

# Mass Media Exposure and Intention to use Contraceptives in North-West Geo-Political Zone, Nigeria

Adebayo O. AJALA

Social Sector Group, Social and Governance Policy Research Department  
Nigerian Institute of Social and Economic Research, P.M.B. 5, U.I.P.O. Ibadan

\* E-mail of the corresponding author: bayoajala1964@yahoo.com

## Abstract

The population has been increasing and is expected to continue to increase rapidly. This increase is projected to be due to the population growth in the less developed countries. The rapidly the population of a country grows, the more the stress on the economy to keep up with the pace of needed infrastructure that enhances quality of life of the citizenry. The main driver of population growth is the use of contraceptives especially among currently married women. The data for this paper is from the 2013 Nigeria Demographic and Health Survey. A subset of currently married women age 15-49 was extracted. The paper set to find out the factors affecting mass media exposure; how exposure to mass media effect a woman's intention to use contraceptives; as well as the correlates of a woman's intention to use contraceptive. The level of education, religion, occupation, place of residence, ownership of radio, and television as well as household access to electricity have significant effect on the likelihood of married women being exposed to mass media. The level of education of a woman also have significant effect on intention to use any contraceptive. The effective use of the mass media will increase the proportion of married women who will want to use any contraceptive in the future as such on the long run there will be an improvement in the contraceptive prevalence rate for the zone and indeed the country.

**Keywords:** Mass Media, Intention, Contraceptive, Currently Married women

## 1. Introduction

The population of the world attained the 7.2 billion mark in 2014 and is expected to increase by more than 2 billion within the next 36 years, this increase is projected to be due to the population growth in the less developed countries (United Nations, 2014). The population of Africa has quadrupled between 1950 and 2010 it is expected to double by 2050 (Longwe, Huisman, and Smits, 2012). Nigeria is the seventh most populous country in the world (PRB, 2014). The country is divided into six geo-political zones, namely North-Central, North-East, North-West, South-East, South-South and South-West. The population growth rate is 3.2 per cent per annum. Population growth rate is the number of persons added to (or subtracted from) the population in a year due to natural increase and net migration expressed as a percentage of the population at the beginning of the period (Haupt and Kane, 2001). The gains of development is easily neutralised by a population growth that is not controlled or managed appropriately (Chander and Kumari, 2012). The rapidly the population of a country grows, the more the stress on the need to provide infrastructure and social services to the people (Pacque-Margolis, Muntifering, Ng, and Noronha, 2011). Fertility is a major determinant of population growth rate, while the use of contraceptive is pivotal and a very important determinant of fertility and ultimately population management (Longwe, *et. al.*, 2012; Das, Gautam, Das, and Tripathy, 2011; Akinyoade, 2007).

The effort to reduce birth rate is essential to improving the quality of life of the population (Longwe, *et. al.*, 2012; Westoff, 2012). Improving the quality of life and standards of living of every Nigerian is the primary goal of the National Policy on Population for Sustainable Development. This policy has ten key targets part of which include achieving a reduction in the total fertility rate of at least 0.6 children every five years and increasing the modern contraceptive prevalence rate by at least 2 percentage point per year. The implication of the above targets is that parental desire for large family size will reduce over the years through direct (more encouragement of the use of contraceptives for limiting than spacing of childbearing) and indirect means (dissuading women from early marriage) in order to achieve fertility transition (Akinyoade, 2007). For there to be a reduction in the total fertility rate or an increase in the use of modern contraceptives, information must be passed to the people either through personal contacts or the mass media.

The mass media (radio, television, newspapers, etc.) is fairly widespread in Nigeria; it is an important vehicle for disseminating information on family planning (FP) in particular and reproductive health in general (National Population Commission (NPC) [Nigeria] and ICF Macro, 2009). In the last two decades there have been dramatic increases in access to television as well as the number of newspapers, it is therefore necessary to revisit earlier studies of the association of mass media exposure with reproductive behaviour (Westoff, Koffman & Moreau, 2011). Mass media in general and electronic media in particular, have been suggested to have powerful fertility-limiting effects in many regions of the world. In most regions where mass media is thought to have

affected reproductive behaviour, these media have been intentionally used to influence the behaviour of their audiences, inundating consumers of these media with advertisements and other messages that promote family planning practices.

The mass media is a veritable tool in changing behaviour of individuals (Chander and Kumari, 2012). Evidence does exist on the interrelation between mass media and reproductive behaviour as depicted by the use of FP (Bertrand, Santiso, Linder, & Pinda, 1987; Piotrow, Rimon, Winnard, Kincaid, Huntington, & Conviser, 1990; Odimegwu and Raimi, 2003). Some other vehicles that could lead to a change in the reproductive behaviour in general include the use of inter-personal communication such as peer education and promotion of contraceptive methods. These have shown to also have significant impact on contraceptive use (Speizer, Oleko & Tegang, 2001). Mass media sources such as radio, television, and newspapers are potential carriers for communicating modern ideas at enhancing reproductive behaviour.

Family planning and indeed use of contraceptives depends on individual actions taken in private with little or no supervision. According to Piotrow, Treiman, Rimon II, Yin, & Lozare (1994) people will not practice family planning even when it is for their own good, except there is information and necessary reinforcement. The use of FP ultimately depends on reaching and influencing the entire population, as such the mass media is pivotal.

It is the expectation of the ordinary citizens that reports by the media will be accurate and fair such that they will be properly informed and capable of taking independent actions and decisions on various issues including those related to their health. Since almost every state has its own radio and television stations, it is possible to broadcast on a regional as well as national basis.

Nigeria is projected to be one of the nine countries that are expected to account for the increase in the world's population between 2014 and 2050. The North-West geo-political zone of the country has the highest Total fertility rate of 6.7 (National Population Commission and ICF Macro, 2014). The mass media in general, and electronic media in particular, have been suggested to have powerful fertility-limiting effects in many regions of the world. This results from the fact that the audiences of the mass media have been inundated with advertisements and other messages that promote family planning practices and to change reproductive behaviour. Information on the level of public exposure to a particular type of media allows policy makers and intervention managers to use the most effective media for various target groups in the population (National Population Commission [Nigeria] and ICF Macro, 2009).

Table 1: Percentage Distribution of Currently Married Women by selected indicators and Geo-political zone

Zone	Without education	The poorest	Knows no contraceptive method	Not currently using any contraceptive	Percentage	N
North Central	11.4	5.9	18.3	14.8	15.4	4,203
North East	29.0	35.3	32.1	22.0	19.5	5,309
North West	52.5	55.4	41.8	34.7	30.5	8,319
South East	1.5	2.0	2.7	7.2	8.6	2,351
South South	2.1	0.2	1.7	10.8	12.1	3,308
South West	3.5	1.3	3.4	10.4	13.9	3,784
	100.0	100.0	100.0	100.0		
Total	45.9	21.6	15.0	85.0	100.0	27,274

Source: NDHS, 2013

Currently married women are the group of women that are most likely to affect the population growth rate of the country, especially women within 15-49 year (the reproductive years). Therefore, understanding the intention of such women will be important to policy makers and programme managers. Table 1 shows the distribution of currently married women by the six geo-political zones in Nigeria by some selected indicators. At least 3 out of every 10 currently married women in the data set are in the North West geo-political zone. The situation of the currently married women in the North West geo-political zone appears to be worst when compared across the six geo-political zones (Table 1).

It is true that there are no specific targets for each of the six geo-political zones in the population policy, but the fact that the national figures are determined by the situation in the geo-political zones makes pertinent an examination of the zone with the worst statistics. The recommendations of this paper will be essential for policy review by policy makers and the designing of appropriate interventions necessary to ensure the targets of the

policy are attained.

The questions of import in this paper are: What are the factors affecting mass media exposure? Does exposure to mass media have any effect on a woman's intention to use contraceptives? What are the correlates of a woman's intention to use contraceptive? This paper will therefore investigate the effects of mass media exposure on intention to use contraceptives of women in the North West geo-political zone of Nigeria. The specifically, the factors determining Mass Media Exposure; how exposure to mass media influences intention to use any contraceptive as well as examine the correlates of future use of contraception.

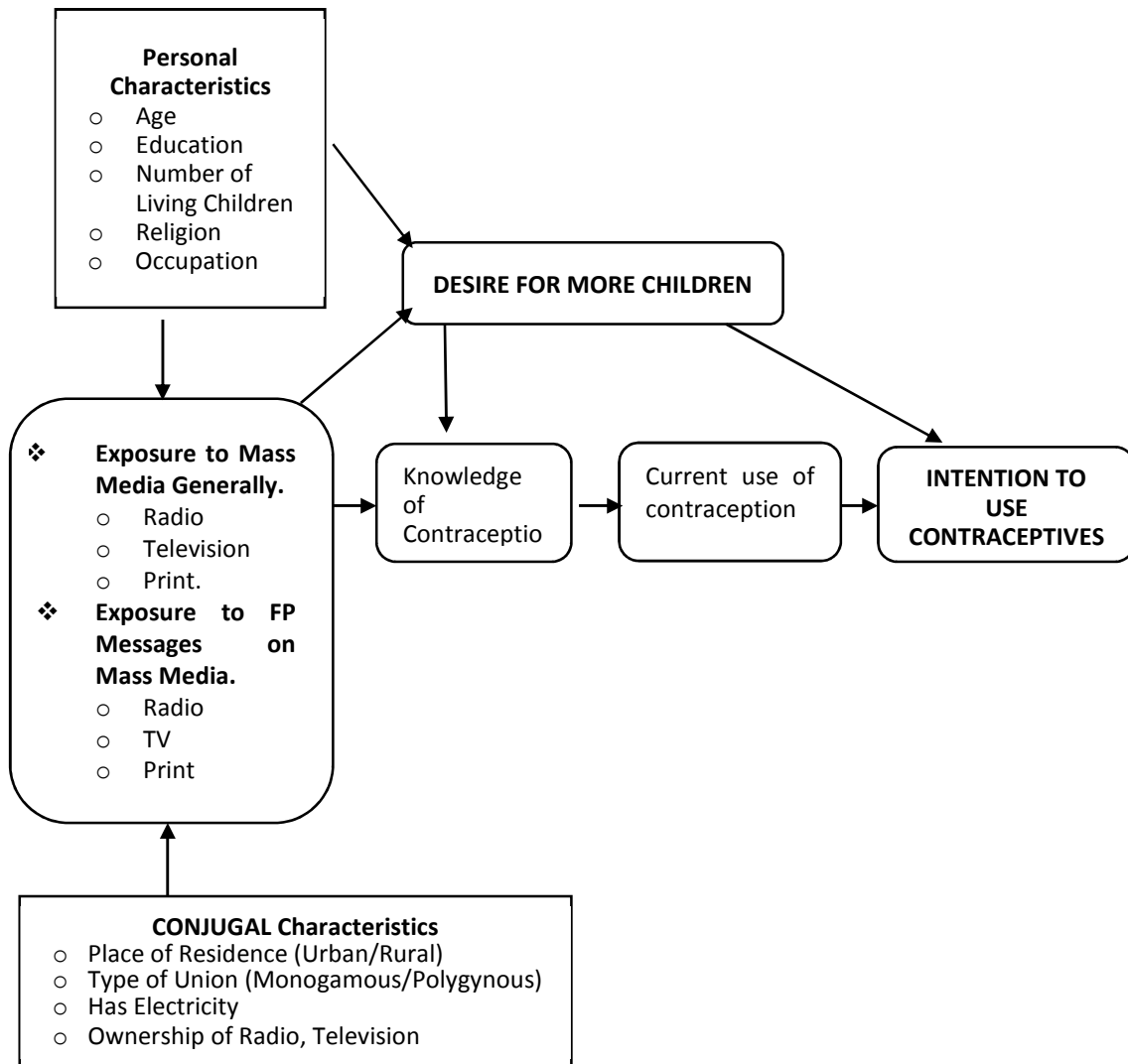
## 2. Data and Methods

The data for this paper is based on the Nigeria 2013 Demographic and Health Survey. This is the fourth survey of its kind, it is a nationally representative sample survey that provides current information on the respondents. Though the target groups of the NDHS are women and men age 15-49 in randomly selected households across Nigeria, the focus of this paper is on the women. The women data among other issues collected information on fertility preferences, awareness and the use of family planning methods as well as the background characteristics of the respondents. The data for this analysis emanates from the 2013 NDHS women data with focus on currently married women in the North-west geo-political zone. The North-west geo-political zone comprise of the following states: Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto and Zamfara. The states are contiguous and consist majorly of Hausa-Fulani ethnic extracts, though other tribes are resident in the zone.

Descriptive analysis was to examine the basic background characteristics of the respondents. Crosstabulations of some core variables such as general media exposure and exposure to family planning messages by the type of mass media were done. Logistic regression models were also adopted in understanding the factors that will predict exposure to mass media as well as intention to use any contraceptives in the future. In all the models control variables were added to account for either mediation or confounding effects of these variables. Formally, these equations may be expressed as follows:

$$\text{Logit}[P(r=1)] = \beta_0 + \sum_{m=1}^n \beta_m X_m$$

Where logit  $[P(r=1)]$  refers to the natural log odds that a respondent will have an outcome (in this paper two outcomes are being examined, namely respondent is exposed to mass media and respondent has the intention to use any contraceptive in the future. Each of the outcomes are treated as different models.  $\beta_0$  refers to the intercept of the regression model; and  $\beta_m X_m$  refer to regression estimates for the set of explanatory variables (numbered 1 through n) included in each of these models.



**Figure 1: Conceptual Framework**

### 3. RESULTS

Table 2 shows the background characteristics of the currently married women in the North-west geo-political zone of Nigeria. The result show that about 13 percent of the women got married as teenagers, with 71 percent of the women are below 35 years. Majority of the women have no formal education. The women reported a mean number of living children of 3.5. Majority of the respondents are of the Islamic faith. The results indicate that at least one-third of the women are not working, while about 45 percent are involved with sales. Majority of the respondents reside in the rural areas, about 45 per cent of the women are in polygynous unions. Majority of the household own radio while less than one-quarter of the household owns television. Less than 40 percent of the households have access to electricity.

Table 2: Background Characteristics of Currently Married women in the North-West geo-political zone

		Percentage (N=8319)
Age	15-19	12.7
	20-24	17.5
	25-29	20.3
	30-34	15.3
	35-39	13.5
	40-44	10.0
	45-49	10.8
Education	None	79.1
	Primary	11.0
	Secondary	8.5
	Higher	1.4
Number of Living Children	0	11.9
	1-2	28.4
	3-4	27.1
	5+	32.6
	<i>Mean</i>	<i>3.46</i>
Religion	Catholic	1.5
	Other Christian	3.3
	Islam	93.9
	Others	0.8
	No Response	0.4
Place of residence	Urban	20.2
	Rural	79.8
Type of union	Monogamous	55.0
	Polygynous	45.0
Household owns Radio		71.1
Household own Television		23.5
Household has access to electricity		38.1
Occupation	Not working	36.2
	Prof./Tech./Manag.	1.1
	Sales	44.5
	Agriculture-self employed	0.3
	Agriculture - employee	1.4
	Services	1.9
	Skilled manual	14.2
	Other <sup>1</sup>	0.1
No Response	0.2	
Has Knowledge of any contraceptive		79.4
Currently using any contraceptives		3.2
Desire for more children	Wants within 2 years	40.4
	Wants after 2+ years	38.3
	Wants, unsure timing	0.8
	Undecided	7.7
	Wants no more	7.5
	Sterilized (respondent/partner)	0.1
	Declared infecund	4.6
No response	0.6	
Intention to use	Use later	12.5
	Unsure about use	8.2
	Does not intend	72.7
	No response	6.6
TOTAL		100.0

Source: NDHS, 2013

More than three-quarters of the women have knowledge of at least a contraceptive, but level of current use is

<sup>1</sup> Include Unskilled manual

dismally low as only 3.2 percent are currently using any contraceptive. About 78.7 percent of the women desire to have another child within or after 2 years. Only 7.5 percent do not want to have more children. Only about 13 percent of the respondents indicate interest in using any contraceptives in the future. Intention to use any contraceptive is an indicator of the shifting demand for contraceptives, it gives an opportunity for policy makers and programme planners to understand the likelihood of the demand for contraceptives in the nearest future. Majority of the currently married women in the North-west geo political zone do not intend to use any contraceptive in the future. This portends danger in that there is likelihood that the population in this zone will continue to grow.

### 3.1 Exposure to Mass Media

The three mass media of interest in this paper are radio, television and print. Exposure to mass media was assessed by asking the respondents how often they listen to the radio, watch television or read a newspaper.

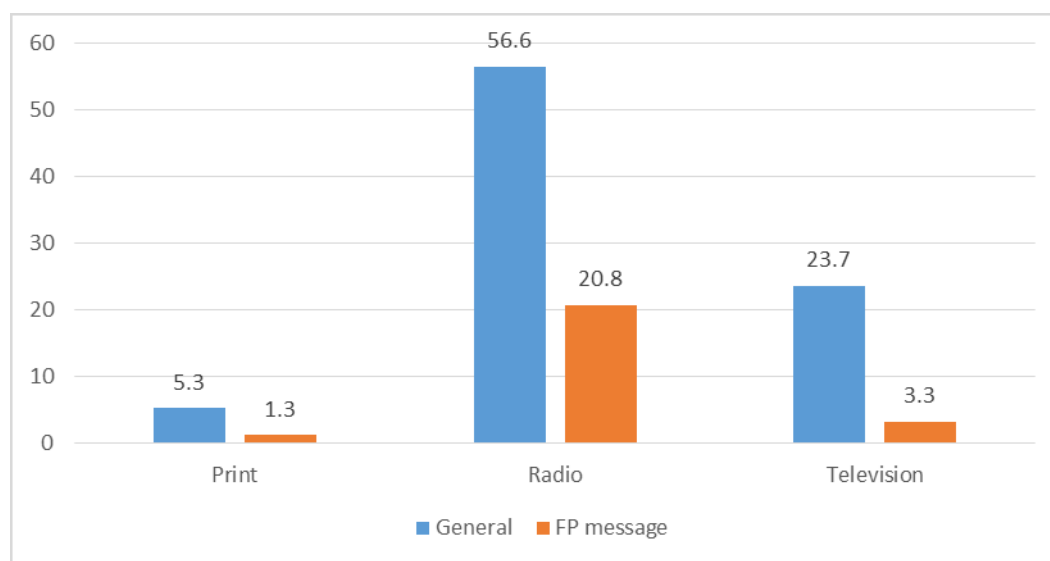


Figure 2: Percentage Currently Married Women Exposed to Mass Media at least once a week in the North-West geo-political zone, Nigeria

Table 3: Currently married women's Exposure to Mass Media by Number of Media Exposed to at least once a Week<sup>1</sup> in the North-west geo-political zone

Media exposure variable	General		FP Message	
	Percentage	N	Percentage	N
No exposure to any	40.6	3378	78.7	6544
Exposed to one	37.5	3118	18.2	1517
Exposed to two	17.6	1467	2.2	182
Exposed to all three	4.3	356	0.9	76
Number of respondents	100.0	8319	100.0	8319

Source: NDHS, 2013

Figure 2 and Table 3 show the distribution of respondents who are exposed to various mass media at least once a week and the number of mass media such an individual is exposed. Radio is the mass media that most of the respondents are exposed to in the North-west zone. The mass media can be a major source of family planning messages apart from interpersonal communication. Information about exposure to messages through a specific medium allows policy-makers ensure that in the nearest future, the most effective means of communication for various target groups is employed in disseminating relevant information to achieve desired effects. The proportion who received family planning messages through the respective mass media is low, less than half who are exposed to a particular mass media received family planning message from the mass media (Fig 2).

About 41 percent of the currently married women in the North-west zone are not exposed to any mass media. Less than 5 percent of the women are exposed to all the three types of mass media. The reality in life is that there is the likelihood of an individual to be exposed to more than one type of mass media at a particular time. The results in Table 4 show the combinations of mass media that the women are exposed to in the North-West

<sup>1</sup> This includes those who have daily access

geo-political

Table 4: Combinations of Mass Media Exposure at least once a week by currently married women in the North-West geo-political zone

	General		FP Message	
	Percentage	N	Percentage	N
None	40.6	3378	78.7	6544
Radio only	35.0	2909	17.8	1481
Television only	2.4	197	0.3	29
Print only	0.1	12	0.1	7
Print & Television	0.3	22	0.1	9
Radio & Television only	16.8	1397	1.9	157
Radio & Print only	0.6	48	0.2	16
Radio, Television & Print	4.3	356	0.9	76
	100.0	8319	100.0	8319

Source: NDHS, 2013

zone. A good proportion of the women are only exposed to the radio, while radio and television are the combinations of mass media that women are exposed to in the geo-political zone. There are also a few that are exposed to the 3 mass media of interest to this paper (Table 4). A similar pattern holds for exposure to family planning messages on the mass media.

To understand the factors that determines exposure to mass media, logistic regression model was adopted. A woman is said to be exposed to mass media if she is exposed to at least a mass media at least once a week. The variables that were found to have significant effect on an individual's exposure to mass media are the level of education, religion, occupation, place of residence of the woman. The household access to electricity; ownership of radio and television are the other variables that significantly affect a married woman's exposure to mass media (Table 5).

Table 5: ODDS Ratio of Exposure to Mass Media among Currently married women in North-West geo-political zone

	Exposure to Mass Media	
Age	15-19	1.00
	20-24	1.05
	25-29	1.08
	30-34	1.23
	35-39	1.11
	40-44	1.16
Education	45-49	1.21
	None	1.00
	Primary	2.91 <sup>+</sup>
	Secondary	4.87 <sup>+</sup>
Number of living children	Higher	26.70 <sup>+</sup>
	None	1.11
	1-2	1.02
	3-4	1.08
Religion	5+	1.00
	Islam	0.83
	Other	0.22 <sup>+</sup>
	Christian	1.00
Occupation	Professional	1.74
	Sales	1.27 <sup>+</sup>
	Agric self employee	1.35
	Agric	0.57
	Services	0.74
	Skilled manual	1.08
	Other	1.28
	Not working (r )	1.00
Type of marital union	Monogamous	1.00
	Polygynous	0.94
Place of residence	Urban	1.97 <sup>+</sup>
	Rural	1.00
Household own radio	Yes	2.92 <sup>+</sup>
	No	1.00
Household own TV	Yes	1.49 <sup>+</sup>
	No	1.00
Household has access to electricity	Yes	1.23 <sup>+</sup>
	No	1.00
Constant		0.42 <sup>+</sup>

Source: NDHS, 2013

+ (p <0.01) \* (p<0.05)

The higher the level of education a woman has the greater the odds of her being exposed to mass media. Women with tertiary level of education are about 27 times more likely to be exposed to a mass media relative to a woman who does not have formal education. Muslim women as well as adherents of other religion are significantly less likely to be exposed to a mass media relative to a woman who is a Christian. Only women who are in sales are significantly more likely to be exposed to mass media relative to women not working. Being resident in the urban area increases the odds of a woman being exposed to mass media. Women in household that owns a radio are about 3 times more likely to be exposed to mass media than a woman in household that do not own a radio. Women whose household owns a television are one and a half times more likely to be exposed to mass media relative to women in households that do not own a television. Women in household with access to electricity are one and one-fifth times more likely to be exposed to mass media relative to women in households without access to electricity.

### 3.2 Exposure to Mass Media and Intention to Use Family Planning.

Table 6: Relationship between Exposure to Mass Media and Intention to use Contraceptives among currently married women in North-west geo-political zone

Type of media	Intention to use contraceptives				Total	Number of Respondents	
	Use Later	Unsure about Use	Does not intend to use				
Radio	15.7	8.4	75.9	100.0	4287	55.2	
TV	24.9	7.2	67.8	100.0	1732	22.3	
Print	38.9	6.1	55.0	100.0	360	4.6	

Source: NDHS, 2013

Table 7: Relationship between Exposure to Media Messages on Family Planning and intention to use Family Planning among currently married women in North-west geo-political zone

Type of media	Intention to use contraceptives				Total	Number of Respondents	
	Use Later	Unsure about Use	Does not intend to use				
Radio	21.7	4.5	73.9	100.0	1522	19.6	
TV	52.8	6.7	40.4	100.0	178	2.3	
Print	53.6	8.7	37.7	100.0	69	0.9	
Number of Respondents	1040	682	6044		7766		
Percentage	13.4	8.8	77.8	100.0			

Source: NDHS, 2013

An examination of the impact of mass media on intention to use any contraceptive in the future show that the print media is likely to be the most effective in getting more couples to decide to use contraceptives in the near future, for about 39 per cent of women exposed to print media reported intent to use any contraceptives. Exposure to television is next effective to the print media (Table 6). In terms of exposure to family planning messages, the print appear to be as effective as the television, for there is only a slight difference in the proportion of women exposed to print and television who intend to use any contraceptive in the future Table 7.

Table 8: Relationship between Number of Media Currently Married Women is Exposed to and Intention to Use Contraceptive in North West geo-political zone

Number of media	Intention to use contraceptives				Total	Number of TOTAL Respondents	
	Use Later	Unsure about use	Does not intend to use				
None	9.7	8.9	81.4	100.0	3264	42.0	
Any 1 Media	11.4	9.8	78.8	100.0	2915	37.5	
Any 2 Media	20.5	6.9	72.6	100.0	1297	16.7	
All 3 Media	43.8	4.8	51.4	100.0	290	3.7	
	13.4	8.8	77.8	100.0	7766	100.0	
	1040	682	6044				

Source: NDHS, 2013



Table 9: Relationship between Number of Mass Media Currently Married Women received Family Planning Messages and Intention to Use Contraceptive in North West geo-political zone

Number of media	Intention to use contraceptives			Total	Number of Respondents	TOTAL
	Use Later	Unsure about use	Does not intend to use			
None	11.3	9.9	78.9	100.0	6211	80.0
Any 1 Media	18.1	4.2	77.7	100.0	1385	17.8
Any 2 Media	47.6	6.3	46.0	100.0	126	1.6
All 3 Media	68.2	9.1	22.7	100.0	44	0.6
	1040	682	6044	100.0	7766	100.0
	13.4	8.8	77.8	100.0		

Source: NDHS, 2013

Naturally, individuals are likely to be exposed to a combination of various mass media at any point in time. This makes it necessary to examine the effect of being exposed to multiple media in understanding the effect of mass media exposure on intention to use any contraceptive in the near future. Table 8 show that exposure to multiple mass media increases the chances of deciding to use any contraceptives later. The only snag is that only about 20 percent of the respondents were exposed to at least 2 mass media. A similar pattern holds for exposure to family planning messages on mass media (Table 9).

Table 10: ODDS Ratio of Exposure to Mass Media and Intention to use any Contraceptives in Future

		Intention to use Contraceptives
Exposed to Radio	Yes	0.93
	No	1.00
Exposed to Television	Yes	2.07 <sup>+</sup>
	No	1.00
Exposed to Print	Yes	1.83 <sup>+</sup>
	No	1.00
Exposed to FP message on Radio	Yes	1.34 <sup>+</sup>
	No	1.00
Exposed to FP message on Television	Yes	1.57 <sup>*</sup>
	No	1.00
Exposed to FP message on Print	Yes	0.96
	No	1.00
Constant		0.10 <sup>+</sup>
Classification ( <i>in percentage</i> )		87.5

Source: NDHS, 2013

+ (p < 0.01) \* (p < 0.05)

In examining how exposure to mass media influences intention to use any contraceptive, logistic regression model was adopted and the odds ratio of exposure to mass media. General exposure to television and print have significant effect on a woman's intention to use any contraceptives in the future (Table 10). Women who are exposed to television are about two and one-tenth times more likely to intend to use any contraceptive in the future. The results also show that women who are generally exposed to the print media are 1.83 times more likely to intend to use any contraceptives in the future relative to women not exposed to the print media. General exposure to radio at least once a week does not have a significant effect on a woman's intention to use any contraceptive in the future, but exposure to family planning message on the radio significantly affects a woman's intention to use any contraceptive. Women exposed to family planning message on the radio are 1.34 times more likely to intend to use any contraceptive relative to women who are not exposed to family planning message on the radio. Women who are exposed to family planning message on the television are 1.57 times more likely to intend to use any contraceptives in the future than women who have not been exposed to family planning message on the television. Exposure to family planning message in the print media does not have any significant effect on a woman's intention to use any contraceptive in the future.

### 3.3 Effect of Mass Media Exposure on Intention to Use Contraceptives

To understand the effect of mass media exposure on a married woman's intention to use contraceptive, the logistic regression statistical tool was used. The dependent variable for the model is a woman's intention to use any contraceptive. The independent variables consists of exposure to general content of various mass media,

exposure to family planning messages on the various mass media, demographic characteristics of the woman, and her conjugal characteristics among others. Table 11 show the odds ratio of the correlates of intention to use any contraceptive in the future. The result show that general exposure to television and print media have significant effect on a woman's intention to use any contraceptive in the future. The age, level of education, number of living children a woman has, her religion, occupation, knowledge of contraceptive<sup>1</sup> as well as her desire for more children have significant effect on her intention to use any contraceptive in the future.

Women exposed to the television are about 1.7 times more likely to intend to use any contraceptive in the future relative to women not exposed generally to the television. Women exposed to the print media at least once a week are 1.4 times more likely to intend to use any contraceptive in the future relative to those not exposed to the print media. Exposure to family planning message on any of the mass media does not have significant effect on a woman's intention to use any contraceptive in the future.

Older women are significantly less likely to have the intention to use any contraceptive in the future. The odds of intending to use any contraceptive reduces with increase in age of the woman. The odds ratio of intending to use any contraceptives rises with a woman's level of education, though there is only a statistically significant effect for women with secondary education. Women with secondary education are 1.37 times more likely to intend to use any contraceptive relative to women without formal education. The odds of intending to use any contraceptive increases with the number of living children a woman has. Women without any child are 63 percent less likely to intend to use any contraceptive in the future relative to women with 5 or more children. While women with either 1 to 2 or 3 to 4 children are 76 percent significantly less likely to intend to use any contraceptive relative to women with at least 5 children. Muslim women are 53 percent less likely to intend to use any contraceptive in the future relative to Christian adherents. In terms of occupation, women in sales and those involved in skilled manual jobs are significantly more likely to intend to use any contraceptive in the future relative to women who are not working. There is no significant difference in intention to use any contraceptive in the future among women who are either in monogamous or polygynous unions.

Knowledge of any contraceptives by a woman have significant effect on her intention to use any contraceptive in the future. Woman with knowledge of any contraceptive is about 2.8 times more likely to intend to use any contraceptives in the future. The desire for more children sheds light on the future reproductive behaviour. A woman's desire to have other children have significant effect on her intention to use any contraceptive in the future. Women who want a child after 2 years are about 15 times more likely to intend to use any contraceptive in the future relative to infecund women. Those who do not want any

---

<sup>1</sup> Use of contraceptive was not included in the model partly due to the small proportion of women currently using any contraceptive

Table 11: ODDS Ratio of Correlates of Intention to use any Contraceptives in Future

		ODDS Ratio
Exposed to Radio	Yes	0.87
	No	1.00
Exposed to Television	Yes	1.68 <sup>+</sup>
	No	1.00
Exposed to Print	Yes	1.36 <sup>*</sup>
	No	1.00
Exposed to FP message on Radio	Yes	1.08
	No	1.00
Exposed to FP message on Television	Yes	1.31
	No	1.00
Exposed to FP message on Print	Yes	0.79
	No	1.00
Age	15-19	1.00
	20-24	0.93
	25-29	0.70 <sup>*</sup>
	30-34	0.63 <sup>+</sup>
	35-39	0.48 <sup>+</sup>
	40-44	0.35 <sup>+</sup>
	45-49	0.24 <sup>+</sup>
Education	None	1.00
	Primary	1.16
	Secondary	1.37 <sup>*</sup>
	Higher	1.36
Number of living children	None	0.63 <sup>+</sup>
	1-2	0.76 <sup>*</sup>
	3-4	0.76 <sup>*</sup>
	5+	1.00
		1.00
Religion	Islam	0.53 <sup>+</sup>
	Other	1.28
	Christian	1.00
Occupation	Professional	1.54
	Sales	1.28 <sup>+</sup>
	Agric self employee	0.47
	Agric	1.43
	Services	0.75
	Skilled manual	1.26 <sup>*</sup>
	Other	1.88
	Not working (r )	1.00
Type of marital union	Monogamous	1.00
	Polygynous	1.03
Place of residence	Urban	1.12
	Rural	1.00
Household own radio	Yes	0.99
	No	1.00
Household own TV	Yes	1.05
	No	1.00
Household has access to electricity	Yes	1.09
	No	1.00
Knowledge of Contraceptive	Yes	2.77 <sup>+</sup>
	No	1.00
Desire for more children	Want within 2yr	11.58 <sup>+</sup>
	Want after 2yr	14.78 <sup>+</sup>
	Undecided	12.80 <sup>+</sup>
	Want no more	12.79 <sup>+</sup>
	Infecund	1.00
Constant		0.01 <sup>+</sup>

Source: NDHS, 2013 + (p <0.01) \* (p <0.05)

more child or are undecided are also 12.8 times more likely to use any contraceptive in the future relative to infecund women.

#### 4. Discussion

Islam is the predominant religion among the respondents, with majority of the respondents residing in the rural

areas. Majority of the household own radio while less than one-quarter of the household owns television. Less than 40 percent of the households have access to electricity. Ownership of radio or television has the tendency to increase the chances of being exposed to family planning messages. Less than half of the women are in polygynous unions. Majority of the women have no formal education and at least one-third of the women are not working. The mean number of children by the currently married women in the North-west geo-political zone is 3.5. The fact that more than three-quarters of the women indicated readiness to have another child within or after 2 years coupled with the few who do not want to have more children gives an indication of the women who may likely indicate intention to use any contraceptive in the near future. Surprisingly, only about 13 percent indicated intention to use any contraceptives in the future. The implication is that women in this zone partly due to the level of education and the influence of religion and culture are limited in their ability to take decisions even for issues that affect their health and that of their children such as ensuring that there is adequate spacing between births. This may be part of the reason why contraceptive prevalence rate is abysmally low in the zone and signifies danger in that there is likelihood that the population in this zone will continue to grow. With effective use of the mass media alongside other modes of communication the proportion of women who indicated intention to use any contraceptive are effectively reached, the contraceptive prevalence rate for the zone and indeed the country will be improved upon, and the population growth may be slowed down a little as such reducing the stress on infrastructure and ultimately may lead to enhanced quality of life.

Level of education, religion, occupation, place of residence, ownership of radio, and television as well as household access to electricity have significant effect on the likelihood of married women being exposed to mass media. There is the need for efforts to make electricity available to all households will go a long way in making women to be exposed to mass media. Radio is the mass media that most of the respondents are exposed to in the North-west zone. Not as much as are exposed to mass media receive family planning message from the various media. The implication is that the content of various programmes in the electronic media and features in the print media must be laden with messages that state the advantages of family planning for the health and well-being of the woman, the child and indeed the quality of life of all and sundry. The low proportion of currently married women exposed to television may be due to the proportion of households with access to electricity. Television has been shown to be effective in affecting intention to use any contraceptive in the future, therefore the more people are exposed to television the more they will likely decide to use contraceptives in the near future. Exposure to multiple mass media enhances the likelihood of women to intend to use any contraceptive in the future.

The odds of intending to use any contraceptive reduces with increase in age of the woman. This may be an indication that things are beginning to change, if younger women will want to use contraceptive than older women. Then the chances that contraceptive prevalence rate will increase in the geo-political zone is probable. The odds ratio of intending to use any contraceptives rises with a woman's level of education, though there is only a statistically significant effect for women with secondary education. Women with higher number of living children are more likely to intend to use any contraceptive gives an indication that the message of having the number of children that is good for the health of the woman is beginning to have effect. A clear emerging fact is that currently married women in the North-west geo-political zone are more likely to use contraceptives for child spacing rather than limiting child bearing.

## **5. Conclusion**

The paper set to find out the factors affecting mass media exposure; how the exposure effect a woman's intention to use contraceptives; as well as the correlates of a woman's intention to use contraceptive. The outcome of the analysis revealed that level of education, religion, occupation, place of residence, ownership of radio, and television as well as household access to electricity have significant effect on the likelihood of married women being exposed to mass media. The level of education of a woman also have significant effect on intention to use any contraceptive. Thus, the import of educating the girlchild cannot be over emphasised, all efforts ensuring that the girlchild is educated to at least secondary level of education. The effective use of the mass media will increase the proportion of married women who will want to use any contraceptive in the future as such on the long run there will be an improvement in the contraceptive prevalence rate for the zone and indeed the country.

The content of various programmes in the electronic media and features in the print media must be laden with messages that state the advantages of family planning for the health and well-being of the woman, the child and indeed the quality of life of all and sundry. It is clear that currently married women in the North-west geo-political zone are more likely to use contraceptives for child spacing rather than limiting child bearing.

## References

- Akinyoade, A. (2007) Dynamics of reproductive behaviour in rural coastal communities of Southern Ghana. Shaker Publishing BV ISBN 978-90-423-0328-7 The Hague, Netherlands.
- Bankole, A. (1994) The role of mass media in family planning promotion in Nigeria. DHS Working Papers Number 11. Macro International Inc. Calverton, Maryland USA.
- Bankole, A. and Westoff, C.F (1996) "Mass media influences on contraceptive behaviour and reproductive preferences" Paper presented at the annual meeting of the Population Association of America, New Orleans, Louisiana, May 9-11.
- Bankole, A, Rodriguez, G. and Westoff, C. F. (1996). Mass media messages and reproductive behaviour in Nigeria. *Journal of biosocial Science* April 28, 227-239.
- Berhane, Y. (2006) Male involvement in reproductive health Ethiopian *Journal of Health Development* 20(3): 135-136
- Bertrand, J.T., Santiso, R., Linder, S. H., and Pinda, M.A. (1987) Evaluation of a communications program to increase adoption of vasectomy in Guatemala. *Studies in Family Planning* 16, 361
- Chander, S. and Kumari, V. (2012) "Education and mass-media exposure vis-à-vis small family norms among scheduled castes of Haryana" *International Journal of Innovations in Engineering and Technology (IJJET)*.1 (3): 32-39.
- Das, K.C, Gautam, V., Das, K and Tripathy, P.K. (2011) Influence of age gap between couples on contraception and fertility. *The Journal of Family Welfare* 57(2): 30-38
- Haupt, A. and Kane, T. T. (2001) Population reference bureau's population handbook. (4<sup>th</sup> Edition) Washington D.C. U.S.A.
- Longwe, A., Huisman, J and Smits, J (2012) Effects of knowledge, acceptance and use of contraceptives on household wealth in 26 African Countries. Nijmegen Center for Economics (NiCE) Institute for Management Research Radboud University Nijmegen. NiCE Working Paper 12-109. Retrieved on July 23 2013 from <http://www.ru.nl/nice/workingpapers>
- National Population Commission (NPC) [Nigeria] and ORC Macro (2009) *Nigeria Demographic and Health Survey 2008*. Calverton, Maryland: National Population Commission and ORC Macro.
- National Population Commission (NPC) [Nigeria] and ORC Macro (2014) *Nigeria Demographic and Health Survey 2013*. Abuja, Nigeria: National Population Commission and ICF Macro.
- Odimegwu, C.O. and Raimi, M.O. (2003) Media mix and contraceptive behaviour of sexually active Nigerians. *Development and Society* 32(1): 61-75.
- Pacque-Margolis, S., Muntifering, C., Ng, C. and Noronha, S. (2011) Population growth and the global health workforce crisis. Technical brief November Capacity Plus IntraHealth International, Inc Washington, DC., USA [www.capacityplus.org](http://www.capacityplus.org)
- Piotrow, P.T., Rimon, G. J., Winnard, K., Kincaid, D.L., Huntington, D. and Conviser, J. (1990) Mass media family planning promotion in Nigerian cities. *Studies in Family Planning* 21, 265
- Piotrow, P.T., Treiman, K.A., Rimon II, J.G. , Yin, S. H. and Lozare, B.V. (1994). *Strategies for family planning promotion*. World Bank Technical Paper No 223. Washington, D.C., World Bank.
- Speizer, I.S., Oleko T. B and Tegang, S-P (2001) An evaluation of the "Entre Nous Jeunes" peer-educator program for adolescents in Cameroon. *Studies in Family Planning* 32(4):339-351
- United Nations 2014 World Population Situation in (2014) A Concise Report. Department of Economic and Social Affairs Population Division, United Nations Secretariat ST/ESA/SER.A/354.
- Westoff C.F. (2012) "The recent fertility transition in Rwanda" *Population and Development Review* 389 Supplement :169-178
- Westoff, C. F. (1999) "Mass communication and fertility", in R. Leete (ed), Dynamics of Values in Fertility Change. Oxford, Clarendon Press.
- Westoff, C. F. and Bankole, A. (1997) Mass media and reproductive behaviour in Africa. Macro International. Demographic and Health Surveys Analytical Reports No 2. Calverton, MD: Macro International.
- Westoff, C.F. and Bankole, A (1999) Mass media and reproductive behaviour in Pakistan, India and Bangladesh, Demographic and Health Surveys Analytical Reports No. 10, Maryland, Macro International.
- Westoff, C.F. and Koffman, D.A. (2011). The association of television and radio with reproductive behaviour. *Population and Development Review* 37(4):749-759
- Westoff, C.F., D.A. Koffman and Moreau, C. (2011). *The impact of television and radio on reproductive behaviour and on HIV/AIDS knowledge and behaviour*. DHS Analytical Studies No. 24. Calverton, Maryland, USA: ICF International

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:  
<http://www.iiste.org>

## CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

## MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

## IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

