Unmet Need for Family Planning Among Women of Reproductive Age in Plateau State Nigeria

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Abstract:

Family planning provides individuals and couples the ability to adequately space each pregnancy. Contraceptive uptake is still low in developing countries. This study aims to determine the proportion of women with unmet need for family planning in plateau State.

Methods and materials: This was a cross sectional study, employing quantitative and qualitative data collection techniques. Multistage sampling technique was used to select 300 study participants across the three senatorial zones in Plateau State. A semi structured interviewer administered questionnaire was used to obtain information from study participants while a Focussed Group Discussion (FGD) guide was used to conduct FGDs among women. Data was analysed using SPSS version 23.

Results: The mean age of respondents was 25.4 years. The proportion of women currently using any form of contraceptive was 36%. Fifty-six percent of the respondents had unmet need for family planning. Educational status and parity were statistically significantly associated with having unmet need for family planning. In the FDGs most women of lower parity narrated that they would like to limit and space their pregnancies but were not using family planning commodities for fear of infertility, back ache, headache and complication such as convulsion in pregnancy.

Conclusion: The use of family planning commodities is low and unmet need for family planning high in Plateau State. Interventions such as health education targeting mothers may reduce the proportion of women with unmet need for family planning. This will enable women adequately space and limit their pregnancies and reduce maternal morbidity and mortality.

Key words: family planning, unmet need, limiting pregnancy, spacing pregnancy.

1. Introduction

Family planning services enables individuals and couples space pregnancies and reduce unplanned or unwanted pregnancies. It contributes significantly to reducing the risk of maternal mortality among women of reproductive age.[1] Contraceptive use also reduces complications from unsafe abortions and prevents Sexually Transmitted Infections (STIs) including Human Immunodeficiency Virus (HIV/AIDs).[2]

Access to family planning plays a major role in achieving a fundamental human right .[2] However, many women are deprived of this right either voluntarily or involuntarily. The proportion of individuals using any form of modern contraceptive is still low, despite the high level of knowledge on family planning even in developing countries, Solving the problems associated with unmet need for family planning could reduce maternal deaths by over 30%.[1] Having unmet need for family planning is still of major concern in developing countries. Up to 214 million women of reproductive age wish to delay or limit their pregnancies but are not using modern contraceptives.[3] In Asia and Latin America, 10.2% to 10.7% of women of reproductive age have unmet need for family planning compared to 24.2%

of women in Africa.[3] The Nigerian Demographic Health Survey (NDHS) 2013 shows that up to 16% of women still have unmet need for family planning, with the North Central zone having the highest percentage (23%) of women with unmet need for family planning in the country. This signifies that a huge gap still exists in access and uptake of family planning in the North central zone of Nigeria[4,5]

Studies have shown that the reasons for unmet need for contraceptives include limited choice of methods, limited access to contraceptives especially among adolescents and the poor. Others are, religious and cultural opposition, health worker bias and fear of side effect such as infertility.[3] This study therefore aimed to determine the proportion of women in Plateau State who have unmet need for family planning and the probable reasons for the unmet need for family planning among women in the State. The information obtained from this study will help to provide targeted interventions and modify already existing interventions to increase the uptake of family planning commodities among women of reproductive age in Plateau State.

2. Methods And Materials
Study design
This was a cross sectional study in which data were obtained from the study participants at a point in time. Mixed methods of data collection were used by employing quantitative and qualitative data collection techniques.

Study area
This study was carried out in Plateau state which is located in the North Central region of Nigeria with an estimated land area of approximately 26,890sq.km lying between latitude $80^o 22$' and $100^o 20$'North and longitude $80^o 32$' and $100^o 38$'East and its capital is Jos. It has seventeen Local Government Areas (LGAs) and shares boundaries with Kaduna State (North West), Bauchi State (North East), Nassarawa State (South West) and Taraba State (South East). The state has an estimated population of 3,206,531 (1,598.998 males and 1,607,533 females).[6, 7]

Plateau State is divided into three senatorial zones namely Northern, Central and Southern senatorial zones.[7]

Study population
Women of reproductive age (15-49 years) who fulfilled the inclusion criteria in selected catchment communities in the study areas.

Inclusion criteria
Women of reproductive age, in the selected communities whose last child birth was within the last three years, had resided in the community for greater than three years and gave consent to participate in the study.

Sample Size Determination
The minimum sample size (n), for this study was determined using the Cochrane formula.[20]

$$n = \frac{(Z_\alpha)^2 \, pq}{d^2}$$

Z_α = 1.96 confidence level at 95% confidence interval

P = proportion of women with Unmet need for family planning in Plateau State in 2013 NDHS) = 23%

q = 1 − p

d^2 = precision error in study= 5% or 0.05.

Therefore, $\quad n = \dfrac{1.96^2 \times 0.230 \times (1 - 0.230)}{0.05^2}$

n = 272 (Minimum sample size)

Putting into consideration a non-response rate of 10%, the sample size calculated was 299.

Sampling method
Multistage sampling technique was used to select study participant.
Simple random sampling technique was to select one Local Government Area (LGA) from the three senatorial zones of Plateau State. Thereafter, simple random sampling technique was used to select three Primary Health Care facilities from the selected LGAs.
Using a simple random sampling technique, one catchment community surrounding each of the selected PHC facilities was selected and included in the study, giving a total of three catchment communities.

At the last stage, a sampling interval was obtained by dividing the number of households with women whose LCB was three years and below in each community by the sample size for each community. this gave a sampling interval of 4. In each of the communities, the first house selected was the mai angwans house and subsequently houses were selected in a clockwise manner from his house using the sampling interval. In households that had more

than one eligible respondents, simple random sampling technique was used to select one respondent.

In the case where a participant did not give consent to participate in this study, the next participant was selected and sampling interval used thereafter. This was done until the sample size was attained.

For the Focused group discussion (FGD), a total of 32 women were selected purposively and stratified based on literacy and parity in collaboration with the women leaders in the communities.

Study instrument

Data was collected using a structured interviewer administered questionnaire. The questionnaire was used to obtain information on socio-demographic characteristics of the women, parity and information on utilization of contraceptive commodities. A focused group discussion guide was used to obtain information from the FGD participants on barriers for the uptake of family planning services.

Data management

After collection, the responses were appropriately coded, entered into Microsoft excel software and cleaned; thereafter, the data was exported to IBM Statistical Package for the Social Sciences (SPSS) version 23.

Ethical consideration

Ethical clearance was obtained from the Jos University Teaching Hospital (JUTH), Human and Research Ethics Committee before commencement of the study.

3. Results

Table 1: Sociodemographic characteristics of study participants

VARIABLE	Frequency (%) n=300
Age group (years)	
15-24	98(32.7)
25-34	124(41.3)
35-44	67(22.3)
>44	11(3.7)
Marital status	
Single	7(2.3)
Married	280(93.3)
Widowed	7(2.3)
Divorced/separated	6(2.0)
Marital setting	
Monogamous	243(81.0)
Polygamous	37(12.3)

Educational status	
None	31(10.3)
Arabic	5(1.7)
Primary	135(45.0)
Secondary	112(37.3)
Tertiary	17(5.7)
Religion	
Christianity	289(96.3)
Islam	11(3.7)
Occupation	
Unskilled	286(95.3)
Skilled/Semi-skilled	14(4.7)
Monthly income of respondent (Naira)	
<18,000	284(94.6)
>18,000	16(5.3)
Parity	
1 delivery	4(1.3)
2-5 deliveries	171(57.0)
>5 deliveries	125(41.7)

Majority of the respondents were married, Christians and earned less than 18,000 naira monthly 93.3%, 96.3% and 94.6% respectively. Also 41.3% and 57.0% of the respondents were between 24-34 years and had 2-5 deliveries respectively.
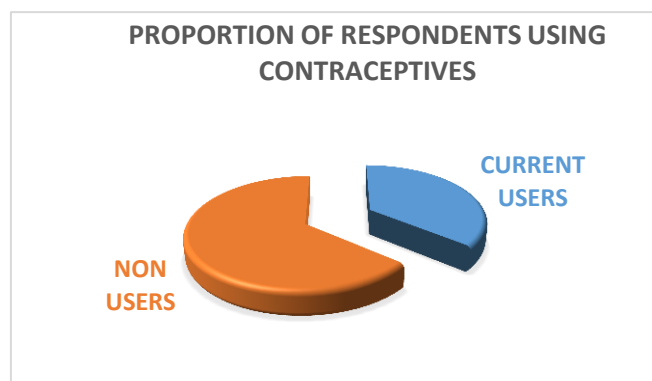

Figure 1: Proportion of respondents currently using contraceptives

Among the study respondents 36% were currently using a modern family planning methods, while 64% of the respondents were not using modern family planning methods.
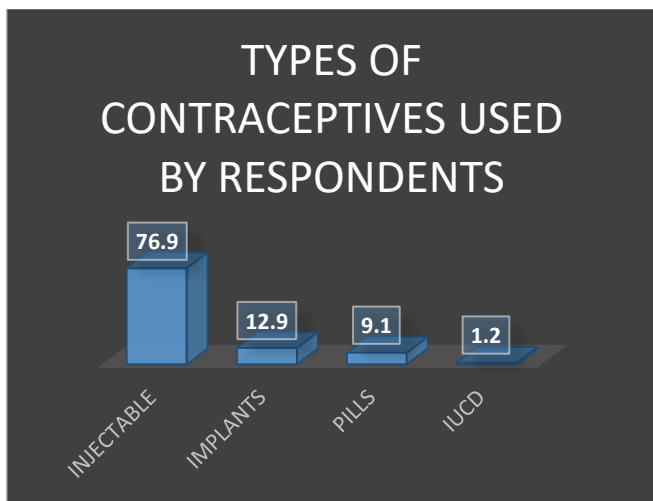
Figure 2: Type of contraceptives currently being used by respondents

Among respondent who were currently using contraceptives, 76.9% of them used injectable, 12.1% were using pills, 9.1% used implant and 1.2% were using IUCD.
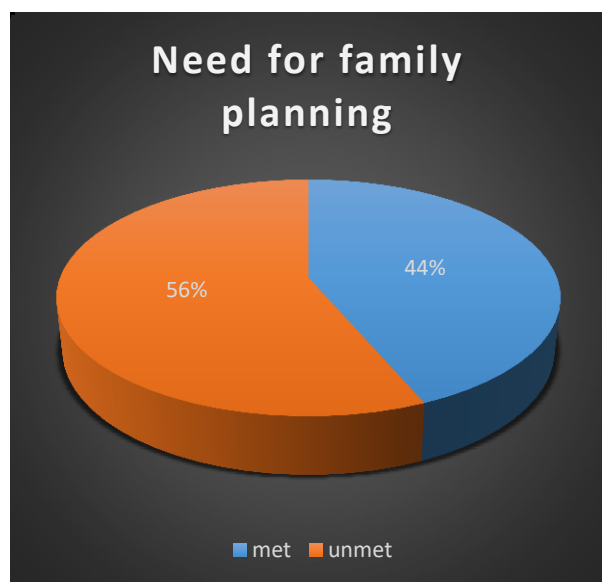

Figure 3: Unmet need for family planning
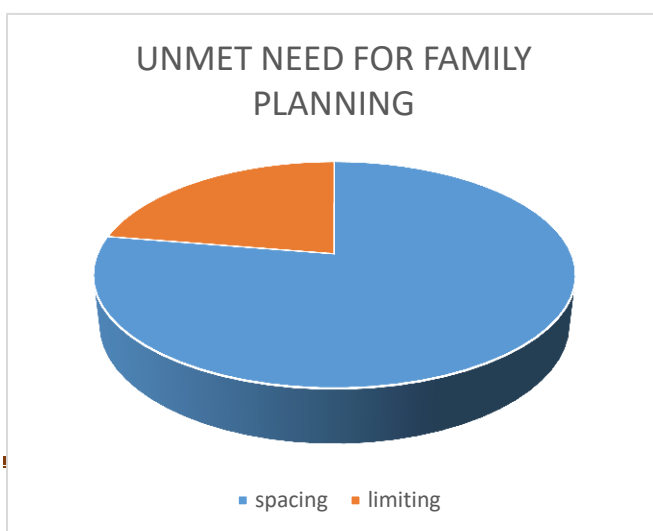The proportion of women with unmet need for family planning was 56%.

Figure 4: Category of unmet need for family planning
Unmet need for spacing pregnancies was 77.6% while 22.4% of respondents had unmet need for limiting their pregnancies.

Table 2: Factors associated with unmet need for family planning

VARIABLE	Met need for FP n=122	Unmet need for FP n=158	χ^2 df p-value
Age group (years)			
15-24	32(35.9)	57(64.1)	3.925
25-34	55(45.5)	66(54.5)	3 0.270
35-44	31(51.7)	29(48.3)	
>44	4(40.0)	6(60.0)	
Educational status			
None	6(17.1)	29(82.9)	17.665
Primary	56(45.2)	68(54.8)	3 0.001
Secondary	47(45.2)	57(54.8)	
tertiary	13(76.5)	4(23.5)	
Religion			
Christianity	120(44.6)	149(55.4)	2.991
Islam	2(18.2)	9(81.8)	2 0.084
Monthly income of respondent (Naira)			
<18,000	114(43.0)	151(57.0)	0.614
>18,000	8(53.3)	7(46.7)	1 0.433
Parity			
1 delivery	1(33.3)	2(66.7)	9.595
2-5 deliveries	56(35.7)	101(64.3)	2 0.008
>5 deliveries	65(54.2)	55(45.8)	

Education and parity were factors associated with having unmet need for family planning. 82.9% of women with no formal education had unmet need for family planning compared to 23.5% of women with tertiary education. This finding was statistically significant (p value 0.001). Also, more women (66.7%) who had one delivery had unmet need for

family planning compared to 45.8% of women with more than five deliveries. This finding was statistically significant (p value 0.008)

Table 3: Logistic regression showing predictors of need for family planning

VARIABLE	Odds Ratio	95% Confidence Interval	P-value
Educational Status None Primary Secondary tertiary	27.8 13.3 6.0 1	5.886-131.37 1.076-163.95 1.770-20.522	<0.001 0.044 0.004
Parity 1 delivery 2-5 deliveries >5 deliveries	3.029 0.979 1	1.723-5.337 0.070-13.62	<0.001 0.988

Educational status and parity were predictors of having unmet need for family planning. Women with no formal education were 28 times more likely to have unmet need for family planning than those with tertiary education p value <0.001 (OR 5.886-131.37). Those with primary and secondary education were 13 and 6 times more likely respectively to have unmet need for family planning compared to those with tertiary education p values 0.044 and 0.004 and (OR 1.076-163.95 and 1.770-20.522) respectively. Women with one delivery were 3 times more likely to have unmet need for family planning compared to those with more than five deliveries P value < 0.001 and OR 1.723-5.337.

FGD and KII responses on utilization of family planning commodities

Majority of the respondents acknowledge that many women had need for family planning but were not using any contraceptives. They attributed the high level of unmet need for family planning to the side effects of the commodities such as infertility, backache, headache and convulsion in pregnancy. Respondents with less than five deliveries did not support the use of family planning commodities, they said that they will not use contraceptives until they have completed their family size.

"family planning ya na da kyau amaya na sa ma mutane chiwon kaman chiwon kai, chiwon baya ko kuma ba su samu chiki dawuri "family planning is good but it causes headache, back ache and delay in getting Pregnant. (A non-literate 27-year-old para three)

"wata mata ta na family planning ama idan rashin lafiya ya zo tana suma shi ya sa tana bi ta aihu kowai sai ya saya "one woman i know was using family planning and when she got pregnant, it made her have convulsions in labour so she decided not to use it again, she said she will continue giving birth until she can't get pregnant again, (A non-literate para two).

4. Discussion

The parity of respondents in this study is in keeping with studies in Plateau, Katsina and Yobe, where 45%, 42% and 46% of respondents had five or more deliveries, but higher than that from a study in Anambra where only 12% of respondents were grand multiparous. The high parity in this state may be explained by the low contraceptive prevalence observed among women in this study and other studies. This disparity may also be as a result of the higher fertility rate in the North compared to the Southern part of Nigeria.[8, 9]

Findings from this study on uptake of contraceptives also concurred with studies on family planning use conducted in Plateau and Edo states which showed a prevalence of 50%.[10-12] This is however not the same as what was observed in Jigawa, Yobe, Zamfara and Katsina states with a lower contraceptive prevalence despite the intervention. This may be explained by the higher fertility rate in the North East and North West compared to other parts of the country.[8]

According to this study, the most preferred contraceptive was the injectable. This is in keeping with studies in Plateau, Zamfara, Katsina Tanzania and Ethiopia, though in these studies, oral pill was the next common which is different from this study where implants are the next preferred to injectable. The reasons proffered for this preference was that most women preferred methods that last longer such as injectable and implants which reduces the cost of hospital visits, cost of transportation and time lost in

visiting the health facility. For others, it was better because of the possibility of forgetfulness with oral pills.[12-14]

Furthermore, findings in this study also revealed that the unmet need for family planning was high with most women having unmet need for spacing rather than limiting their pregnancies. This signifies that many women in the state wish to space their pregnancies but are unable to do that adequately. These findings were similar to a study in Ethiopia which showed that close to 50% of respondents had unmet need for family planning. Different findings were observed from studies in Jigawa, Yobe, Zamfara and Tanzania where only 21%, 14%, 8.3% and 2.2% of respondents had unmet need for family planning most of which were for spacing rather than limiting pregnancies. Differences observed may be due to the desire for more children reflected in the higher fertility rate among respondents in Northern Nigeria and Tanzania.[14 13, 15]

Determinants of family planning utilization in this study were educational qualification, parity and fear of side effects such as infertility. Women who had less than five deliveries were less likely to use modern family planning methods. This finding is in keeping with findings from Jos, Bauchi state, NDHS 2013 and Ethiopia. which showed that women with more deliveries were more likely to use modern contraceptive methods. This may be as a result of the fear of infertility with contraceptive use as stated by respondents in this study.[11, 14, 16] Higher level of education has also been shown to be associated with the use of contraceptives in Nigeria, Ghana and Sudan. Women with higher educational qualification in Nigeria were 6 to 8 times more likely to use contraceptives. This may be explained by the better understanding on contraceptive use obtained through formal education.[4, 10, 17, 18]

Other factors which were not in consistence with this study include women in the higher wealth index using contraceptives more than those in lower wealth index as shown by a study in Edo and another reproductive health survey in Nigeria, which showed that women in the highest wealth quintile used contraceptives 17 times more than women in lower quintiles.[10, 19] This may be due to the fact that those in the higher quintile are more financially secure, may be more educated and exposed to different sources of information on family planning which makes it easier to make informed choices on utilization. Although contraceptives may be relatively cheap and even free in some instances, indirect cost may explain why women in the higher wealth index utilize contraceptives more than those in the lower wealth index.[11]

5. CONCLUSION

This study was able to demonstrate that the proportion of women with unmet need for family planning in Plateau State is still high. Women of reproductive age still believe that contraceptive use may lead to infertility and as such prefer to complete their family size before using any method. There is need for modification of already existing family health programmes and targeted health promotive interventions in Plateau State to educate women more on the need, availability and accessibility of contraceptives.

6. Recommendations

Women of reproductive age should be educated and properly counselled on the importance of contraceptives, they should also be educated on the misconceptions of the side effects of contraceptives. This will enable them make informed choices on family planning.

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