Unmet Need for Family Planning Uptake among Currently Married Women in North central and Northwest of Nigeria

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Abstract— *The study examined unmet need for family planning uptake among currently married women in Northcentral and Northwest of Nigeria. Attempt was made to investigate unmet need for family planning uptake among currently married women in both regions.The study utilized secondary data. Secondary data were extracted from 2013 Nigeria Demographic and Health Survey (NDHS) dataset. Out of the 38,948 currently married interviewed, the study employed sample of 16,564 comprising 5,347for northcentral and 11,217 for northwest. The analysis were done in three stages of univariate, bivariate and multivariate levels. The result showed evidence of higher age of respondents, higher education among currently married in northcentral than northwest. The number of children ever born (CEB) among currently married in both regions were six plus respectively. For both regions unmet need for family planning uptake increased with religion. The result of the multivariable analysis regarding unmet need for family planning uptake, the logistic analysis shows factors such as age, education, religion, occupation, ceb, desire for more children, wealth index and knowledge of family planning as the variables determined unmet need for family planning uptake in Northcentral while age of respondents, occupation ,wealth index, place of residence, ceb, desire for more children and women autonomy determined unmet need for family planning uptake in Northwest than Northcentral. The study concluded that currently married women in Northcentral and Northwest showed differentials on unmet need for family planning. Currently married women in Northcentral exhibiting more unmet need for family planning and less unmet need in Northwest. Religion, education, wealth index, women autonomy, children ever born, knowledge of family planning and desire for more children were the most important variables explaining the differentials on unmet need for family planning among currently married women in Northcentral and Northwest of Nigeria.*

Keywords— ***Differentials, Family Planning, Proximate Variables, Univariate, Unmet Need, Women Autonomy.***

I. INTRODUCTION

The countries of West African have some of the highest level of unmet need for family planning in the world. Women with unmet need for family planning constitute to a significant fraction of all married women of reproductive age in developing countries. Unmet need for family planning has been receiving emphasis both as approach toward fertility regulation and as a controversial fact in term of reproductive health. The question "why some women, who want to control their fertility are not using contraception despite of their real intention" is the core stone of unmet need for family planning, these women are considered to have unmet need for family planning. The definition of unmet need for family planning has been expanded recently to include pregnant women who became unintentionally pregnant because they had been unable to use family planning. If a pregnant women state that her pregnant or the pregnancy for her recent birth was not intended, it means that access to family planning could delayed or prevent that pregnancy. The women had unmet need for family planning for limiting birth if she want to postpone her next birth.

Women with unmet need for family planning can be classified into two groups. Those who would like to postpone the next birth (spacing) and those who would not like to have further children (limiting). Women with unmet need are those who are fecund and sexually active but not using any method of contraception and report not wanting any more children or wanting to delay the next child. The concept of unmet need points to the gap between women reproductive intention and their contraceptive behavior. Unmet need for family planning is investigated because of the following reasons;

Firstly, unmet need for family planning has direct impact on total fertility rate. It is believed that if unmet need for family planning were eliminated, fertility would decline substantially (Westoff, C. F. (2012). Hence fore, unmet need provided a powerful rationale for funding and organizing effective family planning programs.

Second, it can assure well-being of mother and women by preventing unwanted pregnancies. MacQuarrie, K. L. (2014), pointed out the way to reduce fertility is not just adoption of modern family planning method. The infanticide and induced abortion can be experienced as well. Therefore, unmet need lead to unwanted pregnancy, abortion become a special means to control fertility. As regard to harmful consequence of an abortion, decreasing unmet need could help to reduce maternal morbidity and mortality.

Thirdly, unmet need for family planning can be considered as a way to ensure women right. Women have right to choose the number of their children, the time of pregnancies and taking part in decision making in the home. But a big proportion of women with unmet need is forced by their husband and her family to follow their commands and bring as many children as they want. From the standpoint of women reproductive health right, unmet need is considered as an indicator of the violation of such right and one of several basic rationales for women empowerment. (Mc cauley et al .2010).

Thus, the present study was designed with the following objectives;

- To examine socio-demographic factors on unmet need for family planning in both regions (Northcentral and Northwest)
- To examine women autonomy on unmet need for family planning in both regions. (Northcentral and Northwest)

II. DATA AND METHODS

This study used data from the Nigeria Demography and Health Survey (NDHS) data set of 2013. NDHS is the nationally representative stratified, self-weighting probability sample of women age 15-49 years. Sample design in the collection of NDHS data involved multi stage sampling techniques. The procedure involved the division of the country into state. Each state was sub-divided into local government areas (LGAs) and each LGA was divided into localities and each locality was further sub-divided into different census enumeration area (EAs). Each EA was classified as urban and rural based on a defining criterion, where individual household were randomly sampled and successfully interviewed (NPC and ORC Marcro 2013).Out of total numbers of 38,948women of reproductive age 15-49 interviewed in NDHS, 2013. The study make use of information on the 16,564 women representing the number of married women in both regions, in Northcentral (5,347) and in Northwest (11,217) Nigeria.

Data analysis

Stata version 12 would be used for data analysis. The analysis would be in three stages. The first is the univariate analysis in which distribution of respondents will be presented according to background variables. The second stage is the bivariate analysis in which two variables are considered at a time. The relationship between variable are established and the statistical significance of such variables are tested. The chi-square test would be used in this stage. Frequency will be run for all the variables to know the frequency and percentage distribution of each of the variables. Chi-square test is applied where the variable are categorical. The variable to be used are categorical in nature such as age, education, place of resident, wealth index, children ever born, religion and so on. The third stage is multivariate analysis which further analyses the level of effect of related independent variables on dependent variables. In this study the logistic regression model would be used. Logistic regression is a form of regression which is used when the dependent variables is dichotomous (i.e. having 1 or 0) and independent variables are of any type. This stage will be divided into three: the first part, unmet need for family planning which is dichotomous (0= no unmet need for family planning and 1= unmet need for family planning), proximate variables (women autonomy, desire for more childrenandknowledge of any family planning method) while the independent variables are age, education, wealth index, religion, children ever born and place of resident, etc.

Data analysis plan

Univariate analysis involved, Percentage distribution of respondents' socio-demographic factors, Percentage distribution of proximate variables and Percentage distribution of unmet need for family planning.

Bivariate analysis involved, Cross tabulation of socio-demographicfactors against unmet need for family planning in both regions (Northcentral and Northwest of Nigeria, Cross tabulation of socio-demographic factors against proximate variables and cross tabulation of proximate variables against unmet need for family planning in both regions.

Multivariate analysis involved the use of regression model. Regression of independent variables (socio-demographic

factors) on dependent variables, regression of proximate variables on dependent variables and regression selected significant variables on dependent variables.

III. RESULTS

The univariate analysis of socio-demographic factors of currently married women in northcentral and northwest and others variables that are important to the study. In particular, northcentral and northwest differ in terms of socio-demographic factors. These might influence unmet meet need among currently married women in both regions and therefore need to be examined. Information on a total of 16,564 married women comprising 5,347 Northcentral and 11,217 Northwest was analyzed.

Distribution of respondents socio-demographic characteristics by Northcentral &Northwest

The distribution of respondents socio-demographic factors as presented in table1 below show that almost half of the married women (21%) were in age group 15-19. About 21% of northcentral and northwest 20% women are in age group 15-19 years. On the average age of currently married women in both regions tend to be younger 15-19. A larger percentage of the respondents live in rural area. About 61% of currently married women in northcentral live in rural area and 77% of currently married women in northwest live in urban. With respect to education attainment, more than half 57% had no formal education. Distribution across the regions indicate that 32% of respondents in Northcentral are more likely to beuneducated compared to Northwest 69% counterpart. Similarly, higher proportion of currentlymarried women in Northcentral 36% than Northwest 16% reported that they had secondary education.

Wealth status as measured by wealth index is richest among the respondents. 23% of the respondents are in richest index category. It can be observed that the proportion of northcentral women in richest wealth index category 35% is lower than the northwest women 53% in the same category. About 63% out of 100% respondents are employed, with more than half 67% of northcentral and northwest 75% women were employed.

With regard to religion, more than half of the respondents 74% reported that they were Muslim. Also, less northcentral women 44% than northwest women 89% belong to muslin religion Almost 54% and 24% for northcentral and northwest women reported to be practicing christian religion. The distribution of respondents across the two regions, the higher proportion 61% of northcentral women had 1-2 child than counterpart in northwest 56%. Similarly, 25% of northcentral women had 3-5 children compared to 34% of northwest women.

Table.1: Distribution of respondents socio-demographic characteristics by Northcentral and Northwest

Regions Percentage			
Northcentral (n= 5,347)	**Northwest (n=11,217)**	**Both (n=16,564)**	
Age	%	%	%
15-19	21%	20%	21%
20-24	19%	17%	18%
25-29	20%	18%	19%
30-34	14%	14%	14%
35-39	11%	12%	12%
40-44	9%	9%	9%
45-49	7%	10%	9%
Place of resident			
Urban	39%	77%	42%
Rural	61%	23%	58%
Education			
No education	32%	69%	57%
Primary	22%	12%	15%
Secondary	36%	16%	23%
Higher	10%	3%	5%
Wealth status			
Poorest	1%	2%	18%
Poorer	8%	6%	19%

Middle	24%	11%		19%
Richer	32%	29%		21%
Richest	35%	53%		23%
Occupation				
Unemployed	33%	25%		37%
Employed	67%	75%		63%
Religion				
Christian	54%	10%	24%	
Islam	44%	89%		75%
Others	2%	1%		1%
Ceb				
1-2 children	61%	56%	51%	
3-5 children	25%	34%	28%	
6 children+	14%	11%	21%	

Sources: Author's work, 2017 (Data from the 2013 NDHS)

This section present the distribution ofrespondents proximate variables by northcentral and northwest. The distribution as shown in table2 revealed that 32% of respondents desire for more children within two years and after two years. About 21% in northcentral and 37% in northwest desire for more children within two years. Similarly, 28% in northcentral and 35% in northwest desire for more children after two years.Moreso, larger percentage 77% of respondents know modern method of contraceptive. More than half 78% in northcentral and 76% in northwest had knowledge on modern method of contraceptive. With respect towomen autonomy, majority of respondents 76% revealed that only their husband decide health care. It can be observed that the proportion of northcentral women 57% and 84% of women reported that only their husband decide health care. Similarly, almost half 37% respondents in northcentral than 14% of respondents in northwest reported that husband and respondents decide health care.

Table.2: Distribution of respondents proximate variables by Northcentral and Northwest

Regions Percentage			
Northcentral (n= 5,347)	**Northwest (n=11,217)**	**Both (n=16,564)**	
Desire for more children	**%**	**%**	**%**
Wants within 2 yrs	21%	37%	32%
Wants after 2 yrs	28%	35%	32%
Wants, unsure timing	22%	13%	16%
Undecided	11%	8%	9%
Wants no more	18%	8%	11%
Knowledge of any method			
Knows no method	20%	21%	21%
Knows only folkloric	1%	2%	1%
Knows only traditional	1%	1%	1%
Knows modern method	78%	76%	77%
Women autonomy			
Respondents alone	6%	2%	3%
Respondents & husband	37%	14%	21%
Husband alone	57%	84%	76%

Sources: Author's work, 2017 (Data from the 2013 NDHS)

The segment highlight unmet need for family planning among married women in northcentral and northwest Nigeria. The result showed that 20% of respondents in both regions had unmet need for family planning. Distribution

across the regions show that 31% of respondents in northcentral had unmet need for family compared to northwest 15%. Despite unmet need for family planning, proportion 80% of respondents who reported no unmet need for family planning in both regions. About 69% in northcentral and 85% in northwest reported no unmet need for family planning respectively.

Table.3: Distribution of respondents unmet need by Northcentral and Northwest

Regions Percentage			
Northcentral (n= 5,347)	**Northwest (n=11,217)**	**Both (n=16,564)**	
Unmet need	**%**	**%**	**%**
No unmet	69%	85%	80%
Unmet	31%	15%	20%

Sources: Author's work, 2017 (Data from the 2013 NDHS)

Bivariate analysis

This section present the result of bivariate relationship between demographic factors and proximate factors among married women in northcentral and northwest. The relationship between demographic factors and proximate factors were examined across the two regions (northcentral and northwest). The analysis was done using cross tabulation as well as chi-square test. Chi-square was used to test significant between demographic factors and proximate factors. A p-value of less than or equal to 0.05 indicate that there is significant relationship.

Table.4: Relationship between proximate variables and age of currently married women by Northcentral and Northwest.

An over view between proximate factors and age of currently married women in both regions were presented in table4 below.The result showed that there is relationship (p=0.00) between age of currently married women in both region and desire for more children. By comparison 8% and 17% age 15-19 years in both regions, 22% and 18% age 20-24 years in both regions, 29% and 21% age 25-29 years in both regions, 18% and 15% 30-34 years in both regions, 12% and15% age 35-39 in both region, 7% and 9% age 40-44 years in both and 4% and 6% age 45-49 years in both region claimed that they want more children within two years. Similarly, 17% and 13% age 15-19 years in both regions, 28% and 23% age 20-14 years in both regions, 31% and 26% age 25-29 years in both regions, 15% and 19% age 30-34 years in both regions, 7% and 12% age 35-39 years in both regions, 3% and 5% age 40-44 years in both regions and 1% in northcentral and 2% in northwest reported that they want more children after two years plus. Furthermore, 55% and 65% age 15-19 years in both regions, 24% and 18% age 20-24 years in both regions, 14% and 7% age 25-29 years in both regions, 5% and 5% age 30-34 years in both regions, 1% age 35-39 in northwest, 2% age 40-44 in northwest and 1% age 45-49 years in northwest reported that they were not sure timing for more children. Also.16% and 21% age 15-19 years in both regions, 12% and 10% age 20-24 years in both regions, 14% and 13% age 25-29 years in both regions, 17% and 12% age 30-34 years in both regions, 23% and 15% age 35-39 years in both regions, 25% and 15% age 40-44 years in both regions and 24% and 14% age 45-49 years in both regions stated that they were not decided for more children. Moreso, 1% age 15-19 years of respondents in northcentral,2% age 20-24 years in northcentral, 9% and 2% age 25-29 years in both regions, 17% and 7% age 30-34 years in both regions, 23% and 15% age 35-39 years in both regions, 25% and 29% age 40-44 years in both regions and 24% and 48% in both regions reported that they do not want more children.

Following the relationship between age of married women in northcentral and northwest and knowledge of family planning method. Finding from this study revealed that there is significant relationship between age of married women and knowledge on family planning method in both regions. (Northcentral p=0.01 while northwest p=0.00). For instance higher proportion 26% of respondents in northcentral age 15-19 years claimed that they do not have knowledge of family planning method compared to 26% age 15-19 in northwest. Similarly, almost half 28% of respondents 35-39 years in northcentral reported that they have folkloric knowledge of family planning method compared to northwest 30% 35-39years. Inaddition, higher proportion of respondents age 30-34 stated that they have traditional knowledge of family planning method compared to northwest 32% age 30-34. Conversely, 20% of respondents in northcentral age 20-24 years reported that they have modern knowledge of family planning

Women autonomy is also important indicator that was examined with age of currently married women. Finding from this study by comparison in northcentral p=0.00showed that there is significant relationship between the age of currently married women and women autonomy

where p=0.10 in northcentral showed that there is no significant relationship in northwest. Most of respondents in northcentral 21% age 35-39 reported that respondents alone decide on health care compared northwest 23% age 30-34. Conversely, 24% age 25-29 years said that respondents and her partner decide on health care compared northwest 19% age 25-29 years. Similarly, 26% age 25-29 years reported that partner alone decide on health care compared northwest 20% 25-29 years.

Distribution between proximate variables and age of currently married women by Northcentral and Northwest.

Region
Northcentral (n=5,347)
Age of currently married women

Desire for more children	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Want within 2 years	8%	22%	29%	18%	12%	7%	4%
Wants after 2+ years	17%	28%	31%	15%	7%	3%	1%
Wants, unsure timing	55%	24%	14%	5%	2%	0%	0%
Undecided	16%	12%	14%	17%	23%	25%	24%
Wants no more	1%	2%	9%	17%	23%	25%	24%

P=0.00

Region
Northwest (n=11,217)
Age of currently married women

Desire for more children	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Want within 2 years	17%	18%	21%	15%	15%	9%	6%
Wants after 2+ years	13%	23%	26%	19%	12%	5%	2%
Wants, unsure timing	65%	18%	7%	5%	1%	2%	1%
Undecided	21%	10%	13%	12%	15%	15%	14%
Wants no more	0%	0%	2%	7%	15%	29%	48%

P=0.00

Region
Northcentral (n=5,347)
Age of currently married women

Knowledge of FP method	15-19	20-24	25-29	30-34	35-39	40-44	45-49
No method	26%	17%	21%	12%	11%	7%	7%
Folkloric method	12%	28%	16%	0%	30%	2%	13%
Traditional method	6%	37%	5%	32%	2%	0%	18%
Modern method	19%	20%	21%	15%	11%	9%	6%

P=0.01

Region
Northwest (n=11,217)
Age of currently married women

Knowledge on FP method	15-19	20-24	25-29	30-34	35-39	40-44	45-49
No method	26%	17%	21%	12%	11%	7%	7%
Folkloric method	12%	28%	16%	0%	30%	2%	13%
Traditional method	6%	37%	5%	32%	2%	0%	18%
Modern method	19%	20%	21%	15%	11%	9%	6%

P=0.00

Region
Northcentral (n=5,347)

	Age of currently married women						
Women autonomy	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Women alone	3%	10%	15%	16%	21%	20%	15%
Women & her partner	4%	16%	24%	19%	16%	12%	9%
Partner alone	7%	20%	26%	17%	13%	10%	7%
	P=0.00						
	Region						
	Northwest (n=11,217)						
	Age of currently married women						
Women autonomy	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Women alone	3%	18%	15%	23%	13%	16%	12%
Women & her partner	11%	16%	19%	18%	15%	10%	11%
Partner alone	13%	18%	20%	15%	13%	10%	11%
	P=0.10						

*Note: p<0.01, p<0.05***

Sources: Author's work, 2017 (Data from the 2013 NDHS)

Table.5: Relationship between proximate factors and education of married women by northcentral and northwest.

The table 5 below provide an oversight of the education of married women and proximate factors. By comparison northcentral p=0.00 and northwest p=0.00, this show that there is significant relationship between education of married women and desire for more children. Almost half 39% of respondent in northcentral with no education, 23% with primary education, 27% with secondary and 11% with higher education reported that they want more children within two years compared northwest 76% with no education, 12% with primary,10% with secondary and 2% with higher education. Similarly, 37% of respondents in northcentral with secondary education, 32% with no education, 24% with primary education and 7% with higher education said that they want more children after two years plus compared northwest 74% with no education, 12% with primary education, 12% with secondary education and 2% with higher education reported that they want more children after two years plus. Conversely, majority 61% of respondents in northcentral with secondary education, 15% with no education, 11% with primary and 13% with higher education revealed that they are not sure of having more children compared northwest 54% with secondary education, 25% with no education, 12% with primary education and 9% with higher education. Inaddition, almost half 46% of respondents in northcentral with no education, 21% with primary education, 27% with secondary education and 6% with higher education reported that they do not decided for more children compared northwest 77% with no education, 7%, with primary education, 14% with secondary education and 2% with higher education. Moreso, 33% of respondents in northcentral with no education, 33% with primary, 23% with secondary education and 11% with higher education said that they do not want more children.

Examine knowledge of family planning method and education of married women in northcentral and northwest revealed significant relationship (p=0.00). However, the proportion of respondents in northcentral reported that 66% with no education, 16% with primary, 17% with secondary and 1% with higher education revealed that they have no knowledge of family planning method compared northwest 80% with no education, 8% with primary, 11% with secondary and 1% with higher education. Also, more than half of respondents in northcentral 60% with no education and 40% with primary said they know only folkloric method of family planning compared northwest 95% with no education, 4% with primary and 1% with secondary education. Moreso, most of respondents 64% had no education, 10% had primary, 23% had secondary and 3% had higher education reported that they know only traditional method of family planning compared northwest 96% had no education, 2% had primary and 2% had secondary education. Furthermore, almost of half 42% of respondents in northcentral had secondary,24% had primary, 22% had no education and 12% had higher education revealed that they know modern method of family planning compared northwest 65% had no education, 13% had primary, 19% had secondary education and 3% had higher education.

Analysis on the relationship between women autonomy and education level of married women in northcentral and northwest showed that there is significant relationship between women autonomy and education of married women in both regions (northcentral p=0.00 and northwest p=0.00). Almost half 39% of respondents in northcentral with primary education, 30% with no education, 23% with secondary education and 8% with higher education revealed that women alone decide on health care compared northwest 34% with no education, 20% with primary and 46% with secondary. Moreso, higher proportion 33% of respondents in northcentral with secondary education, 26% with no education, 26% with primary and 15% with higher education showed that women and her partner decide on health care compared 59% with no education, 15% with primary, 22% with secondary and 4% with higher education. Conversely, majority 50% of respondents in northcentral with no education, 24% with primary, 21% with secondary and 5% with higher education showed that partner alone decide on health care compared northwest 80% with no education, 11% with primary, 8% with secondary and 1% with higher education.

Distribution of proximate variables and education of married women by Northcentral and Northwest

Region Northcentral (n=5,347) Education of currently married women				
Desire for more children	no education	primary	secondary	higher
Want within 2 years	39%	23%	27%	11%
Wants after 2+ years	32%	24%	37%	7%
Wants, unsure timing	15%	11%	61%	13%
Undecided	46%	21%	27%	6%
Wants no more	33%	33%	23%	11%
P=0.00				

Region Northwest (n=11,217) Education of currently married women				
Desire for more children	no education	primary	secondary	higher
Want within 2 years	76%	12%	10%	2%
Wants after 2+ years	74%	12%	12%	2%
Wants, unsure timing	25%	12%	54%	9%
Undecided	77%	7%	14%	2%
Wants no more	72%	12%	13%	3%
P=0.00				

Region Northcentral (n=5,347) Education of currently married women				
Knowledge of FP method	no education	primary	secondary	higher
Knows no method	66%	16%	17%	1%
Knows only folkloric method	60%	40%	0%	0%
Knows only traditional method	64%	10%	23%	3%
Knows modern method	22%	24%	42%	12%
P=0.00				

Region Northwest (n=11,217) Education of currently married women				
Knowledge on FP method	no education	primary	secondary	higher
Knows no method	80%	8%	11%	1%
Knows only folkloric method	95%	4%	1%	0%

Knows only traditional method 96%	2%	2%	0%	
Knows modern method 65%	13%	19%	3%	
		P=0.00		

Region Northcentral (n=5,347) Education of currently married women				
Women autonomy	no education	primary	secondary	higher
Women alone	30%	39%	23%	8%
Women and her partner	26%	26%	33%	15%
Partner alone	50%	24%	21%	5%
		P=0.00		

Region Northwest (n=11,217) Education of currently married women				
Women autonomy	no education	primary	secondary	higher
Women alone	34%	20%	46%	0%
Women and her partner	59%	15%	22%	4%
Partner alone	80%	11%	8%	1%
		P=0.00		

*Note: p<0.01, p<0.05***
Sources: Author's work, 2017 (Data from the 2013 NDHS)

Table.6: Relationship between proximate variables and religion of married women by Northcentral and Northwest

The table6 below presents proximate variables and religion of married women. The result from the table below showed a significant relationship between desire for more children and religion of married women in both regions (northcentral p=0.00 and p=0.00). Finding in northcentral revealed that 49% are christian, 49% are muslin and 2% practiced other religion reported that they want more children within two years compared to northwest 5% are christian and 95% are muslin. Conversely, majority 55% of respondents in northcentral are christian, 44% are muslin and 1% practiced other religion revealed that they want more children after two years plus compared to northwest 8% are christian, 91% are Muslim and 1% practiced other religion. More so, more than half of respondents in northcentral are 56% are christian, 43% are muslin and 1% practiced other religion reported that they want more children compared to northwest 26% are christian and76% are muslin. Furthermore, 37% of respondents in northcentral are christian, 62% are muslin and 1% practiced other religion said that they have not decide on more children compared to northwest 5% are christian, 92% are muslin and 3% practiced other religion. Also, majority of respondents in northcentral 67% are christian,30% are muslin and 3% are practiced other religion reported that they want no more children compared to 18% are christian,81% are muslin and 1% practiced other religion.

Knowledge on family planning method related to religion. There is significant relationship between knowledge on family planning method and religion of married women in both regions. (northcentral p=0.00and northwest p=0.00). The proportion of respondents in northcentral who reported that they know no method of family planning are christian 26%, 71% are muslin and 3% practiced other religion compared to northwest 2% are christian, 96% are muslin and 2% practiced other religion. However, majority 54% of respondents in northcentral are muslin and 46% are christian who revealed that they know only folkloric method on family planning compared to northwest 99% are muslin and 1% practiced other religion. Also, more than half 65% of respondents in northcentral are muslin, 26% are christian and 9% practiced other religion who showed that they know only traditional method of family planning compared to northwest 1% are christian and 99% are muslin. Moreso, 61% of respondents in northcentral are christian, 37% are muslin and 9% practiced other religion who reported that they know modern method on family planning compared to northwest 12% are christian and 88% are muslin.

Analysis of the relationship between women autonomy and religion of married womenin northcentral (p=0.01) and northwest (p=0.00) showed that there is significant relationship between women autonomy and religion in both regions. The proportion of married women who reported that women alone decide on health care with religion in northcentral, 52% are christian, 45% are muslin and 3% practiced other religion compared to 62% are christian and 38% are muslin. However, majority 55% of respondents in northcentral are christian with 43% are muslin and 2% practiced other religion revealed they women and her partner decide on health care compared to northwest 28% christian,71% are muslin and 1% practiced other religion. Conversely, 54% of respondents in northcentral are muslim with 44% are christian and 2% practiced other religion showed that partner alonedecide on health care compared to northwest 2% are christian, 97% are muslim and 1% practiced other religion.

Distribution of proximate variables and religion of married women by Northcentral and Northwest

	Region		
	Northcentral (n=5,347)		
	Religion of currently married women		
Desire for more children	Christian	Islam	Others
Want within 2 years	49%	49%	2%
Wants after 2+ years	55%	44%	1%
Wants, unsure timing	56%	43%	1%
Undecided	37%	62%	1%
Wants no more	67%	30%	3%
	P=0.00		

	Region		
	Northwest (n=11,217)		
	Religion of currently married women		
Desire for more children	Christian	Islam	Others
Want within 2 years	5%	95%	0%
Wants after 2+ years	8%	91%	1%
Wants, unsure timing	26%	74%	0%
Undecided	5%	92%	3%
Wants no more	18%	81%	1%
	P=0.00		

	Region		
	Northcentral (n=5,347)		
	Religion of currently married women		
Knowledge on FP method	Christian	Islam	Others
Knows no method	26%	71%	3%
Knows only folkloric method	46%	54%	0%
Knows only traditional method	26%	65%	9%
Knows modern method	61%	37%	2%
	P=0.00		

	Region		
	Northwest (n=11,217)		
	Religion of currently married women		
Knowledge on FP method	Christian	Islam	Others
Knows no method	2%	96%	2%
Knows only folkloric method	0%	99%	1%
Knows only traditional method	1%	99%	0%
Knows modern method	12%	88%	0%

	P=0.00		
	Region		
	Northcentral (n=5,347)		
	Religion of currently married women		
Women autonomy	Christian	Islam	Others
Women alone	52%	45%	3%
Women and her partner	55%	43%	2%
Partner alone	44%	54%	2%
	P=0.01		
	Region		
	Northwest (n=11,217)		
	Religion of currently married women		
Women autonomy	Christian	Islam	Others
Women alone	62%	38%	0%
Women and her partner	28%	71%	1%
Partner alone	2%	97%	1%
	P=0.00		

*Note: p<0.01, p<0.05***

Sources: Author's work, 2017 (Data from the 2013 NDHS)

Table.7: Relationship between proximate variables and wealth index of married women by Northcentral and Northwest

The table7 below shows the relationship between proximate variables and wealth index of married women. The analysis in the table revealed asignificant relationship between desire for more children and wealth index in northcentral (p=0.00) and northwest (p=0.00). The percentage of respondents in northcentral who reported that they want more children within two years are poorest, 21% are poorer, 28% are in middle while 21% are richer and 19% are richest compared to northwest 36% are poorest, 32% are poorer,15% are in middle while 10% are richer and 7% are richest. Moreso, almost half 33% of respondents in northcentral are in middle,10% are poorest, 24% are poorer while 18% are richer and 15% are richest revealed that they want more children after two years compared to northwest 37% are poorest, 31% are poorer, 14% are in middle while 11% are richer and 7% are richest. Furthermore, 8% of respondents in northcentral are poorest, 13% are poorer, 30% are in middle while 25% are richer and 24% are richest showed that they want more children compared to northwest 12% are poorest, 18% are poorer, 21% are in middle while 25% are richer and 24% are richest. Inaddition, majority 28% of respondents in northcentral are in middle, 13% are poorest, 18% are poorer, 27% are richer and 14% are richest revealed that they have not decide for more children compared to northwest 40% are poorest, 30% are poorer 17% are in middle, 8% are richer and 5% are richest. Also, almost half of respondents in northcentral 32% are in middle, 8% are poorest, 22% are poorer, 20% are richer and 18% are richest showed that they do not want more children compared to northwest 31% are poorest, 26% are poorer,14% are in middle, 16% are richer and 13 richest.

Knowledge on family planning method was found to be strongly and significant with wealth index in the two regions (northcentral p=0.00 and northwest p=0.00). The proportion of respondents who revealed that they do not know any method for family planning varies with religion, 28% are poorest, 20% are poorer, 32% are in middle,15% are richer and 5% are richest compared to northwest 49% are poorest, 32% are poorer, 11% are in middle, 6% are richer and 2% are richest. However, majority of respondent 53% are in middle, 35% are poorer and 12% are richer revealed that they know only folkloric method of family planning compared to northwest 60% are poorest, 36% are poorer, 3% are in middle and 1% are richer. Moreso, almost half of respondents 37% are poorest, 18% are poorer, 37% are in middle, 6% are richer and 2% are richest showed that they know only traditional method of family planning compared to northwest 53% are poorest, 32% are poorer, 13% are in middle and 2% are richer. Inaddition, 5% of respondents in northcentral are poorest, 20% are poorer, 30% are in the middle, 23% are richer and 22% are richest reported that they know modern method of family planning compared to northwest 29% are poorest, 28% are poorer, 17% are in the middle, 14% are richer and 12% are richest.

Examine relationship between women autonomy and wealth index of married women in both regions. The analysis

between women autonomy and wealth index among married women in both region showed significant relationship. (Northcentral p=0.00 and northwest p=0.00). Almost half of respondents 38% are in the middle, 2% are poorest, 21% are poorer, 21% are richer and 18% are richest reported that women alone decide on health care compared to northwest 17% are poorest, 13% are poorer, 13% are in the middle, 39% are richer and 18% are richest. However, majority of respondents in northcentral 26% are in the middle, 9% are poorest, 17% are poorer, 23% are richer and 25% are richest showed that women and her partner decide on health care compared to northwest 25% are poorest, 27% are poorer, 22% are in the middle, 12% are richer and 145 are richest. Furthermore, almost half of the respondents 33% are in the middle, 14% are poorest,24% are poorer,20% are richer and 9% are richest reported that partner alone decide on health care compared to northwest 40% are poorest, 32% are poorer, 13% are in the middle, 10% are richer and 5% are richer.

Distribution of proximate variables and wealth index of married women by Northcentral and Northwest

Region Northcentral (n=5,347) Wealth index of currently married women Desire for more children	poorest	poorer	middle	richer	richest
Want within 2 years	11%	21%	28%	21%	19%
Wants after 2+ years	10%	24%	33%	18%	15%
Wants, unsure timing	8%	13%	30%	25%	24%
Undecided	13%	18%	28%	27%	14%
Wants no more	8%	22%	32%	20%	18%
P=0.00					

Region Northwest (n=11,347) Wealth index of currently married women Desire for more children	poorest	poorer	middle	richer	richest
Want within 2 years	36%	32%	15%	10%	7%
Wants after 2+ years	37%	31%	14%	11%	7%
Wants, unsure timing	12%	18%	21%	25%	24%
Undecided	40%	30%	17%	8%	5%
Wants no more	31%	26%	14%	16%	13%
P=0.00					

Region Northcentral (n=5,347) Wealth index of currently married women Knowledge of any method	poorest	poorer	middle	richer	richest
Knows no method	28%	20%	32%	15%	5%
Knows only folkloric method	0%	35%	53%	12%	0%
Knows only traditional method	37%	18%	37%	6%	2%
Knows modern method	5%	20%	30%	23%	22%
P=0.00					

Region Northwest (n=11,217) Wealth index of currently married women Knowledge of any method	poorest	poorer	middle	richer	richest
Knows no method	49%	32%	11%	6%	2%
Knows only folkloric method	60%	36%	3%	1%	0%

Knows only traditional method	53%	32%	13%	2%	0%
Knows modern method	29%	28%	17%	14%	12%
			P=0.00		

			Region		
			Northcentral (n=5,347)		
			Wealth index of currently married women		
Women autonomy	poorest	poorer	middle	richer	richest
Women alone	2%	21%	38%	21%	18%
Women and her partner	9%	17%	26%	23%	25%
Partner alone	14%	24%	33%	20%	9%
			P=0.00		

			Region		
			Northwest (n=11,217)		
			Wealth index of currently married women		
Women autonomy	poorest	poorer	middle	richer	richest
Women alone	17%	13%	13%	39%	18%
Women and her partner	25%	27%	22%	12%	14%
Partner alone	40%	32%	13%	10%	5%
			P=0.00		

*Note: p<0.01, p<0.05***
Sources: Author's work, 2017 (Data from the 2013 NDHS

Table.8: Relationship between proximate variables and occupation of married women by Northcentral and Northwest.

The table8 below provides an overview of the relationship between proximate variables and occupation of married women in both regions (northcentral and northwest) using some selected indicators. There is significant relationship between desire for more children and occupation of respondents in both regions. (Northcentral p=0.00 and northwest p=0.00). However, in northcentral the percentage of respondents who reported that they want more children within two years varies across women occupation but it more higher among respondent that are employed (80%) follow by 20% unemployed compared to northwest 38% unemployed and 62% employed. Likewise in northcentral the proportion of respondents who said that they want more children after two years plus varies across occupation,29% are unemployed and 71% are employed compared to northwest 38% are unemployed and 62% are employed. Moreso, majority of respondents in northcentral 56% are unemployed and 44% are employed revealed that they are unsure timing for more children compared to northwest 72% are unemployed and 28% are employed. Conversely,26% of respondents in northcentral are unemployed and 74% are employed reported that they have not decide for more children compared to northwest 33% are unemployed and 67% are employed. Furthermore, most of the respondents in northcentral 88% are employed and 22% are unemployed revealed that they do not want more children compared to northwest 21% are unemployed and 79% are employed.

Thus, there is no significant relationship between knowledge on family planning method and occupation in northcentral (p=0.22) compared to northwest there is significant relationship between knowledge on family planning method and occupation of respondents. Of all the respondents in northcentral who reported that they know no method of family planning; 21% are unemployed and 79% are employed compared to northwest 51% are unemployed and 49% are employed. Conversely, the proportion of respondents in northcentral who reported that they Knows only folkloric method of family planning are employed 100% compared to northwest 39% are unemployed and 61% are employed. Likewise, the result further revealed that the respondents in northcentral who reported thatthey Knows only traditional method; 8% are unemployed and 92% are employed compared to northwest 51% are unemployed and 49% are employed. Also, finding showed that larger proportion of respondents in northcentral 70% are employed and 30% are unemployed revealed that they Knows modern method of family planning compared to northwest 38% are unemployed and 62% are employed.

Analysis on women autonomy and occupation of currently married women in both region revealed that there is significant relationship between women autonomy and occupation of respondents in both regions (northcentral p=0.00 and northwest p=0.00). Finding on women autonomy and occupation of respondents in northcentral revealed that larger percentage 92% are employed and 8% are unemployed reported that women alone decide on health care compared to northwest 10% are unemployed and 90% are employed. Moreso, most of respondents in northcentral 85% are employed and 15% are unemployed revealed that women and her partner decide on health care compared to northwest 22% are unemployed and 88% are employed. Likewise, majority of respondents in northcentral 77% are employed and 23% are unemployed compared to northwest 39% are unemployed and 61% are employed.

Distribution of proximate variables and occupation of married women by Northcentral and Northwest

	Region	
	Northcentral (n=5,347)	
	occupation of currently married women	
Desire for more children	unemployed	employed
Want within 2 years	20%	80%
Wants after 2+ years	29%	71%
Wants, unsure timing	56%	44%
Undecided	26%	74%
Wants no more	12%	88%
	P=0.00	

	Region	
	Northwest (n=11,217)	
	Occupation of currently married women	
Desire for more children	unemployed	employed
Want within 2 years	38%	62%
Wants after 2+ years	38%	62%
Wants, unsure timing	72%	28%
Undecided	33%	67%
Wants no more	21%	79%
	P=0.00	

	Region	
	Northcentral (n=5,347)	
	Occupation of currently married women	
Knowledge of any method	unemployed	employed
Knows no method	29%	71%
Knows only folkloric method	0%	100%
Knows only traditional method	8%	92%
Knows modern method	30%	70%
	P=0.22	

	Region	
	Northwest (n=11,217)	
	Occupation of currently married women	
Knowledge of any method	unemployed	employed
Knows no method	51%	49%
Knows only folkloric method	39%	61%
Knows only traditional method	51%	49%
Knows modern method	38%	62%

		P=0.00	
		Region	
		Northcentral (n=5,347)	
		Occupation of currently married women	
Women autonomy	unemployed	employed	
Women alone	8%	92%	
Women and her partner	15%	85%	
Partner alone	23%	77%	
		P=0.00	
		Region	
		Northwest (n=11,217)	
		Occupation of currently married women	
Women autonomy	unemployed	employed	
Women alone	10%	90%	
Women and her partner	22%	88%	
Partner alone	39%	61%	
		P=0.00	

*Note: p<0.01, p<0.05***
Sources: Author's work, 2017 (Data from the 2013 NDHS)

Table.9: Relationship between proximate variables and place of resident of married women by Northcentral and Northwest.

The table9 below showed a significant relationship between desire for more children and place of resident in both regions (northcentral p=0.00 and northwest p=0.00). The proportion of respondents in northcentral who reported that they want more children within two years increase with 84% in rural and 26% in urban compared to northwest 24% in urban and 76% in rural. Likewise, majority of respondents in northcentral are living in rural 82% and 22% in urban reported that they want more children after two years plus compared to northwest 23% in urban and 77% in rural. Moreso, larger proportion of respondents in northcentral 64% are living inrural and 36% are in urban revealed that theyare unsure timing for more children compared to northwest 69% are living in urban and 31% are resident in rural. Likewise, higher proportion of respondents in northcentral 72% are living in rural and 28% are living in urban reported that they have not decide for more children compared to northwest 61% are living in urban and 39% are living in rural. Furthermore, majority of respondents in northcentral 74% are living in rural and 26% are living in urban said that they want no more children compared to northwest 38% are living in urban and 62% are living in rural.

Analysis on knowledge of family planning method and place of resident of currently married women in both regions. Finding show that there is significant relationship between knowledge of family planning method and place of resident in both regions (northcentral p-0.00 and northwest p=0.00). majority of respondents in northcentral 86% resident in rural and 14% resident in urban reported that they know no method of family planning compared to northwest 16% resident in urban and 84% resident in rural. Moreso, higher proportion of respondents in northcentral 84% resident in rural and 16% resident in urban revealed that they know only folkloric method of family planning compared to northwest 9% resident in urban and 91% resident in rural. Likewise, almost respondent in northcentral 92% resident in rural and 8% resident in urban said that they know only traditional method of family planning compared to northwest 14% resident in urban and 86% resident in rural. Furthermore, more than half of respondents in northcentral 69% resident in rural and 31% resident in urban reported that they know modern method of family planning compared to 33% resident in urban and 67% resident in rural.

Women autonomy is strongly associated with place of resident in both regions (northcentral p=0.00 and northwest p=0.00). The higher proportion of respondents in northcentral 70% resident in rural and 30% resident in urban reported that women alone decide on health care compared to northwest 66% resident in urban and 34% resident in rural. Moreso, majority of respondents in northcentral 77% resident in rural and 23%resident in urban revealed that women and partner alone decide on health

care compared to northwest 31% resident in urban and 69% resident in rural. Also, the higher percentage of respondents in northcentral 82% resident in rural and 18% resident in urban said that only their partner decide on health care compared to northcentral 21% resident urban and 79% resident in rural.

Distribution of proximate variables and place of resident of married women by Northcentral and Northwest

Region Northcentral (n=5,347) Place of resident of currently married women		
Desire for more children	Urban	Rural
Want within 2 years	26%	84%
Wants after 2+ years	22%	82%
Wants, unsure timing	36%	64%
Undecided	28%	72%
Wants no more	26%	74%
	P=0.00	

Region Northwest (n=11,217) Place of resident of currently married women		
Desire for more children	Urban	Rural
Want within 2 years	24%	76%
Wants after 2+ years	23%	77%
Wants, unsure timing	61%	39%
Undecided	20%	80%
Wants no more	38%	62%
	P=0.00	

Region Northcentral (n=5,347) Place of resident of currently married women		
Knowledge of any method	Urban	Rural
Knows no method	14%	86%
Knows only folkloric method	16%	84%
Knows only traditional method	8%	92%
Knows modern method	31%	69%
	P=0.00	

Region Northwest (n=11,217) Place of resident of currently married women		
Knowledge of any method	Urban	Rural
Knows no method	16%	84%
Knows only folkloric method	9%	91%
Knows only traditional method	14%	86%
Knows modern method	33%	67%
	P=0.00	

Region Northcentral (n=5,347) Place of residents of currently married women		
Women autonomy	Urban	Rural
Women alone	30%	70%

Women and her partner	33%	67%
Partner alone	18%	82%
	P=0.00	

Region		
Northwest (n=11,217)		
Place of residents of currently married women		
Women autonomy	Urban	Rural
Women alone	66%	34%
Women and her partner	31%	69%
Partner alone	21%	79%
	P=0.00	

*Note: p<0.01, p>0.05***

Sources: Author's work, 2017 (Data from the 2013 NDHS)

Table.10: Relationship between proximate variables and children ever born of married women by Northcentral and Northwest

The table10 below showed relationship between proximate variable and children ever born in both region (northcentral p=0.00 and northwest p=0.00). The proportion of respondents in northcentral who revealed that they want more children within two years increase relative with 60% had 1-2 children, 31% with 3-5 children and 9% 6+children compared to northwest 42% had 1-2 children, 31% had 3-5 children and 27% had 6+ children. Likewise, majority of respondents in northcentral 59% had 1-2children, 33% had 3-5 children and 8% had 6+children reported that they want more children after two years plus compared to northwest 36% had 1-2 children,37% had 3-5 children and27% had 6+children.Moreso, the highest percentage of respondents in northcentral 92% had 1-2 children, 6% had 3-5 children and 2% had 6+ children revealed that they are unsure timing for more children compared to northwest 92% had 1-2 children,5% had 3-5 children and 3% had 6+children. Conversely, almost half of respondents in northcentral 39% had 3-5 children, 34% had 1-2children and 27% had 6+childen said that they have not decide for more children compared to northwest. Furthermore, more than half 52% of respondents in northcentral had 6+children,5% had 1-2 children and43% had 3-5 children compared to northwest 3% had 1-2children, 24% had 3-5 children and 73% had 6+children.

Analysis on the relationship between knowledge of family planning method and ceb showed that there is significant relationship in the two regions (Northcentral p=0.04 and northwest p=0.00). Most of respondents in northcentral 51% had 1-2children, 30% had 3-5children and 19% had 6+children revealed that they know no method of family planning compared to northwest 53% had 1-2children, 23% had 3-5children and 24% had 6+children. Likewise, almost half 48% of respondents in northcentral had 1-2 children, 19% had 3-5children and 33% had 6+children reported that they know only folkloric method of family planning compared to northwest 31% had 1-2children,25% had 3-5children and 44% had 6+children. Moreso, majority of respondents in northcentral 41% had 3-5children, 24% had 1-2children and 35% had 6+children said that they know only tradition method of family planning compared to 44% had 1-2children, 47% had 3-5children and 9% had 6+children. Also, the highest percentage of respondents in northcentral 54% had 1-2children, 29% had 3-5children and 17% had 6+children reported that they know modern method of family planning compared to northwest 40% had 1-2children, 30% had 3-5children and 30% had 6+children.

Examine the relationship between women autonomy and ceb showed that there is significant relationship in the two regions (northcentral p=0.00 and northwest p=0.02) The highest percentage of respondents in northcentral 39% had 3-5children, 36% had 6+children and 25% had 1-2children reported that women alone decide on health care compared to northwest 32% had 1-2children, 43% had 3-5children and 25% had 6+children. Conversely, almost half of respondents in northcentral 41% had 1-2children, 40% had 3-5children and 19% had 6+children reported that the women and her partner decide on health care compared to northcentral 35% had 1-2children, 38% had 3-5children and 27% had 6+children. Also, majority of respondents in northcentral 40% had 3-5children, 38% had 1-2children and 22% had 6+children reported that partner alone decide on health care compared to northwest 34% had 1-2children, 31% had 3-5children and 35% had 6+children.

Distribution of proximate variables and children ever born of married women by Northcentral and Northwest

	Region Northcentral (n=5,347) Ceb of currently married women		
Desire for more children	1-2children	3-5children	6+children
Want within 2 years	60%	31%	9%
Wants after 2+ years	59%	33%	8%
Wants, unsure timing	92%	6%	2%
Undecided	34%	39%	27%
Wants no more	5%	43%	52%
		P=0.00	

	Region Northwest (n=11,217) Ceb of currently married women		
Desire for more children	1-2children	3-5children	6+children
Want within 2 years	42%	31%	27%
Wants after 2+ years	36%	37%	27%
Wants, unsure timing	92%	5%	3%
Undecided	32%	24%	44%
Wants no more	3%	24%	73%
		P=0.00	

	Region Northcentral (n=5,37) ceb of currently married women		
Knowledge of any method	1-2children	3-5children	6+children
Knows no method	51%	30%	19%
Knows only folkloric method	48%	19%	33%
Knows only traditional method	24%	41%	35%
Knows modern method	54%	29%	17%
		P=0.04	

	Region Northwest (n=11,217) ceb of currently married women		
Knowledge of any method	1-2children	3-5children	6+children
Knows no method	53%	23%	24%
Knows only folkloric method	31%	25%	44%
Knows only traditional method	44%	47%	9%
Knows modern method	40%	30%	30%
		P=0.00	

	Region Northcentral (n=5,347) ceb of currently married women		
Women autonomy	1-2children	3-5children	6+children
Women alone	25%	39%	36%
Women and her partner	41%	40%	19%
Partner alone	38%	40%	22%
		P=0.00	

Region

	Northwest (n=11,217)		
	ceb of currently married women		
Women autonomy	1-2children	3-5children	6+children
Women alone	32%	43%	25%
Women and her partner	35%	38%	27%
Partner alone 34%	31%	35%	
		P=0.02	

*Note: p<0.01, p<0.05** is not applicable*
Sources: Author's work, 2017 (Data from the 2013 NDHS)

Table.11: Relationship between demographic factors and unmet need for family planning of married women by Northcentral and Northwest

An overview of the relationship between demography factors and unmet need for family planning was presented in the table11 below. The result showed a significant relationship between age of respondents and unmet need for family planning in the two regions (northcentral p=0.00 and northwest p=0.00). the higher proportion of respondents in northcentral who revealed that they have no unmet need for family planning varies across the age with 27% age 15-19 years, 20% age 20-24 years, 19% age 25-29, 12% age 30-34 years, 9% 35-39, 7% age 40-44 years and 6% age 45-49 years compared to northwest 22% age 15-19 years, 17% age 20-24 years, 18% age 25-29 years, 13% age 30-34 years, 11% age 35-39 years, 9% age 40-44 years, and 10% age 45-49. Likewise, majority of respondents in northcentral 23% age 25-29years, 75 age 15-19 years, 16% 20-24 years,19% age 30-34,16% age 35-39 years, 13% age 40-44 years and 6% age 45-49 years reported that they have unmet need for family planning compare to northwest 10% age 15-19 years, 18% age 20-24 years, 21% age 25-29 years,17% age 30-34 years,15% age 35-39 years, 12% age 40-44 years and 7% age 45-49 years.

Following the relationship between level of education and unmet need for family planning. Finding revealed that there is significant relationship between level of education and ceb in both regions (northcentral p=0.00 and northwest p=0.00). For, instance the proportion of respondents in northcentral who reported that they have no unmet need for family planning varies with no education 33%, 21% primary, 38% secondary and 8% with higher education compared to northwest 71% had no education, 11% had primary, 16% had secondary and 2% had higher education. Conversely, almost half of respondents in northcentral 33% had secondary, 27% had no education and 14% had higher education reported that they have unmet need for family planning compared to northwest 58% had no education, 15% had primary education, 20% had secondary and 7% had higher education.

Examine respondents religion and unmet need for family planning revealed significant relationship in both regions (Northcentral p=0.00 and northwest p=0.00). Majority of respondents in northcentral 51% were christian, 47% were muslin and 2% practiced other religion revealed that they have no unmet need for family planning compared to northwest 6% were christian,93% were muslin and 1% practiced other religion. Conversely, more than half of respondents in northcentral 61% were christian, 38% were muslin and 1% practiced other religion reported that they have unmet need for family planning compared to northwest 25% were christian, 74% were muslin and 1% practiced other religion. An overview of the relationship between wealth index and unmet need for family planning in the both regions. There is significant relationship between religion and unmet need in northcentral p=0.02 and northwest p=0.00. The proportion of respondents in northcentral who reported that they have no unmet need for family planning varies across wealth index with 11% were poorest, 20% were poorer, 31% were in the middle, 21% were richer and 17% were richest compared to northwest 35% were poorest, 30% were poorer, 16% were in the middle, 12% were richer and 7% were richest. Conversely, almost half 31% were in the middle, 7% were poorest, 19% were poorer, 235 were richer and 20% were richest reported that they have unmet need for family planning compared to northwest 29% were poorest, 25% were poorer, 15% were in the middle, 15% were richer and 16% were richest.

Occupation is also an important indicator that was examine with unmet need for family planning in both regions. There is significant relationship between occupation and unmet need for family planning (northcentral p=0.00 and northwest p=0.00). Finding revealed 34 % of respondents in northcentral were unemployed and 66% were employed revealed that they have no unmet need for family planning compared to northwest 42% were unemployed and 58% were employed. Conversely, majority of respondents in

northcentral 80% were employed and 20% were unemployed reported that they have unmet need for family planning compared to northwest 32% were unemployed and 68% were employed.

Examine respondents place of resident and unmet need for family planning revealed no significant relationship in northcentral (p=0.22) while it revealed significant relationship in northwest (p=0.02). The proportion of respondents in northcentral who reported that they have no unmet need for family planning varies across with place of resident, 26% resident in urban and 74% resident in rural compared to northwest 28% resident in urban and 72% resident in rural. Conversely, majority of respondents in northcentral 70% resident in rural and 30% resident in urban revealed that they have unmet need for family planning compared to northwest 36% resident in urban and 645 resident in rural.

Analysis of the relationship between ceb and unmet need for family planning revealed significant relationship in both regions (northcentral p=0.00 and northwest p=0.00). The highest percentage of respondents in northcentral 62% had 1-2children, 25% had 3-5children and 13% had 6+children reported that they have no unmet need for family planning compared to northwest 44% had 1-2 children, 28% had 3-5 children and 28% had 6+children. Conversely, almost have of respondents in northcentral 40% had 3-5children, 35% had 1-2children and 25% had 6+children revealed that they have unmet need for family planning compared to northwest 33% had 1-2 children, 33% had 3-5children and 3% had 6+children.

Distribution of demographic factors and unmet need for family planning of married women by Northcentral and Northwest

Region							
Northcentral (n=5,347)							
Age of currently married women							
Unmet need	15-19	20-24	25-29	30-34	35-39	40-44	45-49
No unmet need	27%	20%	19%	12%	9%	7%	6%
Unmet need	7%	16%	23%	19%	16%	13%	6%
P=0.00							

Region							
Northwest (n=11,217)							
Age of currently married women							
Unmet need	15-19	20-24	25-29	30-34	35-39	40-44	45-49
No unmet need	22%	17%	18%	13%	11%	9%	10%
Unmet need	10%	18%	21%	17%	15%	12%	7%
P=0.00							

Region				
Northcentral (n=5,347)				
Education of currently married women				
Unmet need	no education	primary	secondary	higher
No unmet need	33%	21%	38%	8%
Unmet need	27%	26%	33%	14%
P=0.00				

Region				
Northwest (n=11,217)				
Education of currently married women				
Unmet need	no education	primary	secondary	higher
No unmet need	71%	11%	16%	2%
Unmet need	58%	15%	20%	7%
P=0.00				

Region
Northcentral (n=5,347)

	Religion of currently married women		
Unmet need	Christian	Islam	others
No unmet need	51%	47%	2%
Unmet need	61%	38%	1%
		P=0.00	

	Region Northwest (n=11,217) Religion of currently married women		
Unmet need	Christian	Islam	others
No unmet need	6%	93%	1%
Unmet need	25%	74%	1%
		P=0.00	

	Region Northcentral (n=5,347) Wealth index of currently married women				
Unmet need	poorest	poorer	middle	richer	richest
No unmet need	11%	20%	31%	21%	17%
Unmet need	7%	19%	31%	23%	20%
			P=0.02		

	Region Northwest (n=11,217) Wealth index of currently married women				
Unmet need	poorest	poorer	middle	richer	richest
No unmet need	35%	30%	16%	12%	7%
Unmet need	29%	25%	15%	15%	16%
			P=0.00		

	Region Northcentral (n=5,347) Occupation of currently married women	
Unmet need	unemployed	employed
No unmet need	34%	66%
Unmet need	20%	80%
	P=0.00	

	Region Northwest (n=11,217) Occupation of currently married women	
Unmet need	unemployed	employed
No unmet need	42%	58%
Unmet need	32%	68%
	P=0.00	

	Region Northcentral (n=5,347) Place of residents of currently married women	
Unmet need	Urban	Rural
No unmet need	26%	74%
Unmet need	30%	70%

		P=0.22	
		Region	
		Northwest (n=11,217)	
		Place of residents of currently married women	
Unmet need	Urban	Rural	
No unmet need	28%	72%	
Unmet need	36%	64%	
		P=0.02	
		Region	
		Northcentral (n=5,347)	
		Ceb of currently married women	
Unmet need	1-2children	3-5children	6+children
No unmet need	62%	25%	13%
Unmet need	35%	40%	25%
		P=0.00	

		Region	
		Northwest (n=11,217)	
		Ceb of currently married women	
Unmet need	1-2children	3-5children	6+children
No unmet need	44%	28%	28%
Unmet need	33%	33%	34%
		P=0.00	

*Note: p<0.01, p<0.05***
Sources: Author's work, 2017 (Data from the 2013 NDHS)

Table.12: Relationship between proximate variable and unmet need for family planning of married women by Northcentral and Northwest

This section presents the result of northcentral and northwest proximate variables and unmet need for family planning of currently married women.

The finding from the table12 showed significant relationship between desire for more children and unmet need for family planning in both regions (northcentral p=0.00 and northwest p=0.00). The percentage of respondents in northcentral who reported that they want more children within two years varies across unmet need, 90% had no unmet need and 10% had unmet need compared to northwest 96% had no unmet need and 4% had unmet need for family planning. Conversely, majority of respondents in northcentral 59% had no unmet need and 41% had unmet need revealed that they want more children after two years compared to northwest 75% had no unmet need and 25% had unmet need for family planning. Also, more of respondents in northcentral 82% had no unmet need and 18% had unmet need revealed that they are unsure timing fir more children compared to northwest 89% had no unmet and 11% had unmet need for family planning . Moreso, more than half of respondents in northcentral 68% had no unmet and 32% had unmet need reported that they have not decide for more children compared to northwest 73% had no unmet need and 27% had unmet need for family planning. Furthermore, the highest proportion of respondents in northcentral 54% had unmet need and 46% had no unmet need said that they want no more children compared to 30% had no unmet need and 70% had unmet need for family planning.

With the respect to knowledge of any family planning method in both regions. The finding revealed that there is significant relationship between knowledge of family planning method and unmet need in both regions (northcentral p=0.00 and northwest p=0.00). The highest proportion of respondents in northcentral 81% had no unmet need and 19% had unmet need reported that they know no method of family planning compared to northwest 90% had no unmet need and 10% had unmet need for

family planning. Also, more than half of respondents in northcentral 57% had no unmet need and 43% had unmet need revealed that they know only folkloric method of family planning compared to northwest 88% had no unmet need and 12% had unmet need for family planning. Also, majority of respondents in northcentral 86% had no unmet need and 14% had unmet need reported that they know only traditional method compared to northwest 99% had no unmet need and 1% had unmet need for family planning. Likewise, the highest proportion of respondents in northcentral 66% had no unmet need and 34% had unmet need revealed that they know modern method compared to northwest 83% had no unmet need and 17% had unmet need for family planning.

Following the relationship between women autonomy and unmet need, finding revealed a significant relationship in the two regions (northcentral p=0.07 and northwest p=0.00). More than half of respondents in northcentral 53% had unmet need and 46% had no unmet need reported that women alone decide on health care compared to northwest 57% had no unmet need and 43% had unmet need for family planning. Also, majority of respondents in northcentral 55% had no unmet need and 45% had unmet need revealed that women and her partner decide on health care compared to northwest 76% had no unmet need for family planning. Likewise, the highest proportion of respondents in northcentral 59% had no unmet need and 41% had unmet need said partner alone decide on health care compared to northwest 85% had no unmet need and 15% had unmet need for family planning.

Distribution of proximate variable and unmet need for family planning of currently women by Northcentral and Northwest

	Region Northcentral (n=5,347) unmet of currently married women	
Desire for more children	no unmet	unmet
Want within 2 years	90%	10%
Wants after 2+ years	59%	41%
Wants, unsure timing	82%	18%
Undecided	68%	32%
Wants no more	46%	54%
	P=0.00	

	Region Northwest (n=11,217) unmet of currently married women	
Desire for more children	no unmet	unmet
Want within 2 years	96%	4%
Wants after 2+ years	75%	25%
Wants, unsure timing	89%	11%
Undecided	73%	27%
Wants no more	30%	70%
	P=0.00	

	Region Northcentral (n=5,347) unmet of currently married women	
Knowledge of any method	no unmet	unmet
Knows no method	81%	19%
Knows only folkloric method	57%	43%
Knows only traditional method	86%	14%
Knows modern method	66%	34%
	P=0.00	

Region

		Northwest (n=11,217)
		unmet of currently married women
Knowledge of any method	no unmet	unmet
Knows no method	90%	10%
Knows only folkloric method	88%	12%
Knows only traditional method	99%	1%
Knows modern method	83%	17%
		P=0.00

		Region
		Northcentral (n=5,347)
		Unmet of currently married women
Women autonomy	no unmet	unmet
Women alone	46%	53%
Women and her partner	55%	45%
Partner alone59%	41%	
		P=0.07

		Region
		Northwest (n=11,217)
		Unmet of currently married women
Women autonomy	no unmet	unmet
Women alone	57%	43%
Women and her partner	76%	24%
Partner alone	85%	15%
		P=0.00

*Note: p<0.01, p<0.05***
Sources: Author's work, 2017 (Data from the 2013 NDHS)

Multivariate Analysis

This section present the interpretation of the result of the multivariate analysis using binary logistic regression. The logistic procedure is a good model in the study due to its capacity to control simultaneously effect of demographic factors and proximate variables on unmet need. Unmet need would be divided into two, the first part; unmet need was dichotomized into "1" and "0" no unmet need. Therefore the table below represent the odd ratio from the general logistic regression model I-IV for unmet need for family planning of currently married women in northcentral and northwest.

Table13:Binary logistic regression unmet need for family planning and demographic factors in northcentral.

Mode1involved northcentral demographic factors of unmet need for family planning. Specifically, as presented in model I, age of currently married women, education, religion, wealth index, occupation and cebshowed a strong and significant relationship with unmet need for family planning. The logistic regression from model I revealed that there is significant relationship between age and unmet need. Age of respondents increase; 20-24years (OR; 2.497P>0.00; 1.890-3.300)), age 25-29 years(OR; 2.723 p>0.00; 2.043-3.629), age 30-34 years (OR; 2.403 p>0.00; 1.775-3.252), age 35-39 years (OR (2.404 p>0.00; 1.730-3.343) and age 40-44years(OR 2.100 P>0.00; 1.529-2.884) are twice significant more likely to had unmet need for family planning than other counterpart within age group 15-19 years. Also, respondents within age 45-49 years (OR; 1.061 p< 0.763; 0.722-1.55) are less likely to had unmet need for family planning than their counterpart within age 15-19years.

The odd ratio of unmet need for family planning increase with level of education such that respondents with higher education (OR 2.416; p>0.00; C.I:1.745-3.346) aretwice significant more likely to had unmet need for family planning than their counterpart with no education. Likewise respondents with primary (OR 1.400; p>0.00; C.I: 1.091-1.796) and secondary (OR 1.715; p>0.00; C.I: 1.331-2.210) education are more likely to had unmet need for family than their counterpart with no education.

The logistics analysis from model1 further provides substantial evidence that the odd ratio of unmet need for family planning increase with respondents religion as analysis revealed that Islam (OR;0.677; p>0.00; C.I: 0.559-0.820) are more likely significant to uptake unmet need for family planning than their counterpart practiced christian religion.

The logistics regression analysis model1 revealed the most significant relationship between wealth index and unmet need for family planning in northcentral. The odd ratio of reporting unmet need for family planning increase steadily with wealth index such that poorer **(**OR; 1.243; p<0.274: C.I: 0.840-1.840) are less likely than those in poorest index to had unmet need for family planning. Moreso, respondent in middle class (OR; 1.483; p>0.054; C.I; 0.993-2.216), richer (OR; 1.690; p>0.013; C.I: 1.120-2.551) and richest (OR; 1630; p>0.026; C.I: 1.060-2.508) are more likely to have unmet need for family planning than their counterpart in poorest index.

The logistic regression analysis from model1 reported that the odd ratio of unmet need for family planning increase with occupation; employed (OR; 1.363; P>0.007; C.I: 1.091-1.704) are more likely to had unmet need for family planning than their counterpart unemployed.

The odd ration of unmet need for family planning significant varies with children ever born as respondents had 3-5 children (OR; 2.776; P>0.00; C.I: 2.215-3.479) are more twice likely significant to unmet need for family planning than their counterpart with 1-2 child. Likewise, respondent with 6+children (OR; 4.805; P>0.00; C.I:3.536-6.527) are more four likely to had unmet need for family planning than their counterpart with 1-2child.

Odds Ratio from Logistic Regression, Assessing the relationship between unmet need for family planning and demographic factors in Northcentral.

			Region		
Model 1			Northcentral		
Odd ratio	Std error	P-value	95% Conf. interval		
Demographic factors					
Age of married women					
15-19		RC			
20-24		2.497	0.352	0.000	1.890-3.300
25-29		2.723	0.396	0.000	2.043-3.629
30-34		2.403	0.368	0.000	1.775-3.252
35-39		2.404	0.401	0.000	1.730-3.343
40-44		2.100	0.337	0.000	1.529-2.884
45-49		1.061	0.206	0.763	0.722-1.558
Education					
No education		RC			
Primary		1.400	0.177	0.009	1.091-1.796
Secondary		1.715	0.220	0.000	1.331-2.210
Higher		2.416	0.398	0.000	1.745-3.346
Religion					
Others	RC				
Christian		0.295	0.169	0.035	0.095-0.915
Islam 0.677	0.066	0.000	0.559-0.820		
Wealth index					
Poorest		RC			
Poorer		1.243	0.247	0.274	0.840-1.840
Middle		1.483	0.301	0.054	0.993-2.216
Richer1.690	0.352	0.013	1.120-2.551		
Richest		1.630	0.355	0.026	1.060-2.508
Occupation					
Unemployed		RC			
Employed		1.363	0.154	0.007	1.091-1.704
Ceb					

1-2child	RC			
3-5children	2.776	0.317	0.000	2.215-3.479
6 children+	4.805	0.745	0.000	3.536-6.527

Note *p<0.05:**p<0.01
RC=reference category
Standard errors are in parenthesis-(std-error)
Model I = model build with soci-demographic

Table.14: Binary logistic regression unmet need for family planning and demographic factors in northwest.

Model II involved unmet need for family planning and demographic factors in northwest of Nigeria. As presented in model II, age of respondents, education, religion, wealth index, occupation, place of resident and ceb showed a strong and significant relationship with unmet need for family planning. The logistic regression from model II revealed the most significant relationship between age of respondents in northwest and unmet need for family planning. The odd ratio of reporting unmet need for family planning decrease with age such that age 20-24 (OR; 1.9262; p<0.00; C.I:1.416-2.718), age 25-29 (OR;1.736; P>0.00; C.I: 1.245-2.422), age 30-34 (OR:1.598; p<0.007; C.I: 1.140-2.241), age 35-39 (OR: 1.428; P<0.052; C.I: 0.997-2.046) and age 40-44 (OR; 1.604; P<0.026; C.I:1.061-2.426) are once more likely to had unmet need for family planning than their counterpart with age 15-19 years. Also, age 45-49 (OR; 1.114; p<0.240; C.I: 0.728-1.705) are less likely to had unmet need for family planning than their counterpart within age 15-19 years.

The logistics regression analysis from model II further provide substantial evidence that the odd ratio of unmet need for family planning increase with education such that respondent with higher education are significantly more likely to had unmet need for family planning (OR; 1.732; p<0.012; C:I: 1.128-2.659), and respondents with primary education (OR; 1.244; p<0.02;: C.I: 1.024-1.512) are once more likely to had unmet need for family planning than their counterpart with no education. Likewise, respondents with secondary education (OR; 0.988; P>0.927; C.I: 0.764-1.279) are less likely to had unmet need for family planning than their counterpart with no education.

With regard to religion, the odd ratio showed significant variation between unmet need for family planning and religion. Respondents who were muslin (OR; 0228; p<0.000; C.I: 0.176-0.297) and respondents practices christian religion (OR; 0.210; p<0.011; C.I: 0.063-0.610) are more likely to had unmet need for family planned than their counterpart who are christian.

Furthermore, analysis of odd ratio base on respondent wealth status showed that respondents who are richest (OR; 1.701; p<0.004; C.I:1.193-2.424) are once more likely to had unmet need for family planning than their counterpart poorest. Also, respondents who are poorer (OR; 0.941; p>0.540: C.I:0.775-1.144), middle (OR; 1.052; p>0659; C.I: 0.838-1.321) and richer (OR; 1.314; p>0.063; C.I: 0.985-1.752) are less likely to had unmet need for family planning than their counterpart poorest.

Moreso, the logistic regression analysis based on occupation showed that respondents who are employed (OR; 1.252; p<0.005; C.I: 1.071-1.464) are once more likely to had unmet need for family planning than their counterpart unemployed.

Also, the logistic regression analysis showed significant variation between unmet need for family planning and child ever born. Respondents who had 3-5 children (OR; 1.521; p<0.000; C.I:1.229-1.883) and 6+children (OR; 2.109; p<0.000; C.I: 1.654-2.688) are twice more likely to had unmet need for family planning than their counterpart 1-2child.

Odds Ratio from Logistic Regression, Assessing the relationship between unmet need for family planning and demographic factors in Northcentral.

Model 2	Region Northwest			
	Odd ratio	Std error	P-value	95% Conf. interval
Demographic factors				
Age of married women				
15-19	RC			
20-24	1.962	0.324	0.000	1.416-2.718
25-29	1.736	0.293	0.001	1.245-2.422

30-34	1.598	0.274	0.007	1.140-2.241
35-39	1.428	0.260	0.052	0.997-2.046
40-44	1.604	0.336	0.026	1.061-2.426
45-49	1.114	0.240	0.617	0.728-1.705
Education				
No education	RC			
Primary	1.244	0.123	0.028	1.024-1.512
Secondary	0.988	0.129	0.927	0.764-1.279
Higher	1.732	0.376	0.012	1.128-2.659
Religion				
Others RC				
Christian 0.210	0.128	0.011	0.063-0.	
Islam	0.228	0.030	0.000	0.176-0.297
Wealth index				
Poorest	RC			
Poorer	0.941	0.093	0.540	0.775-1.144
Middle	1.052	0.121	0.659	0.838-1.321
Richer 1.314	0.192	0.063	0.985-1.752	
Richest	1.701	0.305	0.004	1.193-2.424
Occupation				
Unemployed	RC			
Employed	1.252	0.099	0.005	1.071-1.464
Place of residenceRC				
Rural	1.228	0.129	0.052	0.998-1.510
Ceb				
1-2 child	RC			
3-5 children	1.521	0.165	0.000	1.229-1.883
6 children+	2.109	0.259	0.000	1.654-2.688

Note *p<0.05:**p<0.01
RC=reference category
Standard errors are in parenthesis-(std-error)
Model II = model build with soci-demographic

Table.15: Binary logistic regression unmet need for family planning and proximate factors in northcentral.

The table below present the result of logistic regression of proximate factors build into unmet need for family planning. The result from logistic regression model III revealed significant variation with desire for more children. Respondents who want more children within two years (OR: 7.092; p<0.00; C.I: 5.244- 10.817),wants after two years (OR; 7.752; p<0.00; C.I: 5.798-10.365), unsure timing (OR; 2.141; p<0.000; C.I: 1.478-3.099) and undecided (OR 7.137; p<0.000; C.I: 4.909-10.375)are seven more likely to had unmet need for family planning than their counterpart want no more children.

Contrary to our finding at bivariate level from the multileveled model analyses revealed that there is no significant relationship between unmet need for family planning and knowledge of family planning method (p>0.05). But the result of the analysis from model III further revealed that they know Knows only folkloric method (OR; 3.188; p>0.077; C.I: 0.882-11.514), knows only traditional method (OR; 0.216; p>0.202; C.I: 0.020-2.292) and knows modern method (OR;1.105; p> 0.513; C.I: 0.818-1.491) are less likely to had unmet need for family planning than their counterpart knows no method.

Odds Ratio from Logistic Regression, Assessing the relationship between unmet need for family planning and proximate factors in Northcentral.

	Region
Model 3	Northcentral

	Odd ratio	Std error	P-value	95% Conf. interval
Proximate factors				
Desire for more children				
Wants no more	RC			
Wants within 2 years	7.092	1.143	0.000	5.244- 10.817
Wants after 2+ years	7.752	1.139	0.000	5.798-10.365
Wants, unsure timing	2.141	1.401	0.000	1.478-3.099
Undecided	7.137	1.351	0.000	4.909-10.375
Knowledge of any method				
Knows no method	RC			
Knows only folkloric method	3.188	2.072	0.077	0.882-11.514
Knows only traditional method	0.216	0.258	0.202	0.020-2.292
Knows modern method	1.105	0.168	0.513	0.818-1.491

Note *p<0.05:**p<0.01
RC=reference category
Standard errors are in parenthesis-(std-error)
Model III = model build with proximate factors

Table.16: Binary logistic regression unmet need for family planning and proximate factors in northwest.

The table below presents the result of the logistic regression of unmet need for family planning and proximate factors in northwest. Finding from model IV revealed a strong and significant between desire for more children and unmet need for family planning in northwest. Respondents who reported wants more children within two years (OR; 8.678; p< 0.000; C.I:.409- 17.083), want more children after two years (OR; 8.940; p<0.000; C.I: 6.898-11.587), unsure timing for more children (8.638; p<0.000; C.I: 4.837-15.424), undecided for more children (OR 16.458; p<0.000; C.I: 12.131-22.330) are eight more likely to had unmet need for family planning than their counterpart wants no more children.

Moreso, analysis of the odd ratio of unmet need for family planning base on knowledge of family planning knowledge showed that respondents with only folkloric method (OR; 0.683; p<0.004; C.I: 0.411-1.137) are more likely to had unmet need for family planning than their counterpart with know no method of family planning. Likewise, respondents who reported that they know only traditional method (OR; 0.139; p>0.072; C.I:0.017-1.157), know modern method (OR; 1.382; p>0.542; C.I: 1.141-1.675) are less likely to had unmet need for family planning than their counterpart with no method of family planning.

With regard to women autonomy, there is relationship between unmet need for family planning and women autonomy. Women autonomy varies with unmet need for family planning, respondents with partner alone (OR; 0.339; p<0.001; C.I: 0.240-0.480) are more likely to hadunmet need for family planning than their counterpart wife alone. Likewise, respondents who reported wife and her partner (OR; 0.583; p>0.111; C.I: 0.401-0.848) are less likely to had unmet need for family planning than their counterpart wife alone.

Odds Ratio from Logistic Regression, Assessing the relationship between unmet need for family planning and proximate factors in Northwest.

			Region	
Model 4 Northwest				
	Odd ratio	Std error	P-value	95% Conf. interval
Proximate factors				
Desire for more children				
Wants no more	RC			
Wants within 2 years	8.678	1.915	0.000	9.409- 17.083
Wants after 2+ years	8.940	1.174	0.000	6.898-11.587
Wants, unsure timing	8.638	2.537	0.000	4.837-15.424
Undecided	16.458	2.543	0.000	12.131-22.330

Knowledge of any method				
Knows no method	RC			
Knows only folkloric method	0.683	0.176	0.004	0.411-1.137
Knows only traditional method	0.139	0.149	0.072	0.017-1.157
Knows modern method	1.382	0.134	0.542	1.141-1.675
Women autonomy				
Wife alone	RC			
Wife and her partner	0.583	0.111	0.158	0.401-0.848
Partner alone	0.339	0.060	0.001	0.240-0.480

Note *p<0.05:**p<0.01
RC=reference category
Standard errors are in parenthesis-(std-error)
Model IV = model build with proximate factors

IV. DISCUSSION

This section deals with the validation of two hypotheses put forward in this study.

Analysis on the socio demographic factors of respondents in both regions (northcentral and northwest) revealed a significant relationship between socio-demographic factors and unmet need for family planning. Our result in northcentral at bivariate level (age, education, religion, wealth index, occupation and ceb) showed a significant relationship with unmet need for family planning. On the other hand in northwest (age, education, religion, wealth index, occupation, place of residents and ceb) revealed a significant relationship with unmet need for family planning.

Analysis on unmet need for family planning on age of respondents in both regions (northcentral and northwest) showed a significant relationship. Majority of respondents in northcentral 23% within age 25-29 years had more unmet need for family planning compared to northwest 21% within age 25-29 years had unmet need for family planning.Also, result revealed that respondents with secondary education in northcentral had more unmet need for family planning than respondents with primary and higher education had less unmet needcompared to northwest with no education had more unmet need for family planning. Moreso, northcentral christianare more tend to had more unmet need for family planning than respondents with other religion and muslin has less unmet need for family planning compared to northwest where muslin tend to had more unmet need than respondent with other religion and christian has less unmet need for family planning. Meanwhile, result revealed that northcentral respondents within middle wealth index had more unmet need for family planning than respondents within richer wealth index and richest wealth index had less unmet need compared to northwest whose respondents within poorest wealth index and poorer wealth index had more unmet need. Furthermore, result showed that respondents in northcentral whose had 3-5 children had more unmet need than respondents with 1-2children and 6+children had less unmet need compared to northwest whose respondents with 6+children had more unmet need for family planning.

Concerned second hypothesis, a significant relationship between women autonomy and unmet need for family planning was established at bivariate level in both regions but not substantially validated at multivariate level. However, result at multivariate level justified the hypothesis a significant relationship between women autonomy and unmet need for family planning. Northwest respondents reported that partner alone decided on health care had more unmet need for family planning than respondents whose reported wife and her partner had less unmet need.

V. CONCLUSION AND RECOMMENDATION

Using data from the 2013NDHS, the study examines unmet need for family planning uptake among currently married women in northcentral and northwest of Nigeria. Finding from this cross-sectional study revealed unmet need for family planning uptake among currently married women (in northcentral and northwest) can be explained within the context of variation in age of respondents, education, wealth index, religion and children ever born, place of residence, women autonomy, knowledge of family planning and desire for more children.

Regarding unmet need for family planning, the result of logistic regression analysis shows factors determine northcentral and northwest unmet need for family planning. Among these variables, age of respondents, education, religion and wealth index, occupation, children ever born, desire for more children and knowledge of family planning

determineunmet need in northcentral while age of respondents, education, religion, wealth index, occupation, place of residence, ceb, desire for more children, knowledge of family planning and women autonomy determine unmet need for family planning uptake in northwest than northcentral.

Base on the finding of the study that currently married women in northcentral had more unmet need for family planning than currently married women in northwest of Nigeria.The study concludes that awareness of currently married women in northcentral on the important of using family planning methods to reduce fertility rate and effect of high fertility rate on economic development are still low which mean Nigeria government still need to designing family planningprogrammersand educate currently married women in northcentral on the effect of high fertility rate on economic development.

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