

Unmet Need for Family Planning among Internally Displaced Women of Reproductive Age in Yola, Adamawa State

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Abstract

Background: Unmet need for family planning results in unwanted pregnancies, uncontrolled fertility, overpopulation, and poor socio-economic growth. Studies indicate that displaced persons are more likely to experience higher unmet needs for family planning compared to the general population. However, there is limited literature on this issue among displaced women in Nigeria. This study investigates the unmet need for family planning among internally displaced women of reproductive age in Yola, Adamawa State. **Methods:** A cross-sectional study was conducted among 272 currently married women aged 15-49 years in the Internally Displaced Persons (IDPs) camp using a systematic sampling technique. An interviewer-administered questionnaire was used to obtain information about sociodemographic characteristics, awareness and utilisation of family planning commodities and unmet need for family planning. Data were analyzed using descriptive and inferential statistics. Level of statistical significance of 5% was assumed.

Results: Mean age of respondents was 32.0±8.8 years, and 28.3%, 29.4% and 57.7% had unmet need for limiting, spacing and total unmet need for family planning. The most reported reason for non-usage of family planning by those with unmet need for family planning was religious prohibition (60.0%). Independent predictors of total unmet need for family planning included respondent's age [AOR: 7.17 (95% CI: 2.81-18.30)], employment status [AOR: 3.18 (95% CI: 1.73-5.84)] and spousal discussion of family planning [AOR: 0.13 (95% CI: 0.07-0.25)].

Conclusion: The level of unmet need for family planning was high in this study. Male involvement and collaboration with religious leaders should be explored to address unmet need for family planning in IDPs camps.

Keywords: *Unmet need; Family planning; Internally Displaced Persons, North East Nigeria*

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Abstrait

Contexte: Les besoins non satisfaits en matière de planification familiale entraînent des grossesses non désirées, une fécondité incontrôlée, une surpopulation et une faible croissance socio-économique. Des études indiquent que les personnes déplacées sont plus susceptibles d'avoir des besoins non satisfaits en matière de planification familiale plus élevés que la population générale. Cependant, il existe peu de littérature sur cette question parmi les femmes déplacées au Nigeria. Cette étude examine le besoin non satisfait en matière de planification familiale chez les femmes déplacées internes en âge de procréer à Yola, dans l'État d'Adamawa.

Méthodes: Une étude transversale a été menée auprès de 272 femmes actuellement mariées âgées de 15 à 49 ans dans le camp de personnes déplacées à l'intérieur du pays (PDI) en utilisant une technique d'échantillonnage systématique. Un questionnaire administré par l'intervieweur a été utilisé pour obtenir des informations sur les caractéristiques sociodémographiques, la connaissance et l'utilisation des produits de planification familiale et les besoins non satisfaits en matière de planification familiale. Les données ont été analysées à l'aide de statistiques descriptives et inférentielles. Un niveau de signification statistique de 5 % a été supposé.

Résultats: L'âge moyen des répondants était de 32.0±8.8 ans, et 28.3%, 29.4% et 57.7% avaient un besoin non satisfait de limitation, d'espacement et un besoin total non satisfait de planification familiale. La raison la plus souvent évoquée pour expliquer le non-recours à la planification familiale par les personnes ayant des besoins non satisfaits en matière de planification familiale était l'interdiction religieuse (60.0%). Les prédicteurs indépendants du besoin total non satisfait en matière de planification familiale comprenaient l'âge du répondant [AOR: 7.17 (IC à 95%: 2.81-18.30)], le statut d'emploi [AOR: 3.18 (IC à 95%: 1.73-5.84)] et les discussions entre conjoints sur la planification familiale [AOR: 0.13 (IC à 95%: 0.07-0.25)].

Conclusion: Le niveau de besoin non satisfait en matière de planification familiale était élevé dans cette étude. La participation des hommes et la collaboration avec les chefs religieux devraient être explorées pour répondre aux besoins non satisfaits en matière de planification familiale dans les camps de personnes déplacées.

Mots clés: *Besoin non satisfait ; Planification familiale ; Personnes déplacées à l'intérieur du pays, nord-est du Nigeria*

Introduction

Unwanted pregnancy poses a major public health challenge to women of reproductive age worldwide, especially in developing countries. This has been exacerbated by the poor use of modern family planning methods[1]. Globally, it has been estimated that about 80 million (38%) of the 210 million pregnancies that occur annually are unplanned, and about 46 million (22%) end up in abortion[2]. In Low and Middle-Income Countries especially in Sub-Saharan Africa, reproductive health has been a great concern to many nations as access to quality maternal health services is very poor with high negative health consequences such as high maternal mortality and morbidity[3].

Family planning is identified as a mechanism that affects the decisions made by couples in order to promote the health and welfare of different families[4]. However, the acceptability and voluntary adoption of family planning which affects the health and social development of a country is poor in most developing nations including Nigeria [5]. Unmet need for family planning is defined as the percentage of women of reproductive age, either married or in a union, who want to stop or delay childbearing but are not using any method of contraception [6]. There are about 222 million women of reproductive age worldwide with unmet contraceptive needs for family planning [7]. Adequate knowledge and utilization of family planning services can prevent unwanted pregnancies, reduce abortions, increase opportunities to attain higher education and stimulate economic growth [7-10]. According to the United Nations Population Fund, 1 in 3 deaths in women of reproductive age can be prevented by family planning [8].

Globally, about 59.5 million persons were displaced within the borders of their countries in 2015. It was also estimated that the rate at which people are displaced from their homes worldwide has risen from 6 per minute in 2005 to 24 per minute in 2015 [11]. In Nigeria, the Boko Haram insurgency that began in 2009 has given rise to about 1.87 million internally displaced persons (IDPs) in the North Eastern region (Borno, Adamawa and Yobe States). Ninety-two percent of the IDPs reside in host communities while the remaining 8 per cent live in camps [12].

The fertility pattern of refugees and IDPs is quite unclear; however, several studies have shown that refugees and IDPs have more unmet need for

contraceptives than the general population [13-14]. Studies conducted among migrants in Geneva, Switzerland, revealed lower contraceptive use, higher instances of unintended pregnancies, and increased rates of induced abortions compared to women who were not displaced [15]. A population-based study in the Netherlands found that refugees had a higher pregnancy termination rate (30.2 per 1000 women per year) than non-migrants (16.7 per 1000 women per year) [16]. A study conducted among refugees in Oru camp, Ijebu Oru, Ogun State revealed unintended pregnancy resulting from low contraceptive use [14]. The IDPs camps in Nigeria are characterized by unavailable and inaccessible reproductive health services. Women in IDPs and refugee camps are vulnerable to rape and sexual abuse, which often result in an increase in unsafe abortion, unwanted pregnancies, HIV, and sexually transmitted diseases. This situation exists as women and girls are not well equipped to prevent or deal with unintended pregnancy [17]. Hence, this study was aimed at identifying the predictors of unmet need for family planning among married women, in the IDPs camps in Yola, Adamawa State.

Methods

Adamawa is a state is made up of twenty-one (21) Local Government Areas with Yola North as its capital. It has a total land area of 36,917km² and a population of 3,737,223 according to 2006 census results. The IDP camp located in Malkohi, in Adamawa State, has a total population of 4,278 persons, of which about 1,095 are females within the reproductive age group. Many of the internally displaced persons in the camp are forced to take up farming and other menial jobs in the local communities surrounding the camp in order to supplement whatever aid is made available by the camp management.

A cross-sectional study was conducted among women of reproductive age group (15-49 years) residing in the IDPs camp. The sample size was estimated using the Leslie Kish sample size formula [18] for single proportions which was based on 21.8% reported as the proportion of women with unmet need for family planning in Adamawa State [19]. Assuming a degree of precision of 5% and a type 1 error of 5% and a population less than 10,000, a sample size of 272 who were currently married or in union was determined. A systematic sampling

technique was utilised to select participants for the study using a sampling frame consisting of all the 1,095 women of reproductive age which was obtained from the camp management. The sampling interval width (k) was determined by dividing the total population of reproductive females in the camp by the minimum sample size for the study resulting in a sampling interval of 3. Simple random sampling through the use of a table of random numbers was used to select the first respondent and subsequently, every 3rd woman listed on the sampling frame was selected until the sample size was met.

An interviewer-administered questionnaire was used to obtain information on respondent's socio-demographic status awareness and utilization of family planning and unmet need for family planning. Four trained research assistants who could speak Hausa which is the ubiquitous language spoken in the Northern part of Nigeria administered the questionnaires to respondents. Data were analyzed using SPSS version 20 (IBM Corp., Chicago, IL, USA). All tests were carried out at 95% confidence interval with probability level of $p < 0.05$ accepted as being of statistical significance. Descriptive statistics was used to describe the general characteristics of the sample. Chi-Square test and multiple logistic regression were used to identify factors independently associated with unmet need for family planning. Unmet need was determined using the approach of Bradley and researchers for measuring unmet need for family planning [20,21]. The following steps were used to measure unmet need;

1. Family Planning Use Status: All currently married women of reproductive ages (15-49 years) were considered; from these, Respondents were classified into: (a) users of contraceptives (b) Non users of contraceptives
2. Pregnancy and postpartum amenorrheic status: Non users of contraceptive were divided into two groups: (a) pregnant or postpartum amenorrheic (Period not returned since last live birth in last 2 years) (b) Not pregnant or postpartum amenorrheic.
3. Considering the wantedness of pregnancy among the pregnant or postpartum amenorrheic women, three groups emerged i.e. intended (no unmet need), mistimed (unmet need for spacing), unwanted (unmet need for limiting). Non response to wantedness of current pregnancy was considered missing.
4. Considering the fertility status among women who were not pregnant or not postpartum

amenorrheic, two groups of women were developed i.e. fecund and infecund. Considering the future fertility intention among the fecund group three groups emerged: want child within two years (No unmet need), want no more children (Unmet need for limiting) and wants next child in 2+ years; wants child and undecided timing, or undecided if wants child (Unmet need for spacing).

5. The total unmet need for family planning was determined by the sum of total spacers and limiters.

Ethical approval was obtained from the Ministry of Health, Ethics Review Committee, Adamawa State (approval reference number S/MoH/1131/I). Informed consent was obtained from each respondent after a careful explanation of the purpose and, content of the research were made known to the participants. Each consenting respondent signed the informed consent form. Data was collected and stored in a password-protected computer. Participation in this study was voluntary and without any compulsion.

Results

Two hundred and seventy-two currently married women of reproductive ages (15-49 years) were interviewed. The mean age of respondents was 32.0 (± 8.8) years, with about one in five women aged 24 years and below. Most respondents had not undergone any formal education (87.9%). More than half of the respondents had at least three children and about 56.6% were currently employed. (Table 1). Most of the respondents had heard about family planning (94.1%) but only about 54.8% had discussed family planning with their husbands or partners. The unmet need for limiting was 7.3% and 21.0% among pregnant and non-pregnant women respectively while unmet need for spacing was 4.0% and 25.0% among pregnant and non-pregnant women respectively. The total unmet need for limiting and spacing were 29.4% and 28.3% respectively, giving an overall unmet of 57.7% (Figure 1). More than half of the respondent cited religious prohibition as the main reason for not using family planning. Other cited reasons were spousal refusal (32.5%), desire for more children (24.8%), ignorance (12.1%), fear of side effects (5.1%) and preference for traditional methods (0.6%) (Figure 2).

Table 2 shows the result of the bivariate analysis. Respondent's age, parity, employment status, and spousal discussion of family planning were statistically significantly associated with unmet need

Table 1: Socio-demographic characteristics of respondents (n = 272)

Variable	Frequency	Percentage
Age		
15-24	54	19.9
25-34	110	40.4
≥ 35	108	39.7
Mean (±SD)	32.0 (±8.8)	
Ethnicity		
Margi	82	30.1
Kanuri	66	24.3
Mandara	51	18.8
Goza	39	14.3
Hausa	17	6.3
*Others	17	6.3
Educational status		
None	239	87.9
Primary/secondary	33	12.1
Religion		
Christianity	12	4.4
Islam	260	95.6
Types of marriage		
Monogamy	168	61.8
Polygamy	104	38.2
Parity		
≤ 2	109	40.1
3-4	81	29.8
≥ 5	82	30.1
Mean (±SD)	3.5 (±2.5)	
Currently employed		
Yes	154	56.6
No	118	43.4

*Others=Mafa 6 (2.2%), Baribari 4 (1.5%), Fali 3 (1.1%), Pulka 3 (1.1%), Bama 1 (0.4%) and Fali 1 (0.3%).

for limiting ($P < 0.05$). Older respondents aged above 35 years (38.9%) had a higher unmet need for limiting than younger respondents aged 25-34 years (25.5%) and 15-24 years (13.0%). Unmet need for spacing and total unmet need were higher among older respondents. Currently employed (37.7%) respondents had higher unmet need for limiting (37.7%) and total unmet need (66.9%) than the unemployed women. There was a negative association between the number of children and unmet need for limiting ($P < 0.05$). Women who did not discuss family planning with their spouse had a higher unmet need for spacing (45.8%), limiting (36.4%) and total (82.2%) than other women. There was no significant relationship between unmet need and level of education of the women ($P > 0.05$).

However, total unmet need was higher among educated women (63.6%) than women with no education (56.9%).

Table 3 shows the result of the multivariate analysis. After adjusting for confounding, parity, employment status and spousal discussion of FP were significantly associated with unmet need for limiting ($P < 0.05$). Respondents who had at most two children were 78% less likely to have unmet need for limiting than respondents who had at least five children ($P < 0.05$). Employed women were 3.2 times more likely to have unmet need for limiting than unemployed women ($P < 0.05$). Respondents who discussed about family planning with their spouse were 55% less likely to have unmet need for limiting than those who did not discuss about FP with their spouse ($P < 0.05$).

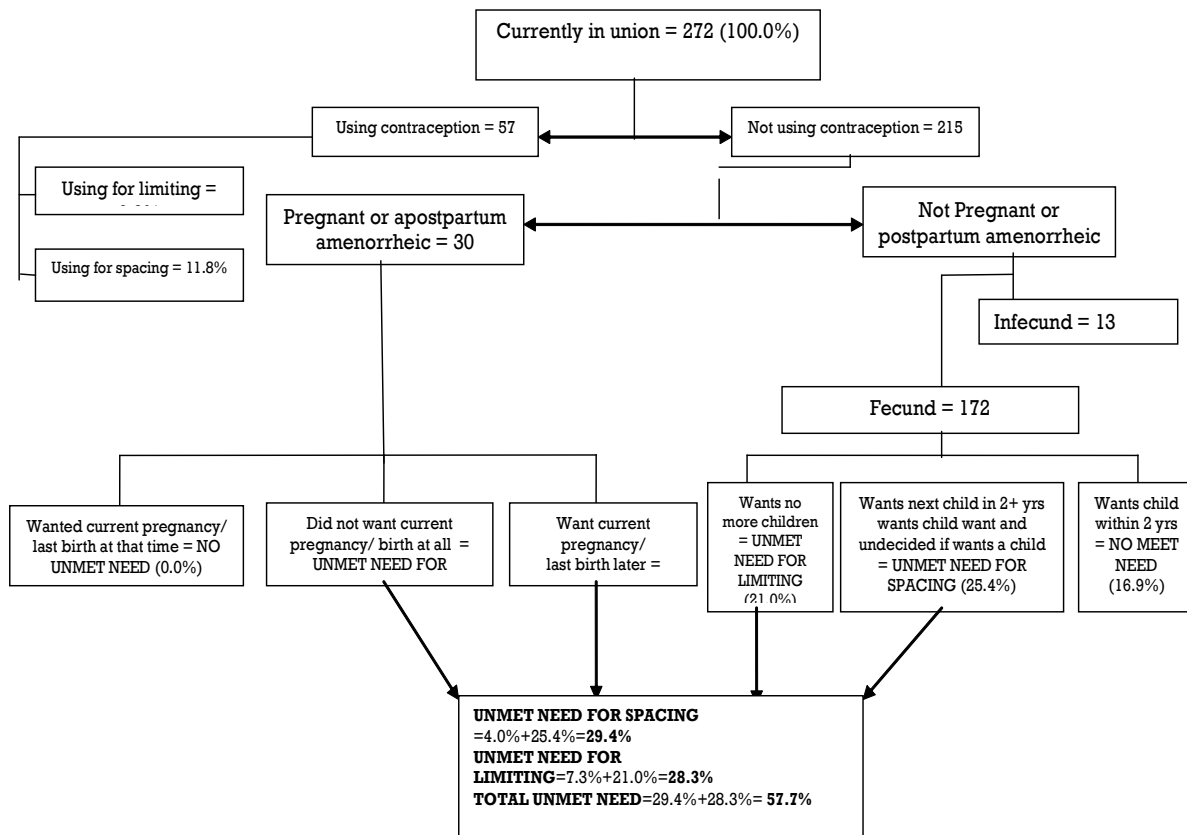


Figure 1: Estimation of unmet need for currently married women

Respondent's age, parity and spousal discussion of FP were statistically significantly associated with unmet need for spacing ($P < 0.05$). Respondents aged 15-24 years were 15.7 times more likely to have unmet need for spacing than respondents aged 35 years and above ($P < 0.05$). Respondents who had 3-4 children were 3.4 times more likely to have unmet need for spacing respectively than respondents who had five children and above ($P < 0.05$). Respondents who discussed family planning with their spouse were 80% less likely to have unmet need for spacing than those who did not discuss about FP with their spouse ($P < 0.05$).

Respondent's age, employment status and spousal discussion of FP were statistically significantly associated with total unmet need for family planning ($P < 0.05$). Respondents aged 15-24 years were 7.2 times more likely to have total unmet need for family planning than respondents aged 35 years and above ($P < 0.05$). Employed women are 3.2 times more likely to have total unmet need for FP than unemployed women ($P < 0.05$). Respondents who discuss family planning with their spouse were 87% less likely to have total unmet need for FP than those who discussed about FP with their spouse ($P < 0.05$).

Discussion

Respondents in this study had a higher total unmet need for family planning (57.7%) than Canadian refugees (26.8%) [22]. This observed discrepancy in the total unmet need may be attributed to the disparity between Nigeria and Canada that is evident in socio-cultural beliefs, attitudes, perceptions and accessibility of family planning. Also, the proportion of women who had unmet need for family planning in the present study is higher than existing evidence from various populations elsewhere. For instance, a study in India found an unmet need of 25% while another study in Cameroon reported an unmet need of 20.4% [23-24]. A secondary data analysis of the National HIV/AIDS and Reproductive Health Survey found a total unmet need of 9.1% and 11.4% in 2007 and 2012 respectively [1]. An analysis of the 2013 NDHS 2013 revealed that 31% and 15% of the women in the North Central and North West, Nigeria respectively had unmet need for family planning [19]. About 20.2% and 16.0% of Nigerian women had unmet for family planning in 2008 and 2013 respectively. An analysis of the 2010 Burkina Faso Demographic and Health Survey revealed that 40.7%

Table 2: Relationship between independent variables and unmet need for family planning

Independent Variables	Unmet need for limiting		Unmet need for spacing		Total unmet need	
	n (%)	P value	n (%)	P value	n (%)	P value
Age (years)						
15-24	7 (13.0)		37 (68.5)		44 (81.5)	
25-34	28 (25.5)	0.002*	31 (28.2)	<0.001*	59 (53.6)	<0.001*
≥35	42 (38.9)		12 (11.1)		54 (50.0)	
Educational status						
None	65 (27.2)	0.273	71 (29.7)	0.774	136 (56.9)	0.463
Primary/Secondary	12 (36.4)		9 (27.3)		21 (63.6)	
Religion						
Christianity	3 (25.0)	0.795	4 (33.3)	0.760	7 (58.3)	0.965
Islam	74 (28.5)		76 (29.2)		150 (57.7)	
Types of marriage						
Monogamy	47 (28.0)	0.877	57 (33.9)	0.038*	104 (61.9)	0.076
Polygamy	30 (28.8)		23 (22.1)		53 (51.0)	
Parity						
≤2	17 (15.6)		47 (43.1)		64 (58.7)	
3-4	58 (71.6)	<0.001*	27 (33.3)	<0.001*	50 (61.7)	0.469
≥5	45 (54.9)		6 (7.3)		43 (52.4)	
Currently employed						
Yes	58 (37.7)	<0.001*	45 (29.2)	0.937	103 (66.9)	<0.001*
No	19 (16.1)		35 (29.7)		54 (45.8)	
Heard about FP						
Yes	72 (28.1)	0.788	76 (29.7)	0.690	148 (57.8)	0.902
No	5 (31.2)		4 (25.0)		9 (56.2)	
Discussed FP with spouse						
Yes	33 (22.1)	0.012*	27 (18.1)	<0.001*	60 (40.3)	<0.001*
No	39 (36.4)		49 (45.8)		88 (82.2)	

Table 3: Logistic Regression of Determinants of unmet need for family planning

Independent Variables	Unmet need for limiting		Unmet need for spacing		Total unmet need	
	AOR (95%CI)	P value	AOR (95%CI)	P value	AOR (95%CI)	P value
Age (years)						
15-24	0.56 (0.17-1.81)	0.331	15.67 (5.01-48.98)	<0.001*	7.17 (2.81-18.30)	<0.001*
25-34	0.85 (0.42-1.73)	0.655	1.70 (0.70-4.13)	0.238	1.00 (0.53-1.90)	0.996
≥35 (Ref)	1.00		1.00		1.00	
Types of marriage						
Monogamy			1.73 (0.84-3.58)	0.140		
Polygamy (Ref)			1.00			
Parity						
≤2	0.22 (0.09-0.57)	0.002*	2.78 (0.88-8.84)	0.082		
3-4	0.52 (0.24-1.07)	0.502	3.39 (1.18-9.70)	0.023*		
≥5 (Ref)	1.00		1.00			
Currently employed						
Yes	3.18 (1.66-6.10)	0.001*			3.18 (1.73-5.84)	<0.001*
No (Ref)	1.00				1.00	
Discussed FP with spouse						
Yes	0.45 (0.24-0.84)	0.013*	0.20 (0.10-0.42)	<0.001*	0.13 (0.07-0.25)	<0.001*
No (Ref)	1.00		1.00			

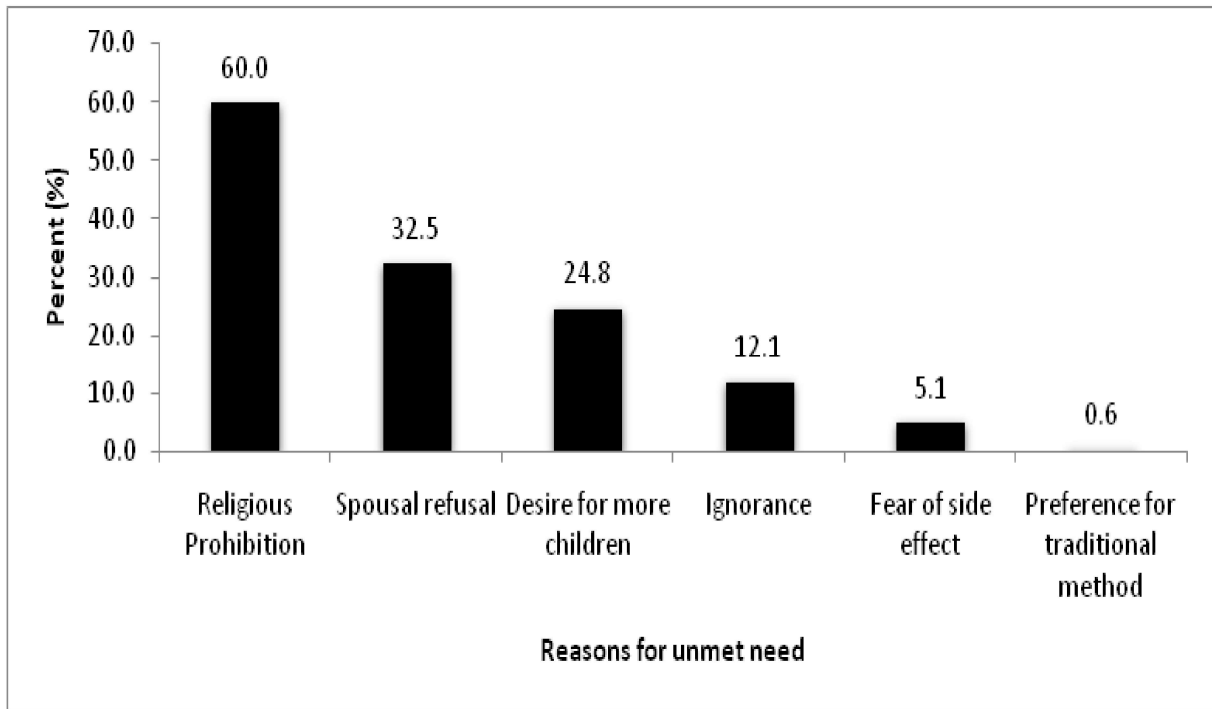


Figure 2: Reasons for unmet need for family planning (n = 157)

of the married women had unmet need for family planning [25].

A cross sectional survey among women in Cameroon found that about one in five women had unmet need for family planning [24]. About 23.9% of the married women in rural India had unmet need for family planning [23]. A plausible reason for the high prevalence of unmet need for family planning in the present study maybe due to the fact that the study area had been under the attack of insurgents and is currently an area under conflict. This may have made essential reproductive health services unavailable and inaccessible [20].

The findings of this study revealed that younger women were more likely to have unmet need than older women. This was quite expected as younger women may be ashamed of seeking family planning services in public places due to cultural or religious reasons. A secondary data analysis of the 2013 NDHS found that the prevalence of unmet was lower among the younger and older respondents but highest among the middle-aged group of women in North Central and North West Nigeria [19]. This is not in agreement with the finding of the present study and may need further investigation by future research.

The finding of this study suggests that respondents who were employed had higher unmet

need for family planning than the unemployed. Similarly, a higher proportion of employed women in North Central and North West Nigeria had unmet need for family planning [1]. A similar trend was observed from a secondary data analysis among Burkinabe women [25]. A plausible reason for the higher odds of unmet need among women who are currently employed is that such women tend to have a higher desire to limit or space births than those who are unemployed [25].

In consonance with some previous studies, women who had discussed family planning with their spouse had a lower prevalence of unmet need than those who did not discuss family planning with their spouse [1,25]. An increased involvement of men in family planning decisions makes the woman free to utilize any type of contraceptive method.

From the results, it was observed that respondents who had fewer children had more unmet need for spacing than those with more children. This present finding agrees with the earlier study conducted by Bamgboye and Ajayi, reporting that the least prevalence of unmet need was found among women with more children; in a study conducted in North central Nigeria [1]. An analysis of NDHS 2008 dataset revealed that unmet need for family planning was more prevalent among women with lower number of living children [27]. In contrast to this finding, other

researchers found a positive association between parity and unmet need for family planning [28]. The finding of this study is expected as mothers who have fewer living children or may have lost some children during the insurgency may tend to desire more children than those who have more living children. Hence, such women may not be interested in preventing pregnancy.

Women with higher levels of education in this study had a higher prevalence of unmet need than those with lower levels of education women. This finding is congruent with the report among Nigerian women and Sudanese women where a positive association is found between level of education and unmet need [29-30]. However, Bamgboye and Ajayi found that highly educated women from North Central and North West Nigeria had the least unmet need for family planning [1]. Similarly, less educated Ethiopian and Filipino women had a higher likelihood of unmet need than educated women [31-32]. A possible reason for the observed higher unmet among educated women may be fear of side effects given their supposed in-depth knowledge of family planning.

Consistent with this study, the prevalence of total unmet need for family planning has been found to be higher among women that have never heard about family planning [33-34]. Similarly, Adebawale and Palamuleni asserted that Burkinabe women who had not been well informed through the media about family planning had more unmet need for family planning than those who were well informed through the media [25]. Adequate and regular information on family planning will change the cultural beliefs of women and their partners towards acceptability of the different family planning methods [25, 34, 35].

In this study, total unmet need was more common among Muslims than Christians. This is in agreement with the findings among women in Southeast Nigeria [28] and North West Nigeria [26] but in contrast with the findings among women in North Central Nigeria [26]. The findings from this study with respect to this could be attributed to the low proportion of Christians in this study compared to Muslims.

Religious prohibition and spousal refusal were found to be the common reasons behind the unmet need for family planning among women studied. In South-East Nigeria, husband's disapproval and perceived fear of side effects were the main cited reasons for unmet need for family planning [28]. Similar assertions have been made by some authors in some African countries [36-37].

A number of limitations must be highlighted in this study. Social desirability bias could not be ruled out, as the questionnaire included some sensitive questions. This was minimized by conducting the interview in a manner and place in which the respondent had freedom of expression. Most of the women had no formal education and could only communicate in their native languages. To address this, only research assistants who understood one or more of the eleven languages spoken by the ethnic groups represented in the Adamawa State IDPs camp were recruited and trained.

This study has shown that most women of reproductive ages in the Adamawa State IDPs camp have heard about family planning. Nevertheless, most women had unmet need for family planning. Religious prohibition was the most cited reason for poor uptake of family planning by women with a total unmet need for family planning. Spousal discussion of family planning was the independent predictor of all forms of unmet need. Male involvement and collaboration with religious leaders should be explored to address unmet need for family planning in IDPs camps.

Acknowledgements

We acknowledge with thanks all the internally displaced women who participated in this study.

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Received = 23/12/2020

Accepted = 16/03/2021