



## SOCIO-DEMOGRAPHIC FACTORS ASSOCIATED WITH UNMET NEED FOR FAMILY PLANNING AMONG WOMEN WHO EXPERIENCED PREGNANCY TERMINATION IN NIGERIA

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### ABSTRACT

*In spite of the large number of studies exploring associated factors of unmet need among women, studies have rarely examined the associated factors of unmet need for family planning among women who experienced pregnancy termination in Nigeria. Data were extracted from the 2013 Nigeria Demographic and Health Survey (NDHS). The outcome variable was unmet need for family planning. The explanatory variables were maternal socio-demographic characteristics. Stata version 12 was used to perform statistical analyses. The binary logistic regression was applied. Result showed that 14.0% of the women had unmet need for spacing; and 8.8% had unmet need for limiting. The socio-demographic characteristics of women experiencing pregnancy termination were significantly associated with the prevalence of unmet need for family planning. The provision of post abortion family planning counselling and services to women seeking pregnancy termination will accelerate the reduction of unmet need for family planning among women in the country.*

**Keywords:** Family planning, demographic, women, unmet need, pregnancy, contraceptive

### INTRODUCTION

Unmet need for family planning refers to the proportion of sexually active women who are able to conceive, and who want to limit childbearing or delay their next pregnancy but are not using either traditional or modern method of contraception (PATH, 2008). Unmet need is a veritable indicator of the performance of national family planning programmes because it reveals the extent to which the programme is able to meet the demand for family planning in the country (Cleland et al. 2006). In developing countries, not less than 222 million women have unmet need for family planning either for spacing pregnancy or limiting number of children, and in sub-Saharan Africa 58 million women have unmet need for family planning (United Nation Fund for Population Activities [UNFPA], 2013). This implies that large proportions of women in the sub region lack the ability to control the number or spacing of their children, they are thus expose to the risk of unintended pregnancies and its associated consequences such as abortion and maternal deaths and ill-health (Ayele, Tesfaye, Gebreyes and Gebreselassie, 2013).

In Nigeria, total unmet need for family planning among currently married women was estimated to be 16.1% in 2013 with differentials across the six geo-political zones of the country (National Population Commission [NPC] and ICF International, 2014). Consequently, large numbers of women in the country and in several developing countries still experience unintended pregnancies with substantial number of them resulting to either unwanted births or unsafe pregnancy termination (Casterline and Sinding, 2000; Lamina, 2015). There is also evidence that some of the women use pregnancy termination as method of child spacing or limiting (Guillaume and Desgrees du Lou, 2002; Lauro, 2011). The key reason for high unintended pregnancy in Nigeria is the low contraceptive prevalence which has been attributed mainly to misconceptions about the adverse effects of modern contraceptives (Monjok, Smesny, Ekabua and Essien, 2010).

Several researches have been conducted to explore the causes of unmet need. Research evidence suggests that social issues rather than access to services, cost of services or other

issues feature prominently as causes of unmet need for family planning (Ashfold, 2003; Westoff, 2012; Sulthama et al. 2015). Large numbers of studies have thus focused on the socio-demographic causes of unmet need. Studies in Nigeria and elsewhere in the developing countries have examined the socio-demographic determinants of unmet need among several groups of women (Adjei, Sarfo, Asiedu and Sarfo, 2014; Dejenu, Ayichiluhm and Abajobir, 2013; Doctor, Findley, Afenyadu, Uzundu and Ashir, 2013). The sets of socio-demographic drivers revealed in the literature include education (Ali and Okud, 2013); age at first marriage, number of living children, household wealth (Hameed et al. 2011); spousal discussion on family planning (Mekonnen and Worku, 2011; Decat et al. 2011); religion, partner education, media exposure, visit to health facility, visitation by family planning worker (Ayele et al. 2013); spousal living arrangement, polygyny, women's age group (Machiyama and Cleland, 2013); and women's autonomy (Kisaaye, 2013).

However, in spite of the large number of studies exploring the determinants of unmet need among women, studies have rarely examined the associated factors among women who experienced pregnancy termination. It is not clear in the literature whether the socio-demographic determinants are the same among women who have ever or never experienced pregnancy termination. Understanding the characteristics of women with unmet need may provide insight into the type of initiative require to expand and improve family planning services among different groups of women. This study thus addresses the limitation of previous studies by focusing on women who have experienced a pregnancy termination. Women who experienced pregnancy termination particularly induced abortion are among the women who need family planning information and contraceptive services. Evidence abounds that many women who have had an induced abortion have at least one previous experience of pregnancy termination (Lamina, 2015), were less likely to have access to effective modern contraceptives (Oye-Adeniran, Adewole, Umoh, Fapohunda and Iwere, 2004), and were not likely to have been counselled about post abortion family planning services (Smith, Ashford, Gribble and Clifton, 2009). Women who experienced spontaneous abortions also have need for post abortion family planning especially if they wish to space their next pregnancy (Westoff, 2005). Against this backdrop, the objective of the study was to examine the socio-demographic factors associated with unmet need for family planning among women who experienced pregnancy termination in Nigeria.

## **METHODS**

### ***Data source and sample size***

Data were extracted from the individual recode dataset of the 2013 Nigeria Demographic and Health Survey. Detail information about the survey design of the 2013 NDHS has been published (NPC & ICF International, 2014). The permission to accessed and used the data was obtained from the MEASURE DHS. The data provides wide range of reliable information about the demographic and health characteristics of 38,948 women surveyed across the six geo-political zones of the country. However, we analysed only a weighted sample size of 2,383 women having excluded women who have never experienced pregnancy termination and infecund women.

### ***Research Variables***

The outcome variable in the study was unmet need for family planning. Women who have unmet need either for spacing or limiting were group together and coded '1' to indicate unmet need for family planning while women having no unmet need for family planning were coded '0' to indicate no unmet need. The explanatory variables are selected socio-demographic factors identified in previous studies as significantly influencing unmet need for family planning (Westoff, 2012; Lata et al. 2012; Dejenu et al. 2013). They include wealth index, place of residence,

education, work status, women's autonomy, media exposure, region, type of marriage, religion, desire for more children, number of living children, child mortality experience, women's age and age at first marriage. Some of the variables were recoded from the dataset. Women's autonomy was generated from responses to questions on who has the final say on own health care, purchase of large items, and visit to friends and relatives. A composite variable was computed from these three household decisions making to indicate level of women's autonomy. Media exposure was generated from responses to frequency of reading newspaper/magazines, watching television and listening to radio. Child mortality was generated from response to whether the respondent has experienced either a son or daughter mortality.

### **Data Analysis**

Stata version 12 was used to perform statistical analyses. Respondents' profile and level of unmet need were described using simple frequency distribution and charts. The binary logistic regression was applied for its suitability for the analysis of binary outcome variables. Similar analytical approach was adopted in previous studies of unmet need for family planning (Hameed et al. 2011; Decat et al. 2011; Westoff, 2012; Dejenu et al. 2013). The logistic regression was replicated in three models. Model 1 included only socio-economic characteristics of the respondents, while Model 2 included only the demographic characteristics of the respondents. Model 3 included all the explanatory variables except the variables that did not show statistical significance either in Model 1 or Model 2.

### **Results**

#### **Socio-Demographic Characteristics of the Respondents**

Table 1 presents the socio-economic characteristics of the respondents. More than one-third of the women had no formal education, while secondary education was the dominant educational attainment among the women. Wealth distribution was nearly evenly distributed among the respondents. However, the highest proportion of respondents was found in the 'poorer' wealth group. Majority of the women are resident in rural areas of the country. More than two-thirds were working during the survey, while slightly above a quarter were not working. More than one-third of the respondents either had 'low' or 'moderate' autonomy over household decisions, while less than one-fifth of the women had 'high' autonomy over household decisions. Nearly half of the respondents had 'moderate' access to mass media. However, more than a quarter of the respondents do not have access to the mass media. Respondents from the northern region of the country dominated the sample with the highest proportion from the northwest zone. More than half of the respondents were Muslims while more than one-third of the respondents are Christians. Monogamy was the dominant type of marriage among the sampled women with majority of them living together with their male partner.

**Table 1: Distribution of respondents by socio-economic characteristics**

Variable	Number of Women (n=2383)	Percent
<i>Education</i>		



None	991	41.6
Primary	543	22.8
Secondary	647	27.1
Higher	202	8.5
<b>Wealth index</b>		
Poorest	483	20.3
Poorer	532	22.3
Middle	418	17.6
Richer	458	19.2
Richest	492	20.6
<b>Place of residence</b>		
Urban	936	39.3
Rural	1447	60.7
<b>Work status</b>		
Not working	636	26.7
Working	1747	73.3
<b>Levels of autonomy</b>		
Low	1055	44.3
Moderate	992	41.6
High	336	14.1
<b>Access to mass media</b>		
No access	669	28.1
Low access	550	23.1
Moderate access	1164	48.8
<b>Region</b>		
North-central	275	11.5
North-east	502	21.1
North-west	767	32.2
South-east	201	8.4
South-south	269	11.3
South-west	369	15.5
<b>Type of marriage</b>		
Monogamy	1513	63.5
Polygyny	870	36.5
<b>Spousal living arrangement</b>		
Living together	2076	87.1
Not living together	307	12.9
<b>Religion</b>		
Christianity	998	41.9
Islam	1357	57.0
Traditional & others	28	1.1

Source: 2013 NDHS

Table 2 presents the demographic characteristics of the respondents. The dominant age group among the respondents was 25-29 years. The proportions of respondents in each age group rise progressively from age group 15-19 years until age group 25-29 years where the proportion peaked and then decline steadily throughout the older reproductive life span. Majority of the respondents wants more children. Nearly half of the women had less than four children. However, more than one-third of the women had four or more children. Child mortality experience was high among the respondents. More than one-third of the respondents had experienced either a son or daughter mortality.

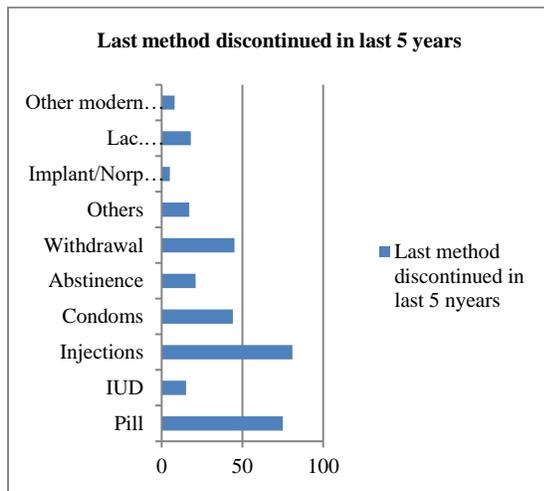


Figure 1: Method discontinued

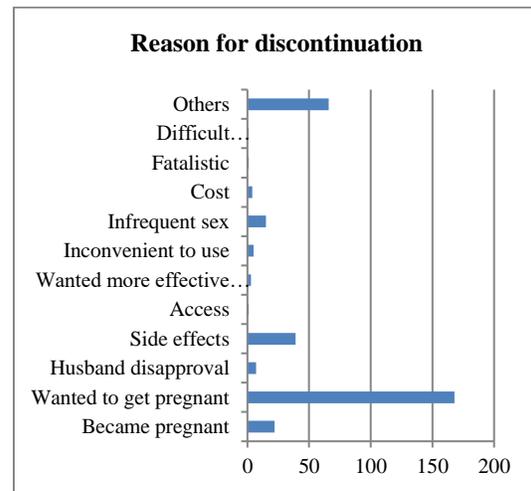


Figure 2: Reason for discontinuation

Source: 2013 NDHS

The dominant age at first marriage among the respondents was 15-19 years. However, early marriage was high among the sampled population with slightly above having been married at 14 years or less than 14 years of age. The knowledge of contraceptives was high among the respondents. Majority of the respondents know at least one method of modern contraceptive while about one-tenth reported no knowledge of any method of contraceptive.

**Table 2: Distribution of respondents by demographic characteristics**

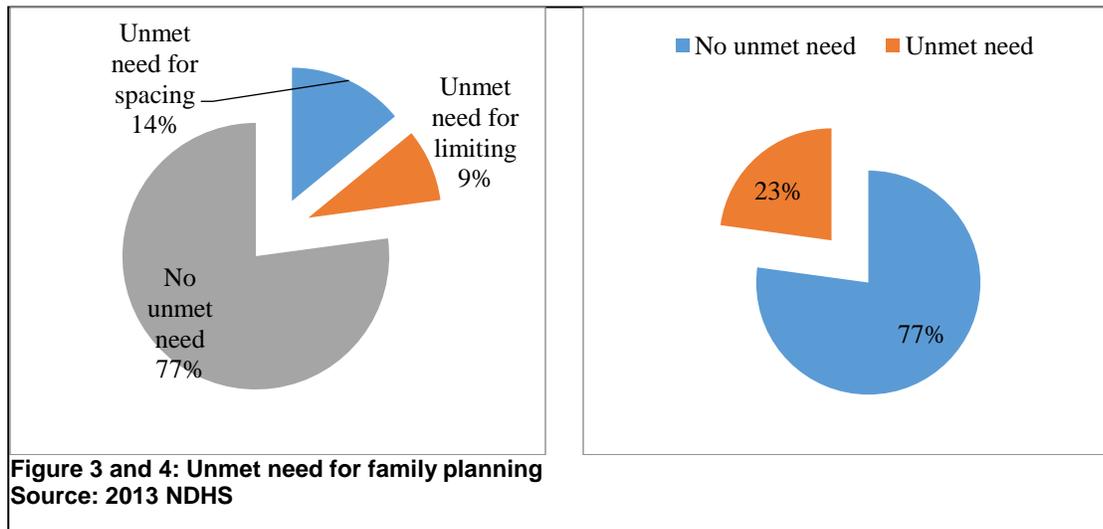
Variable	Number of Women (n=2383)	Percent
<b>Age group in 5-year groups</b>		
15-19	123	5.2
20-24	325	13.6
25-29	574	24.1
30-34	524	22.0
35-39	456	19.1
40-44	240	10.1
45-49	141	5.9
<b>Children ever born</b>		
1-2	621	26.0
3-4	881	37.0
5 and above	881	37.0
<b>Desire for more children</b>		
Wants more children	1896	79.6
Want no more children	487	20.4
<b>Number of living children</b>		
None	326	13.7
Less than 4	1122	47.1
4 or more	935	39.2
<b>Child mortality experience</b>		
Ever experienced	939	39.4
Never experienced	1444	60.6
<b>Age at first marriage</b>		
14 years or less	609	25.5
15-19	1042	43.7
20-24	440	18.5
25 years and above	292	12.3
<b>Knowledge of contraceptive method</b>		
No method	240	10.1
Traditional method	27	1.1
Modern method	2116	88.8
<b>Contraceptive use</b>		
Never used	1857	77.9
Ever used	526	22.1

Source: 2013 NDHS

However, in spite of the high knowledge, majority of the respondents had never used any method of contraceptive. Among those who had ever used any contraceptive method, more than one-tenth had discontinued the method in the last five years. The dominant methods discontinued are injections and pills. The major reasons for discontinuation are desire to get pregnant and other reasons (Figures 1 and 2).

**Prevalence of Unmet Need for Family Planning**

Figure 3 present the prevalence of unmet need for family planning among the respondents. More than two-thirds of the respondents do not have unmet need for contraceptive. Nearly one-tenth of the women had unmet need for limiting while a higher proportion had unmet need for spacing. When unmet need was combined in Figure 4, the proportion of respondents with unmet need was slightly above one-fifth of the sampled women.



### ***Factors associated with Unmet Need***

Table 3 present results of Model 1 showing the influence of socio-economic characteristics on unmet need for family planning. Education show significant association with prevalence of unmet need among respondents. As educational attainment improves, the likelihood of unmet need reduces among the women. For instance, women who attained secondary education were 74.4% less likely to have unmet need compared with women who had no formal education (OR=0.256; CI: 0.19-0.35). Place of residence was significantly associated with unmet need for family planning. The likelihood of unmet need among women in rural areas was lower compared with women in the urban area. Women in rural areas were 27.4% more likely to have unmet need for family planning compared with urban women (OR=1.274; CI: 1.03-1.57). Women currently working were 45.1% less likely to have unmet need for family planning compared with women not currently working (OR=0.549; CI: 0.52-0.58). Women's autonomy was significantly associated with unmet need for family planning. For instance, the odds of unmet need reduce to 0.601 among women who had moderate autonomy and further reduce to 0.467 among women who had high autonomy.

The influence of access to mass media and geo-political zone of respondents on prevalence of unmet need for family planning were inconsistent. On the one hand, the lower odds of unmet need among women with low access to mass media did not show statistical significance while the lower odds among women with moderate access reveal statistical significance ( $p < 0.05$ ). On the other hand, the likelihood of unmet need was either significantly lower or higher for other zones compared with the north-central zone with the exclusion of the north-east zone of the country. Other socio-economic characteristics such as type of marriage, living arrangement and religious affiliation also showed significant influence on unmet need. For instance, Muslim women were twice likely to have unmet need for family planning compared with Christian women (OR=2.199; CI: 1.85-2.61). Similarly, women not living together with male partner were less likely to have unmet need for family planning (OR=0.853; CI: 0.77-0.95).

**Table 3: binary logistic regression showing influence of women socio-economic characteristics on unmet need for family planning, Model 1**

Characteristic	Odds Ratio	p> t	95% confidence Interval
<b>Education</b>			
None (RC)	-	-	-
Primary	0.603	<.001	0.489-0.743
Secondary	0.256	<.001	0.190-0.345
Higher	0.194	<.001	0.120-0.311
<b>Wealth index</b>			
Poorest (RC)	-	-	-
Poorer	0.599	0.006	0.415-0.865
Middle	0.851	0.526	0.516-1.402
Richer	0.883	0.654	0.512-1.522
Richest	0.703	0.267	0.377-1.311
<b>Place of residence</b>			
Urban (RC)	-	-	-
Rural	1.274	0.024	1.033-1.572
<b>Work status</b>			
Not working (RC)	-	-	-
Working	0.549	<.001	0.519-0.581
<b>Levels of women's autonomy</b>			
Low (RC)	-	-	-
Moderate	0.601	<.001	0.486-0.742
High	0.467	0.002	0.288-0.758
<b>Access to mass media</b>			
No access (RC)	-	-	-
Low access	0.927	0.149	0.836-1.028
Moderate access	0.726	0.023	0.551-0.957
<b>Region</b>			
North-central (RC)	-	-	-
North-east	1.044	0.852	0.663-1.644
North-west	1.403	0.003	1.124-1.750
South-east	0.404	0.001	0.236-0.690
South-south	0.609	0.028	0.391-0.948
South-west	0.461	0.002	0.282-0.752
<b>Religion</b>			
Christianity (RC)	-	-	-
Islam	2.199	<.001	1.852-2.611
Traditional and Others	0.818	0.108	0.640-1.045
<b>Type of marriage</b>			
Monogamy (RC)	-	-	-
Polygyny	1.410	<.001	1.224-1.625
<b>Spousal living arrangement</b>			
Living together (RC)	-	-	-
Not living together	0.853	0.003	0.767-0.949

**RC Reference category**

Table 4 present results of Model 2 showing the association of demographic characteristics with unmet need for family planning. The odds of unmet need was seven times more likely among women who wanted no more children compared to women who wanted more children (OR=7.513; CI: 5.70-9.90). The odds of unmet need were higher among young women aged 20-24 years and 25-29 years. However, at older ages, the likelihood of unmet need reduce significantly. For instance, women aged 40-44 years were 51.5% less likely to have unmet need compared with

younger women aged 15-19 years (OR=0.485; CI: 0.29-0.68). Numbers of living children showed significant association with unmet need among the women. Women who had either less than or more than four children both had higher likelihood of unmet need compared with women who had no living children. Similarly, women who had never experienced child death were less likely to have unmet need for family planning (OR=0.279; CI: 0.16-0.40). Women’s age at first marriage was significantly associated with unmet need as result revealed higher odds of unmet need among women who married before age 25 years. Women who married at 25 years and above were 22% less likely to have unmet need compared with women who married at younger ages particularly those in the reference category (OR=0.780; 0.61-0.95). Contraceptive knowledge and use both significantly associate with unmet need for family planning. Women using either traditional or modern contraceptives were less likely to have unmet need for family planning compared with women not using any method of contraception.

**Table 4: binary logistic regression showing influence of women’s demographic characteristics on unmet need for family planning, Model 2**

Characteristic	Odds Ratio	p> t	95% confidence Interval
<b>Desire for more children</b>			
Wants children (RC)	-	-	-
Wants no more	7.513	<0.001	5.701-9.901
<b>Age Group</b>			
15-19 (RC)	-	-	-
20-24	1.689	<0.001	1.482-1.895
25-29	1.115	<0.001	0.897-1.332
30-34	0.224	0.001	0.088-0.359
35-39	0.233	0.004	0.077-0.391
40-44	0.485	<0.001	0.294-0.676
45-49	0.260	0.001	0.113-0.408
<b>Number of living children</b>			
None (RC)	-	-	-
Less than 4	1.316	<0.001	1.001-1.631
4 or more	1.209	<0.001	0.852-1.565
<b>Child mortality experience</b>			
Ever experienced (RC)	-	-	-
Never experienced	0.279	<0.001	0.157-0.400
<b>Age at first marriage</b>			
14 years or less (RC)	-	-	-
15-19 years	1.792	<0.001	1.543-2.040
20-24 years	1.179	<0.001	1.036-1.321
25 years and above	0.780	<0.001	0.611-0.950
<b>Knowledge of contraceptive</b>			
No method (RC)	-	-	-
Traditional method	0.298	<0.001	0.176-0.420
Modern method	0.420	0.001	0.166-0.674
<b>Contraceptive use</b>			
Never used (RC)	-	-	-
Ever used	0.519	<0.001	0.385-0.653

**RC Reference category**

Table 5 present results of Model 3 showing the simultaneous influence of socio-demographic characteristics on unmet need for family planning. With the inclusion of both the social and demographic characteristics in Model 3, the statistical significance of some of the factors examined in the previous models pale into insignificance. Type of marriage, child mortality experience, place of residence and contraceptive knowledge do not exert influence on unmet

need for family planning. Education except at primary level remained a significant predictor of unmet need for family planning. Women with improved educational attainment

**Table 5: binary logistic regression showing influence of socio-demographic characteristics on unmet need for family planning, Model 3**

Characteristic	Odds Ratio	p> t	95% confidence Interval
<b>Education</b>			
None (RC)	-	-	-
Primary	0.818	0.108	0.640-1.045
Secondary	0.134	<0.001	0.101-0.176
Higher	0.196	<0.001	0.122-0.313
<b>Place of residence</b>			
Urban (RC)	-	-	-
Rural	1.278	0.241	0.847-1.928
<b>Work status</b>			
Not working (RC)	-	-	-
Working	0.762	0.024	0.602-0.965
<b>Levels of women's autonomy</b>			
Low (RC)	-	-	-
Moderate	0.982	<0.001	0.676-1.287
High	0.729	<0.001	0.529-0.929
<b>Access to mass media</b>			
No access (RC)	-	-	-
Low access	1.142	0.510	0.768-1.699
Moderate access	0.984	<0.001	0.865-1.103
<b>Region</b>			
North-central (RC)	-	-	-
North-east	1.370	0.002	0.824-2.278
North-west	1.279	<0.001	0.780-2.099
South-east	0.562	0.004	0.304-1.039
South-south	0.791	0.002	0.458-1.367
South-west	0.671	<0.001	0.377-1.193
<b>Religion</b>			
Christianity (RC)	-	-	-
Islam	1.705	<0.001	1.498-1.911
Traditional and Others	1.044	0.852	0.663-1.644
<b>Type of marriage</b>			
Monogamy (RC)	-	-	-
Polygyny	1.171	0.245	0.897-1.530
<b>Spousal living arrangement</b>			
Living together (RC)	-	-	-
Not living together	0.713	0.031	0.525-0.969
<b>Desire for more children</b>			
Wants children (RC)	-	-	-
Wants no more	6.754	<0.001	4.866-9.375

**RC Reference category**

were less likely to have unmet need compared with women who had no formal education. Employment was a consistent determinant of unmet need as result further showed that women currently working were less likely to have unmet need for family planning compared with women not currently working.

The level of autonomy among women maintains inverse relationship with the prevalence of unmet need for family planning. As women's level of autonomy improves from moderate to high, the odds of unmet need consistently reduces. For instance, while women with moderate

autonomy were 1.8% less likely to have unmet need, women with high autonomy were 27.1% less likely to have unmet need. Access to mass media reveals inconsistent influence on unmet need. Contrary to result in Model 2, women who had low access to mass media had higher likelihood of unmet need for family planning compared to women with no access to mass media. The relationship was however not statistically significant. Moderate access to mass media remained a significant predictor of unmet need. Women with moderate access to mass media were less likely to have unmet need for family planning.

The inclusion of socio-economic characteristics in Model 3 reinforced the relationship between geographic region and unmet need. Women in the north-east geo-political zone were 37% more likely to have unmet need for family planning compared to women in the north-east geo-political zone (OR=1.370; CI: 0.824-2.278). Similarly, women in the north-west geo-political zone were 27.9% more likely to have unmet need for family planning compared to women in the north-central geo-political zone (OR=1.279; CI: 0.780-2.099). The odds of unmet need for family planning among women in all the southern geo-political zones were lower than the odds among women in the northern geo-political zones. Other factors including religious affiliation, spousal living arrangement, age, and age at first marriage remained significant determinants of unmet need for family planning.

**Table 5 continued: binary logistic regression showing influence of socio-demographic characteristics on unmet need for family planning, Model 3**

Characteristic	Odds Ratio	p> t	95% Confidence Interval
<b>Child mortality experience</b>			
Ever experienced (RC)	-	-	-
Never experienced	1.103	0.531	0.811-1.499
<b>Age at first marriage</b>			
14 years or less (RC)	-	-	-
15-19 years	2.331	<0.001	2.017-2.692
20-24 years	1.238	0.001	1.087-1.411
25 years and above	0.601	<0.001	0.486-0.742
<b>Knowledge of contraceptive</b>			
No method (RC)	-	-	-
Traditional method	0.757	0.725	0.161-3.555
Modern method	0.959	0.865	0.598-1.541
<b>Contraceptive use</b>			
Never used (RC)	-	-	-
Ever used	0.504	0.002	0.331-0.769
<b>Age group</b>			
15-19 (RC)	-	-	-
20-24	1.465	<0.001	1.239-1.733
25-29	1.413	<0.001	1.225-1.629
30-34	0.287	<0.001	0.224-0.369
35-39	0.467	0.002	0.288-0.758
40-44	0.568	<0.001	0.464-0.694
45-49	0.726	0.023	0.551-0.957
<b>Child mortality experience</b>			
Ever experienced (RC)	-	-	-
Never experienced	1.103	0.531	0.811-1.499
<b>Number of living children</b>			
None (RC)	-	-	-
Less than 4	4.959	<0.001	2.766-8.892
4 or more	7.582	<0.001	3.721-15.449

**RC Reference category**



## DISCUSSION

This study examined the socio-demographic factors associated with unmet need for family planning among women who experienced pregnancy termination in Nigeria. We found 22 percent prevalence of unmet need among women who experienced pregnancy termination. This prevalence was comparable to the 23.5 percent found by Hameed et al. (2011); 25.3 percent by Dejenun et al. (2013); 23.9 percent by Lata et al. (2012); and 27.3 percent by Sulthana et al. (2015) among other groups of women. The significant socio-demographic factors were also similar to the factors found among other groups of women by previous studies (Ayele et al. 2013; Machiyama and Cleland, 2013; Adjei et al. 2014). The finding that similar socio-demographic characteristics predict unmet need among those who have experienced pregnancy termination and other women was worrisome. This was borne out of the fact that the pregnancy termination experience has not impacted their reproductive choice.

Women who had gone through a pregnancy termination whether spontaneous or induced ought to have been provided with post abortion family planning services where correct information about contraceptive methods are provided to help women prevent a repeat abortion. Such information may be provided either before the termination or during treatment if the termination was being done in a health facility. In recognition of the fact that large proportions of induced abortions are taken place in undesignated places in Nigeria, the health authorities in the country can come up with a programme for all categories of health personnel to encourage family planning services as a standard of practice for doctors, nurses and midwives treating complications from poorly performed abortions in line with the consensus of FIGO, ICM, ICN and USAID (2009). This is particularly important to accommodate groups of women using abortion as a means of spacing or limiting number of children (Guillaume and Desgrees du Lou, 2002; Lamina, 2015).

The advantage of providing women with post abortion family planning services is that it not only accelerates post abortion contraceptive acceptance rates as found by HIP (2012), it will also significantly reduce the level of unmet need among women. It is however important to note that the benefits of post abortion family planning services will achieve the best result only when women's empowerment is brought to the fore of public health programmes. Many women experiencing unmet need or induced abortion do not have power over the circumstances in which they become pregnant. By expanding educational, employment and social opportunities for women, the proportions of women who will become autonomous over their reproductive choices will increase substantially, thus reducing unmet need to the barest minimum.

### Study Limitations

Analyses were limited by two issues. The cross-sectional nature of the data which did not permit a cause-effect inference to be made from the study findings, and the small proportion of women who reported ever experiencing at least one pregnancy termination compared to women reporting otherwise. This did not allow us to do a detail comparison of the characteristics of women. We are not also able to separate cases of spontaneous abortions from induced abortions since the data grouped both cases as pregnancy termination.

### Conclusion

This study has attempted to address the limitation by providing additional evidence that in spite of pregnancy termination experience, unmet need for family planning either for spacing or limiting substantially exists among women. The socio-demographic characteristics of women influence the prevalence of unmet need among them. The provision of post abortion family planning counselling and services to women seeking pregnancy termination will accelerate the reduction of unmet need for family planning among women. Empowering women by improving



their socio-demographic environment such as the provision of educational and employment opportunities and providing women with more autonomy to decide if and when they want to have children will ultimately eliminate unintended pregnancies arising from unmet need for family planning.

## REFERENCES

- Adjei, D., Sarfo, J. O., Asiedu, M., & Sarfo, I. A. (2014). Psychosocial factors affecting contraceptive usage: A case of unmet needs in Ghana. *European Scientific Journal*, 10(15), 84-93.
- Ali, A. A., & Okud, A. (2013). Factors affecting unmet need for family planning in Eastern Sudan. *BMC Public Health*, 13, 102 doi: 10.1186/1471-2458-13-102
- Asford, L. (2003). Unmet need for family planning: Recent Trends and Their Implications for Programme. PRB Policy Brief. Retrieved July 10, 2015 from <http://www.prb.org/pdf/unmetneedforfamplan-eng.pdf>
- Ayele, W., Tesfaye, H., Gebreyes, R., Gebreselassie, T. (2013). *Trends and Determinants of Unmet Need for Family Planning and Programme Options, Ethiopia. Further analysis of the 2000, 2005 and 2011 Demographic and Health Surveys*. DHS Further Analysis Reports No. 81. Calverton, Maryland, USA: ICF International.
- Casterline, J. B., & Sinding, S. W. (2000). Unmet Need for Family Planning in Developing Countries and Implications for Population Policy. *Population and Development Review*, 26(4), 691-723.
- Cleland, J., Berstein, S., Ezeh, A., Faundes, A., Glasier, A., & Innis, J. (2006). Family Planning: the unfinished agenda. *The Lancet*, 368, 1810-1827.
- Decat, P., Zhang, W., Moyer, E., Cheng, Y., Wang, Z., Lu, C. et al. (2011). Determinants of unmet need for contraception among Chinese migrants: A worksite-based survey. *The European Journal of Contraception and Reproductive Health Care*, 16, 26-35.
- FIGO, ICM, ICN and USAID (2009). Family Planning a key component of post abortion care. Washington, DC.
- Doctor, H. V., Findley, S. E., Afenyadu, G. Y., Uzongu, C., & Ashir, G. M. (2013). Awareness, Use and Unmet Need for Family Planning in Rural Northern Nigeria. *African Journal of Reproductive Health*, 17(4), 107-117.
- Dejenu, G., Ayichiluhm, M., & Abajobir, A. A. (2013). Prevalence and Associated factors of unmet need for family planning among married women in Enemay District, Northwest Ethiopia: A comparative cross-sectional Study. *Global Journal of Medical Research*, 13(4 version 1), 23-32.
- Guillaume, A., & Desgress du Lou, A. (2002). Fertility Regulation among women in Abidjan, Cote d'Ivoire: Contraception, Abortion or Both? *International Family Planning Perspectives*, 28(3), 159-166.
- Hameed, W., Azmat, S. K., Bilgrami, M., & Ishaq, M. (2011). Determining the factors associated with unmet need for family planning: a cross-sectional survey in 49 districts of Pakistan. *Pakistan Journal of Public Health*, 1(1), 21-27.
- HIP (2012). Post abortion Family Planning: strengthening the family planning component of post abortion care. Washington, DC.
- Kisaakye, P. (2013). Determinants of unmet need for contraception to space and limit births among various groups of currently married women in Uganda. Proceedings of 1<sup>st</sup> Annual International Interdisciplinary Conference, 24-26 April, Azores, Portugal
- Lamina, M. A. (2015). Prevalence of Abortion and Contraceptive Practice among Women Seeking Repeat Induced Abortion in Western Nigeria. *Journal of Pregnancy*, <http://dx.doi.org/10.1155/2015/486203>



- Lata, K., Barman, S. K., Ram, R., Mukherjee, S., & Ram, A. K. (2012). Prevalence and determinants of unmet need for family planning in Kishanganj district, Bihar, India. *Global Journal of Medicine and Public Health*, 1(4), 29-33.
- Lauro, D. (2011). Abortion and Contraceptive Use in Sub-Saharan Africa: How women plan their Families. *African Journal of Reproductive Health*, 15(1), 13-23.
- Machiyama, K., & Cleland, J. (2013). Insights into Unmet Need in Ghana. STEP UP Research Report. London: London School of Hygiene & Tropical Medicine
- Mekonnen, W., & Worku, A. (2011). Determinants of low family planning use and high unmet need in Butajira District, South Central Ethiopia. *Reproductive Health*, 8,37. <http://www.reproductive-health-journal.com/content/8/1/37>
- Monjok, E., Smesny, A., Ekabua, J. E., & Essien, E. J. (2010). Contraceptive practices in Nigeria: Literature review and recommendations for future policy decisions. *Open Access Journal of Contraception*, 1, 9-22.
- NPC and ICF International (2014). *Nigeria Demographic and Health Survey 2013*. Abuja, Nigeria, and Rockville, USA: NPC and ICF International
- Oye-Adeniran, B. A., Adewole, I. F., Umoh, A. V., Fapohunda, O. R., & Iwere, N. (2004). Characteristics of abortion care seekers in south-western Nigeria. *African Journal of Reproductive Health*, 8(3), 81-91.
- PATH (2008). Reducing unmet need for family planning: Evidence-based strategies and approaches. Outlook. 25<sup>th</sup> Anniversary Issue. Retrieved July 10, 2015 from [www.path.org/publications/detail.php?i=1639](http://www.path.org/publications/detail.php?i=1639)
- Smith, R., Ashford, L., Gribble, J., & Clifton, D. (2009). *Family Planning Saving Lives (4th Edition)*. Washington, DC: Population Reference Bureau.
- Sulthana, B., Shewade, H. D., Sunderamuthy, B., Manoharan, K., & Subramanian, M. (2015). Unmet need for contraception among married women in an urban area of Puducherry, India. *Indian Journal of Medical Research*, 115-118.
- UNFPA (2013). Choices not Chances. *UNFPA Family Planning Strategy 2012-2020*. New York: USA
- Westoff, C. F. (2005). Recent trends in abortion and contraception in 12 countries. DHS Analytical Studies, No. 8. Princeton: Princeton University and Calverton, MD: ORC Macro.
- Westoff, C. F. (2012). Unmet Need for Modern Contraceptive Methods. DHS Analytical Studies No. 28. Calverton, Maryland, USA: ICF International.