

# PREDICTORS OF CONTRACEPTIVE USE AMONG MIGRANT AND NON-MIGRANT COUPLES IN NIGERIA

Odusina Emmanuel Kolawole and Adeyemi Olugbenga E.

Department of Demography and Social Statistics, Federal University,  
Oye-Ekiti, Ekiti State, Nigeria

[kolaodusina@yahoo.co.uk](mailto:kolaodusina@yahoo.co.uk)

## Abstract

Evidence reveals low level of contraceptive usage in Nigeria despite high knowledge and efforts of different institutions. To influence behaviour, predictors of contraceptive use are needed. Data for study are from 2008 Nigeria Demographic and Health Survey. Matched couples are target population. Logistic regression is employed to examine predictors of contraceptive use among migrants and non-migrant couples. Majority of migrant couples lives in urban areas, are Christians, belong to rich household and have fewer children while most of non-migrant couples live in rural areas, are Muslims and belong to poor household. Use of contraceptives is more pronounced among migrant couples. Predictors of contraceptive use among migrant couples are age, education, fertility desire and preference while predictors of contraceptive use among non-migrant couples are age, residence, wealth status, religion, number of living children and fertility desire. Population policies on contraceptive use in Nigeria should be revised for effectiveness by taking cognizance of the predictors.

Keywords: contraceptives, couples, migration

## **Introduction**

Migration is one of the three components of population change. Other components, fertility and mortality have attracted more studies and evidences relating to them are comparatively overwhelming when compare to migration. The attention on fertility is not unconnected with its high level in many of sub-Saharan Africa countries (Gerenne, 2008) and the low contraceptive usage. Analysis reveals high knowledge of contraceptive but low contraceptive utilization. Sub-Saharan African countries continue to experience low contraceptive prevalence rate due to desire for large family size (United Nation, 1999). In addition, high fertility is correlated with low socio-economic development and poor access to health and contraceptive facilities and services (Bongaarts et al., 2005).

Migration is also an important factor in fertility and mortality. The pattern of fertility and mortality can be greatly influenced by migration. Migration has been found to change behaviour through new norms and beliefs being adopted and imbibe by migrants.

In sub-Saharan Africa, evidence of the linkages between migration and contraceptive use is limited. Available studies focus more on fertility behaviour of individual migrants (Omondi and Ayiembra, 2005) and contraceptive use (Lindstrom and Hernandez, 2006), without enough attention on contraceptive use of couples. Studies have linked rural migrants with low contraceptive use (Mberu, 2009). Reproduction involves husbands and wives. Migration may bring about different orientations and values, most especially rural-urban migration, there is the need to explore migration and contraception nexus between migrants and non-migrants couples in Nigeria. Rural-urban migration is common in Nigeria. Migrants constitute most people in their reproductive ages.

Contrary to the evidence of differentials in contraceptive use of men and women in rural and urban areas, contraceptive use of migrant and non-migrant couples have received little attention. There is substantial evidence in the literature about more contraceptive use among rural-urban migrants compare to rural natives (Omondi and Ayiembra, 2003; Mberu, 2009; Chen et al., 2010).

This paper provides empirical evidence on the predictors of contraceptive use among migrant and non-migrant couples in Nigeria. Evidence on and deep understanding of contraceptive use among migrant and non-grant couples may assist in policies and programmes directions for highly effective strategies in contraceptive use promotion in Nigeria.

Are there differences in contraceptive use among migrant and non-migrant couples in Nigeria?

What are the predictors of contraceptive use among migrant and non-migrant couples in Nigeria?

## **Hypothesis**

Migrant couples are more likely to use contraception than non-migrant couples.

## **Methodology**

The data for this study are from 2008 Nigeria Demographic and Health Survey (NDHS) instead of 2013 NDHS which is the most current in NDHS dataset in Nigeria. This is due to the fact that data on number of years lived in the place of residence are not available in 2013 NDHS. Moreover, number of years lived by the wives (women) in place of residence are used as basis for the couples because residence of the wives usually determined that of the couples in most of the families in Nigeria. The data set is nationally representative. It provides population and health information at national, zonal and state levels. It is a cross-national survey of reproductive behaviour in Nigeria. Eligible women are in the age range of 15 – 49 who are permanent residents of the households or visitors in the households on the night before the survey. In a sub-sample of half of the households, all men in the age range 15-59 who are permanent residents or visitors to the households present on the night before the survey are eligible for interview. Men's and women's questionnaires are similar and this makes comparisons possible (Becker and Contenbader, 2001). Data are collected from more than 33, 000 women while data are collected from more than 15000 men. Couples, matched couples who are living together, in consensual union or are legally married are the target population. Analyses are performed at univariate, bivariate and multivariate levels. Univariate analysis in form of frequency distribution examines selected background characteristics, contraceptive use and other variables of interest. To know how background and other variables relate with contraceptive use, bivariate (in form of cross-tabulation) analysis is employed. Multivariate analysis is employed to examine the determinants of contraceptive use among migrants and non-migrants couples. Weighting is used to correct sampling variability.

## **Dependent Variable**

Dependent variable, current use of contraceptives, is derived from the reports of couples (husbands and wives) on contraceptive use. Responses on contraceptive use are coded one (1), if both (husband and wives) are not using contraceptives, it is coded two (2), if both are using and three (3), if either is using.

## **Independent Variables**

The explanatory variables consider in this study are migration status, measured in term of migrant (1) and non-migrant (2), other selected explanatory background characteristics of couples are age measured by same age (1), husbands 3 years plus older (2), wives 3 years plus older, educational attainment measured by same education (1), husbands more educated (2), wives more educated (3), residence measured by urban (1), rural (2), religion measured by Christianity (1), Islam (2), Others (3), work status measured by both are working (1), others (2), wealth status measured by rich (1), Middle level (2), poor (3), CEB measured by 0-4 children (1), 5 and more children (2), number of living children measured by 0-4 children (1), 5 and more children (2), spousal communication/decision making measured by both are communicating (1), others (2), fertility desire measure by equal desire (1), husbands desire more (2), wives desire

more (3), fertility preference measured by both want another (1), both want no more (2), others (3), knowledge of contraceptive measured by both have no knowledge (1), both have knowledge (2), either has knowledge (3), ever use of contraceptive methods measured by both have not used (1), both have used (2) and either has used (3).

## **Results**

### **Background Characteristics of Respondents and Migration Status**

The section presents selected background characteristics of migrant and non-migrant couples. About four of every five migrant and non-migrant couples (80.0 percent and 81.9 percent respectively) indicated that husbands are the older partners (Table 1). Nineteen percent of migrant couples are of the same age compare to 17.2 percent among non-migrant couples. Husbands are more educated among the migrant (42.5 percent) and non-migrant (41.6 percent) couples, also couples of the same level of education are 36.8 percent among migrant and 44.0 percent among non-migrant. A high proportion of migrant couples (62.4 percent) compares to low proportion of non-migrant couples lives in urban and rural areas respectively. Conversely, a high proportion of non-migrant couples (80.4 percent) as against low proportion of migrant couples (37.6 percent) lives in rural and urban areas respectively. There are more Christians among the migrant couples (58.6 percent) while there are more Muslims among the non-migrant couples. Higher proportion of migrant couples is working (72.5 percent) compares to non-migrant couples (59.8 percent). Majority of migrant couples (78.2 percent), belong to rich households while the majority of non-migrants couples (56.3 percent), belong to poor households.

In addition, about 23 percent of non-migrant couples as against only 9.3 percent of migrant couples belong to middle level households. A large majority of migrant couples have less than five children (79.0 percent for migrant compares to 59.9 percent for non-migrant couples). Table 1 further reveals that 40.1 percent of non-migrant couples as against 21.0 percent of migrant couples indicated five children and more children ever born. Similar explanation goes for number of living children among migrant and non-migrant couples. Spousal communication was very low among the couples. Couples who indicated that they are both communicating are about 13 percent of both the migrant and non-migrant couples. Equal fertility desire is more pronounced among the couples but much more pronounced among the migrant couples (74.0 percent and 58.1 percent among migrant and non-migrant couples respectively). The fertility desire of husbands of non-migrant couples (38.5 percent) is higher than the fertility desire of husbands of migrant couples (18.3 percent). Fertility preference is about the same among migrant (61.1 percent) and non-migrant (60.7 percent) couples. A large number of migrant (88.0 percent) and non-migrant (74.5 percent) couples know about contraceptives. Conversely, those who have ever used contraceptives are comparatively lower among the migrant and non-migrant couples. Forty-six percent of migrant couples have ever used contraceptives as against only 13.9 percent of non-migrant couples.

In addition, about 60 percent of non-migrant and 21 percent of migrant couples have never used contraceptives. Examination of current use of contraceptives reveals that 17.7 percent of migrant couples are using contraceptives as against only 4.3 percent of non-migrant couples. Those who are not currently using contraceptives are more pronounced among non-migrant couples (79.3 percent) compare to migrant couples (51.8 percent).

**Table 1: Distribution of Couples by Selected Background Characteristics and Migration Status**

<b>VARIABLES</b>	<b>MIGRANT COUPLES</b>	<b>NON-MIGRANT COUPLES</b>
<b>Age</b>		
Same Age	19.3	17.2
Husbands 3 years plus older	80.0	81.9
Wives 3 years plus older	0.7	0.9
<b>Education</b>		
Same education	36.8	44.0
Husbands more educated	42.5	41.6
Wives more educated	20.7	14.4
<b>Residence</b>		
Urban	62.4	19.6
Rural	37.6	80.4
<b>Religion</b>		
Christianity	58.6	40.8
Islam	27.9	51.4
Others	13.5	7.9
<b>Work status</b>		
Both are working	72.5	59.8
Others	27.5	40.2
<b>Wealth index</b>		
Poor	12.5	56.3
Middle	9.3	22.7
Rich	78.2	21.0
<b>CEB</b>		
0-4 children	79.0	59.9
5 and more	21.0	40.1
<b>No of living children</b>		
0-4 children	86.5	71.2
5 and more	13.5	28.8
<b>Spousal Communication/ decision making</b>		

Both partner	13.5	13.6
Others	86.5	86.4
<b>Fertility desire</b>		
Equal desire	74.0	58.1
Husbands desire more	18.3	38.5
Wives desire more	7.7	3.5
<b>Fertility preference</b>		
Both want another	61.1	60.7
Both want no more	12.2	8.9
Others	26.7	30.5
<b>Knowledge of contraceptives</b>		
Both no knowledge	1.9	5.1
Both have knowledge	88.0	74.5
Either has knowledge	10.1	20.5
<b>Ever use of contraceptive methods</b>		
Both have not used	20.6	58.9
Both have used	46.3	13.9
Either has used	33.1	27.2
<b>Current use of contraceptive methods</b>		
Both are not using	51.8	79.3
Both are using	17.7	4.3
Either is using	30.5	16.4

Source: Authors' work, 2015 (Data from the 2008 NDHS)

### Use of Contraceptives

Table 2 shows the percentage distribution of migrant and non-migrant couples by selected background characteristics and the use of contraceptives. The table reveals migration status as an important factor in contraceptive use of couples. The use of contraceptive is more pronounced among migrant couples than the non-migrant couples across all selected background variables. For instance, among couples who are of the same age, 22.3 percent of migrant couples are using contraceptives as against the 7.1 percent of non-migrant couples. Migrant couples who indicated wives are older than husbands, 16.7 percent of them are using contraceptives as against 3.7 percent of non-migrant couples. Similar explanation goes for contraceptive use among migrant and non-migrant couples by level of education. All categories of education reveal that migrant couples are using contraceptives more than non-migrant couples. As for residence, 22.5 percent of migrant couples in urban areas are using contraceptive compared to 11.8 percent of non-migrant couples in urban areas. Also, 9.6 percent of migrant couples in rural areas are using contraceptives as against 2.4 percent of non-migrant couples in rural areas. Cross-tabulation of religious affiliation by contraceptive use reveals that among migrant couples 18.9 percent of Christian and 12.3 percent of Muslim are using contraceptives while among non-migrant couples 8.4 percent of Christian and 1.1 percent of Muslim are using contraceptives. Contraceptive use is

more pronounced among Christian compared to Muslim. As regard work status, couples who are working use contraceptives more than other categories.

In addition, the proportion of migrant couples who are working (18.2 percent) is higher compared to proportion of non-migrant couples who are working (6.0 percent). There is a direct relationship between contraceptive use and wealth status of couples. The rich level households are using contraceptives more than the middle level households while the middle level households are using contraceptives more than the poor level households among the migrant and non-migrant couples. Couples who communicate use contraceptives more than other categories. Table 2 reveals that 21.6 percent of migrant couples indicated they communicate and are using contraceptives while among the non-migrant couples, 6.1 percent indicated they communicate and are using contraceptives. As for CEB and number of living children, examination of the two categories of each group reveals that migrant couples use contraceptives more than non-migrant couples. Similar explanation goes for fertility desire and fertility preference among migrant and non-migrant couples.

**Table 2: PERCENTAGE DISTRIBUTION OF COUPLES BY SELECTED BACKGROUND CHARACTERISTICS, MIGRATION STATUS AND CONTRCEPTIVE USE**

VARIABLES	MIGRANTS CONTRACEPTIVE USE			NON-MIGRANTS CONTRACEPTIVE USE		
	Both not using	Both using	Either using	Both not Using	Both using	Either using
<b>Region</b>						
North Central	66.0	10.3	23.8	70.8	4.0	25.1
North East	92.4	0.0	7.6	89.8	0.7	9.5
North West	85.8	2.9	11.3	91.7	0.8	7.6
South East	38.7	16.7	44.6	65.2	7.8	27.0
South South	50.1	13.6	36.3	64.3	7.5	28.3
South West	41.8	26.0	32.2	48.2	21.8	30.1
<b>Age</b>						
Same age	38.9	22.3	38.8	72.2	7.1	20.7
Husbands 3years + older	78.7	0.0	21.3	65.2	0.0	34.8
Wives 3years + older	54.7	16.7	28.6	81.0	3.7	15.3
<b>Education</b>						
Same Education	58.0	13.5	28.5	84.3	3.2	12.5
Husband more Educated	50.1	18.7	31.2	76.9	4.9	18.2
Wives more Educated	44.5	22.9	32.6	71.5	5.9	22.5
<b>Residence</b>						
Urban	46.5	22.5	31.1	62.8	11.8	25.4
Rural	60.8	9.6	29.7	83.4	2.4	14.2
<b>Religion</b>						
Christianity	44.9	18.9	36.2	62.9	8.4	28.7
Islamic	67.8	12.3	19.9	91.9	1.1	6.9
Other	49.0	23.2	27.9	82.1	3.2	14.7
<b>Work status</b>						
Both are working	49.8	18.2	32.1	74.9	6.0	19.1
others	57.2	16.3	26.5	85.9	1.8	12.4
<b>Wealth index</b>						
Poor	81.7	4.9	13.5	89.4	1.1	9.6
Middle	68.6	7.2	24.3	76.1	2.6	21.3
Rich	45.1	20.9	34.0	55.9	14.6	29.5
<b>Spousal Communication/ decision making</b>						
Both partners	42.9	21.6	35.5	67.3	6.1	26.6
Others	53.2	17.0	29.8	81.3	4.0	14.8
<b>CEB</b>						
0-4	51.0	18.0	30.9	79.6	4.2	16.2
5 and more	54.8	16.2	29.0	79.0	4.3	16.7
<b>Number of living children</b>						
0- 4	52.0	17.5	30.5	80.4	3.9	15.7
5 and more	51.0	17.7	30.5	76.6	5.1	18.3
<b>Fertility desire</b>						
Equal desire	45.3	20.2	34.5	70.5	7.3	22.3
Husbands desire more	62.6	12.0	25.4	91.3	0.0	8.8
Wives desire more	32.8	41.8	25.5	42.9	23.9	33.2
<b>Fertility preference</b>						
Both want another	55.4	14.4	30.2	85.5	3.4	11.2
Both want no more	34.3	33.0	32.7	60.4	8.3	31.3
Others	51.8	18.0	30.3	72.6	4.9	22.5

Source: Authors' work, 2015 (Data from the 2008 NDHS)



## **Estimates of Odd Ratios Predicting Contraceptive Use among Migrant and Non-migrants Couples**

To understand the influence of migration status and selected socio-demographic factors of migrant and non-migrant couples on contraceptive use, multinomial logistic regression model (Table 3) was simulated. Model one (migrant couples), comparison one compared the probability of migrant couples are not using contraceptives versus both are using contraceptives and comparison two compared the probability of migrant couples are not using contraceptives versus either is using contraceptives. Model two deals with non-migrant couples, comparison one compared the probability of non-migrant couples are not using contraceptives versus both are using contraceptives and comparison two compared the probability of non-migrant couples are not using contraceptives versus either is using contraceptives. Model three considers both migrant and non-migrant couples. Therefore, migration status is considered along with all other selected socio-demographic factors. Also comparison one compared the probability of migrant couples are not using contraceptives versus both are using contraceptives and comparison two compared the probability of migrant couples are not using contraceptives versus either is using contraceptives.

In the first model which deals with migrant couples, ten variables are loaded. For comparison one, (probability both are not using compare with both are using) four variables (age, education, fertility desire and fertility preference) are significant in predicting contraceptive use, only two variables (wealth index and religion) are significant in predicting the odds of either is using contraceptives (comparison two). In the second model which deals with non-migrant couples, ten variables are also loaded. For comparison one, (probability both are not using contraceptives against both are using contraceptives) six variables (age, residence, wealth status, religion, number of living children and fertility desire) are significant in predicting contraceptive use, only four variables (residence, wealth index, religion and fertility preference) are significant in predicting the odds of either is using contraceptive (comparison two). Age and fertility desire of couples are the common variables predicting contraceptive use among migrant and non-migrant couples. Education and fertility preference are other factors predicting contraceptive use among migrant couples while other factors predicting contraceptive use among non-migrant couples are residence, wealth status or index, religion and number of living children. The third model considers migration status of both migrant and non-migrant couples along with other socio-demographic variables. Altogether, eleven variables are loaded. For comparison one, seven variables (migration status, age, education, residence, wealth status, fertility desire and fertility preference) are significantly predicting the probability of couples are using contraceptives while for comparison two, six variables (migration status, age, wealth status, religion, fertility desire and preference) are significantly predicting the probability of either of the couples are using contraceptives. It is worth noting that migrant couples are significantly more likely to use contraceptives compare to non-migrant couples. Comparing significant predictors of contraceptive use across comparisons one (both are not using contraceptives with both are using contraceptives) of all models revealed that two variables, age and fertility desire are both significant in predicting the likelihood of both couples are using couples.

**TABLE 3: MULTINOMIAL LOGISTIC REGRESSION PREDICTING CONTRACEPTIVE USE**

Variables	Model 1: Migrant Couples						Model 2: Non-migrant Couples						Model 3: Both					
	Both are using			Either is using			Both are using			Either is using			Both are using			Either is using		
	Odd ratio	C.I		Odd ratio	C.I		Odd ratio	C.I		Odd ratio	C.I		Odd ratio	C.I		Odd ratio	C.I	
<b>Migration Status</b>																		
Migrants																		
Non-Migrants	NA						NA						RC 0.46* .25 .87 0.68* .47 .99					
<b>Age</b>																		
Same	RC						RC						RC					
Husband	.01***	.01	.01	.33	.04	2.81	.01***	.01	.01	2.02	.12	34.35	0.10***	.03	.08	.47	.08	2.70
Wives	.52*	.30	.91	.64	.38	1.09	.38	.12	1.18	.71	.37	1.35	0.56*	.35	.90	.66*	.44	.98
<b>Education</b>																		
same	RC						RC						RC					
husband	1.58	.93	2.70	1.05	.63	1.77	.95	.38	2.34	1.34	.75	2.38	1.48	.91	2.33	1.10	.75	1.61
wives	2.20**	1.19	4.06	1.176	.67	2.02	1.18	.27	5.10	1.00	.49	2.05	1.86*	1.10	3.17	1.09	.70	1.69
<b>Residence</b>																		
Urban	RC						RC						RC					
Rural	.59	.32	1.09	1.29	.82	2.03	.17***	.06	.47	.42*	.21	.86	.50*	.30	.85	.99	.66	1.48
<b>Wealth Status</b>																		
Poor	RC						RC						RC					
Middle	.68	.19	2.38	1.52	.60	3.83	1.71	.29	10.05	1.75	.87	3.51	1.29	.47	3.54	1.87*	1.11	3.14
Rich	2.25	.73	6.88	3.84***	1.75	8.41	15.80***	3.81	65.47	2.10*	1.02	4.32	5.07**	1.86	13.86	3.35***	2.02	5.57
<b>Work status</b>																		
Both are working	RC						RC						RC					
others	.92	.54	1.58	1.1	.70	1.72	3.48	.98	12.38	1.0	.56	1.79	1.11	.68	1.82	1.10	.78	1.57
<b>Religion</b>																		
Christianity	RC						RC						RC					
Islamic	1.02	.56	1.86	.57*	.32	.99	.18**	.05	.61	.33**	.17	.65	.77	.45	1.30	.47	.30***	.72
Other	1.13	.53	2.41	.94	.56	1.59	.06**	.01	.47	.53	.22	1.32	.84	.41	1.71	.79	.50	1.24
<b>No of children</b>	RC						RC						RC					

0- 4 5 and more	1.19 .47 3.01 1.20 .60 2.40	4.80* 1.33 17.35 .76 .41 1.41	1.28 .64 2.57 1.02 .65 1.61
<b>Fertility desire</b>			
Equal desire	<b>RC</b>	<b>RC</b>	<b>RC</b>
Husbands desire more	.46* .21 1.0 .65 .37 1.17	.01*** .01 .01 .57 .3 1.03	.38* .17 .74 .60* .39 .91
Wives desire more	3.01**1.30 6.98 .94 .40 2.19	14.14***3.11 64.31 2.99 .96 9.28	3.85*** 1.79 8.30 1.28 .63 2.62
<b>Fertility Preference</b>			
Both want another	<b>RC</b>	<b>RC</b>	<b>RC</b>
Both want no more	3.01**1.42 6.35 1.30 .66 2.56	.30 .07 1.34 3.25** 1.51 7.02	2.61** 1.37 4.98 1.59 .95 2.67
Others	1.60 .90 2.85 1.25 .79 1.99	.70 .22 2.28 2.53** 1.39 4.59	1.67* 1.02 2.74 1.50* 1.05 2.14
<b>Spousal Communication /decision making</b>			
Both partners	<b>RC</b>	<b>RC</b>	<b>RC</b>
Others	.69 .32 1.49 .78 .42 1.46	1.72 .49 6.10 1.65 .81 3.33	.90 .48 1.69 1.0 .63 1.58

Source: Authors' Work, 2015 (Data from the 2008 NDHS)

## **Discussion**

Migration as one of the components of population change has been established to have effects on contraceptive use.. The migrants are disturbed in their activities including reproductive behaviour due to change of location and exposure to new norms. Most migrants in Nigeria leave rural areas to urban areas. Therefore, it is expected that the fertility of migrants will be lower compared to that of non-migrant. However, there is need for empirical evidence to substantiate this claim. This study examines migrant and non-migrant couples as well as the predictors of their contraceptive use. The study also examines the joint predictors of contraceptive use of both migrant and non-migrant couples.

The study reveals that husbands are older partners in most of the families though husbands among non-migrant couples have higher proportion. Couples of the same age are more among the migrant couples. Also most husbands are more educated compared to their wives but husbands among migrant couples are slightly much more educated. Couples of the same level of education are more among non-migrant couples while the proportion of more educated wives is found among the migrant couples. The study reveals that most of the migrant couples live in urban areas and conversely, most of non-migrant couples live in rural areas. Christianity is more pronounced among migrant couples while Islam is more pronounced among non-migrant couples. Majority of migrant and non-migrant couples are working but it is more pronounced among migrant couples. One of the reasons for migration is the search for greener pasture-employment and other opportunities. This may account for more workers among the migrant couples compare to non-migrant couples. People in majority of the migrant couples belong to rich household classification. This is usually so because migrants are the people who tend to have what is required to live in urban area and also earning higher income due to their better status compare to non-migrant couples who are most classified as belonging to poor household category. As explained above, majority of non-migrant couples live in rural area, therefore people in rural area tend to receive lower income compare to inhabitants of urban area. There are better employment opportunities in urban area compare to rural area and therefore low investment brings low income. As expected, migrant couples have fewer 0-4 children compare to non-migrant couples. Conversely, 5 and more children are common among non-migrant couples compare to migrant couples. Migrants tend to adopt fertility level typical of urban life after many years of life in urban area. Number of living children among migrant and non-migrant couples has similar distribution.

Rate of communication is very low among migrant and non-migrant couples. Equal fertility desire is higher among the migrant couples and the desire of husbands is more pronounced in rural area. Husbands authority and command over their wives are well recognised and regarded as one of the important norms in the rural area.

In support of the high total fertility level in Nigeria, 5.7 and 5.5 according to the 2008 NDHS and 2013 NDHS respectively, majority of migrant and non-migrant couples indicated they want another child. Those who claim they wanted no more children are more among migrant couples.

This may not be unconnected with way of life typical of urban area. There are more health facilities in urban area compare to rural area. The majority of the migrant couples live in urban area. These may be one of the reasons for more proportion of the migrant couples having the knowledge of contraception compare to non-migrant couples whose majority are in rural area. The same explanation goes for ever and current use of contraceptive methods among migrant and non-migrant couples. Ever use and current use of contraceptives are more pronounced among the migrant couples.

Contraceptive use is higher among the migrant and non-migrant couples in the South though more among the migrant couples. Migrant and non-migrant couples of the same ages use contraceptives more than migrant and non-migrant couples of other age categories respectively. The use of contraceptives is higher among migrant couples in the different categories of education, residence, religion, work status, wealth index or status, spousal communication, CEB, number of living children, fertility desire and preference compare to non-migrant couples. This again is not unconnected with the fact that most of the migrant couples are living in urban area where there are information, awareness, accessibility and availability of family planning services.

Analysis of selected socio-demographic variables and current contraceptive use revealed that the significant predictors of contraceptive use among migrant couples are age, education, fertility desire and preference while the significant predictors of contraceptive use among non-migrant couples are age, residence, wealth status, religion, number of living children and fertility desire. However, the significant predictors of contraceptive use among both couples (migrant and non-migrants) are migration status, age, education, residence, wealth status, fertility desire and preference. Across all models (migrant, non-migrant and both), the significant factors predicting the use of contraceptives are age and fertility desire of couples.

## **Conclusion**

Contraceptive use as found in this study is higher among the migrant couples compare to non-migrant couples (Lindstrom and Hernandez, 2006; Lindstrom and Muñoz-Franco, 2005). Background characteristics that are found to be predictors of contraceptive use among migrant couples are age, education, fertility desire and preference. The predictors of contraceptive use among non-migrant couples are age, residence, wealth status, religion, number of living children and fertility desire. The joint predictors of contraceptive use among migrant and non-migrant couples are age and fertility desire. Current contraceptive use among the migrant and non-migrant couples is very low despite the high knowledge of contraception. Moreover, low usage of contraceptives is not unconnected with high preference for children. Population policies on contraceptive use should be revised and enhance for effective and efficient performance. Determinants of contraceptive use among the migrant and non-migrant couples should be given serious consideration.

Therefore, government should increase the tempo of campaign on the need for contraception by couples most especially in the Northern part of Nigeria. If contraceptive use is embraced by many couples in Nigeria, it will reduce fertility level and the rate of population growth. Moreover, the use of contraceptives to space birth and prevent pregnancies will enhance the health of mothers and that of the families as a whole. The use of contraceptives to space birth and prevent pregnancies will reduce families expenses on maternal and child health care as well as the stress and demand for maternal and child health care services. This in turn will increase the living standard of the couples and can set the pace for socio-economic development in the country.

### **Acknowledgements**

The authors recognise and thank National Population Commission and ICF Macro Calverton, Maryland, USA for making their data available for this study.

## REFERENCES

- Becker, S. and Costenbader, E. (2001). Husbands' and wives' Reports of Contraceptive Use. *Studies in Family Planning* 32(2):111-129.
- Garenne, M. M. (2008). *Fertility Changes in Sub-Saharan Africa*. DHS Comparative Reports No. 18. Calverton, Maryland, USA: Macro International Inc.
- Chen, J., Liu, H. and Xie, Z. (2010). Effect of Rural-Urban Return Migration on Women's Family Planning and Reproductive Health Attitudes and Behaviour in Rural China. *Studies in Family Planning*, 41:31-44.
- Lindstrom, D. P. and Hernandez, C. H. (2006). Internal Migration and Contraceptive Knowledge and Use in Guatemala. *International family planning Perspectives*, Vol. 32, No.3, September, 2006: p. 146-153.
- Lindstrom, D. P. and Muñoz-Franco, E. (2005), Migration and the Diffusion of Modern Contraceptive Knowledge and Use in Rural Guatemala. *Studies in Family Planning*, Vol. 36, No. 4, pp. 277-288.
- National Population Commission (NPC) [Nigeria] and ICF Macro. 2009. *Nigeria Demographic and Health Survey 2008*. Abuja, Nigeria: National Population Commission and ICF Macro.
- National Population Commission (NPC) [Nigeria] and ICF Macro. 2014. *Nigeria Demographic and Health Survey 2013* Abuja, Nigeria: National Population Commission and ICF Macro.
- Omondi, Charles O. and Ayiemba, E. H. O. (2005). Fertility Differentials in Kenya: the Effect of Female Migration. *African Population Studies* Vol. 20 No. 2. p. 25 -41.
- Omondi, Charles O. and Ayiemba, E. H. O. (2003). (Contraceptive Use Dynamics among Migrant Women in Kenya. *African Population Studies*. Vol. 18 No. 2.