

DOES EXPOSURE TO FAMILY PLANNING MESSAGES IN THE PRECEDING 12 MONTH PERIOD PREDICT CURRENT USE OF A MODERN FAMILY PLANNING METHOD

Abstract

This study examined exposures to information about FP and modern Contraceptive use among Women in Nigeria. The study used PMA2020/NGR4 data set. Data analysis included Univariate, Bivariate, and Multivariate techniques. Bivariate analysis findings showed that exposure to FP information via radio, television, newspapers told at health facility, known a place to obtain a method, visited by health worker, attended a community event, received a call or text message, brochure, leaflet or flyers and poster or billboard are significantly associated with modern use of FP in Nigeria (p-value <0.05). Binary logistic regression showed that show that women who heard FP information on radio were 0.23 times as likely as those who did not, to report using contraception. Therefore various ways of conveying family planning messages should be encouraged because multiple sources of information on contraception helps reinforce the message better and extends the reach of family planning campaign.

INTRODUCTION

The increase in contraceptives use in Nigeria has given couples the ability to choose the number and spacing of their children and has also presented them with various remarkable lifesaving benefits. The benefits witnessed over the years include the prompt reduction of maternal deaths, infant and child death, teenage pregnancy, STIs, etc. In fact, the governments is focused on combating poverty and achieving a range of health and development goals, such as those outlined in the United Nations' Sustainable Development Goals (SDGs), all of which are linked to Family planning in one way or the other. In spite of these impressive gains, contraceptive prevalence is still very low as only about 15% of women in the reproductive ages currently use modern family planning methods in Nigeria (NDHS, 2013: PMA2020, NGR4). Meanwhile, various factors have been associated with low contraceptives prevalence rates in Nigeria. Exposure to family planning messages is one of those factors. Mass media plays an important role in promoting family planning programs and various medium are used such as radio, television, posters, movies, newspapers and interpersonal communications such as individual patient education and counseling group meetings etc. (Akansha, 2015).

Previous studies on exposure to family planning messages confirmed the importance of mass media in promoting family planning programs mainly because of the coverage especially electronic media like radio has a network reaching thousands of people and television which is

common household asset in Nigeria (NDHS, 2013; Kabir & Amirul, 2000; Akansha, 2015; Angelique, 2103).

In spite of exposure to family planning messages on mass media, contraceptive prevalence rate is still low in Nigeria. Therefore, the relationship between these two gives room for more critical examination because despite the reported high level of awareness in some previous studies, prevalence seems not to conform. Hence, this paper analyzed the relationship between exposure to family planning messages in the preceding 12 month period and current use of a modern family planning method.

MAIN QUESTION/HYPOTHESIS

The question of interest is that if potential users were reached by any means, is there an added advantage to the use of family planning methods? Hence, this paper sought to examine the pattern of modern contraceptive use among women of reproductive age in Nigeria; and also to determine the effect of family planning information acquired through various media in the past 12 months on the current use of modern family planning method.

DATA AND METHODS

The study employed secondary data which was extracted from the Performance Monitoring and Accountability (PMA) 2017 dataset. PMA 2017 was a survey carried out in seven states of Nigeria- Anambra, Kano, Kaduna, Lagos, Nasarawa, Rivers and Taraba. Data collection was conducted between April and May 2017. The survey used aboriginal enumerators who were familiar with the enumeration areas and also had good command of the local language. A multistage sampling technique was employed, first to select EAs in each LG of the state, and also to randomly select households for an interview in each selected EAs. All females of reproductive age (15-49 years) living within the selected household were administered a female questionnaire by the enumerators. Information recorded on the questionnaires included the eligible female's background information, birth history, fertility preference, use of family planning methods and their reproductive health information among others. A total of 11,380 female were interviewed which are the sample size for this study.

DESCRIPTION OF VARIABLE

In order to predict the exposure to family planning messages in the preceding 12 month period on current use of modern family planning method, the following variables are used:

Outcome Variable

The outcome variable in this study was the current use of a family planning method which was coded as yes or no. Yes for those that are currently using a method of contraceptive and No for those that are not using.

Independent Variables

Independent variables in this study include:

Heard about family planning on radio: This variable was measured as yes or no. Yes if the respondent heard family planning messages on radio and No if the respondent did not.

Heard about family planning on television: This variable was measured as yes or no. Yes if the respondent watch family planning messages on television and No if the respondent did not.

Read about family planning on magazine/newspaper: This variable was measured as yes or no. Yes if the respondent read about family planning messages inside magazine/newspaper and No if the respondent did not.

Received call or text about family planning on mobile phone: This variable was measured as yes or no. Yes if the respondent received call or text about family planning on mobile phone and No if the respondent did not.

Read about family planning in a brochure, leaflet or flyers: This variable was measured as yes or no. Yes if the respondent read about family planning in a brochure, leaflet or flyers and No if the respondent did not.

Seen a poster or billboard with a family planning message: This variable was measured as yes or no. Yes if the respondent saw a poster or billboard with a family planning message and No if the respondent did not.

Talk to about family planning at health facility: This variable was measured as yes or no. Yes if the respondent was told about family planning at the health facility and No if the respondent did not.

Know a place to obtain family planning: This variable was measured as yes or no. Yes if the respondent know a place to obtain family planning and No if the respondent did not.

Visited by health worker about family planning in last 12 month: This variable was measured as yes or no. Yes if the respondent was visited by health worker about family planning in the last 12 month and No if the respondent did not.

Talked to about family planning at health facility: This variable was measured as yes or no. Yes if the respondent discussed about family planning at health facility in the last 12 month and No if the respondent did not.

Attend community event where family planning was favoured: This variable was measured as yes or no. Yes if the respondent attended community event where family planning was favoured in the last 12 month and No if the respondent did not.

DATA ANALYSIS

Analysis was performed with STATA 14 software. The data was analyzed adopting univariate, bivariate and multivariate measures. Univariate analysis was based on frequency distribution of selected variable that are related to this study in the dataset. Bivariate analysis was employ in other to show the association between exposure to family planning message and current use of modern family planning method. Chi-square test was use to show this association. Lastly, multivariate analysis was employed in order to predict exposure to family planning in the preceding 12 month period on current use of modern family planning method. Logistic regression was use to achieve this objective.

RESULTS

Table 1 below shows the frequency distribution of characteristics of respondent, it was observed that more than half of the respondents (52%) were between the ages 20-34 years with mean age of 29 years. Mean age at first sex for women was 17 years with about 40% of women had their first sex before 18 years. More than half (56%) resides in urban areas. On level of education, the table revealed that more than half (65%) has secondary or higher education. About 38% were from rich households. Respondent's religion showed that only 0.6% were affiliated with traditional practice compared to 59% for Christian and 39% for Islam. About 62% of respondents were currently married and more than 65% reported that they have giving birth prior to the survey.

Table 1: Frequency Distribution of Characteristics of Respondents

Variable	Percent (N=11380)
Age	
15-19	19.6
20-34	51.7
35-49	28.7
Mean (SD)	29 (9.1)
Age at first sex	
Never	21.8
<18	39.9
18 and above	38.3
Mean (SD)	17 (3.8)
Place of residence	
Urban	55.7
Rural	44.3
Level of education	
Never	17.5
Primary	17.3
Secondary	46.4
Higher	18.8
Wealth index	
Lower	43.7
Middle	18.8
Higher	37.5
Religion	
Christian	59.2

Islam	39.2
Traditional	0.6
Others	1.0
Marital status	
Currently married	62.1
Currently living with partner	2.8
Divorced or separated	4.8
Never	30.3
Ever given birth	
No	33.6
Yes	66.4

Source: PMA2020 Nigeria Round 4

Table 2 present the exposure to family planning messages, the table shows that about 59% of respondents know place to obtain a method of family planning. Only 12% of respondents were visited by health workers about family planning. About 44% participated in family planning discussion at health facility. Fewer than 11% of respondent attended a community event where family planning was favored. Media exposure shows that more than half 59% had family planning message on radio, 42% had it on television, 21% read it in newspaper/magazine, 17% read about it in a brochure, leaflet or flyers and 30% saw it in a poster or billboard. Only 10% received a call or text message about family planning on their mobile phone.

Table 2: Exposure to family planning message

Variable	Percent (N=11380)
Know a place to obtain a method of FP	
No	41.4
Yes	58.6
Visited by health worker about FP	
No	87.8
Yes	12.2
Talked to about FP at health facility	
No	56.1
Yes	43.9
Attended a community event	
No	89.1
Yes	10.9
Heard of FP on Radio	
No	41.4
Yes	58.6
Heard of FP on television	

No	58.3
Yes	41.7
Read about FP in newspaper/magazine	
No	79.2
Yes	20.8
Received call or text about FP	
No	90.1
Yes	9.9
Read about FP in a brochure, leaflet or flyers	
No	83.5
Yes	16.5
Seen a poster or billboard with a FP message	
No	70.1
Yes	29.9

The proportion of respondents who were using modern contraceptive preceding the surveys in each category and the chi square test for exposure to family planning message is presented in table 3 below. In all, Known a place to obtain a method of family planning, visited by health worker about family planning, discussed family planning at health facility, attended a community event where family planning was favored, received a call or text message about family planning on mobile phone, exposure to family planning message on Radio, television, newspaper/magazine, brochure, leaflet or flyers and poster or billboard are associated with modern use of a family planning method and these are statistically significant in this study (p-value <0.05). Across categories, the table shows that more women who were exposed to the message use modern method of family planning compare to those that are not exposed to the message.

Table 3: Proportion of Current User of Modern Contraceptive and Exposure to Family Planning Message

Variable	Use of modern contraceptive
	Yes (%)
Know a place to obtain a method of FP	
No	0.01*
Yes	0.03*
Visited by health worker about FP	
No	13.5*
Yes	26.1*
Talked to about FP at health facility	
No	11.3*
Yes	25.0*
Attended a community event	
No	14.0*
Yes	26.5*
Heard of FP on Radio	
No	11.1*
Yes	17.6*
Heard of FP on television	
No	10.1*
Yes	22.4*
Read about FP in newspaper/magazine	
No	13.5*
Yes	22.5*
Received call or text about FP	
No	14.1*

Yes	26.8*
Read about FP in a brochure, leaflet or flyers	
No	13.3*
Yes	25.4*
Seen a poster or billboard with a FP message	
No	11.8*
Yes	22.9*

** Significant at 0.05 level of significance

Table 4 shows the binary logistic regression analysis of exposure to family planning messages in the last 12 months on those that are currently using a modern method of family planning. The table showed that women who know a place to obtain a method of family planning, visited by health worker about family planning, talked to about family planning at health facility, heard about family planning on radio, read about family planning in newspaper/magazine and read about family planning in a brochure, leaflet or flyers are less likely to use a modern method of family planning. Only exposure to family planning message on radio is statistically significant (OR=0.23, $p<0.05$).

The table also revealed that women who attended a community even favored by family planning, exposed to family planning on television and poster or billboard and women who received call or text about family planning on mobile phone are more likely to use a modern method of family planning but none are statistically significant in this study ($p<0.05$). The significance of this relationship was tested by examining the p-value corresponding to the estimated odds ratios, with the p-value set at 95% significance level ($\alpha=0.05$).

Table 4: Binary Logistic Regression Analysis of Exposure to Family Planning Message and Current use of any Modern Method of Family Planning

Variable	Use of modern contraceptive		
	Odd ratio	P-value	CI (95%)
Know a place to obtain a method of FP (RC =No)			
Yes	0.77	0.72	0.19 – 3.19
Visited by health worker about FP (RC =No)			

Yes	0.81	0.81	0.15 – 4.51
Talked to about FP at health facility (RC =No)			
Yes	0.88	0.86	0.21 – 0.368
Attended a community event (RC =No)			
Yes	3.79	0.06	0.94 - 15.21
Heard of FP on Radio (RC =No)			
Yes	0.23	0.04*	0.06 – 0.95
Heard of FP on television (RC =No)			
Yes	4.68	0.07	0.91 – 24.16
Read about FP in newspaper/magazine (RC =No)			
Yes	0.84	0.83	0.16 – 4.34
Received call or text about FP (RC =No)			
Yes	2.51	0.25	0.53 – 11.86
Read about FP in a brochure, leaflet or flyers (RC =No)			
Yes	0.47	0.43	0.07 – 3.03
Seen a poster or billboard with a FP message (RC =No)			
Yes	2.50	0.21	0.59 – 10.54

* Significant at 0.05 level of significance

SUMMARY, DISCUSSION AND CONCLUSION

The proportions of young women that are using modern contraceptive preceding the surveys were quite low (15%). Across categories, known a place to obtain a method of family planning, visited by health worker about family planning, discussed family planning at health facility, attended a community event where family planning was favored, received a call or text message about family planning on mobile phone, exposure to family planning message on radio, television, newspaper/magazine, brochure, leaflet or flyers and poster or billboard are associated with modern use of a family planning method. Results from logistic regression showed that only exposure to family planning message on radio are statistically significant in predicting use of a modern method of family planning among women in Nigeria.

This study analyzed exposure to family planning messages in the preceding 12 month period and use of a modern family planning method among women of reproductive age in Nigeria using Performance Monitoring and Accountability recent survey datasets (PMA2017/NGR4). Arising from the findings, it is evident that use of modern family planning methods among women in Nigeria is still low indicating that more women who are sexually active were not using which is

similar to findings from other studies (N Peer and N Morojele, 2013: Tsui, Brown and Li, 2017: Seutlwadi, Peltzer, Mchunu and Tutshana, 2012).

The analyses suggested that radio had been the most common source of spreading family planning messages compared to other sources. This confirms previous findings on exposure to family planning messages (Adekunle, Olaseha and Adeniyi, 2004: Bisiriyu & Orisi, 2014: Odewale, Oladosun and Amoo. 2016).

The proportions of information about family planning acquired on most of the media channel were considerably low especially for those that were acquired on televisions, newspapers or magazines, and those that were acquired by word of mouth at health facility. Also, it is found out that exposure to family planning messages in community event, on television, received call or text about FP and poster or billboard with a FP message were good predictor of current use of contraceptive method (Ugboaja, Oguejiofor, Oranu and Igwegbe, 2018).

Hence, various ways of conveying family planning messages should be encouraged because multiple sources of information on contraception helps reinforce the message better and extends the reach of family planning campaign. Complementary messages may help to create an environment where the practice of contraception is perceived as a social norm. Varied sources should continue to be used to promote family planning and other reproductive health issues. Also, more behavioural change informative programmes directed at the importance of using modern contraception should be adopted by the Government.

REFERENCES

Adeleke Luqman Bisiriyu & Adetooke Oladoyin Orisi. (2014). Exposure to Family Planning Messages in the Media and Contraceptive use in southwestern Nigeria.

Akansha Singh. (2015) Are the Family Planning Messages Really Effective in Improving Family Planning Indicators in India.

Amy O. Tsui, Win Brown and Qingfeng Li (2017): Contraceptive Practice in sub-Saharan Africa

Angelique F. Ogena. (2013). Filipino women's exposure to family planning messages in the tri-media and their contraceptive use. Demography Student, University of the Philippines Population Institute angelique.ogena@yahoo.com

Bose J. Odewale, Muyiwa Oladosun and Emmanuel O. Amoo. (2016): Multiple Exposure to Information about Family Planning and Contraceptive Use among Women in Nigeria. 3rd International Conference on African Development Issues (CU-ICADI 2016) ISSN:2449075X

Joseph Odirichukwu Ugboaja, Charlotte Blanche Oguejiofor, Emmanuel Okwudili Oranu1, Anthony Osita Igwegbe (2018): Assessing the Influence of Mass Media on Contraceptive Use in Nigeria: A Secondary Analysis of 2013 Nigerian National Demographic and Health Survey. <https://www.researchgate.net/publication/326202861> DOI: 10.4103/NJGP.NJGP_25_17

Kabir.M & Amirul Islam .M. (2000). The Impact of mass media family planning programmes on current use of contraception in urban Bangladesh.

Lebogang Seutlwadi, Karl Peltzer, Gugu Mchunu, Bomkazi O Tutshana (2012): Contraceptive use and associated factors among South African youth (18 - 24 years): A population-based survey. *S Afr J OG* 2012;8(2):43-47.

Lola V Adekunle, Isaac O Olaseha & Joshua D Adeniyi. (2004). Potential Impact of the Mass Media on Family Planning in an Urban Community in South Western Nigeria.

M.S. Kulkarni. (2003). Exposure to Mass Media and its Impact on the use of Family Planning Methods by Women in Goa.

N Peer and N Morojele, (2013): Factors associated with contraceptive use in a rural area in Western Cape Province. *S Afr Med J* 2013;103(6):406-412. DOI:10.7196/SAMJ.6201.

Nigeria Demographic and Health Survey (2013).