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Qualitative Exploration of factors affecting Uptake and Demand for Contraception and other Family Planning Services in North-West Nigeria

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Abstract

In spite of the improvements in knowledge about family planning (FP), the contraceptive prevalence rate and unmet need for FP remain poor in most parts of Northern Nigeria. This study sought to explore specific factors that influence contraceptive uptake and demand in North-West Nigeria. Key Informant and In-depth Interviews were conducted using guides among stakeholders in two selected states in North-West Nigeria, Kebbi and Sokoto States. Interviewees were selected purposively to include Reproductive Health Focal Persons at the local government level, service providers, Women of Reproductive Age (WRA) and FP coordinators. Factors inhibiting contraceptive uptake included lack of health education, religion, fear of spousal rejection and side effects. Poor government funding and inadequate number of health workers were also identified as systemic factors. Suggested methods of overcoming identified challenges include; task-shifting, increased stakeholder participation and political will. (*Afr J Reprod Health 2019; 23[4]: 63-74*).

Keywords: Contraceptive demand, North-West Nigeria, factors affecting FP demand

Résumé

Malgré l'amélioration des connaissances sur la planification familiale (PF), le taux de la prévalence contraceptive et les besoins non satisfaits en PF restent pauvres dans la plupart des régions du nord du Nigéria. Cette étude a cherché à explorer des facteurs spécifiques qui influencent l'adoption et la demande des contraceptifs dans le nord-ouest du Nigéria. Des entretiens avec des informateurs clés et approfondis ont été menés à l'aide de guides parmi les parties prenantes de deux États sélectionnés du nord-ouest du Nigéria, les États de Kebbi et de Sokoto. Les personnes interrogées ont été choisies à dessein pour inclure les personnes focales en santé de la reproduction au niveau du gouvernement local, les prestataires de services, les femmes en âge de procréer (FAP) et les coordinateurs de PF. Les facteurs inhibant l'adoption des contraceptifs comprenaient le manque d'éducation sanitaire, la religion, la peur du rejet du conjoint et les effets secondaires. Le financement insuffisant du gouvernement et le nombre insuffisant d'agents de santé ont également été identifiés comme des facteurs systémiques. Les méthodes suggérées pour surmonter les défis identifiés comprennent: le transfert de tâches, la participation accrue des parties prenantes et la volonté politique. (*Afr J Reprod Health 2019; 23[4]:63-74*).

Mots-clés: Demande des contraceptifs, nord-ouest du Nigéria, facteurs affectant la demande de PF

Introduction

Nigeria is traditionally a nation with high total fertility and rather high unmet need for contraception. In 2016, the total fertility rate (TFR) was ranked second highest in the West

African region and the 13th in the world¹. A detailed breakdown shows that the Northern region of Nigeria has the greater portion of Nigeria's total fertility rate of 5.5 live births per woman, with the highest TFR of 6.7 in the North West as against 4.3 births per woman in the South-

South². This situation has been linked to increased maternal and infant mortality rates experienced in the region. A primary link remains the lower birth intervals noticed among women with higher fertility rates³. Lengthened intervals between births have proven to help maternal and child health by allowing mothers time to recover from their previous pregnancy and delivery, and allowing surviving children more time for breastfeeding and less competition with other siblings over resources such as food and the mother's time⁴. As such, increasing the intervals between births serves as a major means of reducing maternal mortality rates.

Another factor that has been linked with high fertility rates is low age at first birth⁵. Child bearing at an early age poses substantial health risks for both the mother and the child. Early pregnancy is reported to contribute to an estimated 70,000 maternal deaths worldwide annually among girls aged 15 to 19. An infant's risk of dying is 60 percent higher when the mother is under 18 years of age compared to older mothers⁵. According to the Gates Foundation theory of change, increasing contraceptive uptake as soon as sexual activity commences remains the major means of delaying age of first birth and/or increasing birth spacing and consequently, reducing maternal and infant mortality as well as the total fertility rate. As such, several interventions in Nigeria aimed at improving contraceptive uptake have been implemented⁶.

Literature has shown that there are 2 main drivers of contraceptive uptake namely demand and supply⁷. Demand for contraception, among other factors, demonstrates the willingness to use contraceptives which will in turn inform decisions about supply. The demand side of contraceptive uptake has received attention from government, donor programs and other non-governmental organizations. The aim of demand generation activities is to foster dialogue about family planning, increase social approval for FP and improve knowledge and perceptions of family planning methods^{7,8}. Although the awareness and use of contraceptives have improved slightly, the proportion of Nigerian women using contraceptives remains low⁹. Low modern contraceptive prevalence rate has been attributed

to several factors which fall mostly into socio-cultural, religious, and access-related factors¹⁰.

In the context of the North Western region of Nigeria, socio-cultural factors are usually intertwined to form a very formidable barrier to demand for family planning¹¹. Another factor that severely impedes the uptake in the North West remains the divided opinions over the view of Islam, the dominant religion in the North, on family planning¹². Wolf *et al.* explained that many Muslim clerics have differing views on the use of contraceptive use¹³.

In addition, Austin describes women practicing Islam as having a preference for large families, discouraging them from considering contraceptive use and much less a modern method⁸. Other factors such as fear of spousal rejection and misinformation about the modern contraceptive methods may also contribute to the low contraceptive uptake. Further drawing on these themes, Ankomah, *et al.* in a qualitative study found that many men from Northern Nigeria (including the North West) believed that allowing their spouses to use modern contraceptive methods was synonymous to giving them the freedom to engage in sexual promiscuity and as such were vehemently against modern contraceptive methods¹¹. Any talk of family planning and/or modern contraceptive use is almost futile¹³.

The fear of side effects, imagined and real, of modern contraceptive methods, form another factor that studies have found to be influencing contraceptive demand and uptake. Imagined side effects such as accumulation of 'dirty blood' which causes abdominal protrusion, permanent infertility and others have been stated by several women as preventing them from using modern contraceptive methods¹³. Some of the side effects have led to discontinuation of contraceptive use in almost a quarter of Nigerian women in 2013². In addition, negative reviews about side effects of these methods spread and others become discouraged about using them¹¹.

While the above narrative provides a broad body of knowledge of the contraceptive situation in Northern Nigeria, there continues to be a dearth of studies describing the current contraceptive situation in specific political zones

such as North-West Nigeria. This study aims to provide this information by answering the question- are there factors particular to North Western Nigeria that uniquely or strongly affect contraceptive use? This information will be provided by investigating the factors that are driving contraceptive demand within the region as this is critical to ensuring that appropriate, people-specific policies are developed and implemented.

Methods

Study sites

The research was conducted in two states in North-West Nigeria, namely Sokoto and Kebbi States. Sokoto State lies to the north-west of Nigeria and consists of twenty-three (23) Local Government Areas (LGA). Sokoto state is ranked 14th in Nigeria based on the population of each state. Kebbi State was created out of a part of Sokoto State in 1991, it has a total area of 36,800 km². The State has a total population of 3,137,989 people as projected from the 1991 census, within 21 LGAs. Both states have almost similar socio-cultural characteristics. The people of Kebbi and Sokoto states are predominantly Muslims.

Study design, study population and study site

This study employed qualitative methods using In-depth Interviews and Key Informant Interviews (KIIs) among Family Planning (FP) focal persons in each Local Government Area (LGA) and community representative/stakeholders from religious, traditional/village/groups from each local government selected in the study sites. Two LGAs were selected randomly per state-one urban and another rural. The LGAs selected are Argungu, Aliero, Sokoto-North and Sokoto-South. These were randomly selected from the 6 LGAs in each state where the UNFPA project worked. The LGAs were specifically selected to allow a convergence in our findings across the groups and these findings would not have changed if we had interviewed people in more LGAs.

Sampling technique

A total of 250 participants were recruited for the focus group discussions (FGDs) through a

purposive sampling - a non-probability sampling method. The participants in FGDs were women aged between 15 and 45 years who were resident in the selected communities in Sokoto State. A total of 119 and 131 women were involved in the FGDs sessions in Sokoto and Kebbi states respectively. Data was collected through twenty-four FGDs with between 8 to 10 participants in each group. The focus groups were females only and were divided into four age categories: 15-18 (adolescents) year olds, 19-24 year olds (young adults) 25-35 years old (mid-adults) and 36-45 year olds (older adults). The summary of socio-demographic characteristics of women in the FGDs groups are shown in Table 1.

Eight key informant interviews (KIIs) were conducted for 1 LGA FP focal person and 1 community representative (women group leader) from each of the selected local government areas in the state. These groups are presumed to be more knowledgeable about FP and may be more readily disposed to discussing issues around perceived obstacles to contraceptive uptake.

Data management

Instrument for data collection

A Key informant and In-depth interview guide was developed. The interview tool included a list of open-ended questions the researcher used to explore the respondents' opinion and beliefs about contraceptive uptake and demand for FP. The tool was developed to start with probing questions on the most factual and easy-to-answer questions, then followed with those questions that ask informant's opinions and beliefs about the topic.

Data collection procedure and implementation

Recruitment and selection of interviewees were carried out using selection criteria such as willingness to work, ability to read and write in English and Hausa language, familiarity with the geographical and household setting of the data collection site and good communication skills among others.

Data analysis

Data from the interviews were transcribed and analysed with the aid of NVIVO version 10 using

Table 1: Characteristics of women in North-East, Nigeria

Age	Muslims	Non-Muslims
15 – 24 years	22	12
25 – 35 years	99	36
36 – 45 years	60	12
Total	181	59

The thematic framework approach to qualitative data analysis. A thematic framework was developed from emerging themes in the interviews. This was done after each interview to enrich subsequent interviews. As themes emerged, they were indexed and compared with themes from subsequent interviews until a sense of attainment of saturation was achieved.

Results

Level of knowledge about FP

Generally, respondents in all FGDs agreed that the level of knowledge among WRA in their respective LGAs was poor with many women being unaware of the different family planning methods. One of the interviewees summed up the situation by saying

“...knowledge is very limited. Enlightenment is very poor” (Community Representative, Aliero LGA).

The exception to this trend was in Sokoto South LGA. The community representative said

“Here in Sokoto South, knowledge about family planning is very high. People are aware of different methods” (Community Representative, Sokoto South LGA).

The family planning coordinator also agreed with the view, rating the level of knowledge of family planning in the LGA as high. She relates

“I will give them 80%...When a woman comes to you for service; she already knows most of the methods with advantages and disadvantages, the side effect etc. They are very knowledgeable about [family planning] here” (FP Coordinator, Sokoto South LGA).

Interestingly, the situation was the same in Sokoto North LGA. A respondent affirmed in FGD session 3 in Sokoto state that

“The reason [for the high level of knowledge] is that Sokoto North is the heart of Sokoto”.

Similarly, the Community Representative interviewed claimed

“The urban area of Sokoto caliphate, people here are more educated and enlightened compared to other part of Sokoto [Sokoto North]”.

The importance of cultural factors such as influence of husbands and older women were also expressed by some of the respondents. For example, one of them lamented

“The problem is those old people and women, they are the ones that have the problems and influence young uneducated women against contraceptive use” (FP Coordinator, Sokoto North, KII).

Similarly, another respondent highlighted

“Everything here is all about your husband. You can't do anything without your husband here, so knowledge is very limited” (Community Representative, Aliero LGA).

Another respondent spoke along the same lines when she categorically stated

“...some men do not still allow their wives” (FP Coordinator, Sokoto South LGA).

Even though many of the respondents acquiesced that the level of knowledge on family planning in their LGAs was low, many hoped that the situation would improve in the near future with the implementation of some interventions such as the house-to-house campaigns by community health volunteers (CHVs). A respondent from a LGA with reported low knowledge about family expressed this hope stating,

“The community volunteers trained have been moving from house to house so knowledge is increasing gradually” (FP Coordinator, Argungu LGA)

On the other hand, mass media was the medium of choice when respondents in Sokoto South, where the knowledge level was high, were asked on what could be done to maintain the high knowledge levels reported in the LGA. One of them suggested

“We can continue to increase awareness especially on the television and radio.” (FP Coordinator, Sokoto South LGA).

Perception of family planning services and contraceptive use

Most (86%) of respondents in the FGDs agreed that the perception of WRA towards family planning and contraceptive use was improving as more and more of them were open to using contraceptives now than in past periods. One respondent from the KII opined that

“Things are getting better now, before women are meant to stay home, get pregnant, deliver children and take care of them.” (FP Coordinator, Argungu LGA).

Another respondent from the KII agreed with this supposition, as she also admitted that the perception is improving due to a generational change accompanied with improved education when she said:

...now, with more education, more younger generation coming up, with more training, more sensitization more everything, so things are getting better honestly, and we are getting there and I think I am sure in another couple of years, when you come around again, it (perception towards contraceptive use) is going to be 70 -80% (FP Coordinator, Sokoto North)

Despite this positive outlook towards the acceptance and uptake of contraceptives, some (56.4%) of the respondents in the FGD sessions identified sensitive misconceptions about

contraceptive use that have hindered the rate of uptake of contraceptives in the Northern parts of Nigeria. Describing the role of religion, a respondent in the KII declared

“In Islam, they say it is forbidden for a woman to stop herself from getting pregnant or people from getting more children. So, that is how they see it” (FP Coordinator, Sokoto North LGA)

Factors Influencing Contraceptive uptake

Health education, age at marriage, gender mix of living children and number of living children were additional factors identified by the respondents in the FGDs as affecting the uptake of contraceptives in their regions. The link between health education and contraceptive use was explained to go further than the women but rather extended to religious leaders. A respondent emphasized this point by stating that

“Because of health education (of the religious leaders), the religious leaders are now supporting for child spacing” (Community Representative, Argungu LGA).

The practice of marrying at an early age, as well as an abundance of male children are key factors that encourage contraceptive uptake as women with many children, some of who have male children feel secure in their husband’s house. Highlighting this, a respondent explained

“Many women get married at young age when they are in their mid-twenties above and they already have about six especially when they need male children. When they have many already, they go to the facility for contraceptives” (Community Representative, Sokoto South LGA).

Figure 1 is an illustrative map of the interrelationships found between factors and barriers affecting FP uptake using respondents’ feedback. One of the central barriers as stated by both health workers and community women is spousal rejection of FP. Spousal rejection is usually influenced by

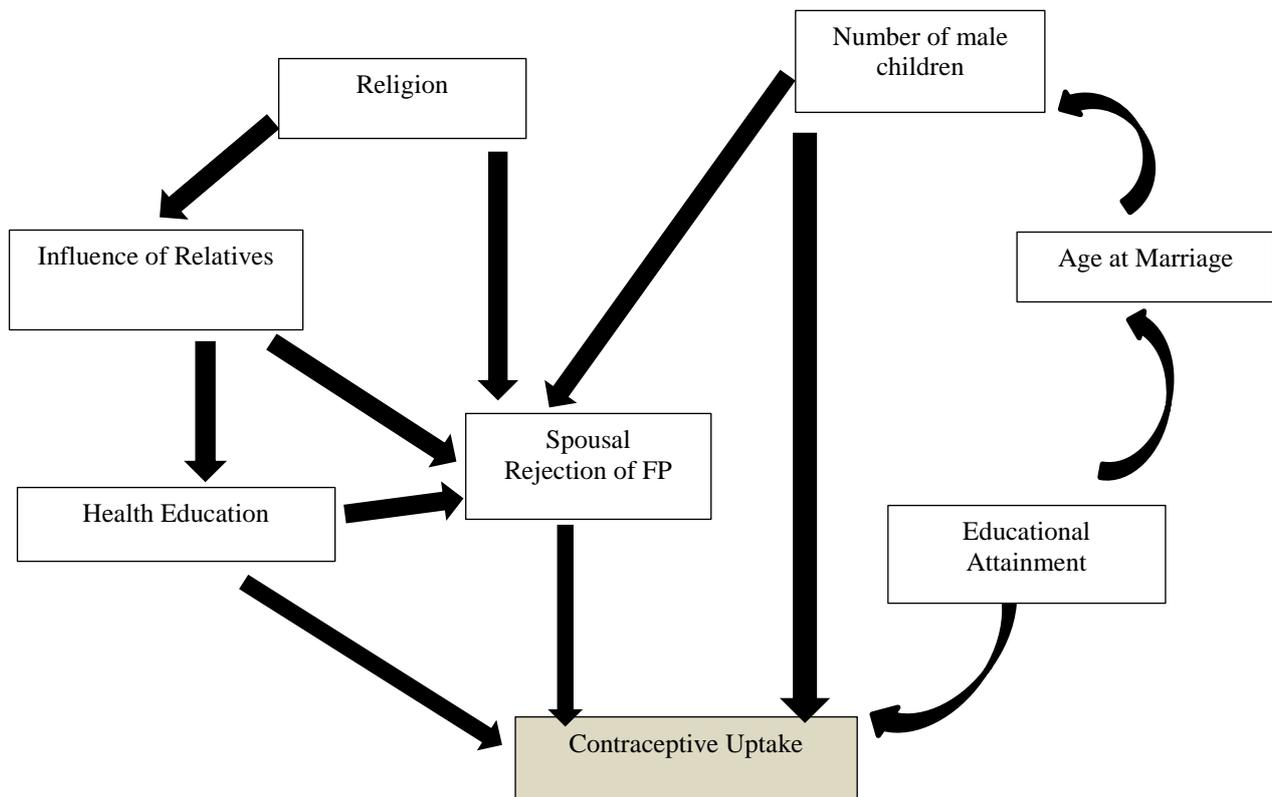


Figure 1: Mapping of factors and barriers associated with contraceptive uptake in North West Nigeria

socio-demographic (educational attainment, religion etc.) and cultural (influence of relatives, number of male children etc.) factors. In most cases, respondents associated spousal rejection with poor contraceptive uptake. Similarly, educational attainment, while directly influencing contraceptive uptake, also plays an indirect role as women with lower educational attainment were likely to marry at a younger age and in turn have more children. Religion, ignorance, low educational status and spousal rejection were recurrent issues that virtually all the respondents commented on as regarding the barriers to contraceptive use in their areas. Explaining this, one respondent said

“We are bound by religion... they say family planning is Haram that means it is forbidden... If she even has some medical issues she cannot, she will say no, it is Haram” (FP Coordinator, Sokoto North LGA).

Another respondent expressed the same view when she commented

“Islam said woman should not be stopped from getting pregnant and deliver babies which our religion focuses on” (Community Representative, Sokoto North LGA).

The influence of spousal rejection as well as the extent of power men have on their wives in reducing the uptake of contraceptives was attested to by most of the respondents, such as this respondent who commented

“Here, whatever your husband says is the final, so for some women, their husband will not allow them” (FP Coordinator, Argungu LGA).

Explaining the length to which some men would go to ensure that their wives do not use contraceptives, one respondent stated

“So the men will stop their women, they will already tell you as you are getting married that it is Haram. Some will even make them to vow, they will make them to swear even before you marry, that you will not do family planning” (FP Coordinator, Sokoto North).

Regarding what can be done to overcome these barriers, respondents identified health education, education on contraceptive use and side effects as well as integration of religious leaders in the discussion on contraceptive uptake as possible routes to overcoming the barriers earlier expressed. Expressing this opinion, one respondent in Kebbi State said that the keys to overcoming the barriers to contraceptive uptake include

“health education from house to house and community dialogue with men and religious leaders in the community” (Community Representative, Argungu LGA).

Also, reiterating this view, another respondent from Sokoto explained that the solutions include:

...community dialogue, invite our religious leaders. Here in Sokoto, the opinions of religious leader especially the sultanate council are more followed and respected than that of even the governor or senator or anybody so invite them to the dialogue with health education (Community Representative, Sokoto South LGA)

In addition to these suggestions, the importance of involving men in the health education interventions was highlighted by some of the respondents who recalled that spousal rejection was one of the barriers to contraceptive uptake. Bringing this to the fore, a respondent from Sokoto state said:

It is also important to involve the men, since they are the one that have the final say once the men are involved, the whole problem of family planning will be solved. They will also be able to talk to their fellow men about it. Community dialogue

and compound meeting involving men to discuss the benefits of family planning are very important. (Community Representative, Sokoto North LGA).

Demand for FP services including contraceptives

The demand for FP services including contraceptive use was noted by all respondents to be on the rise in their respective areas albeit to varying degree and for different reasons. While some respondents said the demand increased across all women, others believe that the increase in demand is specifically among the educated or those who have meet health workers. One respondent noted

“The demand is increasing now unlike before” (Community Representative, Argungu LGA).

Although another respondent agreed with this view, she believed the increase in demand was due to health education activities carried out by various agencies. She said

“The people trained by the Association for Reproductive and Family Health (ARFH) have been moving around so uptake has increased gradually. They are coming, especially this new Sayana Press, it has gotten through, and they are coming” (FP Coordinator, Sokoto North LGA).

A community representative also agreed with this when she said,

“It is free of charge everywhere” (Community Representative, Argungu LGA).

Contraceptives consumer segments and profiles

All the respondents interviewed said that in their respective areas, there was no discrimination as to who was administered FP services and contraceptives. However, except for respondents from Sokoto South LGA, all others pointed out the fact that the married women were more

comfortable openly obtaining FP services and/or contraceptives, with unmarried women using other means such as obtaining from chemists or sending their boyfriends to obtain the contraceptives for them. In Kebbi State, one respondent said,

“Anybody can demand for contraceptive... some that are not married, their boyfriend will buy the drug for them in the chemist” (Community Representative, Aliero LGA).

Further buttressing this view, another respondent from Sokoto State agreed that unmarried women may be wary of the social stigma attached with their openly obtaining contraceptives. She explained

“Anybody can demand for contraceptive and family planning but if you are not married, people will gossip about it especially all these young ones” (Community Representative, Sokoto North LGA).

In Sokoto South, however, the situation was slightly different as the respondents indicated a greater willingness by unmarried women to openly obtain contraceptives. A respondent frankly stated

“Now, since people are educated, not only married people accept family planning, even school girls, highly educated girls in the university even secondary schools come for contraceptives” (FP Coordinator, Sokoto South).

Contraceptive preferences

The injection and the pill were the two contraceptive methods of choice in the areas covered, according to the interviewees. For example, a respondent observed that

“the married women will prefer to go for injection, the ones that are not married take pills” (FGD group1, Sokoto South LGA).

However, while explaining further, the interviewees gave several reasons, such as length

of action, privacy and ease of use, as being responsible for consumer preference, while at the same time noting that the pill was more common among unmarried women while the injection was more acceptable among the married women. A respondent put it this way:

“Yes, they prefer the injection and the implant because the pills you must take it every day, that is what stop people from accessing it. But the injections when you take it, until around 3 or 2 months before you come back again. So, they prefer the injection and the long term, yes long acting” (FP Coordinator, Sokoto North)

Still expressing the same sentiment, but from a different angle, another respondent explained her own view in the following words

“The drugs; the pills, it is easy and private. The injection is like ‘permanent’ pregnancy prevention method here. So, the pills are what is preferred” (Community Representative, Aliero LGA).

Government programs addressing the delivery of contraceptives

When quizzed about the government programs in their area, the respondents all agreed that they had a government program addressing contraceptive delivery. However, when citing examples, all of them went on to name donor agencies and programs. One of the respondents said

“We have a lot of programs from ministry of health, from...before we had TSHIP, we had USAID, there is another PLAN international. There are a lot of them that used to come, PPFN, yes that is... another one” (FP Coordinator, Sokoto North LGA).

Opinions however varied as to the level of collaboration by the state and these partners with one respondent claiming that

“No, the ministry is just supporting them” (FP Coordinator, Sokoto North LGA).

Another respondent from the same state, but a different LG gave a contrasting opinion by saying

“They work together... I have to collate their data and submit report” (Sokoto South LGA).

Most of the respondents said that they were aware of budgetary provisions for FP but however lamented non-release of such funds. A respondent put it this way:

“Yes, they make budget now that one is usual, they must make budget about family planning, they must make budget about it but the problem is that you are not in the picture. There is budget, but they don't release the money especially when they have a lot of donor organizations coming to assist. That is why they will just relax and hold their money” (FP Coordinator Sokoto North LGA)

Stock out of commodities

There were differing opinions on the availability of commodities in the LGAs. Just one of the respondents claimed that they had never had stock-out of commodities, saying

“For the past five years, there has been no out of stock of any commodity. Thanks to [donor agencies]. They provide all the commodity, they go to our clinics they go there with their vans” (FP Coordinator, Sokoto North LGA).

However, this view was countered by the other respondents in other LGAs and state. She complained

“We do experience stock-out sometimes. Even now, we have no commodity and our providers are complaining that they do not have any commodity” (FP Coordinator, Sokoto South LGA).

Discussion

On the average, awareness and knowledge of FP including contraceptives were found in the current

study to be very high indicating that most of the respondents had heard of contraceptives. Other studies have identified awareness of FP services including contraceptive use as the important first point in the continuum that leads to contraceptive uptake^{4,15,16}. A notable finding of the current study is that an appreciable portion of interviewees cited social networks such as family members and older women as their main source of information on contraceptives. Thus, the social network transmission route appears to be an important one in the dissemination of information about FP services in the region.

Despite the high level of awareness reported in the current study, differentials still point to skewed distribution, exposing factors that affect the level of knowledge of different segments of a population about contraceptive use. Urban residents and those completing tertiary education were found to be more likely to be aware of contraceptives than their counterparts living in semi-urban areas and with no formal education. Similar differentials were observed in other studies carried out in North Western Nigeria^{12,17}. This uneven level of awareness and knowledge among different groups in the population may have the potential to hamper efforts to increase FP uptake if not properly addressed⁸.

There was a mixed perception of WRA to contraceptives in the current study. Most respondents believed that the notion of FP contradicting Islamic beliefs was at the root of the negative perception of FP including contraceptives. Studies by Ejembi *et al* in Northern Nigeria and Mohsena and Kamal in Bangladesh, both predominantly Muslim settings, have discussed the similar controversies, with both studies reporting majority of their sample abstaining from contraceptives due to religious reasons^{9,17}. Another controversial aspect of the respondents' perception was that using contraceptives would make a woman promiscuous. This view has also been expressed by Adongo *et al.* and Ochako *et al.* who reported similar findings in other African settings and how they impact negatively on the likelihood of using contraceptives^{19,20}.

When considering other contextual factors that affect FP uptake, the current study found that

being a Hausa, being in a polygamous family setting and not completing basic formal education were substantially linked with non-use of contraceptives. Similarly, the respondents in the current study listed the presence of male children and parity as important factors that affect the uptake of contraceptives in the state. Anjum *et al.* highlighted the importance of family settings in contraceptive uptake while Kabagenyi *et al.* demonstrated that cultural factors also play an important role in shaping the mindset of WRA towards contraceptive use^{13,21}. In addition, in Northern Nigeria, there is a strong expectation that women will bear many children which is likely to be internalized by Hausa-Fulani women¹⁶. Furthermore, the major reasons given by Avidime *et al.* for not currently using contraceptives were partner disapproval and ignorance on contraceptives. Anjum *et al.* and Shittusup *et al.* have discussed the importance of providing adequate information to WRA to enable them make informed decisions about contraceptive uptake^{21,22}.

One of the strategies that could boost contraceptive uptake discussed in the current study was the inclusion of the male folk in the discussion about contraceptives. Community dialogue sessions which include their religious leaders were also noted by respondents as possible strategies that will encourage the uptake of contraceptives in the state. Berhane and OlaOlorun and Hindin have suggested contrary opinions, highlighting the reluctance of men in similar settings to that of the study site to discuss contraceptive matters as they believe it 'diminishes' their manliness^{23,24}. However, some studies have demonstrated that including men in discussions about contraceptives usually leads to improved contraceptive uptake among WRA with partners²⁵.

Majority of women in the study obtained their contraceptive methods from the health center, followed by the Proprietary Patient Medicine Vendors (PPMVs). Most of those WRAs who were not currently married, preferred obtaining their contraceptives from PPMVs due to the fear of stigmatization. Studies have found that fear of stigmatization is a real hindrance to contraceptive uptake^{26,27}.

Most of the providers stated that health facilities entirely depend on donor organizations for supply of FP materials, while women seeking to accept contraceptive are responsible for purchasing required consumables. Other studies have shown similar challenges and lack of commitment from government^{31,32}.

A quantitative assessment may have shown a clearer inferential conclusion on some of the findings in this study. The qualitative approach does not allow for ease of determination of association between variables. This was a major limitation with the present study. A larger sample size from more LGAs could highlight more in-depth differences in opinion of WRA. However, representative proportion of the respondents were specifically selected to allow a convergence in our findings across the groups and these findings would not have changed if we had interviewed people in more LGAs.

Ethical Considerations

Ethical approval was granted by the Sokoto State Ministry of Health Ethical Review Committee and permission to conduct the study was granted by local community leaders, local government officials and other stakeholders.

Conclusion

This study investigated the current state of contraceptive use in North-West Nigeria as well possible factors that affect the uptake of and demand for FP services including contraceptive use.. The need to ensure that BCC campaigns reach the less educated who are more likely to live in rural backgrounds is also highlighted.

It is notable however, that demand for FP services including contraceptive use was noted by all respondents to be on the rise in their respective areas, with observations indicating that the educated women are more likely to drive demand. There remains the need to enlighten uneducated WRA on FP as well help stimulate couple-discussions on FP in order to overcome spousal rejection of FP as a barrier to contraceptive uptake. Spousal rejection, religious beliefs and influence

of other family members were found to be critical factors associated with uptake of FP services including contraceptive use. Overcoming these potential barriers will require innovative strategies such as including men and religious leaders in the discussion about FP uptake including contraceptive use, which have been successful in similar settings.

Policy Implications

- The power of social networks in influencing reproductive health, as noticed in this study, warrants more attention as this channel may serve as an effective route of effecting FP behavioral change.
- Increased political and financial buy-in, especially at the state and local government levels, needs to be developed, for reproductive health programs to succeed in increasing contraceptive uptake in the region.
- Policies that allow larger pool of providers to be available in all channels, such as task shifting should be positioned to address the problem of inadequate manpower plaguing the public health system in the North.

Given the contextual factors uncovered by this study, community-based contraceptive delivery should be given more attention as this can help to remove the problem of fear of stigmatization plaguing single WRA seeking contraceptives. When delivered by persons within to the community, it also stands a chance of gaining higher acceptability.

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Contributions of Authors

Adewole A. Adefalu (AAA) and Oladapo A. Ladipo (OAL), conceptualized and designed the study; AAA, Oluwaseun O. Akinyemi (OOA) and Oluwafemi A. Popoola (OAP) carried out data collection; OOA, OAP, Olajimi O. Latunji (OOL) performed data analysis; while AAA, OOL and

Omowunmi Iyanda (OI) prepared the manuscript. All authors read and approved the manuscript.

References

1. Central Intelligence Agency . The World Factbook: Country Comparison. 2012 <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2102rank.html> (accessed 25 Dec 2016).
2. National Population Commission [Nigeria] and ICF International. Nigeria Demographic Health Survey (NDHS) 2013. *Househ Popul Hous Charact Natl Popul Comm NPC Fed Repub Niger Abuja Niger*2014;;11–29.
3. Speizer IS, Corroon M, Calhoun L, Lance P, Montana L, Nanda P and Guilkey D. Demand generation activities and modern contraceptive use in urban areas of four countries: a longitudinal evaluation. *Glob Health Sci Pract*2014;2:410–426.
4. Goliber T, Sanders R and Ross J. Analyzing Family Planning Needs in Nigeria: Lessons for Repositioning Family Planning in Sub-Saharan Africa. *Futur Group Health Policy Initiat Task Order 1* Published Online First: 2009.http://www.healthpolicyinitiative.com/Publications/Documents/996_1_Nigeria_FamPlan_FINAL_12_3_09_acc.pdf (accessed 27 Dec 2016).
5. Godha D, Hotchkiss DR and Gage AJ. Association between child marriage and reproductive health outcomes and service utilization: a multi-country study from South Asia. *J Adolesc Health*2013;52:552–558.
6. United Nations. *The millennium development goals report 2009*. United Nations Publications 2009. <https://books.google.com/books?hl=en&lr=&id=wDr05dHnTk4C&oi=fnd&pg=PA3&dq=The+Millennium+Development+Goals+Report+2009&ots=UcE5bjrAHN&sig=3Tk17IoOvg4fNJB8-lxe2PO2erk> (accessed 27 Dec 2016).
7. Fotso JC, Ajayi JO, Idoko EE, Speizer I, Fasiku DA, Mberu B and Mutua M. Family Planning and Reproductive Health in Urban Nigeria: Levels, Trends and Differentials. Measurement, Learning & Evaluation Project 2011. <http://www.urbangateway.org/sites/default/ugfiles/Levels,%20Trends%20and%20Differentials.pdf> (accessed 27 Dec 2016).
8. Austin A. Unmet contraceptive need among married Nigerian women: an examination of trends and drivers. *Contraception*2015;91:31–38.
9. Asekun-Olarinmoye EO, Adebimpe WO, Bamidele JO, Odu OO, Asekun-Olarinmoye IO and Ojofeitimi EO. Barriers to use of modern contraceptives among women in an inner city area of Osogbo metropolis, Osun state, Nigeria. *Int J Womens Health*2013;5:647.
10. Ejembi CL, Alti-Muazu M, Chirdan O, Ezeh HO, Sheidu S and Dahiru T. Utilization of maternal health services by rural Hausa women in Zaria environs,

- northern Nigeria: has primary health care made a difference? *J Community Med Prim Health Care*2004;16:47–54.
11. Ankomah A, Anyanti J, Adebayo S, and Giwa A. Barriers to Contraceptive Use among Married Young Adults in Nigeria: A Qualitative Study. Published Online First: 2013.<http://imsear.li.mahidol.ac.th/handle/123456789/153265> (accessed 27 Dec 2016).
 12. Odimegwu CO. Family planning attitudes and use in Nigeria: a factor analysis. *International Family Planning Perspectives*1999;Jun 1:86-91
 13. Wolf M, Abubakar A, Tsui S and Williamson NE. Child spacing attitudes in northern Nigeria. *VI FHI Arlingt* Published Online First: 2008.<http://www.cisfp.org/download/Child%20Spacing%20Attitudes%20in%20Northern%20Nigeria.pdf> (accessed 27 Dec 2016).
 14. Kabagenyi A, Reid A, Ntozi J and Atuyambe L. Socio-cultural inhibitors to use of modern contraceptive techniques in rural Uganda: a qualitative study. *Pan Afr Med J* 2016;25.<http://www.panafrican-med-journal.com/content/article/25/78/full/> (accessed 11 Jan 2017).
 15. Williamson LM, Parkes A, Wight D, Petticrew M and Hart GJ. Limits to modern contraceptive use among young women in developing countries: a systematic review of qualitative research. *Reprod Health* 2009;6. doi:10.1186/1742-4755-6-3
 16. Avidime S, Aku-Akai L, Mohammed AZ, Adaji S, Shittu O and Ejembi C. Fertility intentions, contraceptive awareness and contraceptive use among women in three communities in Northern Nigeria. *Afr J Reprod Health*2010;14:65–70.
 17. 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. *J Med Trop*2013;15:107.
 18. Mohsena M and Kamal N. Determinants of Contraceptive Use in Bangladesh. *Ibrahim Med Coll J*2016;8:34–40.
 19. Adongo PB, Tabong PT, Azongo TB, Phillips JF, Sheff MC, Stone AE and Tapsoba P. A comparative qualitative study of misconceptions associated with contraceptive use in southern and northern Ghana. *Front Public Health*2014;2:137.
 20. 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;15:1.
 21. Anjum S, Durgawale PM and Shinde M. Knowledge of Contraceptives Methods and Appraisal of Health Education among Married Woman. *Int J Sci Res IJSR*2014;3:584–590.
 22. Shittusup LA, Zachariah MP, Ajayisup G, Oguntola JA, Izegebu MC and Ashirusup OA. The negative impacts of adolescent sexuality problems among secondary school students in Oworonshoki Lagos. *Sci Res Essays*2007;2:23–28.
 23. Berhane Y. Male involvement in reproductive health [editorial]. *Ethiop J Health Dev*2015;20:135–136.
 24. OlaOlorun FM and Hindin MJ. Having a say matters: influence of decision-making power on contraceptive use among Nigerian women ages 35–49 years. *PLoS One* 2014;9:e98702.
 25. Okigbo CC, Speizer IS, Corroon M and Gueye A. Exposure to family planning messages and modern contraceptive use among men in urban Kenya, Nigeria, and Senegal: a cross-sectional study. *Reprod Health*2015;12:1.
 26. Moodley J, Naidoo S, Wand H and Ramjee G. Contraception use and impact on pregnancy prevention in women participating in an HIV prevention trial in South Africa. *J Fam Plann Reprod Health Care*2016;42:5–11.
 27. Agarwal S, Najam R and Agarwal A. A clinical study on social stigma and trends of contraception at a tertiary care centre. *Int J Reprod Contracept Obstet Gynecol*2016;5:4271–4274.
 28. Thatte N, Bingenheimer JB, Ndiaye K and Rimal RN. Unpacking the barriers to reproductive health services in Ghana: HIV/STI testing, abortion and contraception: original research. *Afr J Reprod Health*2016;20:53–61.
 29. Lafort Y, Lessitala F, Candrinho B, Greener L, Greener R, Beksinska M, Smit JA, Chersich M and Delva W. Barriers to HIV and sexual and reproductive health care for female sex workers in Tete, Mozambique: results from a cross-sectional survey and focus group discussions. *BMC Public Health*2016;16:608.
 30. Charyeva Z, Oguntunde O, Orobato N, Otolorin E, Inuwa F, Alalade O and Abegunde D. Task shifting provision of contraceptive implants to community health extension workers: results of operations research in northern Nigeria. *Glob Health Sci Pract*2015;3:382–394.
 31. Jacobstein R and Polis CB. Progestin-only contraception: injectables and implants. *Best Pract Res Clin Obstet Gynaecol*2014;28:795–806.
 32. May JF. The Politics of Family Planning Policies and Programs in Sub-Saharan Africa. *Popul Dev Rev* Published Online First: 2016.<http://onlinelibrary.wiley.com/doi/10.1111/j.1728-4457.2016.00165.x/full> (accessed 12 Jan 2017).