



ORIGINAL ARTICLE

A Comparative Qualitative Survey of Male Involvement in Family Planning in Urban and Rural Communities of Sokoto State, Nigeria

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ABSTRACT

Background: Nigeria's total fertility rate has remained high despite decades of family planning (FP) programmes. Studies have identified men as barriers to the use of contraceptives by women. The study aimed to explore and compare the knowledge of FP, perception of FP, male involvement (MI) in FP, barriers and facilitators to MI in FP among men in urban and rural communities of Sokoto State.

Methods: A comparative qualitative study was done among married men in urban and rural areas of Sokoto State in April 2019. Eight focus group discussions were conducted among 55 married men purposively selected and grouped based on educational status and age. Data were transcribed verbatim and content analysis on emerging themes was done.

Results: The participants said that FP is beneficial to the mother, the child and the father. Almost all the participants expressed unwillingness to use or allow their wives to use the permanent methods of FP. Almost all the participants in the urban and rural groups said that men should be involved in FP. Religion and ignorance were the most common barriers mentioned in the urban and rural groups. Increasing awareness of FP, religious leaders and traditional rulers championing the issue of FP and increase commitment by the government were the facilitating factors of MI in FP.

Conclusion: The participants said that FP is beneficial and that men should be involved in it. Sokoto State government should increase commitment to FP by carrying out state-wide campaigns and outreaches at regular intervals.

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INTRODUCTION

Nigeria has a population of about 211 million and a continuous fast population growth rate of 2.5% per year.¹ Nigeria's total fertility rate (TFR) has remained on the high side despite decades of family planning (FP) programmes.² The TFR of Sokoto State is 7.0 which is much higher than the national average of 5.3.³ It is a globally recognized fact that an increase in the use of

contraceptive methods helps to control the population growth to achieve health and economic benefits. The contraceptive prevalence rate (CPR) for Nigeria is 17% with just 12% attributed to modern contraceptive methods.³ Sokoto State has a CPR of 2% which is among the lowest in the country.³

Studies have shown that male participation in FP not only improves the acceptance of contraceptive methods but also enhances its effective use and continuation of use.^{4,5} Studies done in Asia and Africa found that women perceive men's participation in FP as a support for them to use contraceptive methods that are highly efficient.^{4,6,7} Male partner opposition was found to cause an increase in unmet need and a shift in contraceptive mix favouring the use of traditional methods over the modern method.⁶ A study done in India has identified men as barriers to the use of contraceptives by women.⁸ In a study carried out in an urban community in Osun State, 4.8% of the respondents reported ever being involved in FP activities with their wives.⁹ In a study done in a rural community in Sokoto State, 65.5% of the respondents said that their husbands were opposed to FP.¹⁰

Despite many concerted efforts by the Federal Government of Nigeria coupled with a high level of awareness and good knowledge of FP methods among men and women,³ very low levels of use have been established in studies in Nigeria.⁹ Understanding why people do not use FP is critical to addressing the unmet needs and increasing contraceptive use.¹¹ This study is exploratory qualitative in nature as most of the existing studies are purely quantitative in approach and there are limitations associated with such quantitative studies with regards to understanding perception towards FP and psychosocial interplay associated with FP decision-making.¹² The paucity of qualitative studies to facilitate the understanding of the social dynamics of FP intentions and choices is a major drawback to the development of the next generation of FP interventions, which is particularly important for northwestern Nigeria and northern Nigeria at large. Also, comparative studies on this topic in urban and rural men are generally scanty and there is no known published comparative study done in the northern part of the country. There was a study on this topic done in Sokoto Metropolis in 2017 but the study needs to be replicated and carried out on a wider scale in the urban and rural communities to see how the opinions differ.¹³ The study aimed to explore and compare the knowledge of FP, perception of FP, MI in FP,

barriers and facilitators to MI in FP among men in urban and rural communities of Sokoto State.

METHODOLOGY

The study was carried out in Gwadabawa and Sokoto North Local Government Areas (LGAs), which are two out of the 23 LGAs in Sokoto State. Sokoto North is an urban LGA composed of 11 wards and has several health facilities (public and private) and schools located in it. Gwadabawa is a rural LGA with 11 wards and has within it the School of Health Technology, many secondary and primary schools, a General Hospital, other public health facilities such as Primary Health Care (PHC) centres and patent medicine stores.

The study was qualitative in design and was carried out in urban and rural communities of Sokoto State in April 2019. The study population were married men whose wives were within the reproductive age group (15- 49 years). Men who were married for less than one year in the selected study area during the period of the study were excluded because most couples are eager to have a child within the first year of marriage and only consider contraception after the first child is born.

One rural (Gwadabawa) and one urban (Sokoto North) LGA were purposively selected from the five urban and eighteen rural LGAs, respectively. Two wards were selected from each of the selected LGA by purposive sampling technique. One settlement was selected from each of the four wards by purposive sampling technique. Fifty-five men were purposively selected to participate in the Focus Group Discussions (FGDs) from the selected settlements. They were selected based on individuals' willingness to participate and give their views. The selection was done with the aid of heads of the chosen settlements and their assistants. FGDs were conducted for selected men and were grouped based on age and educational status. The groups were structured as follows: men 35 years old or less with formal education, men 35 years old or less with no formal education, men more than 35 years old with formal education and men more than 35 years old with no formal education. Each group

consisted of purposively selected seven eligible participants on the average.

Eight FGDs were conducted (four in the urban areas and four in the rural areas) to explore the knowledge of FP, perception of FP and male involvement in FP. An FGD guide was adapted from previous studies on FP in men.^{5, 7, 10} There were eleven major open-ended questions with probe questions to help elicit responses from the participants. The FGD guide was prepared in English language and translated to Hausa (the local language of the State) and back-translated to English by two scholars to ensure consistency of the translation. Two research assistants who were senior resident doctors in the Department of Community Medicine of Usmanu Danfodiyo University Teaching Hospital Sokoto and had participated in qualitative research in the past were recruited. The FGD guide was pretested by the principal researcher and the trained research assistants in Wamakko (urban) and Bodinga (rural) LGAs to check the feasibility of using the instrument. Adjustments were made based on the observations that were noted.

The principal researcher who served as the moderator led and guided the discussion using the FGD guide. One of the research assistants who served as the note taker documented the major points made by participants including the salient points and non-verbal cues that will add value to the information given by the participants. The second research assistant who served as the timekeeper ensured that time was abided by and monitored the recording device. The sessions were audio-recorded (after seeking the permission of the participants) to enable

proper and complete documentation of each participant's contribution. Each discussion lasted for about 30-45 minutes and was conducted in places chosen by the participants that were convenient and provided privacy and confidentiality to the participants. The FGDs were conducted in the Hausa language. One FGD was carried out per day and if any observation was noted with regards to the ordering and framing of the questions, adjustment was made to the FGD guide before conducting another one. Data collection was done in four weeks.

The audio recordings and the field notes during the FGDs were transcribed into the Hausa language, and both the transcribed audios and the notes taken were translated into the English language immediately after a session. Content analysis along thematic lines was done and the findings were reported in narrative form.

Ethical clearance (SKHREC/105/018) was granted by the Ethical Committee of the Sokoto State Ministry of Health. Permission was sought from the respective LGA administration and traditional ruler of each settlement while verbal consent was obtained from the participants.

RESULTS

Socio-demographic characteristics of the respondents

A total of eight FGDs were conducted, four in the urban areas and four in the rural areas. Fifty-five married men took part in the FGDs, and their ages ranged from 23-72 years. Twenty-five married men took part in the FGDs in the urban areas while twenty-nine married men took part in the FGDs in the rural areas.

Table 1: Socio-demographic characteristics of the respondents

FGD Group	Urban	Rural
	Number of participants	Number of participants
>35 years, Informal education	7	7
>35 years, Formal education	6	7
≤35 years, Informal education	6	7
≤35 years, Formal education	7	8

The major themes that emerged from the FGD were knowledge of FP, perception of FP, male involvement in FP, barriers to male involvement in FP and factors that will facilitate male involvement in FP.

Knowledge of family planning

All the participants had heard about FP and the local names they called it varied. They included *tazarar haihuwa* (spacing of births), *hutun haihuwa* (rest after birth), *tsarin iyali* (family planning), *tsaida haihuwa* (stopping birth) and *qayyade iyali* (limiting family size). However, the commonest name in all the groups was "*tazarar haihuwa*".

"We call it *tazarar haihuwa*" (29 years, Formal education, Urban area - FGD 4).

"*Tazarar haihuwa*" (30 years, Formal education, Rural area - FGD 6).

All the participants in both groups had similar views on the knowledge of the benefits of FP with most of them saying the child will be healthy, the mother will rest health wise and the father will have ease in terms of spending. Some of the respondents said:

"Suffering will reduce like paying school fees. Like five children are enough. Children's disturbance can make someone limit family size to avoid suffering" (59 years, Informal education, Urban area - FGD 1).

"Family planning allows the spacing between children. It is healthy for the mother and the children. It boosts a man's economy" (32 years, Formal education, Rural area - FGD 6).

The mention of delay in the return of fertility and bleeding as the side effects of FP were frequent in the two groups though other side effects such as weight gain and absence of menses were also mentioned.

"Those who take pills used to have problems. She will take pills to stop giving birth until she wants to give birth, then she will be unable to do so" (65 years, Informal education, Urban area - FGD 1).

"It causes problems like bleeding, weight gain, absence of menses, but it depends on the woman" (32 years, Formal education, Rural area - FGD 6).

A few participants expressed the view that

contraceptive methods have no side effects while a few others said they do not know if it has any side effects. These were participants with informal education in both the urban and rural areas and from both age categories.

"*Gaskiya* (truth be told) it does not have problems. A child will be trained and cared for by his mother" (35 years, Informal education, Urban area - FGD 2).

"I do not know what its problems are" (58 years, Informal education, Rural area - FGD 7).

Perception of family planning

On their view on people in their communities who have too many children than they can cater for, participants in the two settings said they see them as careless, doing the wrong thing and lacking both western and Islamic knowledge. Some of their responses were:

"It is carelessness to have kids and be unable to give them proper upbringing" (35 years, Informal education, Urban area - FGD 2).

"*Gaskiya* (truth be told) it is not right because proper upbringing will be difficult if they are many" (30 years, Formal education, Rural area - FGD 6).

Participants in the two groups raised similar points in the discussion on the problems of having too many children for the mother, the family and the entire community. The problems likely to be faced by the mother centred around the mother not having enough rest, ageing fast, losing weight and coming down with high blood pressure. To the family, the problems mentioned were poor feeding, inability to give the children proper training and upbringing and a lot of school expenses. To the community, the recurrent problems mentioned were poorly brought up children influencing others, drug addiction, area boys, terrorism and the spread of communicable diseases.

"To the mother, if they are many, there will be a problem. She cannot control them. Her mind will not be at ease, she will be trying to stop a child from doing something and he refuses to obey. The biggest problem is area boys. They lack home training & jobs so they beat & cut fellow people. If they are well trained and have jobs, will they do that?" (63 years, Informal education, Urban area - FGD 1).

"The mother will age fast because of many children. The father can also age fast because of suffering" (28 years, Formal education, Rural area - FGD 6).

A few respondents were of the opinion that having too many children cause no problem.

"There is no problem if they have adequate accommodation" (56 years, Formal education, Urban area - FGD 3).

"Whatever Allah has given you, there is nothing you can do, there is no problem" (37 years, Informal education, Rural area - FGD 5).

Most of the participants in the two settings had similar views on what they thought the reasons behind some men wanting a large family size were and they included old age security and so that they help the fathers with their work in farming and trading. Other reasons cited were culture/religion, pride, to increase the family's income and as a guarantee in case some die.

"Some people want to have many children because the Prophet (PBUH) said we should marry and give birth to many children so that he will be proud of us" (35 years, Formal education, Urban area - FGD 4).

"When you have many children if you become unable to take care of yourself, they will help you and it will be a source of pride to you when people say these many children are all yours. Some want it to be said that they have representatives everywhere" (38 years, Informal education, Rural area - FGD 5).

Most of the participants in the two groups said that FP is an issue for both men and women.

"Gaskiya (truth be told), it is not for the women only. In fact, it affects the men more. A man is the head of the household. He is the breadwinner" (35 years, Informal education, Urban area - FGD 2).

"It is an issue for the man and the woman so that everyone will have ease in life. A man will have ease in catering to the needs of his family" (38 years, Formal education Rural area- FGD 5).

Only one participant said FP is for women alone.
"It is an issue for the woman alone because of her health. Every FP program is for women only" (32 years, Formal education, Rural area- FGD 6).

There was no difference in the responses of the participants in the two groups with regards to their views on who they think should decide on the use of a FP method; some said it should be a joint decision, and others said the man should decide whereas a few said it is the woman's responsibility.

"Two people- the wife and the husband- should make the decision. Because there is a drug that is to be swallowed if she does not agree, even if I give her the medicine, she will not take it. Likewise, injection. But if we sit and discuss, it is better" (35 years, Informal education, Rural area - FGD 8).

"The man should decide because he is the one that holds the ropes of the marriage. I am the one that is marrying her, if I don't agree, it won't be done" (20 years, Informal education, Rural area - FGD 8).

"The wife because the burden is more on her like pregnancy and breastfeeding/ taking care of the children. So, she will be the one that will not rest more than the man" (45 years, Informal education, Urban area - FGD 1).

Participants had diverse opinions on the willingness to use any FP method but almost all were against vasectomy. Many especially those with informal education said they cannot use any method. Some of the participants preferred either condoms or withdrawal. A few said they can use any method.

"Yes, I can use only one method which is withdrawal. I cannot do vasectomy because if I do it, I have castrated myself" (30 years, Formal education, Urban area - FGD 4).

"I can use any method" (33 years, Formal education, Rural area - FGD 6).

On their willingness to allow their wives to use any FP method, the majority in the two groups were against female sterilisation. As for the other methods, their opinions were diverse. Many in the two settings preferred either implants or injectables. Some said they do not like any method because each method has side effects. Few of the participants said they have no preference and only one participant was in favour of IUCD.

"Gaskiya (truth be told) I like implant because I have an interest in it and my friend's wife used it without any problem. I do not like injection and tying the womb because my mind is not at peace with them and my wife has not used them before" (35 years, Informal education, Urban area - FGD 2).

"I can let her use any method except for tying the womb because if our children die, and the womb has been tied, what will we do?" (23 years, Informal education, Rural area - FGD 8).

One participant will prefer to use a method of FP instead of his wife.

"It is only condom I am OK with because if injections and pills are too much, they can cause a problem on the womb. And if you want your wife to give birth again, a surgery has to be done" (28 years, Informal education, Rural area - FGD 8).

Male involvement in family planning

Some participants said they do not support FP and most of them were people with informal education in both the urban and rural areas. The reasons given for not supporting FP were religion and fear of population size becoming smaller.

"I am not in support because I think if FP is done, families will be smaller" (65 years, Informal education, Urban area - FGD 1).

"I don't support FP because whichever method you used if Allah (God) has destined the child to be born, you cannot stop that" (33 years, Formal education, Rural area - FGD 6).

However, many participants were in support of it.

"No, we support family planning" (chorused all) (Formal education, Urban area - FGD 3).

"We are in support of it" (chorused all) (Informal education, Rural area - FGD 7)

One participant supports FP only on one condition. He had this to say: *"I support it if there is little spacing between previous births, but if not, I do not support it"* (48 years, Informal education, Urban area - FGD 1).

Almost all the participants in the two groups said that men should be involved in FP and they mentioned the activities that constitute their

involvement as discussing the FP method to adopt, giving money to the wife for transport to the FP clinic, accompanying the wife to the FP clinic and using a FP method themselves (i.e. the men).

"Once they sit down and decide on the method to be used, he should take her to the hospital so that it can be given" (33 years, Informal education, Urban area - FGD 2).

"The man should also use a FP method so that she will rest" (37 years, Informal education, Rural area - FGD 5).

Only one participant was of the opinion that men should not be involved in FP.

"It is not right for men to be involved in FP because the responsibility is on the women" (45 years, Informal education, Urban area - FGD 1).

Barriers to male involvement in family planning

Many barriers to male involvement in FP were mentioned during the discussions. Religion and ignorance were the most recurrent barriers mentioned in the two groups. Others were the nonchalant attitude of the husbands, side effects of contraceptive methods, lack of interest, long hospital waiting time and the use of poorly crafted messages on FP in trying to raise awareness.

"They are not enlightened on what FP is. They are not exposed about the way FP things are done. Their hearts are not at peace with it" (29 years, Informal education, Urban area - FGD 2).

"There are those that have religious opinions and rely on the saying of the Prophet that "you should marry and bear children so that I will be proud of you". They did not understand because the Prophet means we should marry and bear children so that he will be proud of a large number of good people not bad-mannered people" (25 years, Informal education, Rural area - FGD 8).

"There is a lack of understanding and lack of beautifully crafted messages because they told us we should limit the number of children we have and limiting is a problem but spacing of births or rest in between births is ok because there is nobody who does

not like giving birth" (35 years, Informal education Rural area- FGD 8).

Facilitating factors to male involvement in family planning

Increasing awareness of FP, religious leaders/traditional rulers championing the issue of FP and increase commitment by the government were the highlights of the discussion on the facilitating factors of MI in FP.

"The government should enlighten its people. Health workers should enlighten the people. The traditional ruler should also enlighten them" (65 years, Informal education, Urban area - FGD 1).

"The imam should be involved, in that way, when he talks, FP will be accepted" (32 years, Informal education, Urban area - FGD 2).

"The people should be enlightened or a workshop should be done for those with western education and those without formal education" (30 years, Formal education, Rural area - FGD 6).

"It is good if the government can be involved as it did with polio, it should be involved in FP like that" (32 years, Formal education, Rural area - FGD 6).

DISCUSSION

This study explored and compared married men's knowledge of FP, perception of FP, involvement in FP, barriers and facilitators of involvement in FP in urban and rural communities of Sokoto State. Generally, no differences were observed in the opinions between urban and rural participants.

All the participants in the FGD were aware of FP and this was not surprising because FP is a popular topic of discussion in the media in Sokoto State. Although awareness does not equate to the utilisation of FP methods, it is the first on the pathway to the adoption of FP methods. Studies have documented a high level of awareness on FP in Nigeria which has been increasing over the years.^{2, 3, 14} Whereas a study done in Fanshekara village in Kano reported 90% level of awareness in 2003, NDHS 2013 reported 95% for the northern region which was the same as the national figure, 97.4% and 96.8% were

reported for the North West region and Sokoto State in the NDHS of 2018.^{2,3,14}

The benefits of FP mentioned in the two study areas were similar and it was heartening to hear the mention of improvement in maternal and child health and improvement of the financial condition of the father. Benefits of FP like limiting the family size, prevention of sexually transmitted infections and prevention of abortion were not mentioned thus high lighting the need to increase information on these benefits of FP in Sokoto State. These findings are similar to what was reported in the qualitative study done in Sokoto Metropolis thus bringing to limelight the need for an interventional study in this regard.¹³ The majority of the respondents in the studies carried out in Jimma zone in Ethiopia, Ghana, urban and rural areas of Anambra and Osun States knew the benefits of FP.¹⁵⁻¹⁸ However, the findings of a study done in Papua New Guinea showed that the majority of the respondents do not know the benefits of FP.¹⁹

A few of the participants with informal education in both the urban and rural areas stated that they do not know any side effects of FP methods. This calls for increasing information to the people on these matters and proper and adequate counselling by health workers before dispensing the FP commodities. Respondents of a study done in Ganmo, a sub-urban community in Ilorin, North Central Nigeria demonstrated poor knowledge of the side effects of contraceptive methods.²⁰

Most of the participants in the two areas thought that having too many children is not right and even went further to mention the problems of having many children that could not be well-catered for. A few of the participants in the two groups irrespective of educational status held the view that having too many children is not a problem citing destiny and abundance of wealth as the reasons; this, however, has grave public health implications because overpopulation even in the presence of adequate resources pose dangers such as the rapid transmission of communicable diseases and making containment of such diseases more difficult.

Thus, this calls for increased awareness of the populace on the other numerous benefits of FP besides the improvement in maternal and child health.

Several reasons were given on why men desire large family sizes and they include old age security, source of labour in farming and trading, culture/religion, pride, increase in wealth and raising the family status. This additionally buttressed the point discussed above that having too many children is not a problem in as much as they can be well-catered for.

Although all except one of the participants said that FP is an issue for both men and women, a much smaller number said the two parties should take a decision together on the use of a FP method and there was no difference in opinions across the study settings, age and educational status. This calls for more enlightenment of the people on the need for the two parties to participate fully in FP decision-making to enhance the utilisation of FP methods. This is comparable to the findings of the studies done in urban and rural areas of Anambra State and Uganda where a greater proportion of the study subjects were of the opinion that FP is not a woman's issue alone.^{15, 21} The findings from a study in Ganmo, a semi-urban town in Ilorin did not support this study's finding as 88.5% men said decisions with regards to FP should be made by the man alone.²²

It did not come as a surprise when almost all the participants were against the permanent methods of FP because they have earlier stated several reasons why men desire so many children in addition to the fact that no one mentioned limiting the family size as a benefit of FP. There was no difference of opinions with regards to the study areas, age and educational status of the participants concerning the preference of FP methods for themselves and their wives. The qualitative study done in Sokoto Metropolis also reported that almost all the participants were against vasectomy and tubal ligation.¹³ A study done in Ekpoma, an urban town in Edo State is in tandem with this finding as 85.9% chose male condom as the preferred FP method.²³

It did not come as a surprise when a few participants said they do not support FP because they have earlier stated their dislike of all FP methods for both themselves and their wives. This opinion did not correlate with the one held by all but one participant that men should be involved in FP.

Religion and ignorance were the most common barriers to MI in FP mentioned although others like the use of poorly crafted messages on FP in trying to raise awareness were also stated. The qualitative study done in Sokoto Metropolis did not report religion as a barrier to MI in FP probably because the study was done on a small scale.¹³ The facilitators of MI in FP proffered in the two settings were increasing awareness of FP, religious leaders and traditional rulers championing the issue of FP and increased commitment by the government as it did with poliomyelitis. Raising awareness of FP is an ongoing issue in many of the media outlets in the State and non-governmental organisations such as Breakthrough Action Nigeria (BAN) is doing a lot of work amongst men and women in some of the LGAs in the state. The championing of the FP issue by the religious and traditional rulers cannot be over-emphasized as they played a key role in the acceptance of the polio vaccine by the populace. Also, the government should increase its commitment to FP just like it did with polio so that people will equally take the issue of FP seriously. This is the most important addition got from this study that did not come up during the study done earlier in Sokoto Metropolis.¹³

Limitations of the study: The study was qualitative hence it cannot be generalized to the population. There may be deliberate withholding of information by some participants because they were in a group. An attempt was made to reduce this bias by segregating the groups by age and educational level.

Conclusion: Generally, no differences were observed in the opinions between urban and rural participants. The participants said that FP is beneficial to the mother, the child and the father. Most of the participants said that FP is an issue for both men and women and almost all the participants expressed unwillingness to use or

allow their wives to use the permanent methods of FP. Almost all the participants in the two groups said that men should be involved in FP. Religion and ignorance were the most common barriers mentioned in the two groups. Increasing awareness of FP, religious leaders and traditional rulers championing the issue of FP and increase commitment by the government were the facilitating factors of MI in FP mentioned. The State and Local Governments should increase commitment to FP just like the case for poliomyelitis by carrying out state-wide campaigns and outreaches at regular intervals. Traditional and religious leaders should champion the issue of FP by preaching and talking about the importance of FP at religious and community meetings/ gatherings.

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REFERENCES

1. World Bank. Population growth (annual %). 2018. [Accessed 23rd September, 2018]. Available from : <https://data.worldbank.org/indicator/sp.pop.grow>
2. National Population Commission (NPC) [Nigeria], ICF International. Nigeria Demographic and Health Survey 2013. Abuja, Nigeria and Rockville, Maryland, USA: National Population Commission (NPC) [Nigeria] and ICF International; 2014. p.31-116.
3. National Population Commission (NPC) [Nigeria], ICF. Nigeria Demographic and Health Survey 2018. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF; 2019. p.43-162.
4. Kassa M, Abajobir AA, Gedefaw M. Level of male involvement and associated factors in family planning services utilization among married men in Debremarkos town, Northwest Ethiopia. *BMC International Health and Human Rights*. 2014; 14(33): 1-8. doi:10.1186/s12914-014-0033-8
5. Okwor EU, Olaseha IO. Married men's perception about spousal use of modern contraceptives: a qualitative study in Ibadan Northwest Local Government Area, Southwest Nigeria. *International Quarterly of Community Health Education*. 2010; 30(3): 223-238. doi: 10.2190/IQ.30.3.d.
6. Ali M, Rizwan H, Ushijima H. Men and reproductive health in rural Pakistan: the case for increased male participation. *The European Journal of Contraception & Reproductive Health Care*. 2009; 9(4): 259-266. <http://dx.doi.org/10.1080/13625180400017511>
7. Ani F, Abiodun O, Sotunsa J, Faturoti O, Imaralu J, Olaleye A. Demographic factors related to male involvement in reproductive health care services in Nigeria. *The European Journal of Contraception & Reproductive Health Care*. 2016; 21(1): 57-67. <http://dx.doi.org/10.3109/13625187.2015.1036856>
8. Jyoti LA, Dehmubed A. Awareness and practice of family planning method

- among married women in an urban slum area of Mumbai, Maharashtra. *European Journal of Pharmaceutical and Medical Research*. 2016; 3(2): 294-297.
9. Adelekan A, Omoregie P, Edoni E. Male involvement in family planning: Challenges and way forward. *International Journal of Population Research*. 2014; 1-9. <http://dx.doi.org/10.1155/2014/416457>
 10. Raji MO, Oche MO, Kaoje AU, Raji HO, Ango JT. Awareness and utilization of family planning commodities in a rural community of North West Nigeria. *Caliphate Medical Journal*. 2013; 1(4): 103-108. <http://dx.doi.org/10.47837/cmj.19770126.nma.20131410122>
 11. Tilahun T, Coene G, Luchters S, Kassahun W, Leye E. Family planning knowledge, attitude and practice among married couples in Jimma Zone, Ethiopia. *PLoS ONE*. 2013; 8(4): 1-8. doi:10.13731/journal.pone.0061335.
 12. Aransiola JO, Akinyemi AI, Fatusi AO. Women's perceptions and reflections of male partners and couple dynamics in family planning adoption in selected urban slums in Nigeria: A qualitative exploration. *BMC Public Health*. 2014; 14(869): 1-14. doi:10.1186/1471-2458-14-869
 13. Abubakar BG, Ezenwoko AZ, Ango JT, Okafoagu NC, Ismail A, Abubakar KT. Male involvement in family planning: A qualitative survey of the barriers and facilitators amongst married men in Sokoto metropolis. *Journal of Community Medicine and Primary Health Care*. 2021; 33(2): 115-27. <https://dx.doi.org/10.4314/jcmphc.v33i2.8>
 14. Kabir MH, Iliyasu Z, Abubakar I, Maje B. The role of men in contraceptive decision-making in Fanshekara village, Northern Nigeria. *Tropical Journal of Obstetrics and Gynaecology*. 2004; 20(1): 24-7. Doi:10.4314/tjog.v20i1.14394.
 15. Ifeadike CO, Eze PN, Ugwoke UM, Nnaji GA. Comparative assessment of family planning knowledge and attitude of men in urban and rural areas of Anambra state, South-East of Nigeria. *Research Journal of Women's Health*. 2015; 2(3): 1-7. Doi: <http://dx.doi.org/10.7243/2054-9865-2-3>.
 16. Netey OEA, Enuameh YA, Mahama E, Sulemana A, Adjei G, Gyaase S, et al. Family planning awareness, perceptions and practice among community members in the Kintampo districts of Ghana. *Advances in Reproductive Sciences*. 2015; 3(1): 1-12. Doi:10.4236/arsci.2015.31001.
 17. Orji EO, Ojofeitimi EO, Olanrewaju BA. The role of men in family planning decision-making in rural and urban Nigeria. *The European Journal of Contraception & Reproductive Health Care*. 2009; 12(1): 70-75. Doi: 10.1080/13625180600983108.
 18. Tilahun T, Coene G, Temmerman M, Degomme O. Spousal discordance on fertility preference and its effect on contraceptive practice among married couples in Jimma zone, Ethiopia. *Reproductive Health*. 2014; 11(27): 1-10. Doi: 10.1186/1742-4755-11.
 19. Kura S, Vince J, Crouch-Chivers P. Male involvement in sexual and reproductive health in the Mendi district, Southern Highlands province of Papua New Guinea: a descriptive study. *Reproductive Health*. 2013; 10(46): 1-10. Doi: 10.1186/1742-4755-10-46.

20. Odu OO, Ijadunola KT, Komolafe JO, Adebimpe WT. Men's knowledge of and attitude with respect to family planning in a suburban Nigerian community. *Niger J Med.* 2006; 15(3): 260-265. Doi: 10.4314/njm.v15i3.37225.
21. Kabagenyi A, Ndugga P, Wandera SO, Kwagala B. Modern contraceptive use among sexually active men in Uganda: Does discussion with a health worker matter? *BMC Public Health.* 2014; 14(286): 1-8. Doi: 10.1186/1471-2458-14-286.
22. Odu O, Ijadunola K, Parakoyi D. Reproductive behaviour and determinants of fertility among men in a semi-urban Nigerian community. *Journal of Community Medicine and Primary Health Care.* 2005; 17(1): 13-19. Doi: 10.4314/jcmp hc.v17i1.32419.
23. Iribhogbe OI, Akpamu U, Nwaopara AO, Osifo UC, Otamere HO, Okhiai O, et al. Contraceptive choice amongst married men in Ekpoma, Nigeria. *African Journal of Biomedical Research.* 2011; 14(3): 213-218.

