

XXXXX XXXXX

# Prevalence and pattern of contraceptive uptake among adolescents in an internally displaced camp, North Central, Nigeria

O.R. ILORI<sup>1</sup>, OLUGBENGA-BELLO A.I.<sup>1</sup>, O.O. GOODMAN<sup>2</sup>, A.A. BABAKUNDI<sup>3</sup> and R.A OLADEJO<sup>4</sup>

<sup>1</sup>Department of Community Medicine, Faculty of Clinical Sciences, College of Health Sciences, Ladoké Akintola University of Technology (LAUTECH), Oyo State; <sup>2</sup>Department of Community Health and Primary Health care, Lagos State University College of Medicine, Ikeja, Lagos; <sup>3</sup>Post-Graduate School Ladoké Akintola University of Technology, Ogbomosho, Oyo State; <sup>4</sup>MurphGan Resources Analysis, Osogbo, Osun State, Nigeria

DOI: 10.4081/jphia.2024.xxxx

**Abstract.** Internally displaced Persons are marginally sidelined in many areas of life, reproductive health issues inclusive. There is a need to know the prevalence and pattern of contraceptive use among this vulnerable group of people. This study determined the prevalence and pattern of contraceptive uptake among internally displaced adolescents in North-Central Camp, Abuja, Nigeria. A descriptive cross-sectional study, among 403 adolescents using semi-structured questionnaires. The mean age of the respondents was 19.53±6.4 years and 21.34±7.34 years at first birth. Awareness about FP was high, (483, 95.0%), however, only 169 (41.9%) ever used a family planning method, while 82 (20.3%) were current users, 72 (42.6%) of the 169 ever users admitted to have used pills, while 44 (53.7%) of the 82 current users were using condom only. One third, 160 (39.7%), were pregnant, while 78 (19.4%) of those pregnant were unintentional, therefore the unintended pregnancy rate was 19.4%. Bivariate analysis revealed that respondents' use of contraceptive was significantly related to religion (<0.001), ethnic group (<0.001), marital status (<0.001), family type (<0.001), and educational attainment (<0.001). While respondents' knowledge of contraceptive was significantly associated with age (P<0.00000001), educational level (P<0.002), and ethnic group (P<0.001). The prevalence of contraceptive use among respondents was 20.3%, while 41.9% ever used a method. Pill was the major Family planning method ever used, while condom was mostly used by the current users.

## Introduction

The reproductive choice made by young women and men have an enormous impact on their health, schooling and job prospects, and their general changes to adulthood (1). Especially, school and employment opportunities essentially influence young adolescents' marriage timing, quality of parenthood and ability to contribute to their families and society (1,2). Young women's reproductive choices are especially important, as early childbearing can impair their health and limit their prospects for productive participation in society.

The literature suggest that many young people in refugee situations face serious reproductive health challenges that put their lives and their health at risk. One of such challenges is unintended pregnancy, which the United Nations High Commissioner for Refugees (3) has identified as a crucial reproductive health issue in crisis situations. The public health community has acknowledged that living in a refugee situation can increase the vulnerability of young people to unintended pregnancies and other reproductive health risks in a variety of ways. These include beginning sexual relations at an earlier age; taking sexual risks, such as having intercourse without using contraceptives; and facing exploitation in the absence of traditional socio-cultural constraints (4). Moreover, in displacement situations, which are often accompanied by poverty, powerlessness and loss of security, young refugee women may be forced to resort to harmful behaviors, such as prostitution and trading sex for food or protection, in order to survive.

Worldwide, approximately 6.6 million adolescents are displaced by armed conflict (5). A large percentage of these displaced young persons live in Africa, where many crisis zones are located and where teenage and unintended pregnancies are among the most prevalent among this age group worldwide. Since adolescents and young persons make up a significant proportion of refugee populations, addressing their reproductive health needs ought to be a major priority in every emergency situation. Although data on sexual behavior, unintended pregnancies and other reproductive health issues among

---

*Correspondence to:* Olugbenga-Bello A.I, Department of Community Medicine, College of Health Sciences, LAUTECH  
E-mail: nike\_bello@yahoo.com

*Key words:* contraceptive, adolescents, IDP camp, uptake, prevalence, pattern

refugee youths in refugee camps are limited, a number of studies have shown a high prevalence of risky sexual behavior and low use of contraceptives (1). These findings highlight the vulnerability of refugee girls to unintended pregnancies. For instance, results from a study in a refugee camp in Kenya found that despite the availability of free condoms and other reproductive health care, about 70% of young refugee men and women had unplanned sex without using condoms (6). However, many adolescents who are refugees or IDPs face unwanted, unplanned, and poorly spaced pregnancies, due to a lack of access to contraceptive services and supplies (7), overburdened health care providers with little time to educate or counsel clients (8), pressure from husbands or other family members to 'rebuild' the population, and increase in rape and prostitution (7). Refugees are at higher risk than stable populations for sexually transmitted infections (STIs) and gender-based violence. Research indicates that the availability of contraceptives has improved in stable refugee populations since the mid-1990s. Researchers know little about how the immediate aftermath of flight affects fertility preferences, but refugees' fertility desires appear to revert relatively quickly to what they were before flight (5). A reproductive health study of Afghan refugees in Pakistan in 2000 showed that family planning methods were used by 9 percent of currently married women, with 70 percent of those users preferring to receive injections (9). Border guards, soldiers, and fellow refugees may also perpetrate acts of violence against refugee women. One study of more than 1,000 households in Sierra Leone during its eight-year civil war showed that as many as 11 percent of displaced women and girls experienced war-related sexual violence (8). Gender-based violence can have long-lasting, severe physical effects, including HIV/AIDS, pregnancy, and miscarriage (5).

STIs, including HIV/AIDS, can spread quickly in refugee settings (10), because of limited contraceptive supplies, such as condoms; the presence of military forces, who tend to have higher STI rates than civilian peacetime populations; refugees' greater vulnerability to sexual and gender violence and sex work; greater exposure to inadequately screened blood transfusions; and the presence of populations with HIV (11). Many refugee women and their newborns face health problems related to pregnancy and delivery, including pregnancy complications and miscarriages. During flight and early settlement, women may be forced to give birth alongside roads, in forests, or in temporary shelters, with conditions hazardous both to them and their children. In Nigeria, refugees indicated that 41 percent of women's deaths were due to maternal causes, exceeding any other cause for women (7). Another study showed that both the perinatal mortality rate (stillbirths and deaths in the first week of life) and the proportion of low birth-weight babies doubled during the siege (7). Complications of pregnancy and childbirth, such as severe bleeding, obstructed labor, and unsafe abortion, may be more serious for displaced women, and may lead to infertility and death. A refugee woman who wants to avoid pregnancy so that there will be no abortion services may seek a protected sex. This study was therefore carried out to determine the prevalence and pattern of contraceptive uptake among adolescents in internally displaced persons (IDP) camps in Abuja, Nigeria.

## Materials and methods

This was a descriptive cross-sectional study that determined the prevalence and pattern of contraceptive uptake among internally displaced adolescents in Abuja. The study employed the use of self-administered pre-tested questionnaires which were distributed to internally displaced adolescents in 2 selected IDPs camps in Wasa and Area 1 Abuja. Female adolescents within the ages of 10-24 were included in the study using the multistage sampling technique. A semi-structured standardized and pretested questionnaire was administered to the respondents to gather information about their socio-demographic characteristics, knowledge about family planning, pattern of uptake of family planning and adolescents' sexual practices. Questionnaires were administered by trained research assistants who could speak both English and the local Hausa language, after some sessions of training on the questionnaire and ethics of research. Data were collated manually, checked for errors, and entered into the computer. The Statistical Package for Social Sciences (SPSS) software (IBM Corporation, version 23), was used for analysis. Bivariate analysis was done using Chi-square test statistics to test for associations between the categorical variables, P-value was set at 0.05. Ethical clearance was obtained from the Research Ethical Review Committee of Federal capital territory, Health research Ethical committee, Abuja, Nigeria. Permission to conduct the study was obtained from the Camp director of Wasa and Area 1 IDPs camp. Informed consent was sought and obtained from each respondent.

## Results

Four hundred and seven (407) respondents were surveyed but only 403 questionnaires were retrieved giving a response rate of 99.1%. Table I shows that the mean age of respondents was  $19.53 \pm 6.4$  years. Majority of the respondents 349 (86.6%) were Muslim, 398 (98.8%) were Hausas, 357 (88.6%) were in a polygamy family setting, while 220 (54.6%) respondents attained only primary education level.

Table II shows that the majority of the respondent 383 (95.0%) was aware of family planning, and more than half of the respondents 347 (86.1%) knows any method a man or a woman can use to avoid pregnancy, while few respondents specified implant as a possible method man and woman can adopt. The common method known by respondents was Intrauterine Contraceptive Device 146 (36.2%), followed by implant 129 (32.0%). Many of the respondents were able to identify the advantage and side effects of family planning. Among the most commonly cited advantages were prevention of unwanted pregnancies 209 (51.9%) and limiting family size 105 (26.1%). However, some perceived side effects of family planning mentioned included infertility 56 (20.9%), irregular menses 52 (19.5%) and bleeding 53 (19.9%).

Table III shows the reproductive history, fertility desires and barriers to family planning use among the respondents. Majority 340 (84.4%) of the respondents don't know how many days in a month they have their menstrual cycle, many of the respondents 375 (93.1%) can not recognize their fertility period. Majority, 338 (83.9%) of the respondents were married and high proportion 57 (87.7%) out of 65 unmarried respondents had

Table I. Socio-demographic characteristics of respondents N=403.

Variables	Frequency (n)	Percentage (%)
Age (years)		
<15	139	34.5
16-20	188	46.7
>20	76	18.9
Religion		
Christian	54	13.4
Islam	349	86.6
Ethnicity		
Yoruba	5	1.2
Hausa	398	98.8
Marital status		
Married	5	1.2
Single	398	98.8
Family type		
Monogamy	46	11.4
Polygamy	357	88.6
Level of education		
Primary	220	54.6
Secondary	54	13.4
Tertiary	69	17.1
No formal education	60	14.9
Mean age=19.53±6.4 years		

only one sexual partner. Majority 280 (83.1%) of respondents were in polygamous marriage, while 118 (64.8%) respondents were the second wife in their polygamous marriages. More than half 349 (86.6%) of the respondents were ever pregnant and among these 62 (17.8%), were unintended. Few 33 (8.2%) of the respondents aborted pregnant before while 22 (66.7%) of those involved in abortion claimed they aborted pregnancy once in their life time. Few, 77 (21.3%), had their first child at the age of 20 years and above. One third 160 (39.7%) were currently pregnant and 78 (48.8%) of those currently pregnant were not intentional. The major reasons for not preventing the current pregnancy were the poor access to contraceptive services 87 (53.4%), due to husband disapproval of contraceptive 68 (41.7%), and religion prohibition 8 (4.9%). Considerable proportion 117 (73.1%) of the pregnant respondents said they will be ready to use any method to delay pregnancy after the birth of the child they were expecting. Among the respondents who were not using any methods, the most common stated reasons for not using contraception were, cost 71 (60.7%), fear of side effect 22 (18.8%), and desire for more children 14 (12.0%).

Table IV shows the pattern and uptake of family planning methods among respondents. One hundred and sixty-nine (41.9%) respondents ever used a family planning method, 152 (37.7%) never use it while only 82 (20.3%) respondents were currently using family planning as at the time of this survey. One hundred and seventy-two (42.6%) of the ever users

respondents claimed they ever used pills method and their major reason for stopping the pills was because of the medical problems 62 (36.7%). However, 44 (53.7%) of the current users of family planning were using condom only, 19 (23.2%) were on pills. Their purpose for using family planning were limiting child birth 190 (75.7%) and child spacing 11 (4.4%), while 63 (76.8%) of the current users have been on it for 1-3 years. Out of the non-users, 37 (24.3%) said they wish to be on family planning, and the reasons was because they need it to limit their child birth 28 (75.7%), and 9 (24.3%) said to space their childbirth. Analysis of the association between the respondents' demographic characteristics and uptake of.

Family planning showed that 'Religion' ( $P<0.01$ ), 'ethnicity' ( $P<0.001$ ), 'marital status' ( $P<0.001$ ), Family type ( $P<0.001$ ), educational level ( $P<0.001$ ) and 'ever married' ( $P<0.05$ ) were all statistically significantly associated with 'uptake status' of family planning (Table V).

Table VI shows the association between socio-demographics characteristics and acceptance to use family planning by non-users. It shows that respondents 'religion' ( $P, 0.008$ ), 'marital status' ( $P, 0.001$ ) and 'educational status' ( $P, 0.032$ ) were statistically significant associated with non-users acceptance to using family planning with  $P<0.05$ . Table VII shows the result of binary logistic regression representing the predictors of contraceptive status of respondents using logistic regression. The overall model was found to be statistically significant as the omnibus test of coefficient was statistically significant,  $\chi^2=68.218$ ,  $P$ -value  $<0.001$  with the overall correct percentage of 62.3%. Significant predictors of contraceptive status were religion, ethnic group, marital status, family type and level of education. Respondents who were married were 1.397 times more likely to use contraceptive compared to respondents who were single,  $OR=1.397$ , 95% CI  $OR (0.683-2.855)$ ,  $P=0.035$ .

Table VIII shows the result of binary logistic regression representing the predictors of acceptance to use family planning method by non-users. The overall model was found to be statistically significant as the omnibus test of coefficient was statistically significant,  $\chi^2=41.316$ ,  $P$ -value 0.028 with the overall correct percentage of 23.7%. Significant predictors of acceptance to use family planning method by non-users were religion, marital status and level of education. Respondents who were Christian were 1.243 times more likely to ready to use family planning if available to respondents who were Muslims,  $OR=1.243$ , 95% CI  $OR (0.375-4.124)$ ,  $P=0.022$ .

## Discussion

Almost half of the respondents were within the age range of 16 and 20 years which was in tandem with another study done among internally displaced persons in Jos where most of the internally displaced were mid-adolescents (2). This is a strong pointer to the fact most people in their productive age group are being incapacitated and shut up in a camp and are unable to contribute to the Gross Domestic Product of the nation. As a result of this, their health issues cannot be over emphasized (11).

More than three fourth of respondents were married; this finding is similar to a study done on sexual and reproductive health needs and problems of internally displaced adolescents in Bornowhere more than half of the adolescents were married

Table II. Adolescents awareness and knowledge about family planning method (N=403).

Variables	Frequency (n)	Percentage (%)
Ever heard of family planning		
Yes	383	95.0
No	20	5.0
Know any method man and woman can use to avoid pregnancy		
Yes	347	86.1
No	56	13.9
If yes, is it possible to obtain this method (n=347)		
Yes	347	100.0
No	0	0.0
Family planning methods known by the respondents		
Pills	13	3.2
IUD	146	36.2
Implant	129	32.0
Condom	67	16.6
Traditional	5	1.2
Natural	32	7.9
Withdrawal	11	2.7
Know any place where family planning method can be obtained		
Yes	350	86.8
No	53	13.2
Place where family planning can be obtained (n=350)		
Camp	276	78.9
Friends	28	8.0
Others	46	13.1
What advantage of family planning method do you know		
Avoid unwanted pregnancy	209	51.9
Delay mysterious pregnancy	27	6.7
Limit family size	105	26.1
Prevent STI	62	15.4
Do you know any side effect of using contraceptive		
Yes	267	66.3
No	136	33.7
If yes, specify specific side effects (n=267)		
Back pain	3	1.1
Bleeding	53	19.9
Bleeding and high blood pressure	14	5.2
Irregular menses	52	19.5
Infertility	56	20.9
Limit child birth	61	22.8
Don't know	31	11.6

too (12). This could actually be because both sexes are lumped together in the same camp. A lot of emotional attachment could have prompted them to marry at a younger age compared to their counterpart in the outside world. Also, almost two third of the married respondents were in a polygamous relationship. This could have increased the prevalence as well as the incidence of STIs among the respondents. Furthermore, this study revealed that more than half of the respondents only

had primary level of education while less than two tenth had tertiary education. This is in contrast to another study done among IDPs in Borno where more than one third of respondents had tertiary education 4. The low level of education in this current study could have contributed to their early marriage too. Almost all respondents in this present study have ever heard of family planning at a particular point in time and more than four fifth knew at least one form of contraception.

Table III. Respondents reproductive history (N=403).

Variables (*multiple responses)	Frequency (n)	Percentage (%)
Do you know how many days in your menstrual cycle		
Yes	63	15.6
No	340	84.4
Can you recognize your fertility period		
Yes	28	6.9
No	375	93.1
Days counted fertile (n=28)		
As soon as my menses start	22	78.6
First day of my period	3	10.7
Don't know	3	10.7
*What are the body changes you notice in your fertility period		
Increase in basal body temperature	20	5.4
Increase in cervical mucus production	102	27.8
Thin clear mucus	3	0.8
Pap like cervical cancer	14	3.8
Are you married		
Yes	338	83.9
No	65	16.1
If no, are you in to relationship (n=65)		
Yes	40	61.5
No	25	38.5
No of sexual partner (n=65)		
1	57	87.7
2	8	12.3
If yes, type of marriage (n=338)		
Monogamous	58	16.9
Polygamy	280	83.1
Order in polygamous marriage (n=290)		
One	77	26.6
Two	188	64.8
Three	25	8.6
Have you ever been pregnant		
Yes	349	86.6
No	54	13.4
If yes, what is intentional (n=349)		
Intentional	287	82.2
Unintentional	62	17.8
Have you ever aborted before		
Yes	33	8.2
No	370	91.8
If yes, how many times (n=33)		
1	22	66.7
2	11	33.3

Intrauterine device happened to be the most widely known form of contraception among internally displaced persons in this study, followed by implants. The availability as well as accessibility of contraceptives in IDP camps cannot be over emphasized. This will give an ample opportunity for people in

their reproductive age to access these commodities since their movement to the outside world may be restricted. Two fifth of respondents were pregnant at the time of data collection and almost half of the pregnancies were unintentional. This is a pointer to the fact that the knowledge of contraceptives does

Table IV. Fertility desires and barrier to use of family planning among respondents (N=403).

Variables	Frequency (n)	Percentage (%)
How many living children do you have (n=361)		
Son		
0	6	1.7
1	168	46.5
2-3	177	51.8
Daughter		
1	123	35.4
2-3	196	56.5
>4	28	8.1
Age at birth of your first child (years) n=361		
<20	53	14.7
>20	77	21.3
Don't know	231	64.0
Are you currently pregnant		
Yes	160	39.7
No	243	60.3
If yes, is it (n=160)		
Intentional	56	35.0
Non-intentional	78	48.8
Failure of family planning methods	26	16.3
If its due to family planning failure, what method did you use		
Pill	64	76.2
Injectables	20	23.8
Reason for not preventing the current pregnancy (n=160)		
Poor access to contraceptive	87	53.4
Husband disapproval of contraceptive	68	41.7
Religion prohibition	8	4.9
Others	7	2.5
After the birth of the child you are expecting now, will you be willing to use any method to delay pregnancy		
Yes	117	73.1
Undecided	43	26.9
If answer is yes, why will you like to use family planning method		
For child spacing	97	82.9
For child limitation	20	17.1
Which method will you prefer to use (n=117)		
Pill	10	8.5
IUD	13	11.1
Implant	64	54.7
Condom	17	14.5
Natural method	13	11.1
If you are not going to use any method, what is your reasons (n=286)		
Fear of side effect	22	18.8
Desire to have more children	14	12.0
Cost	71	60.7
Breastfeeding	10	8.5

not equate to their usage. More than two third of those who had unintentional pregnancies indicated that they would like

to use contraceptives after they deliver the index pregnancy, mainly for child spacing (Fig. 1).



Table V. Pattern of uptake and acceptability of family planning methods by respondents.

Variables	Frequency (n)	Percentage (%)
Which group do you belong?		
Current users	82	20.3
Ever user	169	41.9
Never user	152	37.7
If ever used, what method (n=169)		
Pill	72	42.6
Implant	36	21.3
Injectable	61	36.1
Reason for stopping FP by ever users (n=169)		
Fear of side effect	26	15.4
Medical problem	62	36.7
Desire to have more children	20	11.8
Cost	61	36.1
What method are you using currently (current user only) n=82		
Pill	19	23.2
IUCD	14	17.1
Implant	5	6.1
Condom	44	53.7
Purpose of your using family planning methods (n=251)		
Limiting of child birth	190	75.7
Stopping child birth	50	19.9
Spacing number of children	11	4.4
Current user, period of being on family planning method (n=82)		
<6 months	5	6.1
1-3	63	76.8
>4	14	17.1
As non/never user, ever wish to be on family planning (n=152)		
Yes	37	24.3
No	115	75.7
If yes, which of this is applicable to you (n=37)		
Need family planning to space my child	9	24.3
Need family planning to limit my childbirth	28	75.7
If No, reason for not on any method of family planning (n=51)		
Fear of side effect	11	9.6
Fear of infertility	34	29.6
Medical problem	14	12.2
Desire to have more children	56	48.7
If non-user, interest to be on family planning method (n=152)		
No	101	66.4
Yes	51	33.6
If yes, which method will you like to use (n=51)		
Condom	3	5.9
IUCD	11	21.6
Implant	20	39.2
Injectable	17	33.3
If no. reasons (n=101)		
Partner disapproval	61	60.4
Religious prohibitive	37	36.6
Cultural prohibitive	3	2.9
Suggest a way to improve utilization of family planning method among sexually active adolescent (n=89)		
Availability of family planning methods	14	15.7
Educate our husband about family planning	17	19.1

Table V. Continued.

Variables	Frequency (n)	Percentage (%)
Side effect is much like hypertension they should try to improve on it	28	31.5
Government and NGOs should make family planning free	19	21.3
Young adult should rest in between birth and use family planning	11	12.4

Table VI. Association between respondents' socio-demographic characteristics and contraceptive use staff respondents.

Socio-demographics characteristics	Contraceptive status			Statistics
	Current user	Ever user	Non user	
Age (years)				
<15	35 (18.6)	80 (42.6)	73 (38.9)	$X^2=2.822$
16-20	29 (20.9)	58 (41.7)	52 (37.4)	df=4
>20	18 (23.7)	31 (40.8)	27 (35.5)	P-value=0.831
Religion				$X^2=90.750$
Christian	35 (64.8)	0 (0.0)	18 (35.2)	df=2
Islam	47 (13.5)	169 (48.4)	133 (38.1)	P-value=<0.001 <sup>a</sup>
Ethnic group				$X^2=19.819$
Yoruba	5 (100.0)	0 (0.0)	0 (0.0)	df=2
Hausa/Fulani	77 (19.3)	169 (42.5)	152 (38.2)	P-value=<0.001 <sup>a</sup>
Marital status				$X^2=31.371$
Married	82 (20.6)	169 (42.5)	147 (36.9)	df=2
Single	0 (0.0)	0 (0.0)	5 (100.0)	P-value=<0.001 <sup>a</sup>
Family type				$X^2=47.749$
Monogamy	16 (34.8)	0 (0.0)	30 (65.2)	df=2
Polygamy	66 (18.5)	169 (47.3)	122 (34.2)	P-value=<0.001 <sup>a</sup>
Level of education				$X^2=88.601$
Lower education level	66 (23.6)	104 (37.1)	110 (39.3)	df=2
Higher education level	16 (20.4)	65 (22.2)	42 (57.4)	P-value=<0.001 <sup>a</sup>
Are you married (403)				$X^2=30.729$
Yes	71 (21.0)	122 (36.1)	145 (42.9)	df=1
No	11 (16.9)	47 (72.3)	7 (10.8)	P-value=<0.001
If married, type of marriage (338)				$X^2=0.757$
Monogamous	14 (24.1)	21 (36.2)	23 (39.7)	df=1
Polygamous	68 (96.5)	148 (52.9)	122 (43.6)	P-value=0.384
Order in polygamous marriage (290)				
1	15 (19.5)	37 (48.1)	25 (32.5)	$X^2=1.211$
2	37 (19.7)	94 (50.0)	57 (30.3)	df=2
>3	2 (8.0)	11 (44.0)	12 (48.0)	P-value=0.273
Ever aborted (403)				$X^2=1.203$
Yes	7 (21.2)	11 (33.3)	15 (45.5)	df=1
No	75 (20.3)	158 (42.7)	137 (37.0)	P-value=0.273

<sup>a</sup>Statistical significant <0.05.

The prevalence of contraceptive use among respondents in this current study is twenty percent. More than one third have never used any form of contraception while a higher

proportion have used contraceptives at one time or the other but have stopped. This prevalence is quite higher than that found among adolescents in a Ghanaian IDP camp where



Table VII. Association between socio-demographics characteristics and acceptance to use family planning method by non-users.

Socio-demographic characteristics	Acceptance to use family planning		X <sup>2</sup>	df	P-value
	Yes	No			
Age (years)			2.949	2	0.229
<15	22 (30.1)	51 (69.9)			
16-20	11 (21.2)	41 (78.8)			
>20	4 (14.8)	23 (85.2)			
Religion			6.986	1	<sup>a</sup> 0.008
Christian	13 (68.4)	6 (31.6)			
Islam	37 (27.8)	96 (72.2)			
Ethnic group			-	-	-
Yoruba	0 (0.0)	0 (0.0)			
Hausa/Fulani	37 (24.3)	115 (75.7)			
Marital status			16.069	1	<sup>a</sup> 0.001
Married	32 (21.8)	115 (78.2)			
Single	5 (100.0)	0 (0.0)			
Family type			1.196	1	0.198
Monogamy	5 (16.7)	25 (83.3)			
Polygamy	32 (26.2)	90 (73.8)			
Level of education			8.791	1	<sup>a</sup> 0.032
Lower education level	26 (23.6)	84 (76.4)			
Higher education level	11 (26.2)	31 (73.8)			

<sup>a</sup>Statistically significant <0.05.

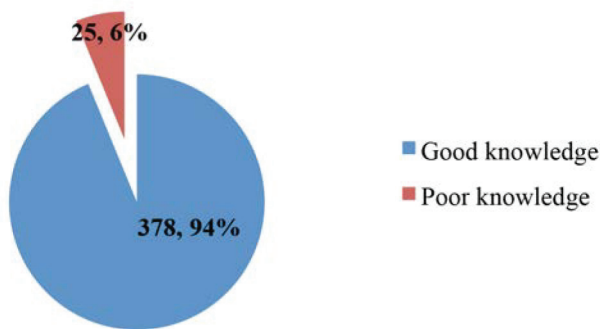


Figure 1. Overall knowledge of respondents on family planning method.

only 7.3% were current users of contraceptives (13). However, in another study done in Ethiopia, a higher prevalence was gotten (15). The relatively high prevalence found in this study could actually be as a result of the awareness and availability of contraceptives in these camps. Contraceptive usage in IDP camps should be encouraged among adolescents, therefore, continuous health education to dissipate the misconception or myths about contraceptive usage should be continuously emphasized.

The cost of obtaining the contraceptives was one of the main reasons why ever users stopped using them. More than half of the current users use condom as their only form of

contraception and two third of them have been on this form of contraception for more than a year. Surprisingly, about two-third of non-users indicated that they will still not use any form of contraception even if they have the opportunity because of spousal disapproval. This similar situation was also discovered in another study done in a refugee camp in Ethiopia where most respondents weren't using modern contraceptives because of their husband's disapproval (15). Men involvement in family planning cannot be over-emphasized if contraceptive commodities will be used by women of reproductive age group.

Statistically, more of the married respondents fell into the category of ever users while almost half of the singles have never used contraceptives before. Also, a higher proportion of those in a polygamous marriage are ever users while more than two third of those in monogamous family type are non-users. From this study, Christians were seven times more likely to use contraceptives than respondents who practice Islam. The finding here is not congruent with another study where age was the most important factor that influenced their use of contraceptives.

**Limitations**

This topic is a very sensitive matter and some of the adolescents were initially conservative in answering the questions. However, confidentiality was assured which subsequently lead to a successful data collection.

Table VIII. Predictors of contraceptive status of respondents using logistic regression.

Variable	B	OR (95% CI)	df (P-value)
Religion			
Christian (Ref)			
Islam	0.331	1.393 (0.569-3.256)	1 (0.445)
Ethnic group			
Yoruba (Ref)			
Hausa/Fulani	-0.407	0.665 (0.349-1.267)	1 (0.215)
Marital status			
Married (Ref)			
Single	0.334	1.397 (0.683-2.855)	1 (0.035)
Family type			
Monogamy (Ref)			
Polygamy	0.137	1.147 (0.430-3.063)	1 (0.784)
Level of education			
Lower education level (Ref)			
Higher education level	-0.020	0.980 (0.534-1.798)	1 (0.948)

$X^2=68.281$ , P-value <0.001. C. C; 62.3%

#### Predictors of acceptance to use family planning method by non-users using logistic regression

Variable	B	OR (95% CI)	df (P-value)
Religion			
Christian (Ref)			
Islam	0.218	1.243 (0.375-4.124)	1 (0.022)
Marital status			
Married (Ref)			
Single	-0.822	0.439 (0.084-2.307)	1(0.331)
Level of education			
Lower education level (Ref)			
Higher education level	0.214	1.238 (0.667-2.298)	1 (0.498)

$X^2=41.316$ , P-value 0.028. C. C; 23.7%

OR, odd ratio; B, Regression coefficient; df, degree of freedom; P-value <0.05 indicates.

## Conclusions

The knowledge of adolescents about contraceptives in the internally displaced camp was low. The prevalence of contraceptive use is low too. Effort and mechanism should be put in place to ensure correct information to IDP campers and access to contraceptives should be ensured.

Accepted: 7, December 2023; submitted: 27, August 2023; published: 27, December 2023.

## References

- Lloyd C, (ed.): Growing up Global: The changing transition to adulthood in developing countries, Washington DC, National academies press, 2005.
- World Bank, Development and the Next generation, World Development Report, Washington DC, International Bank for Reconstruction and development, 2007.
- United Nations Commissioner for Refugees (UNHCR). Reproductive health services for refugees and internally displaced persons (IDPs): Report of an inter-agency global evaluation. UNHCR, 261, 2004.
- Women's Commission for Refugee Women and Children. Minimum Initial Service Package (MISP) for Reproductive Health in Crisis Situations: A Distance Learning Module, 30, 2008.
- Matthew J and Ritsema S: Addressing the reproductive health needs of conflict affected young people. Forced Migration Rev 19: 6-8, 2004.
- Agbaje FO: Sexual behaviour and HIV/AIDS prevention among adolescent refugees in Oru refugee camp, Nigeria. Presented at the International Conference on AIDS. Vienna, Austria, 2010.
- Office on the Coordination of Humanitarian Affairs (OCHA). '2016 Humanitarian Needs Overview,' United Nations Office on the Coordination of Humanitarian Affairs (OCHA), Nigeria Humanitarian Country Team, 2016.

8. Women's Commission for Refugee Women and Children, Minimum Initial Service Package (MISP) for Reproductive Health in Crisis Situations: A Distance Learning Module, 29, 2006.
9. United Nations Children's Fund (UNICEF). 'Nigeria Humanitarian Situation Report,' 2015.
10. Tadiesse EN, Orago A, Karega R and Vivarie R: Socio-cultural determinants of pregnancy and the spread of sexually transmitted infections among adolescent residents of Kakuma refugee camp, Northern Kenya. Presented at the Conference 2003: Reproductive Health from Disaster to Development, Brussels, Belgium, Tutorial Fellowship Centre for Complementary Medicine and Biotechnology, Kenyatta University, UNHCR, Kenya.
11. Mathew B and Joshua IA: Social Characteristics and Risk Factors for Diseases among Internally Displaced Persons: A Study of Stefano's Foundation Camp in Jos, Nigeria, 1, 2017.
12. Amelia NO, Musa K and Oladugba AV: Sexual and Reproductive Health Needs and Problems of Internally Displaced Adolescents (IDAs) in Borno State, Nigeria: A Mixed Method Approach. *Afr J Reprod Health* 24: 87-96, 2020.
13. Ganle JK, Amoako D, Baatiema L and Ibrahim M: Risky sexual behaviour and contraceptive use in contexts of displacement: Insights from a cross-sectional survey of female adolescent refugees in Ghana. *Int J Equity Health* 18: 127, 2019.
14. Abebe M and Awoke W: Utilization of youth reproductive health services and associated factors among high school students in Bahir Dar, Amhara Regional State, Ethiopia. *Open J Epidemiol* 4: 69-75, 2014.
15. Seyife A, Fisseha G, Yebyo H, Gidey G and Gerense H: Utilization of modern contraceptives and predictors among women in Shimelba refugee camp, Northern Ethiopia. *PLoS One* 14: e0212262, 2019.