

**GIVING BABIES THE GIFT OF EXCLUSIVE BREAST-FEEDING: AN
EVALUATION OF THE INFLUENCE OF RADIO EXCLUSIVE
BREAST-FEEDING MESSAGES ON WOMEN
IN EBONYI STATE, NIGERIA**

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Abstract

Medical experts have agreed that exclusive breast-feeding has obvious positive health implications for a baby aged one to six months. But, evidence had shown that many of the Ebonyi women whose majority are in the rural communities believed otherwise. To impart the knowledge and make them to accept exclusive breast-feeding of new babies, Ebonyi Broadcasting Corporation radio health programme tagged Ebonyi Broadcasting Cooperation (EBBC) Salt FM is programme is the *Exclusive Breast-feeding this Week* and Unity FM, Abakakliki *mum and mums-to-be* have for long been on the air. The study therefore, sought to determine the effectiveness of the programmes in influencing the Ebonyi women to adopt exclusive breast-feeding of their new babies. The specific objectives include to: determine the level of exposure to radio messages on exclusive breast-feeding among the Ebonyi women, ascertain their level of knowledge of the radio exclusive breast-feeding messages, determine their level of application of the message and ascertain the major inhibitors to the application of the messages. The study adopted a survey design. The global benchmark of 2.8% was used to compute up to 2022 projected population of the Ebonyi women and it stood at 259,962. The Australian online sample size calculator was used to determine a sample size of 398 respondents. Using a multi-stage sampling technique, the researchers administered copies of the instrument to women sampled across the state. The data collected were analyzed using simple percentages tables and mean computation. The hypotheses were tested using Chi-square test of independence. The findings revealed that majority of the Ebonyi women were exposed to the radio messages and that the majority of them have significant knowledge of the said radio messages. However, the study also found that not only that the majority of the women have not practiced exclusive breast-feeding before, but that they believe that the practice of exclusive breast-feeding is difficult given the existential cultural and economic realities

surrounding them in the state. It was recommended that radio messages on exclusive breast-feeding should emphasize the much needed supportive roles of husbands and family members and that dietary intake of the nursing mothers on exclusive breast-feeding programme should as well be highlighted by the messages.

Key words: Babies, Exclusive Breast-feeding, Influence, Radio messages, Women

Introduction

UNICEF (2010) in its report states that exclusive breast-feeding is giving baby breast milk only and nothing else even sips of water except for medicine prescribed by the doctor or nurse for the first six months of the baby's life. The clear difference between breast-feeding and exclusive breast-feeding is the word 'Exclusive'. Exclusive according to Oxford Advanced Learners' Dictionary (2015: 509) means not including somebody/something. That is to say that exclusive breast-feeding is 'unalloyed' just breast milk and nothing more. Humphrey (2005) highlighting the research done by John Hopkins Bloomberg School of Public Health, University of Zimbabwe in 2005 states that exclusive breast-feeding leads to the reduction in the risk of diarrhea, respiratory tract infections and allergies three times as compared to mixed feeding.

According to World Health Organization report in (2006), it is in view of the need for exclusive breast-feeding that the United Nations International Children's Fund (UNICEF) and World Health Organization (WHO) began an International Campaign called Baby Friendly Hospital Initiative (BFHI). This initiative is meant to promote, protect and support breast-feeding. It is in pursuance of this goal that a country like Zimbabwe going by her Baby Friendly Hospital Initiative prohibits the advertising of formula products used for babies under six months. The ban of the advertising is placed in all media.

In recognition of the seriousness of the practice, the first week of August every year is globally commemorated as breast-feeding week. This testifies that many people globally appreciate the importance of exclusive breast-feeding. It is worthy to that ignorance and misconceptions are still posing as major inhibitors to the adoption of exclusive breast-feeding of new babies in many part of Africa and beyond. It is however dismaying that a research done in America shows that 60% of mothers leave hospitals planning to exclusively breast feed their babies, but only 22% out of this 60% still breast feed exclusively for six months (America Academy of Pediatrics Committee on Nutrition 2004).

Breastfeeding addresses all four facets of a new baby's healthcare need; namely: physical, spiritual, mental and social for mothers, children, fathers/partners, and the immediate family. Exclusive breastfeeding, during the first 6 months of a child's life ensures the provision of certain biological and psychological needs and therefore increases the probability of survival during this critical stage of development (Austin and Boyd, 2010). Exclusive breastfeeding as an innovation is a practice that is expected to be imbibed by every family especially those who are of child-bearing age. It is in view of its relevance that a global outcry is being raised to ensure it that many more nursing mothers and families adopt it. If this is consistently and consciously done over time it will eventually normalize with the people's culture.

The results of some studies have identified some of the major factors which should be given attention if many more African women would faithfully embrace exclusive breastfeeding. According to Uchendu, Ikenna and Emodi (2009), it is clearly evident that women who have fewer well-spaced babies can more easily cope with the demand of exclusive breastfeeding as this reduces the likelihood of 'burnout' or maternal exhaustion. This is also substantiated by Uwaisava, Peterson, Thompson and Panyo (2009) who state that improved maternal education enhances mother's understanding and appreciation of the demands and benefits of exclusive breastfeeding and empowers them to resist external interferences and pressures. They go further to state that younger mothers are most likely not to exclusively breastfeed due to inexperience and pressures from older women who did not practice it.

In spite of all the efforts geared towards achieving the goal of exclusive breast feeding in Ebonyi State, the project still appears not have recorded significant success. This may be attributed to a number of factors which include gap in communication, among the women. Writing on the effective promotion of breast-feeding in the 21st century, Oruamabo (2004, p. 15) affirms that "Women resident in the rural areas pose the greatest problems". Incidentally, majority of the Ebonyi women are resident in the rural communities scattered across the state. This necessitated the consistent use of radio messages/programmes to mobilize the Ebonyi women and people to accept exclusive breastfeeding of new babies. Ebonyi State Government through relevant agencies sponsor these messages which have been on air for quite a number of years and remain on going. To facilitate ease of comprehension/understanding, the programme handlers have

inculcated the use of local dialects/ languages in reaching various tribal communities across the state.

However, the researchers at the time of the study observed that not much empirical evidence has been documented on the effectiveness/influence of these radio messages towards realizing the goal of up-scaling the adoption of exclusive breastfeeding in the state. Thus, it became imperative that an evaluative study be undertaken with a view to underscoring the effectiveness or otherwise of the messages. The study covered Radio Nigeria Unity FM and Ebonyi Broadcasting Corporation (EBBC) Salt FM radio exclusive breastfeeding messages, all in Ebonyi state.

Meanwhile, Radio Nigeria Unity FM *Mums and Mums to Be* frequently features a 30- minute talks on the benefit of exclusive breastfeeding aired on Wednesdays between 3.30pm to 4.00pm and on Sundays at the same time. On the side of Ebonyi Broadcasting Cooperation (EBBC) Salt FM is programme is the *Exclusive Breastfeeding this Week*. This programme which attracts health personnel such as Paeditrician, Obstretician and gynaecologists, nurses and midwives comes on air every Tuesday and Saturday.

Statement of the Research Problem

Radio exclusive breastfeeding messages have been on air for a number of years and remain ongoing in Ebonyi state, however, not much is known or empirically documented on the anticipated influence of the messages, particularly, as it relates to the goal of mobilizing the Ebonyi women to adopt exclusive breastfeeding of their new babies. This observed intellectual lacuna ordinarily underscores the imperativeness of the study.

The fact that such studies as Orji-Egwu and Nwankwo (2017) have noted that knowledge of radio messages on Lassa fever did not significantly translate to the tendency to avoid the consumption of rat meats by many of the Ebonyi people further calls for this study. Besides, research results like that of Aligwe, Nwankwo and Nwafor (2017) also note that exposure to media messages sometimes does not automatically translate to knowledge of the said messages. Consequently, it becomes imperative that this study be undertaken so that researchers, the radio programme handlers and the government will not continue to be guided by mere assumption of the presumed positive influence of the radio messages on exclusive breastfeeding in Ebonyi State.

Objectives of the Study

The general objective of this study is to ascertain the influence of radio campaigns on exclusive breast-feeding among women in Ebonyi State. In line with the general objective, the specific objectives of the study are:

1. determine the level of women's exposure to radio messages on exclusive breast-feeding in Ebonyi State.
2. ascertain the level of women's knowledge on radio exclusive breast-feeding messages in Ebonyi State.
3. Determine the level of adoption of radio messages on exclusive breast-feeding among women in Ebonyi State.
4. ascertain the major inhibitors to the adoption of radio messages on exclusive breast-feeding among women in Ebonyi State.

Research Questions

1. What is the level of women's exposure to radio messages on exclusive breast-feeding in Ebonyi State?
2. What is the level of women's knowledge on radio exclusive breast-feeding messages in Ebonyi State.
3. What is the level of adoption of radio messages on exclusive breast-feeding among women in Ebonyi State.
4. What are the major inhibitors to the adoption of radio messages on exclusive breast-feeding among women in Ebonyi State.

Research Hypotheses

The following null hypotheses were formulated and tested:

1. Ho: Radio messages do not influence the attitude of Ebonyi women towards the adoption of exclusive breast-feeding of their new babies.
2. The women in Ebonyi State do not apply the radio messages on exclusive breast-feeding.

Significance of the Study

The significance of this study cannot be understated. It will provide practical and theoretical significance to the concerned and affected class of people in the society. On the practical significance, this study would enhance the effectiveness of radio campaigns in Ebonyi state because it will help campaign designers to use the right medium for the right target audience. In doing this, it will create a plethora of

awareness on the importance and ways of how best to practice exclusive breast-feeding especially among rural women in Ebonyi State.

On the other hand, this study will immensely contribute to sources of literature for further studies in this area. This study will also add to the rising body of scientific understanding and knowledge on newborn feeding practice in Ebonyi State.

Review of Related Literature

Radio as agent of social mobilization

Radio has a lot of functions in the society. The functions of radio bring lot of positive impacts by mobilizing and sensitizing the people to embrace development. Nwanze (2003, p.3) reveals the effectiveness of the functions of this medium especially in the Nigerian rural community by stressing that “ In a setting of mostly illiterate, poor, and rural communities of most third world countries, radio broadcasting is the most effective medium of mass communication as it transcends geographical, linguistic and other traditional barriers”. It is the fastest means of reaching the rural masses that are cut off from the urban cities due their low level of standard of living.

According to Aliede (2003, p.30) as an electronic medium “Radio is very pervasive, volatile and sensitive like television. A tool for journalism education, enlightenment, mobilization, cultural propagation and entertainment, radio also promotes economic development, stimulates political participation and arouses national consciousness and unity”. It is in fact clearly stated by Nwanze (2003, p.17) that “Radio operators must come to terms with the fact that it is indeed a most challenging, though exciting and rewarding venture”. Certainly, evidences abound pointing to the fact that the radio has raised hopes of a new era characterized by improvement in programming, an enhanced free flow of information, education and audience satisfaction”. Adamu (2007, p.59) supports that “The broadcast media, whether radio, television, cinema or video CDs or cassette recorders, can effectively reach large number of people with convincing development messages that can influence the masses knowledge, attitude and behaviour.” This supports the fact that the industry has since its inception not failed at all or much in bridging the communication gap between different sectors of the society and impacting positive change on our behaviour and attitude toward certain significant issues.

A well established and managed radio outfit can create a lot of changes in the society. Kur (2005:51) opines that, “It is capable of many

things; it can make or destroy, it can instigate war under certain conditions as well as foster peace initiatives". It has the operational power to impact on the listeners by providing sound or audio messages at efficient functional qualities

Before the independence era, radio was mostly used by the colonial administration as a tool to propagate and to advance the interests of the imperial government in the colonies, especially in promoting and prolonging colonial dictatorship. These roles were transformed with the achievement of the Nigerian independence. Not only as vehicles for political socialization and re-orientation but also for economic, cultural and socio-political advancement of the people and the entire country.

According to Nwuneli (1985, p.23), Government realized that the medium is powerful in several ways and aspects including their potentials as: "Vehicle in publicizing government activities, policies and programmes; a means of defending government policies and programmes, a viable machinery for educating the people and an effective channel for bringing government nearer to the grassroots." The role of the radio has diversified and widened to cover every important aspect or area of man in the society.

Nwodu and Fab-Ukozor (2003:29) stated such roles as "promoting national consciousness, political integration and the overall socio-economic, cultural, scientific and technical advancement of our country are best handled by the electronic media in order to achieve the dreams and aspirations of the Nigerian democracy". Though the medium does not work in isolation, Dominick (1993:34-38) maintains that "it operates at the fulcrum of the government and the governed to fulfill the five basic roles to the society". These are: the surveillance role, interpretation role, linkage function, transmission of values or socialization function and the entertainment function just like other electronic/broadcast media like television and even the print media.

Exclusive Breast-feeding Practice: Gains and issues

Infants and children in developing countries are unarguably affected by life threatening diseases poor healthcare, and lack of potable water, malnutrition, poverty and war. However, the addition of additional foods and liquids causes higher rates of diarrhea illness and higher mortality rates Aidam, Perez Escamilla and Lavtey (2015). Exclusive breast-feeding is said to protect against common and widespread childhood diseases and has long term benefits such as

lowering mean blood pressure and cholesterol, reduces the prevalence of obesity and type 2 diabetes.

WHO (2001) maintains that exclusive breastfeeding reduces the mother's risk of fatal postpartum hemorrhage and premenopausal diseases. Frequent exclusive breastfeeding is said to contribute to a delay in the return of fertility and helps protect women against anemia by conserving iron. It is also said to provide frequent interaction between mother and infant fostering emotional bonds, a sense of security and a stimulus to the baby's developing brain. Research has also shown that exclusive breastfeeding reduces the risk of Human Immune Virus (HIV) transmission from mother to child. A research conducted by Zvitambo Project in Zimbabwe confirms that exclusive breastfeeding reduces the chance of postnatal survival in children born of HIV positive parents. Breastfeeding is said to address all four facets of health which are physical, spiritual, mental and social for mothers, children, fathers/partners and the immediate family. Exclusive breastfeeding during the first year of a child's life ensures the provision of certain biological and psychological needs and therefore the probability of survival during this critical stage of development.

Women who breastfeed, return to their pre-birth weight more easily. The bond enjoyed by the baby and the mother increases affinity and affection. This was supported by Spitz (2005) who confirmed that babies need intimate involvement with other human beings for their immediate survival as well as for their long term emotional health. It is generally believed that the first twenty four hours after birth is probably the critical period in which bonding takes place in humans. Suffice it to say that breastfeeding has profound benefits for infants which go beyond childhood. The benefits also extend to the mothers, the family and the society at large. Beyond the aforementioned positive aspects for long term health and wellbeing, breastfeeding has an untold impact on the work place, the health care as encapsulated below (UNICEF, 2010).

Studies carried out by UNICEF (2010) have proved that early initiation of breastfeeding had a significant impact on reducing overall neonatal mortality. It states that initiation within the first hour of life – could prevent 20% of neonatal deaths. Breastfed children are said to have at least a six times chances of survival in the early months than non-breastfed children. In the first six months of life, breastfed children are said to be six times less likely to die from diarrhea and 2.5 times less likely to die from acute respiratory infection. Breast-feeding is said to protect infants against diarrhea through two mechanisms (1) reduced

risk of bacteria from contaminated formula, other liquids and complementary foods and (2) transfer of maternal antibiotics through breast milk.

Mass Media/Radio Campaigns on Exclusive Breast-feeding

Most radio campaigns on breast-feeding have addressed attitudinal issues, although messages on breast feeding skills have been added in recent years. These approaches assume that women will change their breast-feeding practices once they have sufficient information. An alternative view of made by Development Communication Specialist, Hornik (1988) is that breast-feeding practices may be largely determined by expectations within a social network and that group norms, rather than individual preferences, may be the key factors influencing breast-feeding behavior. If the group expectations scenario is predominant, the implications for breast-feeding promotion programs are:

- 1) Campaigns emphasis has to be intensive or confidence building may have limited success;
- 2) A change in group requires long-term institutionalized support; and
- 3) Messages making breast-feeding exempt from the influence of social networks may permit some women to adopt it

In regard to attitudes toward breast-feeding, radio messages can help mothers, as well as, people who are influential in their daily lives to understand the many benefits of breast-feeding. Radio can also correct widespread misconceptions about breast-feeding, such as the idea that it causes breasts to sag or that it is less convenient than bottle feeding. To some extent, radio coverage can also provide support to mothers who may be influenced by negative interpersonal channels such as a friend who extols the convenience of bottle feeding. According to Naugle (2016, p. 27), "Breastfeeding campaigns focus on the importance of early initiation, giving colostrum, breastfeeding exclusively for the first six months, continued breastfeeding for two years, and the timely introduction of complementary foods. Interventions addressing complementary feeding of children between 6 and 24 months of age emphasize not giving food and water until six months of age, continued breast-feeding, hands-on feeding practices, meal frequency, and meal diversity.

Empirical Review

Naugle (2016) in his dissertation on the Evaluation of a Mass Media Campaign to Promote Exclusive Breast-feeding in Vietnam explores whether a mass media campaign, comprised of two television spots promoting exclusive breast-feeding (EBF), was successful in changing EBF behavior when implemented alone and when implemented in conjunction with other media materials, the training of service providers, and the establishment of a franchise network of infant and young child feeding counseling centers. The data were collected at five waves in four provinces of Vietnam through a three-stage cluster sampling methodology for a total of 11,277 face-to-face interviews with mothers of infants under the age of six months. Although the same individuals were not interviewed over time, the same 118 communes were sampled at each wave.

The core analyses explore the longitudinal effects of commune level exposure to commune level EBF. Mediation analyses suggest that, in franchise communes, the mass media campaign had an effect by driving women to franchise centres to seek additional IYCF support and that appears to have had an effect on EBF behaviour. From the studies it was concluded that: 1) Mass media alone, in the format of two 30-second spots, was not effective in changing EBF behavior in Vietnam; (2) Where other intervention strategies were implemented alongside mass media, the mass media campaign led to greater EBF behaviour change; (3) In geographic areas where the intervention was comprised of multiple components, the mass media campaign had effects through a process of social diffusion.

Gupta, Katende and Katende (2004) conducted a study and evaluated the extent to which exposure to behaviour change communication (BCC) messages in the media determined recent improvements in exclusive breast-feeding knowledge and practices in areas targeted by the Delivery of Improved Services for Health (DISH) Project of Uganda. Data were drawn from the 1999 DISH Evaluation Survey. The survey collected information from representative samples of women and men of reproductive age. Multiple logistic regressions were used for assessing the independent influences of BCC exposure on breastfeeding knowledge and practices, controlling for several confounding factors. The results indicated that the exposure to BCC messages was strongly associated with women's knowledge of six

months as the ideal duration for exclusive breast-feeding. Positive influences on knowledge of men were also found. Media effects on women's current practice of exclusively breast-feeding of their infants up to six months were less conclusive, possibly because of the short interval between the launch of the BCC campaign and survey implementation. While there was some evidence of bias of self-reported exposure, results of exploratory analysis of the indirect effects of communication campaigns suggest that impacts may be compounded as overall awareness is increased at the community level eventually leading to improved knowledge among individuals.

In their study on the factors associated with breast-feeding exclusively during the first 5 months. Sarita, Tae, and Eun (2017) reveal that the study target public health interventions in the selected community towards healthier infant nutrition and address child mortality in this population. A cross-sectional survey among 1145 random households was conducted in the Kwango district of the Democratic Republic of the Congo (DRC) during 2 November 2015 to 13 November 2015. Women of reproductive age from 15–49 years and having less than 5 years old child were selected for the study. Chi-squared test and bivariate and multivariate analyses were performed using SPSS. A major finding of this study is 49.2% of the mothers are exclusively breast-feeding their children, and marital status, literacy, place of delivery, knowledge of exclusive breast-feeding and access to radio are the key indicators for exclusive breast-feeding. Exclusive breast-feeding rate is almost equivalent to the national prevalence rate for the DRC. Providing adequate knowledge to raise awareness of exclusive breast feeding and increase involvement of health care providers in enhancing knowledge through antenatal care and during delivery and postnatal care will be the best approaches to increase exclusive breast-feeding practice.

Theoretical Framework

This research work is hinged on two different theories, the Diffusion theory Health Belief Model (HBM). The Diffusion Theory is credited to Everett Rogers and it is of 1962 fame. It is said to be an extension of Paul Lazars field's original idea of two step flow. Rogers observed that any technological innovation introduced must pass series of stages before being fully embraced by the target audience. It takes the following sequence. First, majority of the people get knowledge of the

innovation from the media messages. Second, the innovation will be adopted by a small group of early adopters. Third, opinion leaders take it over from the early adopters and try it out themselves to know the workability. Fourth, of the opinion leaders find it valuable, they persuade their friends and opinion followers. After the majority has adopted the innovation a group of laggards/late adopters follow suit.

The second theory is Health Belief Model (HBM). It was propounded by Becker (1974) developed the *health belief model* (HBM) from the work of Rosenstock (1966). It was developed in the 1950s by a group of U.S. Public Health Service social psychologists who wanted to explain why so few people were participating in programmes to prevent and detect disease. The Health Belief Model proposes that a person's health-related behavior depends on the person's perception of four critical areas: the severity of a potential illness, the person's susceptibility to that illness, and the benefits of taking a preventive action, and the barriers to taking that action. Thus, it postulates that health-seeking behaviour is influenced by a person's perception of a threat posed by a health problem and the value associated with actions aimed at reducing the threat.

The essence of employing these two theories is that they share so many things in common with the topic of the research. Firstly, exclusive breast-feeding is still an alien practice to this part of the country, so to speak. To bring the practice to the level of acceptance of every nursing mother, the message of the innovation undergoes a series of hand-to-hand passage. Similarly, the perception that people about the severity or otherwise of a given disease determines their dispositions to the messages/actions required to handle the disease.

Research Design

The study adopted survey research design. The design is succinctly appropriate since the research has to do with gathering information from the people on vital facts about them, their beliefs, opinion and behaviours with regard to the problem of the study. The population of the study consists of up to 2022 projected population of women in the 13 Local Government Areas of the State. According to Citypopulation.de (2022) the population of Ebonyi State women as at December 2022 stood at 1,534,431. Using Australian online sample size calculator, a sample size of 398 was computed and used for the study.

The researchers adopted a multi stage sampling technique

which involved the use of simple random, cluster, proportionate and accidental sampling approaches. The principle of simple randomization (lucky deep) was used to draw a total of 6 Local Govt Areas, 2 LGAs from each of the 3 senatorial districts of the state. Consequently, Izzi and Ohaukwu LGAs were drawn from Ebonyi North Senatorial District; Ikwo and Ishielu LGAs from Ebonyi Central Senatorial district and Afikpo and Ohaozara were drawn from Ebonyi South Senatorial district. Each of the LGAs got a proportion of the sample size based on its total population of women as at Dec. 2022. Again, each of the LGAs was divided into clusters and accidental sampling approach was finally used to reach the respondents who were issued with the research instrument- (questionnaire).

Data Analysis and Presentation

1. Question 1: What is the level of women's exposure to radio messages on exclusive breastfeeding in Ebonyi State?

Table 1: Level of exposure to Unity FM and EBBC radio messages on exclusive breastfeeding

S/N	Statement	SA	A	U	D	SD
1	Unity FM messages on exclusive breastfeeding comes up twice every week.	155 (40.79%)	95 (25%)	35 (9.21%)	60 (15.8%)	35 (9.21%)
2	EBBC radio messages on exclusive breastfeeding comes up once every week.	150 (39.47%)	115 (30.47%)	24 (6.32%)	42 (11.1%)	49 (12.9%)
3	Unity FM messages on exclusive breastfeeding comes up on air every Wednesday and Sunday evening.	148 (38.95%)	107 (28.26%)	51 (13.14%)	42 (11.1%)	32 (8.42%)
4	EBBC radio messages on exclusive breastfeeding comes up on air every Tuesday and Saturday evening.	150 (39.47%)	95 (25%)	36 (9.47%)	49 (12.9%)	50 (13.2%)
5	You enjoy listening to both of the station's messages on exclusive breastfeeding.	151 (39.47%)	114 (30.47%)	26 (6.32%)	40 (11.1%)	49 (12.9%)

Source: Field survey 2023

The table one above clearly shows that the Ebonyi women are largely exposed to Unity FM and EBBC radio messages on exclusive breast-feeding. As reflected the responses above, particularly in response to statement number five, about 80% of the respondents agreed that they enjoy exposing themselves to the messages on exclusive breast-feeding.

Question 2: To what extent has radio messages influenced the attitude of women in Ebonyi State towards adopting exclusive breast-feeding?

Table 2: The extent radio messages influence the women's attitude to exclusive breast-feeding

S/N	Questionnaire items	SA	A	N	D	SD
6	The radio messages advocate that exclusive breast feeding is healthy.	158 (41.58%)	95 (25%)	15 (3.95%)	61 (16.1%)	51 (13.4%)
7	The radio messages advocate that e exclusive breast feeding is beneficial to nursing mothers.	152 (40%)	105 (27.63%)	27 (7.11)	58 (15.3%)	38 (10%)
8	The radio messages advocate that e exclusive breast feeding is beneficial to the infant.	162 (42.63%)	113 (29.74%)	45 (11.8%)	37 (9.74%)	23 (6.05)
9	The radio messages advocates that e exclusive breast feeding is have been approved by renown medical bodies	140 (36.84%)	115 (30.26%)	53 (13.9%)	32 (8.42%)	40 (10.5%)
10	The radio messages advocates that exclusive breastfeeding does not lead to sagging of the breast	160 (42.11%)	105 (27.63%)	51 (13.4%)	39 (10.3%)	25 (6.58%)

11 Based on your exposure to the

radio messages you believe that exclusive breastfeeding is good, healthy and beneficial..

161	104	50	40	25
(42.11%)	(27.63%)	(13.4%)	(10.3%)	(6.58%)

Source: Field survey 2023

Table 2 above shows that radio messages on exclusive breast-feeding to a large extent are changing the hitherto negative attitude to exclusive breast-feeding among the Ebonyi women. The response to statement number 11 above clearly demonstrate that about 70% of them are adopting positive attitude towards exclusive breast-feeding.

Question 3: To what extent do the women in Ebonyi State apply the radio massages on exclusive breast-feeding?

Table 3: Knowledge and application of radio massages on exclusive breast-feeding

S/N	Questionnaire items	SA	A	U	D	SD
11	You are now convinced that exclusive breastfeeding helps fight infant killer diseases.	157 (41.32%)	108 (28.42%)	55 (14.5%)	35 (9.21%)	25 (6.58%)
12	Exclusive breastfeeding does not led to infant malnutrition.	160 (42.11%)	100 (26.32%)	55 (14.5%)	41 (10.8%)	24 (6.32%)
13	Exclusive breastfeeding even helps in family planning.	144 (37.89%)	111 (29.21%)	60 (15.8%)	34 (8.95%)	31 (8.16%)
14	It was not stressful exclusively breastfeeding your baby as you had earlier feared.	152 (40%)	118 (31.05)	55 (14.5%)	39 (10.3%)	16 (4.21%)
15	You have exclusively breastfed more than a baby.	150 (39.47%)	95 (25%)	55 (14.5%)	37 (9.75%)	43 (11.3%)
16	You are ever ready to encourage other women to adopt exclusive breastfeeding	160 (42.11%)	105 (27.63%)	51 (13.4%)	39 (10.3%)	25 (6.58%)

Source: Field survey 2023

Table 4: Major inhibitors to the application of radio massages on exclusive breast-feeding

S/N	Questionnaire items	SA	A	U	D	SD
17	Inadequate availability of good food is a major challenge to the engagement in exclusive breastfeeding programme	158 (41.32%)	107 (28.42%)	54 (14.5%)	36 (9.21%)	25 (6.58%)
18	Your mother is always kicking against exclusive breastfeeding	161 (42.11%)	101 (26.32%)	54 (14.5%)	40 (10.8%)	24 (6.32%)
19	The mother to your husband is always kicking against exclusive breastfeeding.	143 (37.89%)	112 (29.21%)	59 (15.8%)	35 (8.95%)	31 (8.16%)
20	Your husband kicks against exclusive breastfeeding of his baby.	151 (40%)	119 (31.05)	56 (14.5%)	38 (10.3%)	16 (4.21%)
21	You have exclusively breastfed more than a baby.	152 (39.47%)	93 (25%)	55 (14.5%)	37 (9.75%)	43 (11.3%)
22	Your husband gives permission for exclusive breastfeeding but does not provide enough of good food and food supplement	161 (42.11%)	104 (27.63%)	50 (13.4%)	40 (10.3%)	25 (6.58%)

Source: *Field survey 2023*

The above shows that the major inhibitors to application of the radio messages on exclusive breast-feeding included: inadequate availability of good food, opposition from the spouse's mother and the mother-in-law and inadequate supports by husbands.

Test of Hypotheses

The hypothesis stated earlier on this research work will be subjected to empirical test, using the χ^2 (chi-square) techniques, which is a test of independence that is to ascertain that one variables is not affected by or related to another variables. Chi-square is used to compare observed and expected frequencies:

The chi-square (χ^2) formula is given as

$$X^2 = \frac{\sum (of-ef)}{Ef}$$

Where E= summation

Ef = Expected frequency

Of = Observed frequency

The Ef (expected frequency) is gotten by

$$E_f = \frac{\text{Row total} \times \text{column total}}{\text{Grand total}}$$

Decision Rule:

The null hypothesis will be accepted or rejected based on the calculated value and tabulated value. If the calculated value is greater than the tabulated value, the researcher will reject the null hypothesis at 0.05 level of significance and 0.4 degree of freedom where (df) is given as (R-1) (C-1)

Where: R= number of rows

C= number of columns

$$= (2-1)(5-1) = 4$$

Therefore Chi-square critical value is (7.815) at 0.05 level of significant

Hypothesis 1

H₀: Radio messages do not influence the attitude of Ebonyi Women towards the adoption of exclusive breast-feeding of their new babies.

Table 5: Chi-Square analysis

	N	\bar{X}	SD	Df	t-cal	t-table	Sig. level	Decision
Radio	225	2.46	0.56	339	9.58	7.81	0.05	Null Rejected
Attitude	115	2.73	0.98					

Table 5 above showed that the calculated value of t = 9.58 which is greater than the table or critical value. Therefore, the null hypothesis which states radio messages do not influence the attitude of Ebonyi Women towards the adoption of exclusive breastfeeding of their new babies was rejected. This implies that the radio messages influenced the women to adopt exclusive breastfeeding of their babies.

Hypothesis 2

H₀: The women in Ebonyi State do not apply the radio messages on exclusive breastfeeding.

Table 6: t-test analysis of mean

	N	\bar{X}	SD	Df	t-cal	t-table	Sig. level	Decision
Radio	145	2.96	0.34	339	9.67	1.960	0.05	Null Rejected
Apply	200	2.58	0.51					

Source: *Field survey, 2023.*

Table 6 showed that the calculated value of $t = 9.67$ which is greater than the table or critical value. Therefore, this means a rejection of the null hypothesis which states the women in Ebonyi State do not apply the radio messages on exclusive breast-feeding was rejected. The implication of the rejection of null hypothesis is the acceptance of the alternate which states that the women in Ebonyi State significantly apply the radio messages on exclusive breastfeeding.

Discussion of Findings

The results of the data analysed above and the test of hypotheses have shown that: the Ebonyi women have significant level of exposure to EBBC and Unity FM Abakaliki radio exclusive breastfeeding messages, that they have significant level of knowledge about the messages and that majority of them have applied the messages by way of engaging in exclusive breastfeeding of their babies as a result of their exposure to the messages. According to them, the major inhibitors to the application of the messages are: inadequate availability of good food, opposition from the spouse's mother and the mother-in-law and inadequate supports by husbands. The above findings except for the listed inhibitors are all in line with results of previous researches. For instance, Gupta, Katende and Katende (2004) had found that exposure to radio behavior change communication correlated with the acceptance and engagement in exclusive breastfeeding in Uganda. In their submission, Nwankwo and Ojo (2021) had found that though adults in Ebonyi State had admitted exposure and knowledge of radio family planning messages, there was however, insignificant application of the messages. Adducing possible reason for their finding, the authors noted that the issue of family planning is culture oriented. According to

them, an Ebonyi man by culture does not believe in family planning, hence, the failure of the said radio message to produce the desired result.

Similarly, Nwankwo and Orji-Egwu (2017) also discovered that the then popular radio jingle advocating the stoppage in the consumption of rats as sources of meat among the majority of the Ebonyi people also failed because consumption of rat meat had become a long time culture of the people. However, the results of this study differed because not only that the majority of the respondents (Ebonyi women) admitted exposure and significant knowledge of radio exclusive breastfeeding messages, but they also admitted application of the messages and would even go further to encourage other women to do the same. The reason may not be far-fetched. Women by nature are lovers of children and would ever go to any length in engaging practices that are said to be child health promoters. The researchers in different occasions listened to the said radio programmes and observed that messages listed the advantages of exclusive breastfeeding to among others include: promoting the intelligent quotients of the child and helping to infant killer diseases. It therefore not surprising that many of the women were not only interested in the messages are very much ready to apply it for the benefit their child. In their own opinion, Gupta, Katende and Katende (2004) exclusive breastfeeding also has obvious good health implications for the lactating mother. These among others include, help keeping the breast healthy and promote family planning among many of the women. For these reasons, the woman would have no hesitation in accepting to practice exclusive breastfeeding.

Meanwhile, a critical analysis of the data in table 4 and 5 above will reveal that there are salient issues to be looked into as much as the issue of exclusive breastfeeding is being discussed in Ebonyi state. The level of economic poverty in Ebonyi State is still very high such that many families can hardly afford three good square meal each day. This reflected in the responses of the majority of the women when they identified inadequate good meal as one of the major inhibitors to the engagement in exclusive breastfeeding. Again, many ground mothers and fathers in the state did not have sound education and as such are still sticking to their old ways of managing new babies. The researchers recalled having engaged some of the old women on issues relating to family planning and exclusive breastfeeding and they unanimously

opined that family and exclusive breast-feeding are aberrations and should be stopped. This therefore calls for attention to focused on all these identified inhibitors to further improve on the success of the messages.

Conclusion

The findings of this study suggest that radio messages are recording significant successes in the promotion of exclusive breast-feeding in Ebonyi State, however, attention must be given to such inhibiting factors like inadequate availability of good food, opposition from the spouse's mother and the mother-in-law and inadequate supports by husbands.

Recommendations

In line with the findings of this study, we recommend as follow:

1. Radio messages should incorporate admonitions to ground mothers and fathers educating to stop their opposition to exclusive breast-feeding
2. The messages should also incorporate the expected role of the husband to promote engagement in exclusive breastfeeding among their wives. Such role include adequate provision of good food and dietary supplements

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