quran) sometimes between you and the people you are informing, what is your belief about the level of this gap and what do you do to make any user or prospective user understand the stance of the church/Islam on this practice despite the gap? (How do you breach this gap)
14. How does the church/Islam come about what to communicate, and how to communicate? Is this to say all the teachings on family planning are directly from the Bible? Or a mix of Biblical knowledge, secular or cultural knowledge?

15. Are these sponsored? Who sponsors them?
16. What category of individuals (Married, singles, youths) are provided with family planning information, and at what point (before marriage, after marriage, youths) and what channels are used to communicate this information? Probe: Why does the church see a need to educate the unmarried? How would you describe the attitude of men and women in the church/Islam towards this information provided (do they adhere to the teachings on NFP)?
17. What are the major challenges experienced in communicating the religions accepted method of family planning? Has anyone complained before on a failed method advised by the church/by you (How was this resolved).
18. What has been the major motivators or hindrance of the users in accessing FP information from the church?

Follow-up

Are there other non-scientific methods of FP practiced,

is there an ideal family size preached by the church? (If yes, what are they)