Sahel Journal of Life Sciences FUDMA (SAJOLS)
March 2025 Vol. 3(1): 456-465
ISSN: 3027-0456 (Print)
ISSN: 1595-5915 (Online)
DOI: *https://doi.org/10.33003/sajols-2025-0301-56*

Research Article

Socioeconomic Factors Influencing Mass Media Exposures to Family Planning Information among Married Women in South-West Nigeria

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ABSTRACT

The role of socio-economic factors in mass media exposures to family planning information among married women cannot be over-emphasized in South-West Nigeria. Hence, this paper examines socio-economic factors influencing mass media exposures to family planning information among married women in south-west Nigeria. The study employed Nigeria Demographic and Health Survey (NDHS) dataset-2013; in which 3,784 women belonging to 15-49 years were selected. The data were analyzed using descriptive, chi-square tests and multivariate (logistic regression). The results of this study indicate that: state of residence, place of residence, age, educational level, religion, wealth index and employment status have significant relationships with married women's exposures to family planning information on radio, television and newspaper magazines. The paper recommends that married women in urban centers of south-west Nigeria needs to be more effective in accessing family planning information on radio, television and newspaper magazines.

Keywords: Exposure; Family planning; Married women; Mass media; Socio-economic factors

Citation: Akanbi, M. A. (2025). Socioeconomic Factors Influencing Mass Media Exposures to Family Planning Information among Married Women in South-West Nigeria. *Sahel Journal of Life Sciences FUDMA*, 3(1): 456-465. DOI: *https://doi.org/10.33003/sajols-2025-0301-56*

INTRODUCTION

Nigeria's population of over 200 million makes it the 7th most populous country in the world and has propensity to contribute substantially to the world population increase in the future (United Nations, 2019). The population growth rate is about 3.2 per cent per annum (UN, 2019).

Across the world, family planning is vital to curbing the rapid population growth also in Nigeria, and the use of contraceptives cannot be over-emphasized (Aliyu et al, 2010, Owoloko & Oladosun 2018,). A prominent study depict that there has been family planning program interventions in Ethiopia, Bangladesh and Pakistan respectively. Findings clearly showed the correlation between contraceptive use and fertility in Ethiopia, Bangladesh and Pakistan. This is because these countries experienced about 75% decline in fertility and their contraceptive prevalence increased from 19% to 62% (Creanga et al, 2011).

In many developing countries, evidences show that there have been some records of improvements in family planning services. This is due to the fact that new methods of contraception have greatly contributed to couples' well-being which enabled them to avoid unwanted pregnancy and abortions, as well as improving childbirth spacing. Nevertheless, there are still gaps in the adoption of family planning thereby creating challenges to health programs and policy (Aliyu, et al, 2010).

This study is necessary because the need to ensure good healthy lives of married women and their well-being will come into the limelight as part of the attainment 2030 which is goal 3 of the United Nations Sustainable Development Goals (SDGs).

However, the study is justified by the fact that it will shed light on the role of socio-economic factors onmass media exposures to family planning information among married women in south-west Nigeria. Essentially, the research questions for this study are: first, are there socio-economic factors influencing mass media exposures to family planning information among married women in south-west Nigeria? Second, are there probable significant socio-demographic variables of married women that influence mass media exposures to family planning in south-west Nigeria?

This paper has contributed to the sub-theme of this journal-African Renaissance by displaying the role of socio-economic factors in mass media exposures of married women to family planning information in Nigeria.

Theoretical Consideration

This study adopted diffusion of innovation theory. This theory developed by E.M. Rogers in 1962. This theory is adopted because people now do things differently than they previously did. In fact, the key to adoption or acceptance is the person's agreement that the idea, behaviour, or product is new or innovative (LaMorte; 2018).

MATERIAL AND METHODS

This paper examines socio-economic factors influencing mass media exposures to family planning information among married women in South-west Nigeria. The study employed 2013 Nigeria Demographic and Health Survey (NDHS) dataset. The target population of 3,784 women belonging to 15-49 years was extracted from the total number of 38,948 women who participated in the survey.

Research design: The study was analyzed by Statistical Package for Social Scientists (SPSS) version 20.0. This survey collected information on socioeconomic characteristics of married women who are in their reproductive ages (15-49 years). The respondents in this survey are from the six geopolitical regions of Nigeria.

The independent variables are socio-economic factors measured by state of residence, place of residence, age, educational level, religion, wealth index and employment status. The dependent variable is married women of 15-49 years conceptualized to be those who have exposures to family planning information on radio, television and newspaper magazine. Three levels of analyses were done in this study. The first segment was descriptive analyses which displayed frequency distribution of socio-economic profiles of married women (aged 15-49 years) and mass media exposure variables. Secondly, the bivariate relationship between two simultaneous variables was analyzed using cross-tabulation and chi-square. The third level of analysis used multivariate (logistic regression).

RESULTS AND DISCUSSIONS

Table 1 shows the frequency distributions of respondents' socio-economic factors influencing mass media exposures to family planning information among married women. These socio-economic variables of respondents which include: state of residence, place of residence, age, educational level, religion, wealth index and employment status have significant relationships with married women's exposures to family planning information on radio, television and newspaper magazine are discussed in this segment.

The result in Table 1 below shows that majority of respondents resides in Lagos States (24.2%), followed by Oyo States (17.8%), Osun States (16.1%), Ondo States (15.2%), Ekiti States (13.7%) while the lowest number lived in Ogun States (12.9%). Majority of the respondents live in the urban areas (71.4%) while only (28.6%) stay in rural area. With respect to the age of respondents, age group 40 and above constituted the highest percent with (27.0%), followed by age group 30-34 (21.2%), 25-29 (20.7%), 35-39 (19.6%), and 15-24 are the lowest (11.5%).

Educational status shows that majority of respondents had secondary education 46.3%, 11.6% had no education, 24.3% had primary education, and only 17.8% had higher education. The respondents majorly practiced Christianity (66.3%) while 33.5% practiced Islam-traditional religion. The table shows that the highest percent of respondents belong to the richest in the wealth index with 47.9%, 30.3% were richer, 12.7% in the middle class, while 9.2% were poorest/poorer. Majority of respondents were working (90%) while; minority (10%) were not working. Also, 68% heard family planning information on radio in the last few months, and 52.4% heard family planning information on TV in the same period, while only 11.4% read about family planning information on newspaper-magazine in the last few months.

The cumulative index of mass media exposure to family planning information combine all the three channels of communication i.e. radio, TV, and newspapers/magazines. About 39.3% of the respondents were exposed to two mass media platforms, 21.4% exposed to one, 10.5% exposed to three and 28.7% were not exposed to any medium of communication.

Table 1: The Frequency Distribution by Variables

Variables	Frequency	%	Variables	Frequency	%
State of residence			**Employment status**		
Oyo	674	17.8	no working	377	10.0
Ogun	490	12.9	Working	3398	90.0
Lagos	917	24.2	**Mass Media Exposure to Family Planning information**		
Osun	611	16.1	**Heard family planning on radio last few months**		
Ekiti	518	13.7	No	1211	32.0
Ondo	574	15.2	Yes	2569	68.0
Total	**3784**	100.0	**Total**	**3784**	100.0
Place of residence			**Heard Family planning on TV last few months**		
Rural	1082	28.6	No	1799	47.6
Urban	2702	71.4	Yes	1982	52.4
Total	**3784**	100.0	**Total**	**3784**	100.0
Age group			**Read about Family planning on newspaper/ magazine last few months**		
15-24	434	11.5	No	3350	88.6
25-29	784	20.7	Yes	429	11.4
30-34	803	21.2	**Total**	**3784**	100.0
35-39	743	19.6			
40+	1020	27.0			
Total	**3784**	100.0			
Educational level			**Cumulative index of mass exposure to media info**		
no education	440	11.6	no exposure	1087	28.7
Primary	918	24.3	One	811	21.4
Secondary	1751	46.3	Two	1489	39.3
Higher	675	17.8	Three	397	10.5
Total	**3784**	100.0	**Total**	**3784**	100.0
Religion					
Islam-traditional	1267	33.5			
Christian	2510	66.3			
Total	**3784**	100.0			
Wealth index					
poorest-poorer	347	9.2			
Middle	480	12.7			
Richer	1145	30.3			
Richest	1812	47.9			
Total	**3784**	100.0			

Source: Computed from selected NDHS datasets (2013)

The bivariate relationships are displayed in Table 2 of this study. Table 2 depicts the respondents' states of residence according to cumulative index of exposures to family planning information. The cumulative index is measured at four levels i.e. no exposures, one exposure, two exposures, and three exposures. The results presented here combines two and three exposures to family planning information. Interestingly, Ekiti state had the highest percentage of respondents (68.5%) who reported exposure to family planning information in at least two platforms, followed by Lagos state (56.9%), Osun state (54.4%), Ogun state (50.9%), Ondo state (35.2%) and lastly Oyo state (33.5%) (p-value = 0.000). The majority of the urban respondents (57.9%) compared to their rural counterparts (29.7%) were exposed to information on family planning in at-least two media platforms (p-value =0.000).The emphasis is that there is a high significant relationship between state of residence and two or three exposures to family planning information. These findings corroborate the previous works of (Palamuleni, 2013; Yihunie *et al.*, 2013).

With reference to age category, for respondents in 30-34 age group, 53.3% had two or three exposures followed by those in age groups 35-39, and 25-29 (both 52.4%), those in age group 40 and older (48.4%), and lastly the youngest age group 15-24 (38%) (p-value = 0.000). These results imply that there is a high significant influence between age and two or three exposures to family planning information. These results were supported by previous studies conducted by Asiimwe, et al, (2014); and Ilori et al (2013).

As expected, respondents with the higher level of education (72.1%) had two or three exposures to family planning information, for those with secondary, primary and no education the statistics were 55.7%, 38.2%, and 16.4% respectively (p-value = 0.000). In essence, there is a high significant interaction between level of education andtwo or three exposures to family planning information in the study. Previous studies carried out by Agbo (2013); Lamidi, (2015); and Okezie et al (2010); have buttressed these recent findings.

Also, findings showed that 52.8% of Christians had two or three exposures to information about family planning while 44.1% of Muslims/traditionalists had the same (p-value = 0.000). Here, these findings showed that there is a high significant influence between religious affiliations and two or three exposures to information about family planning. Evidences from previous studies are in agreement with the results of this study (Palamuleni, 2013; Ullah & Chakraborty, 1993).

Table 2 further showed that most respondents in the richest wealth status (63.7%) had two or more exposures to information about family planning compared to the richer (51.6%), middle (25.9%), and poorest (4.9%) wealth status (p-value = (0.000). From these results, there is a high significant interaction between wealth status andtwo or more exposures to information about family planning. In-fact, the study conducted by Agha (2000) has validated these results.

Employment status depict that respondents in the working category (50%) had two or three exposures to family planning information than those that are not working (48.3%), (p-value = (0.076). Obviously, there is a low significant influence between employment status and two or more exposures to information about family planning. This result is also in support of previous work done by Agha (2000).

Table 2: Cumulative index of exposures to media information on family planning by socio-economic factors (Total (N) = 3784)

	No Exposure	One	Two	Three	P-Value		No Exposure	One	Two	Three	P-Value
State of residence						**Educational level**					
Oyo	31.6%	34.9%	29.8%	3.7%		no education	62.5%	21.1%	15.5%	0.9%	
Ogun	34.3%	14.9%	47.8%	3.1%		Primary	34.9%	26.9%	35.4%	2.8%	
Lagos	25.8%	17.2%	34.7%	22.2%		Secondary	22.6%	21.7%	46.3%	9.4%	
Osun	24.4%	21.3%	45.7%	8.7%		Higher	14.4%	13.5%	42.2%	29.9%	0.000
Ekiti	17.6%	13.9%	54.6%	13.9%		**Religion**					
Ondo	39.9%	24.9%	30.3%	4.9%	0.000	Islam-trad	32.7%	23.3%	37.9%	6.2%	
Place of residence						Christian	26.7%	20.5%	40.2%	12.6%	0.000
Rural	43.1%	27.2%	26.3%	3.4%		**Wealth index**					
Urban	23.0%	19.1%	44.6%	13.3%	0.000	poorest-poorer	70.6%	24.5%	4.3%	0.6%	
Age group						Middle	39.0%	35.2%	24.0%	1.9%	
15-24	41.0%	21.0%	31.1%	6.9%		Richer	25.9%	22.5%	46.1%	5.5%	
25-29	27.9%	19.6%	42.7%	9.7%		Richest	19.8%	16.5%	45.9%	17.8%	0.000
30-34	26.8%	19.9%	41.2%	12.1%		**Employment status**					
35-39	26.1%	21.5%	41.2%	11.2%		Not working	32.1%	19.6%	35.3%	13.0%	
40+	27.5%	24.1%	37.5%	10.9%	0.000	Working	28.3%	21.7%	39.9%	10.1%	0.076

Source: Computed from selected NDHS datasets (2013)

Multivariate Relationship between Exposure to Mass Media and Socio-Economic Factors

Table 3 Model 1; tested the relationships between exposure to family planning information on radio and socio-economic factors. Model II examined the relationship between exposure to family planning information on TV and socio-economic factors, while Model III observed the relationships between exposure to family planning information on newspapers/magazines and socio-economic factors. Only statistically significant results at p=0.005 levels are reported in this study. At this juncture, it is vital to note that results from the relationships between exposure to mass media information about family planning and state of residence, religion, and employment status were not significant in this study.

In Model I (Table 3) respondents in Ogun State were 0.421 times less likely to have heard about family planning messages on radio compared to their counterparts in Oyo state (p-value = 0.000), and similar pattern was observed for Lagos (0.392), Osun (0.731), and Ondo (0.452) states (p-values = 0.000, 0.027, and 0.000respectively). Findings showed that exposure to information about family planning on radio varied significantly by age. The odds that respondents aged 25-29 heard family planning information on radio was 0.560 times more than the reference category aged 15-24 (p-value = 0.001), and for those aged 30-34, 35-39, and 40+ the odds were 1.618(p-value = 0.000), 1.786 (p-value = 0.000), and 1.752 (p-value = 0.000) times respectively. Exposure to family planning information on radio varied significantly by education. The odds that respondents with primary, secondary, and higher education heard family planning information from radio were 1.996 (p-value = 0.000), 3.259 (p-value = 0.000), and 4.101(p-value = 0.000) times respectively compared to the reference category, no education. Also, exposure to family planning information on radio varied significantly with wealth status. Respondents in the middle category, richer, and richest were 1.717 (p-value = 0.000), 2.966 (p-value = 0.000), and 3.668 (p-value = 0.000) times more likely than those of poorest/poorer category to have heard about family planning information from the radio.

Generally, exposure to family planning information through TV showed significant variation across the states. Findings in Model II showed that respondents in Ogun state were 0.973 times (p-value = 0.000) more likely than Oyo state to have heard about family planning messages on TV compared to their Oyo state counterparts, and similar increase in odds were observed for Lagos (1.404, p-value = 0.006), Osun (1.601, p-value = 0.000), and Ekiti (3.092, p-value = 0.000) states. Findings showed that exposure to family planning information on TV varied significantly by age. The odds that respondents aged 25-29 heard family planning information on TV was 0.540 times (p-value = 0.002) more than the reference category aged 15-24, and for those aged 30-34, 35-39, and 40+ the odds were 1.456 (p-value = 0.007), 1.563 (p-value = 0.002), and 1.356 (p-value = 0.025) times respectively. Findings of this study showed that exposure to family planning information on TV varied significantly by education. The odds that respondents with primary, secondary, and higher education compared to those with no education heard family planning information on TV were 1.539 (p-value = 0.007), 2.304 (p-value = 0.000), and 3.367 (p-value = 0.000) times respectively. Likewise, exposure to family planning information on TV varied significantly across wealth status. Respondents in the middle category, richer, and richest were 3.447 (p-value = 0.000), 9.583 (p-value = 0.000), and 14.759 (p-value = 0.000) times more likely than those of poorest/poorer category to have heard about family planning information on TV.

Evidences from Ajala, (2014); Asekun-Olarinmoye, (2013); and Babalola and Oyenubi; (2018) are in agreement with results of this study.

With respect to exposure to family planning information from newspaper/magazine, findings in Table 3 suggest statistically significant variation within states. In Model III (Table 4.7) showed that respondents in Lagos state were 2.213 times (p-value = 0.000) more likely than those in Oyo state to read about family planning messages on newspaper/magazine compared to the reference category, and in Ekiti state the odds were 1.826 (p-value = 0.013) times. The odds that respondents with secondary, and higher education compared to those with no education read family planning information on the newspapers/magazines were 3.992 (p-value = 0.004) and 14.504 (p-value = 0.000) times respectively. Findings of this study showed that respondents in the richest wealth status category were 4.596 (p-value = 0.023) times more likely than those in the poorest/poorer category to have read about family planning information from the newspapers/magazines. The findings of Karungari (1996); Kulkarni (2003) and Ugboaja et al, (2018) discovered that women who read newspapers and other print media are enlightened on contraception for family planning purposes. All these authors are strongly in support of the results of this study.

Table 3: Logistic Regression showing the relationship between exposure to media information on family planning and socio-economic factors

Socio-economic factors Total (N)= 3784	Model I (Exposure to Family Planning info on Radio)		Model II (Exposure to Family Planning info on TV		Model III (Exposure Planning info on Newspaper - Magazine	
State of residence	Odds	Sign	Odds	Sign	Odds	Sign
Oyo (Ref)	1.00		1.00		1.00	
Ogun	0.579	0.000	1.973	0.000	0.806	0.501
Lagos	0.392	0.000	1.404	0.006	3.213	0.000
Osun	0.731	0.027	1.601	0.000	1.365	0.206
Ekiti	0.769	0.098	3.092	0.000	1.826	0.013
Ondo	0.452	0.000	1.228	0.144	0.838	0.537
Place of residence						
Rural(Ref)	1.00		1.00		1.00	
Urban	0.956	0.692	1.204	0.083	0.991	0.965
Age group						
15-24 (Ref)	1.00		1.00		1.00	
25-29	1.560	0.001	1.540	0.002	0.878	0.579
30-34	1.618	0.000	1.456	0.007	0.921	0.725
35-39	1.786	0.000	1.563	0.002	1.003	0.991
40+	1.752	0.000	1.358	0.025	1.163	0.516
Educational level						
no education (Ref)	1.00		1.00		1.00	
Primary	1.996	0.000	1.539	0.007	1.706	0.287
Secondary	3.259	0.000	2.304	0.000	3.992	0.004
Higher	4.101	0.000	3.367	0.000	14.508	0.000
Religion						
Islam-trad (Ref)	1.00		1.00		1.00	
Christian	1.080	0.372	1.021	0.801	1.318	0.053
wealth index						
poorest-poorer (Ref)	1.00		1.00		1.00	
Middle	2.717	0.000	4.447	0.000	2.102	0.345
Richer	3.966	0.000	10.583	0.000	3.439	0.100
Richest	4.668	0.000	15.759	0.000	5.596	0.023
Employment status						
No working (Ref)						
Working	1.042	0.752	1.081	0.548	1.153	0.447
Model I: 2Log Likehood = 4245.482[a] ; Chi-square = 477.425; Nagelkerke R Square = .167						
Model II: 2Log Likehood = 4374.629[a] ; Chi-square = 838.649; Nagelkerke R Square = .266						
Model III: 2Log Likehood = 2118.097[a] ; Chi-square = 527.958; Nagelkerke R Square = .259						

Source: Computed from selected NDHS datasets (2013)

CONCLUSIONS

The study concludes thatmass media exposures to family planning among married women varies significantly depending on theirstate of residence, place of residence, age, educational level, religion, wealth index and employment status. The results of this study clearly showed that: state of residence, age, educational level, and wealth index has significant influence on exposures to mass media information about family planning. However, variables of respondents such as:place of residence, religion, and employment status have no significant relationship with exposures to mass media information about family planning in the study.

These results are clear evidences that six states in south-west Nigeria have begun to partially achieve goal 3 of the Sustainable Development Goals (SDGs) by 2030.

The recommendations for this study are as follows: First, married women in urban centers of south-west Nigeria needs to be more effective in using mass media information about family planning. Second, religious organization especially Christians in south-west Nigeria are urgently admonished to create serious awareness

and mobilize members to access programs about family planning campaigns on radio, television and newspapers/magazines. Third, married women who are working in south-west Nigeria should channel their financial resources towards the adoption and use of family planning method(s) suitable for them.

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