

## ORIGINAL RESEARCH ARTICLE

# Perceptions of and barriers to uptake of contraceptives in plantation farming communities of Cross River State, Nigeria: A qualitative inquiry

DOI: 10.29063/ajrh2024/v28i2.8

Veronica A. Undelikwo<sup>\*1</sup>, Glory E. Basse<sup>2</sup>, Ntongha E. Ikpi<sup>1</sup>, Lilian O. Ubi<sup>1</sup> and Rosemary I. Eneji<sup>1</sup>

Department of Sociology, University of Calabar, Calabar, Nigeria<sup>1</sup>, Department of Social Work, University of Calabar, Calabar, Nigeria<sup>2</sup>

\*For Correspondence: Email: [vundelikwo@yahoo.com](mailto:vundelikwo@yahoo.com); Phone: +2348027175636

## Abstract

The contraceptive use in Nigeria is relatively low, indicative of the non-adoption of contraceptives by people of reproductive age to curtail the increasing fertility rate with its attendant consequences on the family. The non-use is attributed to numerous factors, including perceptions of and attendant barriers to the uptake of contraceptives. This study was aimed at assessing the perception of and barriers to the uptake of contraceptives among residents of plantation farming communities in Cross River State, Nigeria. It was a multi-sited qualitative descriptive study conducted in three Local Government Areas (Ikom, Yakurr, and Akamkpa) in Cross River State, Nigeria between March and April 2022. Nine Focus Group Discussions (FGDs) and twelve key informant interviews (KIIs) were conducted with respondents from three plantation farming communities. The FGDs were conducted on sexually active unmarried girls, married women within the reproductive age, and married men with spouses of reproductive age. The KIIs were conducted on health care providers, village heads, youth leaders, and women leaders. The generated data were thematically analyzed using both deductive and inductive analytical approaches. Married women were deemed eligible to use contraceptives, which are viewed as a method for preventing pregnancy. The information supplied by healthcare professionals was deemed insufficient for women to make informed decisions. Fear of side effects, dysfunctional health facilities, frequent stock outs, and spousal opposition were the most significant barriers to contraceptive use. Family planning programs should be targeted more at residents of rural areas to increase awareness, dispel misconceptions, and promote contraceptive use. (*Afr J Reprod Health* 2024; 28 [2]: 83-95).

---

**Keywords:** Reproductive age, sexually active, contraceptives, Nigeria, misconceptions, attitude

---

## Résumé

L'utilisation de contraceptifs au Nigéria est relativement faible, ce qui indique que les personnes en âge de procréer ne les adoptent pas pour freiner l'augmentation du taux de fécondité et ses conséquences sur la famille. La non-utilisation est attribuée à de nombreux facteurs, notamment les perceptions et les obstacles à l'adoption des contraceptifs. Cette étude visait à évaluer la perception et les obstacles à l'adoption des contraceptifs parmi les résidents des communautés agricoles des plantations de l'État de Cross River, au Nigéria. Il s'agissait d'une étude descriptive qualitative multisites menée dans trois zones de gouvernement local (Ikom, Yakurr et Akamkpa) dans l'État de Cross River, au Nigéria, entre mars et avril 2022. Neuf discussions de groupe (FGD) et douze entretiens avec des informateurs clés (KII) ont été menées auprès de répondants de trois communautés agricoles de plantations. Les groupes de discussion ont été menés auprès de filles célibataires sexuellement actives, de femmes mariées en âge de procréer et d'hommes mariés ayant des épouses en âge de procréer. Les KII ont été menées auprès des prestataires de soins de santé, des chefs de village, des jeunes leaders et des femmes leaders. Les données générées ont été analysées thématiquement en utilisant des approches analytiques déductives et inductives. Les femmes mariées étaient considérées comme éligibles à l'utilisation de contraceptifs, considérés comme une méthode permettant de prévenir une grossesse. Les informations fournies par les professionnels de santé ont été jugées insuffisantes pour permettre aux femmes de prendre des décisions éclairées. La peur des effets secondaires, le dysfonctionnement des établissements de santé, les ruptures de stock fréquentes et l'opposition des conjoints étaient les obstacles les plus importants à l'utilisation des contraceptifs. Les programmes de planification familiale devraient cibler davantage les résidents des zones rurales afin de les sensibiliser, de dissiper les idées fausses et de promouvoir l'utilisation des contraceptifs. (*Afr J Reprod Health* 2024; 28 [2]: 83-95).

---

**Mots-clés:** Âge de procréer, activité sexuelle, contraceptifs, Nigeria, idées fausses, attitude

---

## Introduction

Ease of access to family planning services is one of the Sustainable Development Goal targets meant to improve population health and reduce the burdens associated with rising fertility rates. Nigeria is one of the countries with the highest fertility rates in the world. The total fertility rate in Nigeria among women of reproductive age (15-49) is estimated to be between 5.5 and 5.7<sup>1</sup>. There are about 214 million women of reproductive age in developing countries, especially young, poor, or unmarried women desiring to avoid pregnancy but unable to do so due to limited access to contraception<sup>2</sup>. As the most populous country in Sub-Saharan Africa, Nigeria remains a focus for increasing contraceptive use<sup>1</sup>, as many sexually active women of reproductive age end up with unwanted pregnancies and most of them seek unsafe abortions, which contribute to the high rate of maternal morbidity and mortality in Nigeria<sup>3</sup>. Therefore, sexually active young women need to have access to and be able to use contraceptives<sup>4</sup>. However, this access to family planning and quality reproductive health services remains poor in Nigeria<sup>5</sup>, and there is a low demand for family planning in the country<sup>6</sup>. Thus, despite more than a decade of family planning programs in the country, limited progress in contraceptive use has been recorded<sup>7</sup>.

It is reported that only 17 percent of currently married women are using contraceptives in Nigeria and only 36 percent demand family planning, while 14 percent and 22 percent are for limiting and spacing, respectively<sup>8</sup>. A woman's choice to use contraception might be influenced by factors such as her traits, religious and cultural characteristics, the contraceptive method, the attitude of healthcare providers, and other perceived constraints in the healthcare system<sup>9</sup>. Since individuals live in the community, their use of contraceptives is also influenced by the community in various ways, such as the community's access to healthcare institutions and infrastructure, the prevailing attitude and behavior, and the socio-economic conditions of the community<sup>10</sup>.

The low use of contraceptives and the unmet needs is also a function of the people's perception which is influenced by numerous factors such as the environment, location, as well

as cultural, educational, and socio-economic backgrounds, misconceptions, gender inequalities, etc.<sup>7,11,12</sup> and people's health-seeking behavior. For instance, despite the numerous awareness campaigns, public education initiatives, and other activities conducted by the government and other public and private organizations, societal beliefs and practices still have a significant impact on Nigerians' health-related behaviors<sup>13</sup>. Also, the socio-cultural environment, education rate, tradition, and overall development level of a particular society or community are critical determinants of childbearing practices<sup>14</sup>.

In rural areas, the provision of family planning services is hindered by a shortage of health workers<sup>15</sup>, poor access of clients to service providers, weak government programs, rural/urban influence, educational status, wealth quintile, and marital status<sup>16</sup>. Progress and universal access to healthcare are impeded when critical healthcare workers are unavailable. This also affects the community's quantity and quality of public health services<sup>17</sup>. The delivery of family planning services, especially for injectables and long-acting reversible contraceptives, in Nigeria, is hindered by the significant shortage of skilled providers<sup>18</sup>.

Several studies have identified barriers to the demand for contraceptives. Such barriers include side effects and health concerns, low level of awareness of the sources and methods of contraceptives, as well as self and spousal opposition to contraceptives use as the commonest reasons for unmet demand, and in some instances, no demands for contraceptives among Nigerian women<sup>19</sup>. Other barriers were the influence of educational attainment and wealth status. Women at the greatest risk of low contraceptive demand and unmet needs were the poor and uneducated rural women<sup>19</sup>. Lack of knowledge of modern family planning methods has also been a barrier to family planning<sup>20</sup>. Although most women consider the use of family planning as a necessary health action, they are not motivated because of the perception of barriers<sup>21</sup> such as perceived or actual side effects of contraceptives<sup>22</sup>, and their husband's disapproval<sup>21,23,24</sup>. In many African societies, especially in rural areas, children are seen as God's gifts, a sign of social prestige, an investment for parents, and a source of security in old age. Thus, women residing in a community where the general desire for many children is prevalent may feel the

social pressure to conform to the societal norm and not use a contraceptive method<sup>25</sup>. Individuals with a solid attachment to friends, relatives, and other community members will conform to the culture of the society<sup>13</sup>.

The attainment of the Sustainable Development Goal number 3 target 7 is invariably linked to planning one's family, improving family health, better care for children, financial stability, and the decision to limit and freely space children. Understanding the local perspectives on fertility, birth, contraception, and family composition is crucial in increasing family planning uptake and promoting retention in family planning programs<sup>26</sup>. Cross River State is one of the states in Nigeria where low contraceptive use and high fertility rates are evident<sup>27</sup>. Only 18.9% of sexually active females between the ages of 15 and 49 are currently utilizing any form of modern contraceptives<sup>8</sup>. Additionally, 35% of married women in the state have unmet family planning needs, which is one of the highest percentages in the country<sup>8</sup>. The state's high unmet needs, especially in underserved rural areas, and the absence of empirical studies in plantation communities in the state, therefore, makes it imperative to undertake this study.

Plantation communities in Cross River, like in most states in Nigeria, lack basic and functional infrastructure like good roads, potable water, health facilities, good schools, electricity, etc. This lack influences the social, political, psychological, and economic lives of residents. It also affects their views/perception of health and health-seeking behavior, and their general utilization of healthcare services. The present study aimed at assessing the perception of and barriers to the uptake of contraceptives among residents of plantation farming communities in Cross River State, Nigeria, to galvanize action towards promoting access and uptake of contraceptives among sexually active women in underserved rural communities in the state.

## Methods

We used a combination of the health belief (HB) model<sup>28</sup> and the four 'As' of access to care (availability, accessibility, affordability, and acceptability). The HB model holds that treatment options likely to be adopted by individuals depend on their perceptions of susceptibility to and

severity of illness; perceived benefit of and barriers to care; cues to action (promoting awareness); and self-efficacy (providing guidance)<sup>28</sup>. The four 'As' of access holds that people take action to address their illnesses if health services are available, accessible, affordable, and acceptable<sup>29</sup>. Using these models, our study provides a better understanding of the perspectives of the users and providers of contraceptives as well as other critical stakeholders within the study sites.

## Study design

This was a multi-sited qualitative descriptive study based on data from key informant interviews and focus group discussions conducted in Cross River State, South-south Nigeria, between March and April 2022. This investigation formed a portion of a broader study to evaluate the perceptions of and barriers to using contraceptives in plantation farming communities.

## Study setting and population

The study population consisted of married and unmarried sexually active women of reproductive age (15-49 years), married men whose spouses are still within the reproductive age, community leaders (village heads, youths, and women leaders), and health care providers resident in three plantation farming communities (Akparabong Farm, Ekom Agoi, and Mbarakom) selected from Ikom, Yakurr, and Akamkpa Local Government Areas. These three LGAs were randomly selected from the eight local government areas in the state with plantation farming communities. Participants for this study were selected purposively. First, village/community heads, youths and women leaders, and healthcare providers were selected purposively as KII participants because they are known community influencers who shape the decision and actions of the locals on daily basis. On the other hand, married women of reproductive age, married men whose spouses are within reproductive age, and sexually active unmarried girls were purposively selected into the FGD groups through the help of community leads. Criteria for their selection were: self-identification as sexually active persons, knowledge of and/or use of contraceptives, and provision of verbal consent to participate in the study.

### **Data collection**

Nine focus group discussions, [(three per community) (FGDs, n=72)], were held with sexually active unmarried women, married women, and men. Each FGD consisted of eight participants. Twelve key informant interviews (KIIs) (four per community) were also conducted with healthcare providers, community leaders, youth leaders, and women leaders in the three communities. We recorded each session once informed consent had been sought and obtained. At the end of each day, the recorded sessions were transcribed verbatim. Participants for the study were purposively selected with the assistance of community leaders to avoid the error of recruiting respondents who did not possess characteristics of interest for the study. Participants were interviewed in English language and pidgin (based on the preference of members of each interview category). All interviews were held in private locations within the communities. The FGDs lasted 60-90 minutes while the KIIs lasted 30-45 minutes. The interview guides for this study were developed and designed by the researchers and were validated. The validation involved content review-which ensured that the guide covered all relevant issues related to the research objective; expert review-which involved submitting the instrument to experts and seeking their feed-back; and pilot-testing the instrument with a small sample of participants in a different locality to look out for any ambiguities in the instruments.

### **Quality assurance**

Fieldworkers with knowledge, skills, and requisite years of experience in qualitative research were trained for two days to enable them to undertake data gathering while community mobilizers were also sourced to guide the fieldworkers in the three communities. One field worker recorded and moderated the discussions while another handled note-taking and documentation of non-verbal cues. The interview guides were written in English and translated (where necessary) into Pidgin English during interview sessions. Translation and transcription of audio recordings were later done in English by the site lead and co-researchers (VAU, NEI and GEB) who listened to the audio recordings to detect discrepancies.

### **Data analysis**

Transcribed FGD and KII data were thematically analyzed using a combination of deductive and inductive analytical techniques. Deductive analysis was done in line with the three *a-priori* (primary) themes: perception of contraceptives, barriers to uptake, and strategies for improving the demand and uptake of contraceptives. Emerging themes: attribution of other ailments to use of contraceptives, and coping strategies for dealing with stock-outs were analyzed inductively. Data were coded by GEB and all team members (VAU, NEI, GEB, and LUO) verified the coded data by reading and rereading the quotes. A codebook was finally generated based on the recurrent *a-priori* themes and emerging themes. To begin the process of analysis, the transcripts were read repeatedly and the data were coded iteratively. This enabled the team to develop a codebook, which contained a list of codes arising from the primary and secondary themes. Items or issues that were interesting in the transcripts were highlighted and dragged into the generated codes that reflect the meanings in the sections of the transcript. Every code and its related texts were assigned a common color to differentiate one code from another. Subsequently, some codes were grouped hierarchically, in the form of a coding tree, to form a predominant theme. To achieve reliability of the coded data, inconsistent codes were verified through discussions among team members until they arrived at a consensus.

### **Ethical approval**

Ethical clearance for the study was obtained from the Cross River State Ministry of Health Research Ethics Committee (REC NO. CRSMOH/RP/REC/2021/223). Oral informed consent was obtained from study participants after the study was explained to them.

### **Results**

The study identified three primary and two emerging themes. The three primary themes are the perception of contraceptives, barriers to the uptake of contraceptives, and strategies for improving demand and uptake of contraceptives. The two emerging themes are: attributing other ailments to the use of contraceptives, and coping strategies for dealing with stockouts.

### **Perception of contraceptives**

The following categories emerged in the perception of contraceptives from our analysis of the data: (1) Eligibility to use contraceptives; (2) Reasons for utilizing contraceptives; and (3) Religious/cultural influence on the acceptance of contraceptives.

#### *Eligibility to use contraceptives*

A significant proportion of respondents believed that married women of reproductive age, who had gotten the intended number of children, should use contraception. Further, the majority held that married women who still want children and sexually active unmarried females should not use contraceptives so that they don't encounter fertility challenges in the future.

*Family planning is good for women who don't want to have children above what they can cater for or the ones they are not ready for, but it has to be used carefully to avoid side effects (FGD married woman, community 2).*

*It is not approved for single girls to use contraceptives; even those married ones that still want to give birth should not use them until they give birth to all the children they want before they use them (FGD married man, community 1).*

#### *Reasons for utilizing contraceptives*

The majority of respondents see contraceptives as a method for preventing pregnancy rather than for spacing births, so they are not aware of the use of contraceptives for spacing. Their views were expressed as follows:

*Since I started hearing of family planning and contraceptives, in school and from the healthcare personnel, the story has always been that it is used to space children. But now, I think it is not doing the spacing work perfectly because it fails a lot of women by either blocking them from getting pregnant or deceiving them into pregnancies that they are not ready for (FGD married woman, community 3).*

*Much of the information we have heard about family planning contraceptives is that it helps*

*women to space their births, but the thing we are seeing and also hearing from those who have used them is that it stops them from getting pregnant when they are ready (KII woman leader, community 1).*

#### *Religious/cultural influence on the acceptance of contraceptives*

People's health-seeking behaviors are strongly influenced by their religious and cultural beliefs. However, there are no cultural or religious barriers to the use of contraceptives in the three communities under investigation. Rather, participants were more concerned about the increasing rate of pregnancy among unmarried women and prefer contraceptives to unsafe abortion to prevent pregnancy.

*Our community forbids abortion, so we encourage family planning to protect ourselves. Religion or culture does not prevent anyone from using contraceptives (KII woman leader, community 1).*

*We advise ourselves and talk to our children to protect themselves because the way our young girls who are not married give birth is alarming and they bring it to punish their parents (KII community/village head, community 3).*

*I have not heard any mother saying that their church is against it. I'm sure that the church will not want its members to do an abortion, so it is important to prevent pregnancy (KII healthcare provider, community 3).*

*The majority of adults including adolescents know about family planning and contraceptives, especially condoms. The only people who may not welcome family planning are those who are practicing abstinence. They are very few and are young people under very strict parenting (FGD unmarried girl, community 2).*

### **Barriers to the uptake of contraceptives**

Respondents indicated six categories of barriers to the use of contraceptives: (1) Insufficient information about contraceptives (2) Non-functional health facility (3) Side effects (4)

Experience of stock outs (5) Preference for many children, and  
(6) Husbands/spouse opposition

#### *Insufficient information about contraceptives*

The majority of respondents agreed that residents of the community lack sufficient information about contraceptives, that the information provided at health centers is insufficient, and that some individuals do not use contraceptives out of fear because they lack adequate education.

*The only nurse in the facility cannot provide information about contraceptives in this big community. Most times, she is even not there (FGD married man, community 2).*

*They (healthcare providers) give information but it is never enough. It is what their friends say that they act on. Also, we don't have enough nurses in the health centers to give the information. But, sometimes the only nurse used to come to our women's meeting to give women information about a lot of things (KII woman leader, community 2).*

However, healthcare providers held a contrary opinion:

*They are provided with the information on family planning, but for side effects, we don't state it except if someone experiences it and comes to us, we will counsel and check the person. If we start by telling them the side effects, the people will be discouraged from receiving the services (KII, healthcare provider, community 1).*

A healthcare provider held a different view on the information provided as noted below:

*They are given full information on the use of family planning. We tell them what family planning is all about, its importance to the individual, family, and society, and its benefit for both husband and wife. We also inform them of the various methods available and their possible side effects and then determine the particular method to be administered to the person (KII healthcare provider, community 3).*

#### *Non-functional health facility*

The majority of the respondents in the communities lamented the non-functionality of the health facilities due to a general lack of health personnel to perform clinic duties and the absence of the contraceptive methods desired by the people, despite recognizing the positive effects of the facility's proximity to the people. Consequently, they frequently travel to other health facilities to obtain contraceptives.

*There is only one nurse in our health facility that sometimes is not available to give the desired services. This is negatively affecting those who may wish to use contraceptives but lack money to look for them elsewhere (FGD unmarried girl, community 1).*

*Our facility is not always open. There is no nurse and no drugs. People go to the chemist or a nearby town (FGD married woman, community 2).*

*If you go to the facility now, you won't find the nurse. The facility is less functional than before. Even the drugs you won't get sometimes. We only have one nurse working in the facility. Our people go to other facilities in town (KII woman leader, community 3).*

*The facility is close, but the challenge is that the women need implants, so they go where they can get them. Also, stock-out is a bit of a challenge. We only have pills and injectables to offer (KII healthcare provider, community 1).*

#### *Side effects*

Perceived or actual experiences of side effects have remained a barrier to contraceptive utilization among women. The side effects of concern were bleeding, weight gain, migraines, cessation of menstruation, and occurrence of pregnancy even when using contraceptives.

*Some people who have received contraceptives before complained of bleeding and that it stops their menses and makes some of them fat, others say it reduces their weight, and some say you can even get pregnant with family*

*planning in them. Because of that some people have refused to go and take it too (KII woman leader, community 1).*

*I'm scared of using contraceptives because I have seen my sister go through a lot of health troubles since she started using implants. She has been experiencing irregular menstruation and persistent headaches. She removed it after two years to get pregnant for the last time, but the pregnancy refused to come (FGD unmarried girl, community 2).*

Two male respondents whose spouses allegedly experienced side effects provided the following responses:

*My wife and I have 2 kids. She used contraceptives to prevent pregnancy for some time. This is now six years after we had our last baby and another one has refused to come after several attempts (FGD married man, community 2).*

*My wife nearly died because of contraceptives. She was using an implant, which she received from a neighboring facility. After five months she started gaining weight and having persistent headaches, and other health problems. She removed it eventually and everything stopped like magic. This is why I am afraid of her using any contraceptive again (FGD married man, community 3).*

### *Experience in stock outs*

The availability of contraceptive methods at the health facility at all times influences contraceptive use. Stock outs of contraceptives, injectables, pills, and implants are a common occurrence in the health facilities of all the communities, according to the majority of responses to a question about the frequency of stock outs in the various communities.

*We do not have male condoms and injectables. Sometimes, I stay up to a week after making the requisition. The one with frequent stock-out is the male condom. As I am talking to you now, we have not had a condom for over a month (KII healthcare provider, community 1).*

*We do not even have a nurse talk less about contraceptives. The people go to the patent medicine stores or to a nearby community that*

*has supplies because there is always a shortage (FGD married woman, community 2).*

### *Preference for many children*

The majority of respondents believed that having a large number of children is advantageous and that children are enormous assets when it comes to supplying labor on their numerous plantations.

*We like many children in my community. We use the number of children we have to boast. We also have food to feed the children, and they help us on the farm. That is why we don't emphasize so much on family planning (KII community/village head, community 1).*

*They are affected by the settlement. They want to have many children to assist them on the farms. You hear them say, our parents had so many children, so I need more children. This mentality is part of the reasons they are not too concerned with contraceptive use (KII healthcare provider, community 2).*

### *Husbands/spouse opposition*

Men's perception and attitudes toward family planning affect their consent. The opposition of husbands/spouses to contraceptives is a major determinant of women's use. The majority of respondents concurred that some men oppose family planning due to their desire for large families. In addition, they believe that contraceptives have negative adverse effects and encourage promiscuity among women. As shown in the following excerpt, the female FGD participants, both married and unmarried reported that the dread of promiscuity and infidelity is the reason why partners do not support the use of contraceptives.

*Some husbands say to my hearing that their wives should not use family planning since they are ready to take care of all the children that will be born (KII community/village head, community 2).*

*The reason I don't approve of family planning is that it is only pregnancy that keeps a woman in the house. If they do family planning, it gives the women a freeway to move from one man to another (FGD married man, community 1).*

For men who support the use of contraceptives, the nation's difficult economic situation is the reason why people should employ contraception to prevent unintended pregnancy, as a participant noted:

*I allow my wife to use it. The economy is difficult, so we have to give birth to the number of children we can cater to (FGD married man, community 1).*

Additionally, some unmarried women held divergent opinions. According to them, only married women encounter disapproval or opposition from their husbands. For instance, a single woman stated:

*The issue of opposition is mainly with the married people. Some boyfriends don't like the use of contraceptives, but I will use them even if my boyfriend does not like them (FGD unmarried girl, community 3).*

### **Strategies for improving demand and uptake of contraceptives**

#### *Intensification of awareness campaigns*

In addition to educating men on the benefits of contraceptives, the top recommendations for increasing the demand and utilization of contraceptives included creating awareness and providing regular sensitization for accurate information so that women know what to do if they experience adverse effects.

*I'm pleading with the government to create more awareness. If there is more awareness, there will be a good change. Enlighten the people, some of these women don't know why they give birth like that, but if the government educates them well, there will be a great change (KII community/village head, community 1).*

*Let the government pay more attention to awareness campaigns to promote more knowledge of the necessity and benefits of family planning, with the assurance of its safety (FGD married woman, community 2).*

#### *Improving the functionality of health facilities*

Respondents believed that the utilization of family planning services can be increased by enhancing the functionality of local health facilities through the recruitment of additional personnel and the provision of desired family planning commodities. Some of their views are captured below:

*We need family planning commodities, and we also need more staff. Yesterday I was called to the local government headquarters; the volunteer mounted the place, and she is limited. Sometimes, I am out for as long as three days, and the facility is non-functional. I also think that we can continue to sensitize and create more awareness of family planning to the people's doorsteps (KII healthcare provider, community 1).*

*Create awareness, employ more professionals, and fix our facility well (FGD respondent married man, community 2).*

#### *Reduction in stock out periods*

Most respondents believed that minimizing stock out periods and making commodities more readily available in healthcare facilities could increase contraceptive use.

*What discourages some of us from doing the family planning thing is that the facility does not always have what we want. If they can regularly have a supply of what we want, I think our patronage will improve (FGD married woman, community 2).*

*Let the government send enough of the family planning medicines to our health centers and always monitor them to be sure there are no shortages, especially the ones with higher demand (FGD married woman, community 3).*

#### **Emerging themes**

##### *Attribution of other ailments to use of contraceptives*

Some believed that contraceptive use contributed to the vulnerability of contraceptive users to other

diseases. This increased their suspicions regarding its safety, thereby discouraging some from utilizing it. Some respondent expressed their opinion on this as follows:

*My wife nearly died because of contraceptive use. She was using an implant, which she received from a neighboring facility. After five months she started gaining weight and having persistent headaches, and other health problems. She removed it eventually and everything stopped like magic. This is why I am afraid of her using any contraceptive again (FGD married man, community 3).*

*Some people who use the implant and maybe get sick of malaria or any other illness will attribute it to the contraceptive because of negative stories heard from others, and so that fear makes them come to take it off (KII healthcare provider, community 3).*

### *Coping strategies to deal with stock outs*

Patronage of patent medicine purveyors (chemists) and visits to health facilities in neighboring communities were employed as a means of coping with persistent stock outs at local facilities. Some respondents held that:

*I know that some of our women who use family planning medicine sometimes go to the chemist to get the family planning injection or tablets if those in the health center are exhausted. That is the only way they help themselves (FGD married woman, 3).*

*The chemist people help to give the contraceptives. Some women even prefer the chemist people because they are always there and they always have the medicine. The only challenge with the chemists' own is that they sell it, so you must be ready to pay for their services (FGD unmarried girl, community 1).*

*When we face stock outs in the facility, some of them go to facilities in neighboring communities to get services. I know it is inconvenient for them, but it is still better than those who cannot get services during our stock out periods (KII healthcare provider, community 2).*

## **Discussion**

The study examined the perceptions of and, barriers to the uptake of contraceptives in three plantation farming communities in Cross River State. Married women were deemed eligible for access to contraceptives, which are regarded as a method of preventing pregnancy. For women to make informed decisions, the information provided by healthcare professionals must be adequate. Fear of adverse effects, dysfunctional health facilities, and husband/spouse opposition were the most significant barriers to the use of contraceptives.

The majority of respondents in our study held a negative view of unmarried women who access and utilize contraceptives. This finding corroborates a report that, in many societies, there is significant resistance to providing contraceptive information and services to unmarried adolescents<sup>30</sup>, with the belief that contraceptives should primarily be reserved for married women<sup>31</sup>. In some cases, the use of contraceptives by women depends on the perception of others. Some women avoid contraceptives due to opposition from their partners, families, and communities<sup>32</sup>. Due to the increase in premarital sex, it is necessary to provide sexual and reproductive health-related services to all adolescents, regardless of their marital status<sup>33</sup>. Nigerian statistics also highlight this need. In Nigeria, 19% of women initiate sexual debut at the age of 15, 57% at the age of 18, and 70% at the age of 20. This trend is increasing, as the percentage of women who initiated sexual activity at the age of 18 increased from 54% in 2013 to 57% in 2017<sup>8</sup>. Similarly, 19% of adolescent girls between the ages of 15 and 19 have begun childbearing, 4% are pregnant with their first child, and 14% have given birth. Consequently, the dearth of contraception among unmarried women leads to unintended pregnancies. In Nigeria, married women are less likely to use modern contraception (12%) than sexually active unmarried women (28%) due to inadequate family planning information<sup>8</sup>.

There was a low level of awareness and low information about those eligible to access family planning contraceptives. Most respondents opined that contraceptives should only be used for stopping and not for preventing or spacing childbirth. This study found a low level of knowledge from respondents on the use of family

planning to postpone or delay childbearing. Other studies also reported similar misconceptions, as respondents were aware of family planning methods but could not make informed choices due to a lack of deeper knowledge<sup>23</sup>. The use of contraceptives for most respondents is for women who have completed their desired fertility. Respondents in a study see the limiting of family size as having adverse outcomes for the economy and food production of the household<sup>34</sup>; this perception may be a contributory factor to the high fertility rates in the country. Many countries had reduced fertility levels by postponing first births and extending the intervals between births<sup>8</sup>.

Findings from the study showed several conceptions, which are significant barriers to the use of contraceptives. They include side effects like bleeding, cessation of menstruation, weight gain or loss, infertility, failure of contraceptives to prevent pregnancies, and the attribution of other ailments to the use of contraceptives. A study in Malawi also showed the non-use of contraceptives by almost half of the respondents due to side effects and interference with bodily processes<sup>35</sup>. As revealed in this study, respondents stressed that contraceptives by women who had not given birth could result in infertility<sup>31</sup>. These misconceptions may be primarily linked to the study's results that information provided by the healthcare workers was inadequate to enable family planning users to make informed decisions. Thus, this predisposes them to heavy dependence on unreliable sources of information. A previous study showed that most respondents cited friends as their primary source of information on contraceptive use<sup>36</sup>, of who themselves may not be adequately informed. These sources often exaggerate side effects like uncontrollable bleeding, enormous weight gain or loss, and the propagation of myths such as infertility and congenital disabilities<sup>22</sup>. Some male respondents also reported that contraceptives make women promiscuous, which corroborates findings from other studies conducted in Nigeria and Kenya<sup>6,22,36</sup>. This perception, which was also reported as one of the challenges faced by women, may be why some male partners may oppose their partners' utilization of family planning contraceptives.

Other challenges and barriers to the uptake of family planning services, like contraceptive stock out, locality of residence, and non-functional

health facility were reported during the study. Stock out of all contraceptive commodities was a regular occurrence in all community health facilities. Previous studies also identified contraceptive stock out<sup>6,23</sup>, as a constraint to choice in contraception<sup>37</sup>. If people experience difficulties in accessing contraceptives, and if it is unavailable and unaffordable, then their sustained use of contraceptives may be a challenge<sup>6</sup>. A condom can be accessed in the patent stores, but affordability poses a challenge. Since injectables and implants are only accessed through health facilities, their use becomes difficult whenever the stock is out. Inaccessibility to clinic-based contraceptives in rural areas was reported as a problem<sup>6</sup>. The lack of functioning health services in the various communities, according to the respondents, prevents more people from using contraceptives. The provision of services in the communities is consistently impacted by this non-functional state. Sterilization, implants, and emergency contraception were not as readily available as they were in secondary and tertiary healthcare facilities in Nigeria<sup>38</sup>. According to earlier studies, the ineffective distribution systems for contraceptives and the shortage of qualified healthcare professionals are barriers to family planning access<sup>39,40</sup>.

Our results also demonstrated that the government and other stakeholders can increase the uptake of contraceptives among the populace by launching intensive awareness campaigns, enhancing the functionality of community health centers, employing well-trained healthcare professionals in all healthcare facilities throughout the state, and shortening the times when contraceptives are out of stock in health facilities. Therefore, government and health-based NGOs should make concerted efforts to ensure that contraceptives are accessible to all areas of the state to ensure their utilization<sup>41</sup>.

This study's findings must be understood based on the following limitations: the study design examines the phenomena - perception of, and barriers to uptake of contraceptives occurring within specific communities. Explanations of the phenomena were produced by eliciting discussions based on lived experiences of the people about contraceptive issues in the communities under study. This study adopted the qualitative method and makes it impossible to establish any cause-and-

effect relationships as would be done in quantitative research. Furthermore, findings from the study may not be generalized owing to the non-randomization of study participants who were purposively selected. However, generalization may only be done on the phenomena under investigation within the study sites.

However, our study has some strength that stands it out. The design and methodology used enabled the triangulation of data from diverse categories of respondents (men, married women, unmarried girls, healthcare workers, and community leaders) who provided robust insights into the phenomena under investigation. The inclusion of men in the study, and consideration of their insights, was particularly strategic. This is because they are critical actors in the women's use of contraceptives within the communities, but are most often neglected during studies of this nature. The study also shows its strength in its ability to recognize and describe contextual issues that contribute to the understanding of perception and barriers to the uptake of family planning contraceptives in the study setting, thereby enabling the making of recommendations that may aid policy making.

## Conclusion

The barriers identified in this study have been reported previously<sup>6,19,34</sup> but are yet to be addressed by stakeholders. Programs should be directed at individuals in rural regions to raise awareness that will minimize misconceptions and unfavorable attributions about contraception and instead encourage use due to the bad perception of those eligible to use contraceptives. To achieve the SDGs' target of ensuring universal access to family planning services and to address unmet needs in the state, the government must also strengthen the health facilities in plantation farming communities by providing them with relevant infrastructure and equipment; and by deploying adequate number of health personnel, with tested and proven capacity and skills, in the rural areas to deliver the desired health services.

## Authors' contributions

VAU, GEB, and NEI, developed the initial research project. VAU, GEB, NEI, and LUO collected the data. LUO, ERI contributed to the

literature search and interpretation of the results. The manuscript was reviewed and approved by all the authors.

## Acknowledgments

All participants involved in the study are acknowledged.

## Funding

The Nigerian Tertiary Education Trust Fund (TeTFund) funded this study.

## Competing interest

None declared.

## References

1. Blackstone SR and Iwelunmor J. Determinants of contraceptive use among Nigerian couples: Evidence from the 2013 Demographic and Health Survey. *Contraception and Reproductive Medicine*. 2017;2(9):1-8. doi:10.1186/s40834-017-0037-6
2. Federal Ministry of Health. Nigeria national family planning blueprint 2020-2024. Abuja, Nigeria, June 2020. Available from <https://www.health.gov.ng/doc/Final-2020-Blueprint.pdf>
3. Akinlusi FM, Rabiu KA, Adewunmi AA, Imosemi OD, Ottun TA and Badmus SA. Complicated unsafe abortion in a Nigerian teaching hospital: pattern of morbidity and mortality. *Journal of Obstetrics and Gynaecology*. 2018;38(7):961-6. doi:10.1080/01443615.2017.1421622
4. Bajoga UA, Atagame KL and Okigbo CC. Media influence on sexual activity and contraceptive use: a cross sectional survey among young women in urban Nigeria. *African Journal of Reproductive Health*. 2015;19(3):100-110.
5. Doctor HV, Findley SE, Afenyadu GY, Uzundu C and Ashir GM. Awareness, use and unmet need for family planning in rural northern Nigeria. *Africa Journal of Reproductive Health*. 2013;17(4):107-117.
6. Ankomah A, Anyanti J, Adebayo S and Gius A. Barriers to contraceptive use among married young adults in Nigeria: a qualitative study. *International Journal of Tropical Disease and Health*. 2013;3(3):267-282.
7. Aransiola JO, Akinyemi AI and Fatusi AO. Women's perception 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): doi:10.1186/1471-2458-14-869
8. National Population Commission (NPC) [Nigeria] and ICF. Nigeria demographic and health survey 2018.

- Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF. 2019.
9. Agbo HA, Ogbonna C and Okeahialam BN. Factors related to the uptake of contraceptive in a rural community in Plateau State, Nigeria: A cross-sectional community study. *Journal of Medicine in the Tropics*. 2013;5(2):107-112.
  10. Ejembi CL, Dahiru T and Aliyu AA. Contextual factors influencing modern contraceptive use in Nigeria. DHS Working Papers No.120. 2015; Rockville, Maryland USA: ICF International. Available from <https://dhsprogram.com/pubs/pdf/WP120/WP120.pdf>
  11. Ansary R and Anisujjaman M. Factors determining pattern of unmet for family planning in Uttar Pradesh, India. *International Research Journal of Social Sciences*. 2012;1(14):16-23.
  12. Hutchinson PL, Anaba U, Abegunde D, Okoh M, Hewett PC and Johansson EW. Understanding family planning outcomes in northwestern Nigeria: analysis and modeling of social and behavior change factors. *BMC Public Health*. 2021;21,1168. doi:10.1186/s12889-021-11211-y
  13. Undelikwo VA and Enang EE. Cultural practices and infant mortality in Cross River State, Nigeria: A sociological perspective. *Mediterranean Journal of Social Sciences*. 2018;9(5):211-220.
  14. National Bureau of Statistics. 2018 Statistical report on women and men in Nigeria. May 2019.
  15. Juma PA, Mutombo N and Mukiira C. Women's attitude towards receiving family planning services from community health workers in rural western Kenya. *African Health Sciences*. 2015;15(1):161-170. doi:10.4314/ahs.v15i1.22
  16. Alenoghena I, Yerumoh S and Momoh AM. Knowledge, attitude and uptake of family planning services among women of reproductive age group attending outpatient clinic at a tertiary health institution in Edo State, Nigeria. *Public Health and Epidemiology*. 2019;11(3):63-70. <https://doi.org/10.5897/JPHE2018.1112>
  17. Okoroafor SC, Ahmat A, Osubor M, Nyoni J, Bassey J and Alemu W. Assessing the staffing needs for primary health care centers in Cross River State, Nigeria: A workload indicators of staffing needs study. *Human Resources for Health*. 2022;19(1):1-10. <https://doi.org/10.1186/s12960-021-00648-2>
  18. Federal Ministry of Health. Nigeria's family planning blueprint (scale-up plan). Federal Government of Nigeria. October 2014. Available from [https://www.healthpolicyproject.com/ns/docs/CIP\\_Nigeria.pdf](https://www.healthpolicyproject.com/ns/docs/CIP_Nigeria.pdf)
  19. Fagbamigbe AF, Afolabi RF and Idemudia ES. Demand and unmet needs of contraception among sexually active in-union women in Nigeria: distribution, associated characteristics, barriers, and program implications. *Sage Journal*. 2018;1-11. doi:10.1177/2158244017754023
  20. Mathe JK, Kasonia KK and Maliro AK. Barriers to adoption of family planning among women in Eastern Democratic Republic of Congo. *African Journal of Reproductive Health*. 2011;15(1):69-77.
  21. Aryeetey R, Kotoh AM and Hindin MJ. Knowledge, perceptions and ever use of modern contraception among women in GA East district, Ghana. *African Journal of Reproductive Health*. 2010;14(4):27-32.
  22. Ochako R, Mbondo M, Aloo S, Kaimenyi S, Thompson R, Temmerman M and Kays M. Barriers to modern contraceptive methods uptake among young women in Kenya: A qualitative study. *BMC Public Health*. 2015;15:118. doi:10.1186/s12889-015-1483-1
  23. Dansereau E, Schaefer A, Hernández B, Nelson J, Palmisano E, Ríos-Zertuche D, Woldeab A, Zúñiga MP, Iriarte EM, Mokdad AH and El Bcheraoui C. Perceptions of and barriers to family planning services in the poorest regions of Chiapas, Mexico: A qualitative study of men, women, and adolescents. *Reproductive Health*. 2017; 14(129). doi:10.1186/s12978-017-0392-4
  24. Ashimi AO, Amole TG, Ugwa EA, Ohonsi AO. Awareness, practice and predictors of family planning by pregnant women attending a tertiary hospital in a semi-rural community of north-west Nigeria. *Journal of Basic and Clinical Reproductive Sciences*. 2016; 5(1): 6-11.
  25. Elfstrom KM, Stephenson R. The role of place in shaping contraceptive use among women in Africa. *PLoS ONE*. 2012; 7(7):e40670. doi:10.1371/journal.pone.0040670
  26. Farmer DB, Berman L, Ryan G, Habumugisha L, Basinga P, Nutt C, Kamali F, Ngizwenayo E, St Fleur J, Niyigena P, Ngabo F, Farmer PE and Rich ML. Motivations and constraints to family planning: a qualitative study in Rwanda's southern Kayonza district. *Global Health: Science & Practice*. 2015;3(2):242-254. doi:10.9745/GHSP-D-14-00198
  27. Undelikwo VA, Ikpi NE, Eteng GB. Factors influencing contraceptive use among women of reproductive age in plantation farming communities in South-south Nigeria. *African Journal of Reproductive Health*. 2023;27(2):67-75.
  28. Rosenstock IM, Strecher VJ and Becker MH. Social learning theory and the health belief model. *Health Educ Q*. 1988;15(Suppl 2):175-83.
  29. Hausmann-Muela S, Ribera JM, Nyamongo I. Health-seeking behavior, and the health system response. London: London School of Hygiene & Tropical Medicine. 2003. P.14. DCPD working paper no.14
  30. Chandra-Mouli V, McCarragher DR, Phillips SJ, Williamson NE and Hainsworth G. Contraception for adolescents in low and middle-income countries: Needs, barriers, and access. *Reproductive Health*. 2014;11(1). doi:10.1186/1742-4755-11-1
  31. Hakansson M, Super S, Oguttu M, Makenzius M. Social judgments on abortion and contraceptive use: A mixed methods study among secondary school teachers and student peer-counselors in Western Kenya. *BMC Public Health*. 2020;20:493. doi:10.1186/s12889-020-08578-9
  32. Moreira LR, Ewerling F, Barros AJD and Silveira MF. Reasons for nonuse of contraceptive methods by women with demand for contraception not satisfied: An assessment of low and middle-income countries

- using demographic surveys. *Reproductive Health*. 2019;16:148. doi:10.1186/s12978-019-0805-7
33. Shukla A, Kumar A, Mozumdar A, Acharya R, Aruldas K and Saggurti N. Restrictions on contraceptive services for unmarried youth: A qualitative study of providers' beliefs and attitudes in India. *Sexual and Reproductive Health Matters*. 2022; 30(1). doi:10.1080/26410397.2022.2141965
  34. Akamike IC, Madubueze UC, Okedo-Alex IN, Anyigor CJ, Azuogu BN, Umeokonkwo CD and Mbachu CO. Perception, pattern of use, partner support and determinants of uptake of family planning methods among women in rural communities in Southeast Nigeria. *Contraception and Reproductive Medicine*. 2020;5(14). doi:10.1186/s40834-020-00120-x
  35. Odland ML, Vallner O, Toch-Marquardt M and Darj E. Women do not utilize family planning according to their needs in southern Malawi: A cross-sectional survey. *International Journal of Environmental Research and Public Health*. 2021;18(8):4072. doi:10.3390/ijerph18084072
  36. Adefalu AA, Ladipo OA, Akunyemi OO, Popoola OA, Latunji OO and Iyanda OF. Awareness and opinions regarding contraception by women of reproductive age in North-west Nigeria. *Pan Afr Med J*. 2018;30:65. doi:10.11604/pamj.2018.30.65.12975
  37. Muhoza P, Koffi AK, Anglewicz P, Gichangi P, Guiella G, OlaOlorun F, Omoluabi E, Sodani PR, Thiongo M, Akilimali P, Tsui A and Radloff S. Modern contraceptive availability and stockouts: A multi-country analysis of trends in supply and consumption. *Health Policy and Planning*. 2021;36(3):273-287. doi:10.1093/heapol/czaa197
  38. Onoja JA, Sanni OF, Ogedengge CO, Onoja SI, Abiodu PO and Abubaka A. Regional variation of family planning services in Nigerian health facilities. *MGM Journal of Medical Sciences*. 2021;18: 24-30. doi:10.4103/mgmj.mgmj\_21\_21
  39. Abdul-Hadi RA, Abass MM, Aiyenigba BO, Oseni LO, Odafe S, Chabikuli ON, Ibrahim MD, Hamelmann C, Ladipo OA. The effectiveness of community based distribution of injectable contraceptives using community health extension workers in Gombe State, Northern Nigeria. *African Journal of Reproductive Health*. 2013;17(2):80-88.
  40. Akinyemi O, Harris B and Kawonga M. Health system readiness for innovation scale-up: The experience of community-based distribution of injectables contraceptives in Nigeria. *BMC Health Services Research*. 2019;19(1):1-11.
  41. Undelikwo VA and Ikpi NE. Education as a determinant of age at first birth and contraception in Calabar South Local Government, Cross River State. *Multi-Disciplinary Journal of Research and Development Perspective*. 2018;7(2):128-134.