

## **AN ASSESSMENT OF THE USE OF RADIO IN FAMILY PLANNING HEALTH MESSAGES: A SYSTEMATIC LITERATURE REVIEW**

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### **Abstract**

*This study assesses the use of Radio for family planning health messages and the impacts of demographic variables on the practice of family planning in Nigeria. Systematic Literature Review Method was used while 32 articles met the selection criteria and were included in this study. Findings revealed that health message has impact on knowledge and adoption of family planning among the people. It was also found out that Radio Health Messages in the indigenous language are more impactful than those in other languages. In some cases, people are exposed to Radio Health Messages on family planning, thus, having adequate knowledge of it but the practice rate was still low. This was revealed to be as a result of the moderating effects of demographic variables of age and religion.*

**Keywords: Assessment, Radio, Family Planning, Health Messages, Nigeria.**

### **Introduction**

Radio is one of the oldest and most relied on genre of media for information exchange. Over time, various people, community groups, organizations and nations have utilized radio as a tool for national development and putting across sensitizing messages (Ajisafe, 2021). Some of the reasons radio has been adopted as a medium for such communication as well as for information transfer to engender social change, to impart knowledge and to exchange ideas is because it spans literacy gaps, geographic distances, and language barriers and remains an

affordable source of information that reaches a heterogeneous audience. Its varied uses have enabled radio's sustainability even through explosions in information technology, such as the advent of advanced two-way communication and the Internet (Odero & Kamweru, 2010).

In the dissemination of health information, radio has been and remains a veritable tool in this regards, as it has been used for many of such, like Campaigns against HIV and AIDS both as jingle and radio dramas, Immunization, Oral rehydration therapy, Fight against Malaria, Kick Polio Out, Wash Your Hand Campaign during Ebola outbreak in August, 2014, Family Planning Adoption Campaign, among others (Bongaart, 2016). The usage of radio by both governments and non-governmental organizations for the purpose of education and information pertaining to Health Communication is hinged on the increasing availability of radio sets, televisions and print media in developing countries and their ability to influence behaviors (Kincaid, 1992).

In the past, The Planned Parenthood Federation of Nigeria (PPFN) in its efforts towards family planning has overtime produced health messages which were aired on both radio and television. Among such media messages was the one produced for Nigerian Television Authority (NTA) in August, 1989 by popular Nigeria artists- King Sunny Ade and Onyeka Onwenu titled "Wait for me" (JHU, 1990; Kincaid et al, 1992). From time past till now, radio has continually been used in the dissemination of family planning health messages, campaigns, jingles and episodic dramas. Other media of mass communication have also had programs which include, *Ilera Loro* (Health is wealth) on Osun State Broadcasting Corporation (OSBC), "Health Check" on Orange FM, Akure, "Ilera Loro" (Health is wealth) on Family FM, Ogun State, "Se e ri gbo?" (Have you heard of it?) Ogun State Broadcasting Corporation, among others. All these are geared towards enhancing the adoption of Family Planning.

Despite efforts by the government, non-governmental organisations, and media, the population of Nigeria continues to increase at an alarming rate. Among the signs of overpopulation in Nigeria according to Victor (2018) are unemployment, inadequate tertiary institutions to cater for the teeming youths, lack of medical facilities, low per capital income, and environmental deterioration, among others. One of the viable measures to curtail overpopulation is the adoption of family planning.

Against this backdrop and the scary prediction that Nigeria's population will double by 2050 putting it at four hundred million people (making it the third most populous nation in the world), the study assesses the use of Radio for family planning health messages and the impacts of demographic variables on the practice of family planning in Nigeria.

### **Objectives of the Study**

The main objective of this study is to assess the use of Radio for family planning health messages while the specific objectives are:

- 1) to find out the impact of radio health message on knowledge of family planning;
- 2) to assess the relationship between demographic variable of age and adoption of family planning;

3. to examine the relationship between demographic variable of religion and adoption of family planning.

## **Literature Review**

### **Family Planning**

Family planning implies the ability of individuals and couples to anticipate and attain their desired number of children by spacing and timing their births. It is achieved through the use of contraceptive methods and the treatment of involuntary infertility. The availability of family planning does more than enable women and men to limit family size. It safeguards individual health and rights, and improves the quality of life of couples and their children. Family planning is an important strategy in promoting maternal and child health. It improves health through adequate spacing of births and avoiding pregnancy at high risk maternal ages and parities. Family planning is defined as the ability for individuals and couples to attain their desired number of children and plan the spacing and timing of their births through use of contraceptive methods (WHO, 2018).

Family planning (FP) is defined as a way of thinking and living that is adopted voluntarily upon the bases of knowledge, attitude, and responsible decisions by individuals and couples (Oyedokun, 2017). Family planning refers to a conscious effort by a couple to limit or space the number of children they have through the use of contraceptive methods (Gaur, Goel & Goel, 2018). Family planning deals with reproductive health of the mother, having adequate birth spacing, avoiding undesired pregnancies and abortions, preventing sexually transmitted diseases and improving the quality of life of mother, foetus and family as a whole (Handady, Naseralla, Sakin & Alawad, 2015).

Family Planning has several benefits, some of which are specific to the health of mothers and their children. Others include socio-economic benefits; for example, women are able to advance their education and careers by delaying or limiting childbearing and this can bring better economic prospects to their household (WHO, 2018; Smith, 2019). Family planning serves to reduce child and maternal morbidity and mortality by preventing unintended pregnancies and unsafe abortions (Moreland & Talbird, 2016). The number of maternal deaths that could be averted during childbirth as a result of a reduction in the number of pregnancies and induced abortions would be significant. Family planning also enables birth spacing, ultimately reducing child mortality while enhancing the nutritional status of both mother and child (WHO, 2014).

### **Mass Media and Family Planning (Health Programmes)**

Mass media play an invaluable role in the development of a nation in all aspects of their engagements. Thus, well-designed mass-media campaigns have proved their ability to increase the use of family planning in Nigeria. Happenstance and Programmes have shown this. Between 1985 and 1988, television promotion of family planning in the cities of Ilorin, Ibadan, and Enugu helped increase the numbers of new and continuing contraceptive users (Bayol, 2014). After the campaign, the number of new clients had almost quintupled in Ilorin, tripled in Ibadan, and more than doubled in Enugu. About half of respondents surveyed reported having seen the family planning messages on television; of these viewers, more than two-thirds recalled the specific clinics promoted.

Meanwhile, in Borno State, in the Capital city of Maiduguri, a mass-media campaign involving radio, television, print materials, and an advocacy forum with religious leaders showed similar results. The number of first-time users in sentinel clinics rose by 24 percent over pre-campaign levels, and the number of continuing users rose 37 percent (Bajos, et al, 2014). As well, research based on nationally representative surveys supports a strong association between family planning mass media campaigns and contraceptive use, even after social and demographic variables are controlled for. The 1989 Kenya Demographic and Health Survey found half of the women who recalled hearing or seeing family planning messages in radio, print, and television consequently used contraception, compared with 14% who did not recall family planning messages in the media, even after age, residence and socioeconomic status were taken into account. (Guttmacher Institute, 2018).

The Health Education Division of the Ministry of Health in Tanzania conducted the Tanzanian Family Planning Communication Project from January 1991 through December 1994, a project funded by the U.S. Agency for International Development (USAID) (Guttmacher Institute, 2018). The program intended to educate both men and men of reproductive age about modern contraception methods. The major media channels and products included radio spots, radio series drama, Green Star logo promotional activities (identifies sites where family planning services are available), posters, leaflets, newspapers, and audio cassettes. In conjunction with other non-project interventions sponsored by other Tanzanian and international agencies from 1992–1994, contraception use among women ages 15–49 increased from 5.9% to 11.3%. The total fertility rate dropped from 6.3 lifetime births per individual in 1991–1992 to 5.8 in 1994 (Guttmacher Institute, 2018).

Nigeria is a well-recognized economic and political force in Africa, and, with a population of 98.1 million people, it is the most populous nation on the African continent (PRB, 1994). Because the mass media are fairly widespread in Nigeria, they are an important vehicle for disseminating information about family planning to this large population. Nigeria has many daily newspapers, numerous radio transmitters, as well as that of television transmitters. There are 171 radios and 27 televisions per 1,000 population higher ratios than in most sub-Saharan African countries (United Nations, 1992, cited by Vogel, 2014). A survey of predominantly urban areas found that nearly 90 percent of all households have radios and 60 percent own television sets (Vogel, 2014). Since almost every state has its own radio and television stations, it is possible to broadcast on a regional as well as a national basis. The Nigeria Television Authority (NTA) is the primary national television station, with affiliates in each state. The affiliates broadcast national programs such as the news from NTA in addition to their own local programming. All these have helped a great deal in helping to advance the course of family planning among the people, both in the urban areas and the rural dwellings.

According to Ogunbamigbe (2021), some of radio programmes on family planning and other health issues across southwest Nigeria include:

**Osun State Broadcasting Corporation (OSBC), 104.5 FM, Osogbo**

Programmes	Days	Time	Synopsis
Breakfast Tray	Saturday	9 a.m. – 10:30a.m	Magazine/Phone-in (English)
Health Matters	Saturday	12:30p.m.-1:30 p.m.	Discussion (English)
Ilera Loro/Alaaafia Tayo	Monday	5p.m. – 5:30p.m.	Drama/Discussion/Phone-in (Yoruba)
Ojuse Obinrin	Monday	5:30p.m.- 6p.m.	Discussion/Phone-in (Yoruba)

**Gold, 95.5 FM, Ilesa**

Programmes	Days	Time	Synopsis
Omo o mi	Monday	11:30a.m. – 12 noon	Discussion (Yoruba)

**Adaba, 88.9 FM, Akure**

Programmes	Days	Time	Synopsis
Live Well	Monday	11:45a.m. – 12noon	Talk Programme

**Orange, 94.5 FM, Akure**

Programmes	Days	Time	Synopsis
Health Check	Saturday	7:30a.m. -8:30 a.m.	Discussion/Phone-in (Yoruba)

**Ogun State Broadcasting Corporation (OGBC) 90.5 FM**

Programmes	Days	Time	Synopsis
Se e ri gbo (Sponsored by UNICEF and Ogun State Ministry of Health)	Monday Wednesday	10 a.m. – 11a.m 10 a.m. – 11a.m	Drama/ Discussion and Phone-in.
Ilera Loro	Monday	5p.m. – 5:30p.m.	Discussion (Yoruba)
Health Line	Sunday	4p.m- 4:30p.m	Discussion (English)

**Family 88.5 FM, Ogun State**

Programmes	Days	Time	Genre
Ilera Loro	Saturday	11a.m-11:30a.m	Discussion/Phone-in (Yoruba)

**Research Methodology**

This study uses Systematic Review Method. Snyder (2019) defines Systematic Review as a research method involving critical identification and appraisal of studies, collection of data and analysis of the data collected.

### **Search Strategy**

The studies included in this research are within the timeframe of 2015-2022. The data base of Scopus while houses all journals written across the globe was used with boolean operator and truncations used to search through the database. According to Beerkens (2021), Scopus provides access to studies including their titles, abstracts and keywords. The search keywords used are: *"Radio AND family planning OR Health Messages"*, (Radio AND family planning AND Age AND religion), (Radio AND family planning OR Age OR religion), (LIMIT-TO "2015-2022"), etc. After the search, there were 325 articles.

### **Eligibility Criteria**

The inclusion criteria for studies in this research are: studies must be (1) empirical studies (2) written in English Language (3) between 2015 and 2022 and (4) focused on radio and family planning or health information. However, the exclusion criteria are: studies that are: (1) not written in English Language (2) not primary studies (3) grey papers with missing bibliography and other details of the paper (4) not focused on radio and family planning or health information.

### **Data Extraction**

Based on the eligibility criteria, 28 studies were included in the final sample size of this study. In the the first instance, 84 studies not written in English Language were removed from the 325 articles searched on Scopus. It remained 241 articles. Secondly, 62 articles that were written before 2018 were removed. It remained 179 articles. From the remaining articles, 112 of which are not empirical studies were excluded; it remained 67 articles. 17 articles that were not complete articles were removed while 18 duplicates were also excluded from the study. Finally, 32 articles met the selection criteria and were included in this study.

### **Result and Discussion of Findings**

#### **RQ1: What is the impact of radio health message on knowledge of family planning?**

Studies indicated that mass media, especially radio stands to be the most accessible and affordable media in rural setting and even, it is ubiquitous in the urban setting (Muhammad and Farahnaz, 2018). Thus, it must be extensively used to promote the use of family planning method (Mghweno, Katamba & Nyirabavugirije, 2017) and according to Oberiri (2017), women in Jalingo metropolis are aware of family planning as propagated in the media but they do not practice it. Oberiri (2017) concluded that religion and cultural beliefs dissuaded women from practicing family planning in Jalingo, Northern Nigeria despite being exposed to Radio Health Messages on radio. Affirming this, Mghweno, Katamba and Nyirabavugirije (2017), in their study which explored the influence of mass media on family planning methods use among couples in Gashenyi Sector revealed that the level of listening to radio was high, whereas that of reading posters, watching TV and reading newspapers were very low. Then, the mass media health messages were found not to influence them despite the high listenership to Radio Health Messages on Family Planning among the respondents.

In agreement, Chukwuedozie, Clifford, Ijeoma and Chidiebere (2016) while looking at the relationship between access to mass media messages on family planning and use of family planning in Nigeria affirmed that the relationship between each of the respondents' claimed access to mass media messages, and the family planning variables after being determined

with Pearson correlation analysis showed weak direct relationships between the access to mass media health messages and use of family planning.

Essentially, Chukwuedozie, Clifford, Ijeoma and Chidiebere (2016) affirmed that there exist significant variations within Spatio-demographic groups with regards to having access to mass media messages on family planning, and on the use of family planning. However, they concluded that access to mass media messages increases the likelihood of the use of family planning while people with higher socioeconomic status and those from the Southern part of the country were shown in the findings as those with high use of family planning in Nigeria. Contrary to the above, a study by Dana (2018) indicated that mass media-delivered family planning campaigns have a positive impact on family planning behaviors. Effect sizes were consistent with previous research on the impact of mass media-delivered campaigns.

Contrasting between the effect of radio health messages on family planning and effect of such messages on television, Nazim and Hakim (2015) revealed that viewing family planning messages on TV improves the chances of using modern contraception for a woman who actually saw the messages by about 11 and 8 per cent in Kyrgyzstan and Tajikistan, respectively. They further suggested that, if every woman in Kyrgyzstan and Tajikistan had an opportunity to watch a family planning message on TV, then the likelihood of using modern contraception would have improved by 10 and 7 per cent in Kyrgyzstan and Tajikistan, respectively. By contrast, the effect of hearing family planning messages on radio in both countries was found to be insignificant.

Negating the findings of Nazim and Hakim (2015), Uprety, Ghimire, Poudel, Bhattra, and Baral (2017) revealed that radio was the main source of family planning information and it was effective. In the study by Jacqueline, Hellen and Margaret (2017), it was revealed that there is a positive and significant effect of interactive radio broadcast content and drama format on the comprehension of family planning programs in the selected radio stations and radio programs among the population of Kigali City.

Further, in the study of Nyakundi, Kibiwott and Alfred (2018), on vernacular radio programmes and family planning promotion among reproductive women in rural areas: The study established that messages aired through vernacular radio programmes promote family planning among women in rural areas.

## **RQ2: What is the relationship between demographic variable of age and adoption of family planning?**

Contraceptive use patterns differ substantially by age in both the developed and developing countries. Carrasco (2018) and Nortman (2019) argued that contraceptive use increases with age until 35 to 40 years then declines due to infecundity among older age groups for who contraceptive is unnecessary. In Kenya, Muia (2015) found out that, women of age group 15 to 19 years contribute least while those of age group 20 to 39 years contribute most to modern contraceptive use. Trussel (2016) found out that age at first pregnancy could have a profound effect not only in the health of child and mother but also on the ultimate fertility and population growth. In the United States of America, 77% of the women aged 15-19 years, are both fecund and contraceptive users (World Fertility Survey, 2015). The prevalence is five

times higher than the same age group in the developing countries. In the developing countries, according to this report, modern contraceptive use among women aged less than 30 years is low, but rises substantially after that. In the USA, however, contraceptive use is relatively even among women aged 15-44 years. Nyange (2018) alongside Levesque & Minniti (2016) found out that, modern contraception was slightly higher among women aged 25-29 years and lower among women of age groups 15-19 and 40-49 years.

In Ahmad and Oparil (2017)'s study, 26% of the women aged 15–24 wanted another child within 2 years compared to 16% among women aged 25–34. The use of pills and condoms are preferred more when the average age is lower. When the contraceptive use of married and fertile women is examined according to their age, it is observed that middle-aged women tend to use the family planning method more than younger and older ones. Another study, demonstrated that use of contraception was maximum (84.8%) in 30 years and more and minimum (2.2%) in 20 years age (Ohadike, 2017). Similarly, India reported more use of contraceptive by women of higher age group and parity. Maternal age at first birth is an important determinant of the quality of life of the woman and the baby, maternal and child health and general fertility level (Joseph, et al., 2018).

Studies have highlighted different views of researchers regarding age and its impact on decision making success and behaviour. For instance, Rose (2016) has related the age of individuals positively to the success of decision making while Bosma (2016) has related it positively with knowledge rather than the success. According to him, age is positively related with knowledge and that knowledge makes the individual successful (Bosma, 2016; Rose, 2016; Reynolds, 2015).

### **RQ3: What is the relationship between demographic variable of religion and adoption of family planning?**

There has been a convergence in birth patterns in modern times for the main religions in low fertility countries, but there have been differences in form of contraception used. Religious expression and values continue to influence the family, but education is an important means of achieving effective contraceptive use (Clayton, Ross & Kolbe, 2017).

Religiosity positively influences adolescent sexual behaviour through its association with decreased likelihood of sexual initiation and adolescent pregnancy and birth. According to Aggleton and Campbell (2016) as well as Brattan-Wolff and Portis (2017), male and female adolescents who regularly attend church are less likely to be sexually experienced at a younger age, and female adolescents are less likely to have adolescent births. Abouzahr, Vlassoff and Kumar (2016) found that adolescents who attend church regularly are more likely to delay sexual initiation than their counterparts who do not attend church. In addition, adolescents who emphasize the importance of religion and prayer are at less risk of early sexual initiation and less likely to have frequent sexual intercourse. However, in their study, Clayton, Ross and Kolbe (2017) observed a positive relationship between religiosity and sexual experience. Clayton (2017) found that adolescent males who value religious and moral beliefs highly were significantly more likely to have had sex in the four weeks prior to the survey interview.



Blank, George and London (2016) found religious affiliation related to adolescent sexual behaviours. With regard to the use of contraception, some Christian denominations oppose any form of (artificial) contraception as going against God's law. Islam, with its strong patriarchal history, considers contraceptive use a sin. Some believe that contraceptives are detrimental to health, reduce libido, and have side-effects like skin irritations, weight gain, swollen ovaries, nausea, and vomiting (Cleland & Ferry 2015; Zelnick 2018). Some religions, such as Catholicism, have restrictions on contraception based on the belief that it is God's will to bring children into the world. According to Dixon-Muller (2019), religious believers or observers might choose to avoid certain methods of family planning, such as birth control pill, in an effort to live their lives according to the teachings of their religion.

### **Conclusion**

Based on the reviewed studies, majority of them revealed that radio health message has impact on knowledge and adoption of family planning among the people. The Radio Health Messages in the indigenous language are revealed to be more impactful than those in other languages. In some cases, people are exposed to Radio Health Messages on family planning, thus, having adequate knowledge of it but the practice rate of family planning was still low. Among the notable reasons for this as revealed in the studies reviewed are; age and religion. Age of giving birth to the first child determines the adoption rate of family planning. As such, the use of pills and condoms are preferred more when the average age is lower. Religion is also another factor as some religions as reviewed above suggested that adoption of family planning is a taboo.

As recommendation, further studies can study other factors apart from age and religion which influence the adoption of family planning despite people being exposed to Radio Health Messages on family planning.

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