



Fertility Regulation and Barriers to Family Planning Utilization among Married Catholics in Ibadan, South-West Nigeria

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Abstract

More than 1 billion of the world population are prohibited to use modern fertility regulation practices due to religious inclination which term it sinful. This has been associated with unintended births. This study explored fertility regulation and barriers to family planning among married Catholics in Ibadan.

A cross-sectional mixed-method study using multi-staged sampling to select 358 participants in 8 Catholic churches. Utilizing both quantitative and qualitative method, a valid pre-tested questionnaire, key informant interview guide, and focus group discussion guide was used to elicit information from the respondents. Data were analyzed at $p < 0.05$ level of significance respectively.

Respondents' mean age was 37.38 ± 6.75 . literacy level was 55.9% for tertiary, 38.5% for secondary, and 7% had primary education. About 71% were aware of the Catholic Church's policy on child spacing. The desire for children was high (96.9%) among respondents that had not given birth and 50.0% among respondents with children. More than half (51.6%) believed two years interval was best for them to have a child. One-third (29.1%) use contraceptives while 34.7% use natural family planning. However, a further probe revealed that 51.1% do not use the method recommended by the church while 48.9% practice what the church teaches.

There was a significant association between family planning utilization and monthly income ($p = 0.034$) and the number of

children ($p = 0.001$). The majority indicated that the use of the natural family planning method is the Church's policy against the use of modern contraceptives. However, 12% of respondents disagree with the church, the majority (75.1%) wanted it maintained even amidst challenges, while 23.7% want it modified.

The barriers to family planning utilization were found to be religious policy, lack of proper education, side effects, and health implications. Tailored reproductive health education is needed to improve the knowledge of Catholics to enhance proper utilization.

Keywords: Catholics; Contraceptives; Family planning; Fertility; Married Couples

Introduction

The fertility rate of a country refers to the total number of children each resident female of reproductive age will produce. Nigeria has a fertility rate of 5.4 children per woman which depicts a high fertility rate [29]. According to the United Nations [30], the country's population will increase from 174 million to 440 million by 2050 if the trend continues making it the third most populous country in the world.

Nigeria has high under-five mortality as more than 1 in 8 children in Nigeria die before their 5th birthday [12]. Most (80%) of currently married women have the potential for a high-risk birth. In the 5 years preceding the NDHS survey [14], 63% of infants were at elevated odds of dying from avoidable risks: 40%

fell into a single high-risk category, and 23% fell into multiple high-risk categories. Only 23% of births were not in the high-risk category [12].

A high fertility rate is known to be associated with health risks for children and their mothers, food insecurity, high unemployment rate, slow economic growth, and environmental threats [15]. On the United Nations Human Development Index, Nigeria ranks 152 out of other countries that fall under the Low Human Development category [22].

Fertility regulation helps to prevent decay by empowering women and helping improve the economy. It prevents the mother from health risks that are associated with early or late pregnancy and poor child spacing as well as enables her to have control over her body and the right to determine when to deliver. With these, the woman can freely pursue her career, be empowered, and live healthier and longer [23]. When the mother is healthy, the child will be well cared for allowing the attention needed from the mother in terms of feeding and well-being, thus reducing the infant mortality rate.

Reproductive health right is one of the important choices an individual is allowed to make but not everyone can realize it due to cultural, personal, economic, and religious reasons [1,2,9,21]. Religion is a key factor responsible for high fertility rates in Nigeria. It is associated with the experience of unintended births as Doctor Henry [26] discovered, many studies have connected faith to demographic behavior as well as contraception. This is consistent with the eco-social theory that posits that religious tenets influence women's and communities' attitudes, perceptions, and behaviors, including those on reproductive health, and thus, religion has a bearing on programs and policies for addressing the problem of unintended childbearing in Nigeria.

The Roman Catholic church does not permit the use of artificial/modern methods of birth control. The Catholic position on contraception was formally explained and expressed by Pope Paul VI's *Humanae vitae* [17]. Artificial contraception is considered intrinsically evil, but methods of natural family planning may be used as they do not usurp the natural way of conception. However, sufficient education and knowledge required to effectively observe it are lacking [3]. This is responsible for the perceived high fertility among the Catholic faithful [27]. Without a comprehensive understanding of the natural family planning techniques, fertility levels will remain high. Ibadan, Oyo State is one of the places with a high percentage of unmet needs for family planning [12].

When used properly, natural family planning techniques are known to be effective; otherwise, more women would experience unexpected births. The natural planning method involves dedication and repetition to be effective [12]. A World Health Organization study found that many women who claimed to use natural family planning were unable to correctly identify the fertile days of the cycle, suggesting that fertility regulation methods may be challenging for some of these women due to their religious beliefs and commitments. Numerous calendar-based techniques are performed improperly

because they lack professional training. This leads to a high pregnancy rate. Going by this belief and strict adherence to such injunction, the world contraceptive prevalence rate will be undermined considering that Catholics represent over one billion of the overall world population [16,25].

Thus, insufficient attention has been given to fertility regulation concerning how religious views influence family planning practices. There is a dearth of literature on the fertility regulation practices of married Catholics as most studies conducted in this regard focus more on women generally [20]. Even though some studies have been done to determine family planning among this population in other countries, little or none has been done on the family planning practices among married Catholics in Nigeria. This necessitated investigating the fertility regulation and barriers to family planning utilization among married Catholics in Ibadan.

Materials and Method

Study Design

A cross-sectional descriptive mixed-methods design was used to determine fertility regulation practices among married Catholics in Ibadan.

Study Area

The study area for this project was Ibadan, Nigeria. The population of Ibadan as of 2007 was estimated to be 3,847,472. Politically and administratively, Ibadan municipality is divided into 11 Local Government Areas (LGAs). It is divided into three socio-economic and cultural zones, which cut across the LGAs: a traditional inner core, a transitional, and a suburban periphery [4]. The study area for the research was selected catholic churches from three deaneries out of five deaneries in Ibadan Archdiocese. The East and West deaneries were excluded because they are outside Ibadan and Oyo state. Also because of the insecurity in those areas.

Study Population

The study population for this study was 358 married Catholics attending Catholic churches and catholic church leaders in Ibadan.

Inclusion/exclusion criteria

The study included all married Catholics and leaders who consented to participate in the study and excluded all married Catholics and leaders who did not consent to participate in the study.

Sampling Procedure

In the first stage, simple random sampling was used to select three deaneries from four deaneries in Ibadan. In the second stage, respondents from each deanery were calculated by dividing the number of churches in a deanery by the total number of churches in all the deaneries, then multiplied by the sample size. Proportionate sampling was used at the third

stage to select respondents from each of the Catholic churches from each of the deanery.

Data collection procedure

The study was carried out with the assistance of ten trained Research Assistants (RAs). The RAs were recruited and trained. The trained RAs were involved in the pretest to provide them with practical experience.

A valid pre-tested questionnaire was used for the quantitative data to elicit information from 300 respondents. The key informant interview guide was used to get data from 8 priest and 8 marriage counselors while 4 focus group discussion per church (young/elderly – males and females) was carried out using the focus group discussion guide both for the qualitative. The aim of the research and principles of ethics guiding the data collection was explained to them. Informed consent was acquired from the respondents before data collection. All questions were administered in the English language.

In continual observation of ethics, advocacy visits were made to the chancery, appropriate permission was taken from the archbishop. Each church was visited and the priest in charge was informed of the study to gain access to the congregation. Respondents were identified and the instruments were administered.

Data Management

Quantitative data: The completed copies of the questionnaire were serially numbered for control and recall purposes. Data collected was checked for completeness and accuracy before leaving the field. Data analysis was carried out using the Statistical Package for Social Science (SPSS version 23) for descriptive statistics such as frequency and percentages and inferential statistics such as Chi-square respectively.

Qualitative data: Interviews were transcribed verbatim. A spot check of transcripts was done to ensure the completeness of the transcription. The data was sorted, categorized, and analyzed using the thematic approach, examined for common themes, and organized into overarching themes.

Ethical Considerations

Ethical approval was obtained from the Joint Ethical Review Committee of the Oyo State Ministry of Health, Ibadan with reference number AD13/479/4455A. Participation in the study was voluntary with an option to withdraw anytime. Written informed consent was obtained from the respondents, confidentiality, anonymity and all principles guiding the ethics of health research were observed.

Result and Discussion

Qualitative Report

Key Informant Interview (KII)

Family planning utilization

When asked about factors that make utilization of family planning methods easy, respondents shared different opinions highlighting the love of God, financial implication, awareness, and availability of the method.

“Well, for us in the church I will say our love for God if we truly love God, we want to do things in the way God wants it” (Priest at St. Peter Church)

“Natural one may not cost you much, you may not spend money to do that some may like to do that because there is no money involved but artificial one, I think they did, you have to buy drugs, go to the clinic, sometimes costs of transportation...” (Priest)

“I will say strictly constant information and accessibility of information. People over time become more knowledgeable when certain things are impressed over and over again” (Priest)

“If there is the availability of the method, if you are talking about the cost nobody will want to go for the artificial because of the cost, the natural does not cost you anything” (Priest)

The Catholic Church’s stand on family planning was expressed to be a natural family planning method by all respondents.

“The catholic church agrees on family planning, of course, we should have children you can be responsible for, have children you can adequately cater for. The natural one.” (Priest)

“...we should use a natural method that this natural method does not destruct normal processes in the body so let us go natural and God himself know why because if we study our self very well, we will know that there are times we can be pregnant and there are times we cannot be pregnant, so God knows all this and put it in us...” (Marriage Counselor)

“The church has adopted what the scripture itself made it clear by nature that is why we call it natural” (Priest)

“I told you Catholic Church does not believe in artificial or local family planning; they believe in natural family planning and which is very safer and there is no problem because they are not putting any devices or we are not using chemical and some other things. So, the catholic people believe that natural family planning is good.” (Marriage Counselor)

Respondents were in unison that the church’s stand is maintained and they provided reasons for their opinion.

“Because it is God’s way, you don’t do things to disrupt God’s way, the other thing is that people may not know that it is effective but if you understand it, it is very effective” (Priest)

“Because I have seen it and it has worked and it has brought joy to people” (Priest)

“It should be maintained because when you do natural family planning there is no any side effect...” (Marriage Counselor)

“It does not cause any harm for these processes at all. Economically, financially, you don’t spend anything and you will be healthy” (Marriage Counselor)

Findings showed that the natural method was the most commonly encouraged by respondents to couple within the church.

“Natural family planning method especially billing method, there can be a combination. In that natural planning, we have a temperature method, that is every morning you wake up you check your temperature...” (Marriage Counselor)

“We can never promote artificial family planning but we do encourage and promote the use of natural family planning” (Priest)

“We encouraged them on natural family planning, we don’t even mention the artificial in the church. Is not only because of having children also, but also want to teach people on what they call discipline, is more than procreation and having children, and also to understand intimacy.” (Priest)

“The natural family planning method because it is proven over and it will be of no effect because it aligns with our religious belief of light and disposition says that everyone believes the right to life from natural conception to natural death, anything that could interfere in the development of a conceive person is sinful to us and we do not support any method that kills.” (Priest)

It was made evident by respondents that artificial family planning will not be advised by members of the church by them in any situation.

“God forbid bad thing, any method that goes against the principles I will not advise but when you talk about artificial planning you must also take a look at what it is because someone may just categorize even something that is more or less natural because you are using medicine or using some technology and they considered it broadly as artificial not necessarily so, so I feel that every method should be evaluated ethically and biologically to know.” (Priest)

“I will never, never advice because I don’t use the artificial method so I will encourage people to be suing it I maintain my natural family planning with everybody.” (Marriage counselor)

“I am a churchman o; I can never encourage anybody to do artificial family planning if I should be doing that I will be going against my vows.” (Priest)

In responding to perceived challenges attached to the use of the natural family planning method, while some do not perceive any challenges to the natural method of family planning, some respondents stated that spousal agreement, poor know-how, mistrust, and lack of discipline.

“The challenges are not agreeing to do it between husband and wife when one will go to learn it, another one will say it is woman matter.” (Marriage Counselor)

“If the husband and the wife did not trust themselves that may have a problem but if they trust themselves, there is a sense of trust between both of them then there might not be a problem for that one.” (Marriage Counselor)

“One of the challenges that can be experienced is lack of discipline, discipline to be attentive. If you apply for a natural family planning method then you lose guide you may end up achieving conception at a time you did not plan for It because you were not attentive enough or you miss calculate your cycle” (Priest)

“Inadequate knowledge, because some people don’t understand and several women don’t understand their circle, so it makes it more difficult for them to learn it” (Priest)

Utilization of family planning

Factors influencing utilization of family planning

Participants mentioned different factors that influence the use of family planning in the discussion when asked, factors ranged from spousal cooperation and mutual agreement to engaging in the preferred method of choice, not wanting to give birth to more children and current financial burden.

“Cooperation, when there is a cooperation between the woman and the man, whatever they say, they agree, no problem and there is love.” (Adult Woman 3 at CKC)

“The thing wey make me do family planning, I don’t have many children and I don’t want to go beyond wey my power feel takes, I no want to born another one because no power to take care of them” (Adult Woman 2 at CKC)

“What makes it easy for the two couple is that when the two agreed, they will now say ok, let us go to the hospital, so that if they are ready to have an injection for preservation.” (Adult man 4 at St Gabriel)

“The factors, as in when both couples understand each other, they should go to a physician who understands the main about the family planning, so that they will not do the mistake most couples do a mistake” (adult man 7 at St Gabriel)

“Mutual understanding of the couple and then enlightenment, sometimes, for example, one’s spouse can have a better understanding of what family planning and marriage is all about, while the other may not” (elderly man 3 at St Gabriel)

“The economic aspect of the parent, if you don’t have enough fund to cater for your offspring is a problem so very essential.” (Elderly man 1 at St Peter)

Factors mitigating utilization of family planning

When asked this question, participants were able to highlight that most difficulty in getting family planning is commonly associated with the artificial methods of family planning.

“To me, I believe the family planning that is easy is the pills and the family planning I believe that is difficult is the injection one because not everybody can know how to place the injection.” (Adult man 1 at St Peter)

“The factors that make it difficult is that some people believe that it is a sin because of the way they understand the bible. They feel that to do such a family planning is a sin, that is against their faith.” (Adult man 6 at St Peter)

When discussing the other factors, common factors mentioned include misunderstanding, health challenges, lack of communication, lack of self-control, the unreliability of selected methods, lack of trust, and financial factors

“If there is no love, if you and your husband no agree together, it will be difficult for you to do family planning.” (Adult Woman 3 at CKC)

“I said health challenges now if your health cannot carry you, you don’t need to go for family planning.” (Adult Woman 4 at CKC)

“Financial aspect can make it difficult, if you are financially handicapped, for a man who is the father of the house, lack of fund to support his wife if she wants to go to the hospital. The second one is that if you do this thing, you can be having frequent sex” (Elderly Man 6 at Holy Trinity)

“It is because of some disadvantage, do you know that there are sometimes, it fails” (Elderly Woman 1 at St John)

“The reason why some people are running away from it is that when they go for artificial when a mistake occurs, the next thing is death. That is why some people are running away from artificial family planning.” (Adult Man 2 at St Gabriel)

“The challenges are this if you a type that probably you are the man cannot hold themselves especially when the thing come up on them, as in when they feel to meet their wife, so some men find it difficult to control, so that is the challenges, such men should work on himself for you to achieve the goal.” (Adult Man 2 at St Peter)

“Lack of proper understanding of the topic family planning,” (Elderly Man 2 at St Gabriel)

The Church’s stand on family planning

Church’s teaching on family planning

Most participants had a clear understanding of the Catholic church’s stand on family planning, they indicated that the church support family planning however only the natural family planning which is the billings method.

“The church didn’t ask us to do any family planning oo, any artificial family planning, they say we should not do it. So, we do natural family planning.” (Adult woman 1 at CKC)

“Rhythm’s method is what the church advised for a married couple and it is the best because it frees you from sickness, different ailment and you have rest of mind, your mind is at peace and you get the desired result.” (Adult woman 4 at CKC)

“Let me go with that sister mass billing, that is billing method, natural billing method. In the book she wrote believes that instead of going for the new modern one you can go for that natural one where you study the chart know the time that you omit and know the time to abstain from sex.” (Adult man 5 at St Peter)

“Church is against artificial family planning, but some people I don’t know whether now ooo but in the church, they are against artificial family planning but now I have seen some people that are encouraging people to go and do artificial family planning.” (Elderly woman 3 at St John)

“The catholic church supports family planning if it is done naturally if the catholic church does not support artificial family planning that is contraception, the use of pills coils, and condom and all that, the church is strictly against those things” (elderly man 6 at St Gabriel)

While a respondent thought that the church doesn’t support family planning at all according to the canon law.

“They didn’t accept family planning at all..... in canon law, anything about family planning is unacceptable.” (Adult man 5 at St Gabriel)

“Like the catholic church, we have a doctrine that goes contrary to governmental view on family planning to me, because the catholic church will tell you, not even withdrawal method is allowed in the religion.” (Adult mane 2 at CKC)

Validity of church's teaching

The participants were asked if the church's teaching should be maintained, modified, or removed. Respondents' responses varied across the board. While some respondents clamored for modification, the majority wanted it to be maintained.

"They should modify it. and let there be awareness for everybody, they should stop assuming that everybody has heard about it." (Elderly woman 5 at St John)

"I think nothing is static, as the world enrolls, automatically there are civilizations here and there, is I believe that, there should be modified because of the way things are moving in the world." (Elderly man 1 at Peter's)

"The church is a dynamic institution, the catholic church is not static, over time the church itself modify itself, that's the beauty of the catholic church. Some of the things that the church preaches today, hundred years ago the church did not make mention of it. So, I believe that with time the church itself involves, some of this thing when the time comes the church will sit again, and modify what is necessary to be modified." (Elderly man 4 at St Peter's)

"To me, I will prefer to modify because like me as I stand, I no day do adultery, I no dey fornicate, and if I am in the mood and maybe my wife is on wet period, it is like I am moving from minor sin to a big sin, before, you will know your status that you don't like going out with another woman and the church stand that you shouldn't do modern family planning and your wife when you need these things, your wife is in wet period, and that can make you go and what you don't want to do, I will prefer to review it, or modify it." (Adult man 5 at HTCC)

Participants who clamored for maintaining the teaching gave reasons like the natural method being the best, artificial method affecting health, it works and reliable.

"It should be maintained ooo, it should be maintained and it is the best and it should remain, they should continue to pass it from one generation to the other, they should not allow it to die" (Adult Man 5 at CKC)

"You are not introducing any drugs or anything, it is a pure natural, you are not introducing any drugs or anything that can hinder or affect your health. So, you are at peace with God and you are at peace with yourself, so you don't need to be thinking ehh, I have killed, I have done abortion, ehnnn...what and what, but this one is the best." (Adult Man 4 at CKC)

"I think with the percentage of people undergoing the natural family planning, that sister, it works." (Adult Man 5 at St Peter's)

"Naturally it is better that we maintain the culture of family planning through the enlightenment of our priest

because these things that have been laying down should not be destroyed." (Elderly Man 2 at St Gabriel)

"I think it should be maintained, through proper education and enlightenment so that people can practice it rather than rejecting it entirely because is for the good." (Elderly man 2 at St Peter's)

"It must be remained and maintained because it does not have any side effect" (Adult Man 3 at St Jude)

Utilization of family planning

Types of family planning methods utilized

Utilization of family planning was reportedly high among participants and most of the respondents answered to the use of the natural method of family planning while few answered to artificial methods like copper T, injectable, implant, and a condom.

"I don't know but I went to the centre here, they test me for many things, then they now give me the one for hand, they put it inside like key, they key am" (Elderly Woman 3 at CKC)

"Yes, I used natural family planning." (Elderly Woman 3 at St John)

"I used natural family planning, that is what I used." (Elderly Woman 1 at St John)

"I have done it before, the one they do in the hospital, that of copper T." (Elderly Woman 4 at St John)

"Yes, I have done it before, the one that was put inside private part, copper T." (Elderly Woman 2 at St John)

"I have not used any method but my wife uses injectable" (Elderly Man 9 at Holy Trinity Church)

"My wife also is using one after the birth of our twins, we also injectable" (elderly man 5 at Holy Trinity Church)

"My wife also uses implants" (Elderly Man 4 at Holy Trinity Church)

"I have used injection type before, but due to the complaint from my wife, we have to stop it. Then we have to be compassionate maybe we use condom sometimes to be on the safer side." (Elderly man 2 at St Peters)

Exploring the reasons for the choice of family planning, it was discussed that teachings from the marriage course, bible teaching, and knowledge of the disadvantages of artificial methods were major reasons for the choice of the natural method of family planning.

"Why I used the natural family planning you know when I see the disadvantage of artificial family planning and

sincerely the person that taught us this natural family planning, do you know he said, that every month, we are doing an abortion with that artificial family planning, he said do you know the baby will come, but that thing will push it away, that is the disadvantage” (Elderly woman 1 at St John)

“I used it, they taught us in marriage course that this artificial family planning is not good and the natural one is the best for Christians so I decided to use that natural family planning.” (Elderly woman 3 at St John)

“You see as a catholic, I am aware and even according to the bible too that using the other aspect of this is more or less like you know it has to do with killing” (Elderly man 6 at St Gabriel)

“I only heard that the use of the natural method, is being ordained by God because God has the power to control everything on earth, so if he wishes that this family will have more than enough, he has a way of doing that, a natural one, natural way to me is the best and it has no comparison.” (Elderly man 5 at St Gabriel)

Challenges using natural family planning

Respondents explained their challenges when using the natural family planning method. While some revealed they had no challenges, some identified the unreliability of the method due to miscalculation, lack of know-how, reduced sex life, and ultimate division in the marriage as major challenges.

“I don’t have any challenges because, in the marriage course, they taught me and my husband we understand ourselves and we use the calendar to do it. I don’t face any challenges.” (Elderly woman 3 at St John)

“Sincerely speaking I have not faced any serious challenge, as regards family planning” (elderly man 3 at St Gabriel)

“I faced challenges because that time I said I don’t want to have a child that time, but do you know that I miscalculated, the moment you miscalculate, I am telling you the baby will come ooo.” (Elderly woman 1 at St John)

“Just like what he has said, one of the challenges is level of the education of some of our women, when they ask them to cycle, they cannot even explain it” (adult man 2 at CKC)

“Sometimes, this eh.. period of calculation, this eh... we use to vex sometimes, naturally, God does his things in his way but at times we do calculate the time and, in the process, your wife will get pregnant sometimes, she may not get pregnant, that is the basic challenges that some people are facing.” (Adult man 4 at HTCC)

“The calculation uses to fail, at times, we miss calculate.” (Adult man 3 at HTCC)

“I believe it is part of the act of marriage you get closer, when the time interval is once a month, over time, your wife will look like a man to you because there is nothing really to calculation, you are in the mood to say no today, tomorrow, somehow, it will divide the family.” (Adult man 2 at HTCC)

Challenges using artificial family planning

Identifying the challenges attached to the artificial family planning method, stomach pain, headache, and discomfort were mentioned.

“She always complains about pains, stomach pains” (elderly man 5 at HTCC)

“She will be complaining as if she is doing period, she will be complaining of headache and stomach ache, she will not be comfortable, she will be having complains of pregnancy.” (Elderly man 23 at HTCC)

Situation to use other family planning methods

Participants were asked if there will be any situation where an artificial family planning method will be advised instead of natural, they answered by giving different scenarios where it is advised that an artificial method is used. This includes if the husband is not cooperating, health hazards, husband’s lack of self-control, and failure of the natural method.

“It is only if the husband is not cooperating if that person’s husband or wife is not cooperative, that is why you can be tempted to use another method when there is no cooperation and love.” (Elderly woman 2 at CKC)

“Like if the woman has health hazards like SS, all these serious dieses, I will advise the person to use artificial family planning method instead of natural.” (Elderly woman 5 at St John)

“Nowadays, I don’t know, there are some men I am telling you, they can’t do without that sex, they don’t even border to follow the woman to do the charting, all they know is sex and the woman will continue having children, children and in this case, what will you advise the lady” (Elderly woman 1 at St John)

“I don’t think there is any situation that will make me go for other family planning method, except if there is a health issue, for example, we cannot say, it may be through a cut or something contact an infection, a disease or virus” (Elderly woman 3 at St John)

“In my own opinion, the advice will come when the natural means of family planning fails, and the failure could be as a result of the fact that the couple is not getting it right, since the success of the natural means of family planning is solely depended on the couple, they have to do it and get it right unlike the artificial means.” (Adult man 1 at CKC)

“That is maybe when you tried the natural one and it fail you, and the result, you see, you have to give birth more than what you expect, that is when you will try to use the modern one.” (Adult man 4 at HTCC)

Some participants believed that no situation should warrant using the artificial method of family planning.

“There is no situation, the church should organize seminars, symposium, couples’ dinner and some other things that bring couples together even young adults who are ripe for marriage should also be taught about family planning before they even go in, they will know that these things are also available the benefits of what they are being taught” (adult man 1 at St Jude)

“I don’t think there is any situation that the church will be able to tell you but on a discretionary basis, by the priest, it won’t be legal or lawful that ok, if you don’t see this, you do this so if you get into that kind of situation, it will be a one-on-one counseling or whoever the authority is but it should not be publicly said that everybody can do this among us.” (Adult man 2 at HTCC)

Barriers to utilization of family planning

While some participants believed there is no barrier to the utilization of family planning, especially the natural method, some barriers were identified by respondents and including lack of proper education, fear of side effects, and health implications.

“I don’t think there is any barrier in using it because, in natural family planning, there are no barriers if you know your way. if you know how to read your chart very well, I don’t think there is any barrier.” (Elderly woman 5 at St John)

“There are no barriers in the use of the natural family planning method, it is good, if it is not good the church will not introduce it here to the parishioners, they would not even encourage the couples to be using it.” (Elderly man 9 at HTCC)

“One of the barriers I have noticed is lack of proper education, people have this misconception of the fact that the natural method of family planning fail and that is because they are not properly enlightened” (elderly man 3 at St Gabriel)

He also added that

“The major barrier is the side effect the health challenges it will impose to the people that use it, I know of a woman who uses artificial family planning,” (Elderly man 3 at St Gabriel)

Dealing with barriers

Quantitative Report

Discussing ways of limiting the aforementioned barriers, participants suggested the creation of awareness, consistent training, and retraining for couples on family planning, enhanced public health education, involvement of the husband in the family planning, and free availability, and education unit at antenatal clinics.

“We can remove them by awareness, they should continue to teach people, tell people on television, everywhere, let people know, both small and old if they teach them properly, they give them the awareness of the importance and how to go about it, I don’t think there will be any barrier.” (Elderly woman 5 at St John)

“If we have people that are well train concerning this family planning” (elderly woman 1 at St John)

“I think the only way to remove the barriers just like one of my brothers said is to educate people because people lack education as regard s family planning” (elderly woman 6 at St John)

“The first role I believe is the government because, at the end of the day, it goes back to affect the general economy, I believe they should work on the price the cost, they should make it as free as HIV test.” (Adult man 2 at HTCC)

“During the antenatal period, our health sector is supposed to put their agent on the ground to educate them, to create awareness of this family planning or in a rural area, they don’t know what is going on in that place. let them create awareness of this thing more, that is what I have to say.” (Adult man 3 at HTCC)

“In my understanding, the role has to do with more and enhance public health education, the populare needs to be enlightened on the benefit of natural planning, they need to be enlightened on the ways and manners to go about natural planning.” (Adult man 3 at CKC)

“The calendar study should not be left to the women only, the couples are to be together to know what is going, so by so doing, they wttill be able to overcome problem along the line.” (Elderly man 5 at HTCC).

Variable	Frequency	Percentage
Age*		
Less than 30 years old	72	20.1
30 years to 40 years old	169	47.2
Above 40 years old	117	32.7
<i>Mean age 37.38 ± 6.75</i>		
Gender		
Male	106	29.6
Female	252	70.4
Ethnic Group		
Yoruba	122	34.1
Hausa	7	2.0
Igbo	195	54.5
Others	34	9.5
Educational level		
Primary	17	7.14
Secondary	138	38.5
Tertiary	200	55.9
No formal education	3	0.8
Monthly Income**		
None	115	32.1
Below 30,000 naira	77	21.5
Above 30,000 naira	166	46.4
Marital Status		
Married	352	98.3
Widowed	3	0.8
Separated	3	0.8
Marital Union		
Monogamous	353	98.6
Polygamous	5	1.4
<i>** Mean monthly income 34,590.78 ± 42,862.44</i>		
Occupation		
Civil servant	62	17.3
Artisans	48	13.4
Full housewife	13	3.6
Trading	165	46.1
Students	6	1.7
Others	64	17.9
Spouse Occupation		
Civil servant	85	23.7
Artisans	35	9.8
Full housewife	7	2.0
Trading	177	49.4
Students	4	1.1
Others	49	13.7

Number of children*		
None	32	8.9
Less than 4	285	79.6
More than 4	41	11.5
Family size**		
Less than 6	256	71.5
More than 6	102	28.5
Length of time between your last two children**		
None	103	28.8
Less than 2 years	11	3.1

More than two years	244	68.2
Ever had an unplanned pregnancy	68	19.0
Yes	290	81.0
No		
Ever had abortion		
Yes	47	13.1
No	311	86.9
Ever had birth complications		
Yes	55	15.4
No	303	84.6
* Mean number of children 2.47 ± 1.56 ; ** Mean family size 4.66 ± 1.99 ; *** Mean length of time 3.32 ± 10.48		

Table 1: Socio-demographic characteristics of the respondents.

The mean age (years) of the respondents was 37.38 ± 6.75 . Almost half of the respondents (47.2%) were between the ages of 30 years and 40 years and 20.1% were below the age of 30 years. The majority of the respondents (70.4%) were female. More than half (54.5%) were of Igbo ethnicity with 34.1% being of Yoruba ethnicity and 55.9% had tertiary education while 38.5% had secondary. About one-third of the respondents (32.1%) do not earn monthly income with almost half (46.4%) earning above 30,000 naira. Almost all of the respondents were married (98.3%) and the majority (98.6%) were in a monogamous marriage.

Trading is the most popular occupation among respondents (46.1%), civil servants were 17.3%, respondents' spouse occupation was commonly trading (49.4%), and civil servant (23.7%). Almost all (79.6%) of the respondent's children were below 4 while 8.9% had not given birth. The average number of children was 2.47 ± 1.56 and the average family size was 4.66 ± 1.99 , majority of the respondents (68.2%) had more than two years of spacing between their last two children. Most of the respondents (81%) had not had unplanned pregnancies before, likewise, 86.9% have not had an abortion before, similar to 84.6% who have not had birth complications before.

Fertility Intention

Statement	Frequency	Percentage
Do you have a desire to have children		
Yes	31	96.9
No	1	3.1
If yes, how many children		
2	7	22.6
3	16	51.6
4	8	25.8
How long do you think is best for you to have the child		
One year	8	25.0
Two years	18	56.3
Three years	5	15.6
Four years	1	3.1
Will you use contraceptives to achieve this?		
Yes	16	50.0
No	16	50.0

Do you desire to have another child?		
Yes	163	50.0
No	163	50.0
If yes, how many children		
1	9.8	21.5
2	10.9	23.9
3	14.0	30.7
4	8.1	17.8
5	2.2	4.9
8	0.3	0.6

	12	0.3	0.6
How long do you think is best for you to have the child			
One year		43	26.4
Two years		82	50.3
Three years		28	17.2
Four years		10	6.1
Are you using any contraceptives to achieve this			
Yes		95	29.1
No		231	70.9
Was your last pregnancy wanted at that particular time?			
Yes		250	76.9
No		75	23.1

Table 2: Fertility intention of respondents.

There were thirty-two (32) respondents who had not given birth at the time of the study and were asked about their fertility intention. The desire to have a child was high among almost all of the respondents (96.9%) with half (51.6%) desiring to have 3 children. More than half (56.3%) believed two years was best for them to have the child. The use of contraceptives to delay pregnancy was among half of the respondents with the other half (50%) not willing to use contraceptives to delay pregnancy.

Among respondents who already had children, the desire to have another child was among half of the respondents (50%) with 30.7% and 23.9% willing to have 2, 3, or more children, respectively. Half of the respondents (50.3%) believed two years is best to have the child. About one-third of the respondents (29.1%) use contraceptives to achieve this with 76.9% of the respondents admitting that their last pregnancy at the particular time was wanted.

This goes in line with a study [6] that found about 17 percent of men and 22.3 percent of women desire to have one child and equally 52.7 percent of men and women wanted to have two children. The only factor that contributed to the female participant’s decision for a desirable number of children was their number of siblings.

A study [8] also reflected that fertility intention can be inclined by several factors that operate at the societal and personal/individual levels. At the societal level, fertility intention is largely driven by social-cultural pressures and the need to maintain the stability of the union [13]. At the personal/individual level, several factors have been associated with fertility desire including the age of individuals [24,31], the number of living children [10], and male sex [24] respectively.

Statement	Frequency	Percentage
Have you used any family planning method before?		
Yes	202	56.4
No	156	43.6
What type did you use?		
Abstinence	2	1.0
Billing method	6	3.0
Coil	2	1.0
Condom	29	14.4
Counting of days	1	0.5
Implant	44	21.8
Injectable	33	16.3
Lactation	1	0.5
Monthly Calendar	1	0.5
Natural	61	30.2
Oral contraceptive	9	4.5
Withdrawal	13	6.4

Are you currently using any family planning method?		
Yes	157	43.9
No	210	56.1
Reasons for using the family planning method	Without prompt	With prompt
For children to grow up healthy	85 (54.1%)	69 (43.9%)
To prevent pregnancy-related health risk	72 (45.9%)	82 (52.2%)

To reduce infant mortality	34 (21.7%)	120 (76.4%)
Reduces unwanted pregnancy	110 (70.1%)	47 (29.9%)
To ensure enough resources for family	69 (43.9%)	85 (54.1%)
To improve health status	66 (44.9%)	78 (53.1%)
What method are you currently using?		
Abstinence	4	1.1
Billing method	6	1.7
Billing method natural family method	1	0.3
Condom	15	4.2
Counting of days	1	0.3
Cycle bead	1	0.3
Implant	24	6.7
Injectable	20	5.6
IUCD	4	1.1
Natural	52	14.5
Pills	8	2.2
Seed	1	0.3
Withdrawal	13	3.6
How long have you been using		
Less than 10 years	113	76.9
More than 10 years	34	23.1
Reasons for non-use of the family planning method		
Not married	4	2.0
Not having sex	14	7.0
Menopause has started	3	1.5
Cannot get pregnant	8	4.0
Partner opposed	15	7.5
Religion prohibits	27	13.4
Culture prohibits	6	3.0
I don't know the method to use	10	5.0
I don't know where to get the method	5	2.5
Side-effects of contraceptives	51	25.4
It's costly	6	3.0
It is inconvenient to use	24	11.9

Table 3: Family planning utilisation.

More than half of the respondents (56.4%) have used contraceptives before. The most common contraceptives include: Natural method (30.2%), injectable (16.3%) and condom (14.4%). More than half (56.1%) do not currently use any family planning method. Without prompt, 23.7% of the respondents admit to using family planning for children to grow up healthy, 20.1% used it to prevent pregnancy-related health risks, 9.5% to reduce infant mortality, and 30.7% to reduce unwanted pregnancy. The natural family planning method was the current most commonly used by respondents (34.7%), then the implants (16%) and injectable (13.3%). The majority of respondents (76.9%) have been using family planning for less than 10 years.

Exploring reasons for non-use of family planning, 7% don't use because they are currently not sexually active, 1.5% because of menopause, 4% because they are currently pregnant, 7.5% because of opposition from partners, 13.4% because of religious prohibition, 25.4% because of fear of side effects and 11.9% because of inconvenience in use. This was not corroborated with the study on the utilization according to Rao et al, 2016 where

43% of mothers opted to limit family size as 71% had already 2 children, 23.9% had 3 children and 5% had 1 child.

In most families, the final decision regarding the family planning method was taken by the husband alone or by elders. The main reason for the non-utilization of contraceptives was lack of awareness, followed by socio-economic issues as well as gender issues. The literate couples tend to understand better and show willingness for contraception utilization after counseling. This denotes that apart from literacy status, separate education regarding family planning is needed.

Some of the factors influencing the utilization of family planning in this study were also documented by another study [7]. These factors were the age of the mother, occupation, religion, educational level of women under study, parity of women, number of living children, type of family, socioeconomic group, not comfortable to use, no family support, cultural factors, myths about contraceptive methods, and previous painful experience respectively.

In a study [5], it was observed that the percentage of women who ever used contraceptives was high among the age group of 20 to 40 years (91.4%). And the majority of women use contraceptives in their early 15 years of marriage (88.4%). According to another study [18], it was observed that among 260 eligible couples, 71.79% of the couples were between the ages of 30 -34 years. However, 65% of these couples utilize at

least one of the methods of contraception. Similarly, the fertility desire of women in Tehran showed that poor income was associated with a lack of interest to use contraceptives [24]. Although some researchers argued that income might not purely interpret childbirth behaviors of couples, it is necessary to assess the different kinds of social support that people receive [19].

Variables	Frequency	Percentage
What is your church's teaching on family planning?		
Artificial family planning is not welcomed	5	1.4
Billings method	18	5.1
Church supports family planning	96	27.0
Don't know	37	10.4
Natural	198	55.6
Religion prohibits	1	0.3
Self-control	1	0.3
Which family planning does your church approve?		
Abstinence	2	0.6
Anyone	10	2.8
Artificial	1	0.3
Billings method	34	9.6
Child spacing	4	1.1
Condom	3	0.8
Don't know	10	2.8
Implant	1	0.3
Injectable	1	0.3
Medical	2	0.6
Natural	252	71.0
Nil	24	6.8
None	10	2.8
Withdrawal	1	0.3
Do you use it?		
Yes	175	48.9
No	183	51.1

Variables	Frequency	Percentage
How easy and convenient is it to use?		
Convenient	25	14.5
Easy	53	30.6
I Guess I Had to Exercise Restraint and Self Control	1	0.6
Nil	5	2.9
Not Convenient	8	4.6
Not easy	30	17.3
Very easy	51	29.5
What are your experiences using the church-approved method		
Be careful	3	1.7
Convenient	4	2.3
Easy	2	1.1
Easy to use	7	4.0
Effective	9	5.2
Good	53	30.5
Good health	3	1.7
It's okay	3	1.7
No experience	2	1.1
No financial implication	2	1.1
No risk	4	2.3
None	25	14.4

Normal	2	1.1
Not easy	12	6.9
Not reliable	10	5.7
Peace	2	1.1
Safe	6	3.4
Very good	13	7.5
Worked	3	1.7

Variables	Frequency	Percentage
Why are you not using it?		
Breastfeeding	3	1.7
Don't know	2	1.1
Ease of use	5	2.8
Husband refusal	5	2.8
I want to get pregnant	33	18.6
Newly married	2	1.1
No reason	61	34.5
Not Convenient	8	4.5
Not easy to use	3	1.7
Not interested	3	1.7
Not reliable	29	16.4
Not safe	3	1.7
Observing abstinence	1	0.6
Personal choice	4	2.2
Pregnant	7	4.0
Other reason	4	2.4
Do you agree with the church's teaching on family planning?		
Yes	315	88.0
No	43	12.0

Variables	Frequency	Percentage
If not, why?		
Financial reason	2	5.0
It can lead to problem	1	2.5
Nil	20	50.0
No confidence	1	2.5
Not comfortable	2	5.0
Not Convenient	1	2.5
Not realistic	1	2.5
Not reliable	4	10.0
Personal choice	3	7.5
Religious belief	2	5.0
Side effect	3	7.5
Do you think this religious stand should be		
Maintained	269	75.1
Modified	85	23.7
Removed	4	1.1

Table 4: Religion's influence on family planning.

Exploring the church's teaching on family planning, more than half (55.3%) stated that the church supports natural family planning, this translates to the majority of the respondents (70.4%) identifying the natural method as the family planning method approved by the church. However, less than half of the respondents (48.9%) use this method. There were 30.6% of

the respondents found this family planning method easy and 29.5% found it to be very easy to use.

Respondents' experience using the method was found to be good (30.5%), unreliable (5.7%), not easy (6.9%), and effective (5.2%). When asked reason for non-use of the family planning method, more than one-third (34.5%) did not have a

reason, 16.4% believed it not to be reliable, and 18.6% because they have the intention of getting pregnant. Almost all of the respondents agreed with the church’s teaching on family planning. For the remaining 12% of the respondents who do not, half of them had no reason, however, a few 10% believed it is not reliable. There were 75.1% of the respondents believed the religious stand should be maintained.

From the data of this data, it can be deduced that the majority of the respondents believed that natural family planning is safe, devoid of side effects, and effective if the method is understood and done properly thus prompting them to insist that the religious stand should be maintained. This was further corroborated showing that religion is one of the important determinants influencing acceptance and use of contraceptive methods. In this study majority of women who utilized family planning methods belong to the Hindu religion (90.8%). It was

also found that usage of contraception is 46% lower among Muslims compared with Hindus [11].

There is no association between respondents’ socio-demographic characteristics and family planning utilization.

Chi-square analysis was used in testing this hypothesis. Statistical analysis showed no significant association between family planning utilization and age of respondents $X^2 (2, N = 358) = 4.982, p = 0.083$, gender $X^2 (1, N = 358) = 0.344, p = 0.558$, ethnicity $X^2 (3, N = 358) = 5.263, p = 0.154$, marital status $X^2 (2, N = 358) = 2.509, p = 0.285$ and educational level $X^2 (3, N = 358) = 2.082, p = 0.555$. there was however a significant association between family planning utilization and monthly income $X^2 (2, N = 358) = 6.752, p = 0.034$, number of children $X^2 (2, N = 358) = 23.618, p = 0.000$, family size $X^2 (2, N = 358) = 12.980, p = 0.000$ and length of time between last two children $X^2 (2, N = 358) = 29.981, p = 0.000$.

Variable	Family planning utilization		Chi-square			
	Yes	No (%)	No	df	X ²	P-value
Age						
Less than 30 years old	30 (19.1)		42 (20.9)	2	4.982	0.083
30 years to 40 years old	66 (42.0)		103 (51.2)			
Above 40 years old	61 (38.9)		56 (27.9)			
Gender						
Male	49 (31.2)		57 (28.4)	1	0.344	0.558
Female	108 (68.8)		144 (71.6)			
Ethnic Group						
Yoruba	46 (29.3)		76 (37.8)	3	5.263	0.154
Hausa	2 (1.3)		5 (2.5)			
Igbo	96 (61.1)		99 (49.3)			
Others	13 (8.3)		21 (10.4)			
Educational level						
Primary	7 (4.5)		10 (5.0)	3	2.082	0.555
Secondary	67 (42.7)		71 (35.3)			
Tertiary	82 (52.2)		118 (58.7)			
No formal education	1 (0.6)		2 (1.0)			
Monthly Income						
None	41 (26.1)		74 (36.8)	2	6.752	0.034
Below 30,000 naira	42 (26.8)		35 (17.4)			
Above 30,000 naira	74 (47.1)		92 (45.8)			
Marital Status						
Marrried	156 (99.4)		196 (97.5)	2	2.509	0.285
Widowed	0 (0.0)		3 (1.5)			
Separated	1 (0.6)		2 (1.0)			

Variable	Family planning utilization		Chi-square			
	Yes	No (%)	No	df	X ²	P-value
Number of children						
None	2 (1.3)		30 (14.9)	2	23.618	0.000
Less than 4	130 (82.8)		155 (77.1)			
More than 4	25 (15.9)		16 (8.0)			
Family size						
Less than 6	97 (61.8)		159 (79.1)	1	12.980	0.000
More than 6	60 (38.2)		42 (20.9)			
The time between the last two						

children	22 (14.0)	81 (40.3)	2	29.981	0.000
None	5 (3.2)	6 (3.0)			
Less than 2 years	130 (82.8)	114 (56.7)			
More than two years					

Approved family planning by the Church	Accepted Family planning utilization		Chi-square		
	Yes No (%)	No No (%)	df	X ²	P-value
Abstinence	2 (1.1)	0 (0.0)	11	40.584	0.000
Anyone	5 (2.9)	5 (2.8)			
Artificial	0 (0.0)	1 (0.6)			
Child spacing	3 (1.7)	1 (0.6)			
Condom	3 (1.7)	0 (0.0)			
Don't know	1 (0.6)	9 (5.0)			
Implant	0 (0.0)	1 (0.6)			
Injectable	0 (0.0)	1 (0.6)			
Medical	0 (0.0)	2 (1.1)			
Natural	156 (89.1)	130 (72.2)			
None	4 (2.3)	30 (16.7)			
Withdrawal	1 (0.6)	0 (0.0)			

Table 5: Chi-square analysis.

Implications for Health Promotion and Education

The results of this study lend their voice to other findings to scale up health promotion and education interventions that target religious beliefs. This study found out that a substantial proportion of the study population would adopt a method because of the religious teachings irrespective of the outcome thus creating an unmet need thereby stalling efforts to reduce overpopulation and increasing other risk factors associated with high fertility rates. The participants mentioned that they would like to be taught natural family planning in the language they understand and also tools to make it easier to use should be created. This finding calls for training and development of tools to improve their knowledge and understanding of the approved method of family planning as little or no attention is given to natural family planning even though it is scientific and effective if done properly.

Conclusion

The desire to have children was high among the unmarried respondents and average among the married. The barriers to the use of the artificial methods of family planning were identified as i. the teachings of the church, and ii. the fear of side effects associated with artificial contraceptives such as secondary infertility, weight gain, bleeding, and cancer. In the same vein, the barrier to the utilization of natural planning method was the challenge associated with the miscalculation of safe sex periods in the 28 days cycle, irregular cycles, lack of spousal support, and cumbersome. Although there were expressed preferences for both methods due to the challenges aforementioned, two years of birth spacing was the preferred gap for births.

Furthermore, less than half of the respondents adhere to the natural family planning method recommended by the

church. although the consequences of poor knowledge and incorrect use of natural family planning method were evident in this study, the interest of the respondents using the artificial method of birth control in being trained along sides their partners in the language they understand on how to effectively and easily use natural family planning was also evident.

Recommendation

1. A similar study should be conducted in other geopolitical zones of the country to have more generalizable data on the entire religions in Nigeria.
2. There is a need for more research to be done on natural family planning vis a vis deployment of technology such as mobile applications among others to enhance the understanding and ease of utilization of natural family planning.
3. The catholic church should increase the frequency of training on natural family planning. It should not be taught only during the marriage course, but even among the youth group so that they can understand it long before the marriage course as three months is not enough time to get used to practicing the natural family planning method as limiting the training to during the marriage course will not allow full attention as the couple is distracted with wedding preparations. The females need to learn it early so that they can understand their cycle and get used to charting long before they get married.

Declaration of interest

The authors declare that they have no known conflict of interest that may have influenced the findings of this study in any way.

Consent and Ethics

Ethical approval was obtained from the Joint Ethical Review Committee of the Oyo State Ministry of Health, Ibadan with reference number AD13/479/4455A. Participation in the study was voluntary with an option to withdraw anytime. Written informed consent was obtained from the respondents, confidentiality, anonymity, and all associated principles guiding the ethics of health research were strictly observed.

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References

1. Agunwamba A, Bloom D, Friedman A, Ozolins M, Rosenberg L, et al. (2009) Nigeria: The next generation – Literature review. *British Council and Harvard School of Public Health*.
2. Akpotu N (2008). Education is correlated to the fertility rate among families in southern Nigeria. *Journal of Human Ecology*, 23:65-70.
3. Arisukwu O, Olaosebikan D, Asaley A, Asamu F (2019). *The Journal of Social Sciences Research*. 5:498-506.
4. Arulogun O, Titiloye M, Afolabi N, Oyewole O, Nwaorgu O (2013). Experience of girls with hearing impairment in accessing reproductive health care in Ibadan. Nigeria. *African Journal of reproductive Health*. 17:85-93.
5. Balgir RS, Singh S, Kaur P, Verma G, Kaur S (2013). Contraceptive practices adopted by women attending an urban health centre in Punjab, India. *International Journal of Research Developmental Health*; 1:115-9.
6. Bongaarts J (2020). Trends in fertility and fertility preferences in sub-Saharan Africa: the roles of education and family planning programs. *Genus*, 76:1-15.
7. Devaru JS, Jabeen B, Mayanna P (2020). A cross-sectional study on knowledge, attitude, and practice of family planning method usage among urban women of Dr. B. R. Ambedkar Medical College field practice area. *International Journal of Community Medicine and Public Health* 2020; 7:981-6.
8. Dyer SJ, Abrahams N, Hoffman M, van der SZM (2013). Men leave me as I cannot have children: women's experiences with involuntary childlessness. *Hum Reprod*. 2002; 17:1663-8.
9. Feyisetan B, Bankole A (2002). Fertility transition in Nigeria: trends and prospect. *Population Bulletin of the United Nations: completing the fertility transition*. New York: United Nations Department of Economic and Social Affairs.
10. Gutin SA, Namusoke F, Shade SB, Mirembe F (2014). Fertility desires and intentions among HIV-positive women during the post-natal period in Uganda. *African Journal of Reproductive Health*. 2014; 18:67-77.
11. Kerketta S, Kumar A (2015). Knowledge of family planning and current use of contraceptive methods among currently married women in Uttar Pradesh, India. *International Journal of Community Medicine and Public Health*. 2015; 2:449-55.
12. National Population Commission (NPC) [Nigeria] and ICF. (2019). Nigeria Demographic and Health Survey 2018. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF.
13. Ngure K, Baeten JM, Mugo N, Curran K, Vusha S, et al. (2014). Fertility intentions and HIV risk perceptions among HIV-sero discordant couples experiencing pregnancy in Kenya. *AIDS Care*. 2014; 26:1283-7.
14. Nigeria Demographic and Health Survey. (2018). National Population Commission NPC [Nigeria], ICF International. Abuja Nigeria, and Rockville Maryland USA.
15. Oluwayemisi OA, Olusanya EO, Olaomi JO (2017). Spatial patterns and determinants of fertility levels among women of childbearing age in Nigeria, South African Family Practice, 59:4, 143-147.
16. Pew Research center. (2013). The Catholic church population.
17. Encyclical Letter Humanae Vitae of the Supreme Pontiff. (1968). Pope Paul VI. The Vatican.
18. Rajinder B, Singh S, Kaur P, Verma, G, and Kaur, S. (2013). Contraceptive practices adopted by women attending an urban health center in Punjab, India. *International Journal of Research and Development of Health*, ISSN: 2321 - 1431. 1:115-9.
19. Rindfuss RR, Guilkey D, Morgan SP, Kravdal O, Guzzo KB (2007). Child care availability and first birth timing in Norway. *Demography*. 44:345-372.
20. Saheed U, Kalejaye O, Isola I, Oluwaniyi O, Ojogbode A, et al. (2016). Family planning practices among rural community women in Nigeria. *Journal of Experimental and Integrative Medicine*. 6:88-92.
21. United Nations Population Fund. (2019). Family planning.
22. United Nations. (2016). Human development report 2016: Human development for everyone. New York: United Nations Development Programme.
23. Falae V (2018). Importance of family planning to the mother.
24. Wagner GJ, Wanyenze R (2013). Fertility desires and intentions and the relationship to consistent condom use and provider communication regarding childbearing among HIV clients in Uganda. *ISRN Infectious Diseases*. 2013; Article ID 478192.
25. World Population Review. (2021). World Population by Country.
26. Doctor HV, Phillips JF, Sakeah E (2009). The Influence of Changes in Women's Religious Affiliation on Contraceptive Use and Fertility among the Kassena-Nankana of Northern Ghana. *Studies in Family Planning*, 40:113-122.
27. Nwogu J, Igbolekwu C, Nwokocho E, Nwogu E, Nwabugwu O, et al. (2021). Roman Catholicism and fertility among the Mbaise, Southeast, Nigeria. *Heliyon*. 7. e05929.
28. Mahmoud T, Mohammad EM, Mohammad E, Aliasghar H, Akram H, et al. (2016). Fertility desire among Iranians living in Tehran: reasons for desire and disinterest. *Payesh*. 2016; 15:663-668.
29. Pew Research Center. (2016). The Gender Gap in Religion Around the World.
30. United Nations. 2012. World Population Prospects: The 2012 Revision. Population Division of the Department of Economic and Social Affairs New York; United Nations.

31. Asfaw H M, Gashe F E (2014). Fertility intentions among HIV positive women aged 18–49 years in Addis Ababa Ethiopia: a cross-sectional study. *Reproductive Health*. 2014; 11:36.
32. Tavousi M, Motlagh M E, Eslami M, Haerimehrizi A, Hashemi A, et al. (2015). Fertility desire and its correlates: a pilot study among married citizens living in Tehran, Iran. *Payesh*. 14:597-605.
33. Kerketta S, Kumar A (2015). Knowledge of family planning and current use of contraceptive methods among currently married women in Uttar Pradesh, India. *International Journal of Community Medicine and Public Health*. 2015; 2:449-55.

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