

NURSING MOTHERS AWARENESS OF EXCLUSIVE BREASTFEEDING CAMPAIGNS ON RADIO IN NASARAWA STATE, NIGERIA

Ndijida Mary Anthony*, Tsegyu Santas*, Josiah Sabo Kente*,

*Department of Mass Communication, Faculty of Communication and Media Studies, Nasarawa State University Keffi.

Abstract

Breastfeeding is the cornerstone of a child's development, nutrition, and mother's health. Breastfeeding has proven to increase a child's chances of survival and lower infant mortality by 13%. Nigeria still has a low rate of exclusive breastfeeding, even though it is crucial component for a healthy generation. This study investigated the level of awareness of EBF through radio campaigns among nursing mothers in Nasarawa state. The study was anchored on Yale's Persuasion Theory. The researcher adopted a cross-sectional design which made use of Survey research design and Focus Group Discussion (FGD). The population of this study consists of nursing mothers attending public health institutions in four (4) wards from 2 LGAs selected for the study in Nasarawa state. The sample size of four hundred (400) adopted for the study, 252 was returned and used for the analysis. Multi-staged sampling technique was used, the data gathered from the administered questionnaire was analysed using Statistical Package for Social Science (SPSS) version 24.0 software. Out of the 252 mothers who participated, the demographic data showed 96(38.1%) of the respondents to be within the age range of 26-30 years with majority 251(99.6%) of them being married. The study revealed that the majority of the respondents 70(27.8%) were illiterate or can either read or write while University graduates or equivalent were 9(3.6%). Findings also revealed that 113(44.9%) of the respondents are highly aware of radio broadcast media campaigns on exclusive breastfeeding. The study showed that 117(46.4%) of the respondents were exposed to an exclusive breastfeeding campaign in the Hausa language which helped them to understand the benefits of exclusive breastfeeding. The study further revealed 143(56.7%) that fully adhere to the practice of EBF for 6 months in both urban and rural locations. The FGD revealed that most nursing mothers got their EBF awareness and importance of Colostrum through radio broadcast campaigns and Health Workers during antenatal. The study concluded that less than half of the respondents are highly aware of exclusive breastfeeding practice radio campaigns in Nasarawa State. Therefore, the study recommended the need for more awareness campaigns and the need for more exposure of the women to such publicity in order to highly intensify their practice of exclusive breastfeeding.

Keywords: Nursing Mothers, Radio broadcast, Exclusive Breastfeeding and Awareness

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

Introduction

Exclusive Breastfeeding (EBF) is defined as the practice of providing only breast milk for an infant for the first 6 months of life without the addition of any other food or water, except for vitamins, mineral

supplements, and medicines [United Nations International Children's Emergency Fund (UNICEF), 2018]. Breastfeeding contributes significantly to mothers' health in many ways. In post-delivery, breastfeeding helps in birth control, reducing risk of

postmenopausal osteoporosis, pre-menopausal breast cancer, ovarian cancer and auto-immune disease among others (Nadeem, et al., 2017). Though certain medical conditions may be a contraindication to breastfeeding, its benefits cannot be overemphasized. Breastfeeding is a critical first step on a child's path to a healthy future. Aside from being a foundation for a child's future health and well-being, is also a critical element of worldwide development efforts to create a more healthy, prosperous and sustainable planet.

Over the last two decades, there has been a growing attention in the endorsement of exclusive breastfeeding as the recommended feeding practice for newborns Danso (2014; as cited in Ezeah & Odionye, 2021). This, to a large extent, has been encouraged by increasing scientific substantiation on the significance of exclusive breastfeeding in reducing infant morbidity and mortality. An important aspect of exclusive breastfeeding initiatives includes constantly informing the nursing mothers about benefits and management of breastfeeding to ensure the integration of messages about breastfeeding in all prenatal and antenatal education.

Apart from contributing to the mutual bonding between mother and child, breastfeeding is also essentially important to their health. Several studies have established exclusive breastfeeding's role in reduction of infant mortality, risk of obesity and limiting morbidity from infections. It also plays a role in enhancement of immunity as well as reduction of atopic disease (Nadeem et al., 2017). WHO (2020), described breast milk as the natural first food for babies which provides them all the energy and nutrients they need for the first months of life. Breast milk can also provide up to half or more of their nutritional needs in the second half of their first year, and up to one-third during their second year of life. Breastfeeding is the cornerstone of child survival, nutrition, development and maternal health. WHO recommends exclusive breastfeeding for the first 6 months of life, followed by continued breastfeeding with appropriate complementary foods for up to 2 years or beyond (Victora, 2016)

Mass media campaigns uses television, print, social media, radio broadcast and other media forms to communicate messages to large audiences. The main purpose for any media campaign is to alter people's thoughts and actions. The ability of the media to communicate persuasive messages will enable the public to get acquainted with government policies and programmes (Asemah, 2022; Ogbodu, et al., 2023). Naugle (2016) argued that mass media campaigns can

have effects through individual routes reflecting direct exposure to content producing changes in cognitions and behaviour through social routes in which campaign messages, through a process of social diffusion, influence the information available in the environment and, consequently, the cognitions and behaviour of individuals (regardless of whether or not they were directly exposed to campaign messages).

In both urban and rural areas, radio broadcasts are believed to be a highly effective medium for disseminating health-related messages (Ezegwu & Madaki, 2023). Radio can be regarded as an essential medium for educating nursing mothers about EBF and emphasizing its health benefits. Santas (2013) opined that radio is a popular medium for communicating health programmes especially among rural areas in most parts of Africa. The public can be informed, entertained, and educated by radio. Even for people who are illiterate, live in rural areas, or lack access to electricity, it is one of the most accessible forms of media. It can convey messages in regional languages and dialects, particularly through community radio, that are relevant to the local audience and customized to their cultural background [United Nations Educational Scientific and Cultural Organisation (UNESCO), 2016]. Additionally interactive, radio allows listeners with mobile phone service to participate in conversations by responding and exchanging messages through call-in lines or short messaging service (SMS). The portability and affordability of radios makes it accessible to most people, including those in rural areas. As a result, radio campaigns can be used to reach pregnant women, nursing mothers, and prospective mothers in both rural and urban areas.

Globally, of the total 8.2 million under-five deaths, more than 40% of them are caused by infections, and around 99% of deaths occur in developing nations, especially in Africa and Asia (UNICEF, 2016). Beyond preventing death, EBF provides a strong mother to child relationship, reducing various childhood illnesses, including infections, diarrhea, pneumonia, diabetes mellitus, and the likes (Ogho, et al., 2017). The importance of EBF is not limited to children but also prevents nursing mothers from experiencing depression, various cancers and hemorrhage (Holtzman & Usherwood, 2018).

Studies have shown that low adherence to EBF practice in Nigeria is associated with a high diarrhea-related deaths among children younger than five years of age (Ogbo, Page, Agho & Claudio, 2015). The benefits of exclusive breastfeeding for the health of both mother and child have been recognised by global and

local agencies like WHO, UNICEF and American Academy of Pediatrics (AAP). However, despite international and local efforts to propagate the importance of EBF through various campaigns such as media campaign, EBF practice among nursing mothers has still not reached the desired percentage mark of 90% as recommended by WHO and is not close reach to the World Health Assembly's (WHA) global target of at least 50% exclusive breastfeeding by 2025 (World Health Organisation [WHO], 2017).

Hence, to design promotional activities and set national goals, EBF awareness and rates of responsiveness (practice) need to be assessed. It is therefore the intention of this study to assess the rate of awareness of Exclusive Breastfeeding radio campaigns in Nasarawa state and to assess the level of responsiveness of EBF through radio campaigns awareness among nursing mothers in Nasarawa state.

Statement of the Problem

Despite the World Health Organization's (WHO) recommendation of exclusive breastfeeding for the first six months of life, a significant proportion of nursing mothers in Nigeria, particularly in Nasarawa state, might not be aware of the benefits and guidelines of exclusive breastfeeding. According to a study by Alade, Bamidele & Owoeye (2021) only 35% of mothers in Nigeria are reported to have exclusively breastfed, which is lower than the global average of 43% (WHO, 2018). A review of literature suggests that lack of awareness about exclusive breastfeeding practices can be a major barrier to optimal breastfeeding outcomes (El-Houfey, et.,2018; Eze, 2020; Fatile, 2022; Meme & Oche, 2019; Motilewa, et al., 2019). In recent times, there is an increase in the EBF campaign which has raised the awareness level of people. The radio, which is one of the most used medium due to its wide usage and characteristic is one of the foremost foundations for disseminating information about medical discoveries and health education to the public. Catalán-Matamoros & Peñafiel- Saiz (2019) asserted that "the media's effects on its viewers are widely documented and the volume and type of information offered in the media can affect beliefs, opinions and perceived norms, all of which influence behaviour"

In Nasarawa state, where infant mortality rates is high (64 per 1000 live births as against the sustainable development goals target (SDG) of 12 per 1000 live birth) (UNICEF, 2024), exclusive breastfeeding has been identified as a crucial strategy to improve child health outcomes (National Population Commission [NPC], 2019). However, there is a need to assess EBF radio campaigns awareness to ascertain the

level of awareness and how the campaign promotes exclusive breastfeeding practices among nursing mothers in Nasarawa state. The current state of awareness and practices of exclusive breastfeeding among nursing mothers in Nasarawa state seems to be low, therefore the importance of assessing the level of awareness of EBF through radio campaigns in Nassarawa state and to ascertain how the radio campaigns affect their EBF practice becomes paramount.

Research Question

1. What is the rate of awareness of the EBF radio campaign in Nasarawa state?
2. What is the level of responsiveness of EBF through radio campaign awareness among nursing mothers in Nasarawa state?

Conceptual Framework

The Concept of Awareness

Awareness refers to the state or ability to perceive, feel, or be conscious of oneself, others, one's surroundings, or certain information (Vera & Ufuoma, 2020). It involves being cognisant of thoughts, emotions, sensations, events, or the environment. Awareness is a multi-faceted concept that can be applied to various aspects of human experience (Vera & Ufuoma, 2020). Informational awareness is being informed about relevant facts, events, or issues. Informational awareness is crucial in decision-making and staying knowledgeable about one's field of interest. Health awareness which is informational, is recognising and understanding one's physical well-being and health status. This includes being aware of symptoms, engaging in preventive health measures, and making informed health-related choices. Awareness is not a static state but rather a dynamic and evolving aspect of human experience. It can be cultivated and enhanced through education, reflection, mindfulness practices, and a willingness to engage with oneself and the world. Increased awareness is often associated with improved decision-making, emotional intelligence, and overall well-being.

More broadly, it is the state or quality of being aware of something. There are different aspects of awareness, Wyart & Tallon-Baudry (2009, cited in Vera & Ufuoma, 2020), defined awareness as a human or an animal's perception and cognitive reaction to a condition or event. They further said, awareness is a relative concept, an animal may be partially aware, may be subconsciously aware, or may be acutely aware of an event. According to Dourish & Bellotti, (1992, cited in Jati, et al., 2019). Awareness is "an understanding of the activities of others, which provides a context for

your own activity". Awareness may be focused on an internal state, such as a visceral feeling or on external events by way of sensory perception. Awareness provides the raw material from which animals develop equally or subjective ideas about their experience. Insects have awareness that you are trying to swat them or chase after them, but insects do not have consciousness in the usual sense, because they lack the brain capacity for thought and understanding.

Literature Review

Awareness and Rate of Exclusive Breastfeeding Practice

The low adherence to EBF practice in Nigeria is associated with diarrhoea-related deaths among children younger than five years of age (Ogbo et al., 2015). This is inimical to the realization of the Sustainable Development Goal (SDG) target of reducing infant and child mortality rate to a significantly low level by 2030. Research studies to date examining breastfeeding practices in both developed and developing countries have found high rates of breastfeeding initiation and also that this high initiation rate is accompanied by a steep fall in exclusive breastfeeding in the first 6 months of life (Mwiza, et al., 2023). The nutritional status of an infant is determined largely by how a child is breastfed. There is however the recognition of the fact that the main hindrance to proper execution of exclusive breastfeeding is due to lack of knowledge and awareness in which babies are introduced to water at birth and under the age of six months by feeding the babies with solid or semi-solid food before six months (Federal Ministry of Health, 2017).

Chineke, et al. (2017) asserted that there is low level of EBF practice among nursing mothers in Nigeria as observed in their study on the breastfeeding practices and its associated socio demographic determinants of nursing mothers at a tertiary care hospital. This was also established in a number of other Nigerian studies, the prevalence of exclusive breastfeeding appears to vary across and within the regions from 10% - 56% with a few studies reporting prevalence rates above 50% (Sholeye, Abosede & Salako, 2015). Even though the majority of the nursing mothers were aware of EBF, it appeared not to have influenced its practice. This level of practice observed, could probably be due to other overriding factors such as maternal age, occupation and level of education, as the majority of the study participants were 35 years or less and were either traders, civil servants or students with a primary or secondary level of education. Similarly, Fatile (2022) revealed that perceived awareness about

EBF were high among nursing mothers and they were also aware that EBF is the means of giving infants only breast milk with no other food, drinks or water for the first six months of life but the EBF rate in Ondo State falls way below the level recommended by WHO.

Neji & Chidiebere (2019) noted that there is a significant association between level of knowledge and practice of exclusive breastfeeding. Hence encourage intensive awareness creation on benefits of EBF to be carried out for mothers during antenatal period (Neji & Chidiebere, 2019).

Radio Campaign and EBF Practice

The media plays a critical influence in public health. The term media describes a range of methods of communication that have the ability to reach a wide audience, such as radio, television, newspapers, magazines, and social media. Radio has become an increasingly important tool in public health efforts. Public health is greatly influenced by the radio. The radio has grown in significance as a vehicle for public health initiatives. Due to its effectiveness in quickly and efficiently reaching a large number of people, it has gained popularity in recent years (Mahli, 2023). A valuable friend in any public health crisis is the media. It fulfils the functions of an accurate information source and a champion of healthy lifestyle choices (Dang, 2021). Many people have come to accept the radio's growing power over time. The radio is frequently seen by the general people as an impartial source of information. Individuals increasingly base their health decisions on what they hear from the radio, which they depend on as their primary source of news (Dang, 2021). Public health programmes have the power to influence people's opinions about the likelihood of contracting diseases, the severity of preventable diseases in children, and the importance of prevention through the dissemination of government and non-governmental organisation (NGO) strategies and policies. Regarding EBF, radio coverage can increase awareness of the importance of EBF and promote EBF practice among nursing mothers and encourage pregnant and intended mothers to practice. Campaigns on the radio have shown to be successful in raising the acceptability rates of tactics and policies in a number of different nations. In Nigeria, government policies on health issues like HIV/AIDS, Malaria, Polio and Covid-19 had received wide public enlightenment campaigns via radio (Santas and Ogoshi, 2015).

The public, both in rural and urban areas, can be empowered by the radio to combat key causes of infant mortality and impairment, such as dehydration

from diarrhoea and diseases that can be averted by EBF. According to Nnabuanyi (2021), the media may educate nursing mothers on the skill of breastfeeding. Due to greater awareness, the media can assist in promoting healthy behaviours like infant exclusive breastfeeding, preventing negative consequences (Nnabuanyi, 2022).

Theoretical Framework

Yale's Persuasion Theory was adopted for this study. Yale's Persuasion Theory is also known as the Yale attitude change model. It is social psychology research that looks at the circumstances in which individuals are most likely to change their minds in response to persuasive communications. The persuasive communication approach was first studied by Carl Hovland and his colleagues at Yale University in the 1940s and 1950s and was later known as Yale attitude change approach (Asemah, 2012; Asemah & Ezeji, 2020; Asemah, et al., 2017). This approach core paradigm may be summarized as "who said what to whom" the source of communication, the type of message and the audience's character. Many elements influence each component of a compelling message, according to this method. With a persuasive communication, the source's credibility and attractiveness (source), the message's quality and sincerity (nature of the communication) and the audience's attention, intelligence and age (nature of the audience) can all influence an audience's attitude change (Anwumabelem & Asemah, 2023).

The source, message, medium and audience are all independent variables, whereas the impact of persuasion is the dependent variable. The Yale method to attitude transformation has resulted in new research and understanding of persuasion. This approach has aided social psychologists in their understanding of the persuasion process, as well as business in improving their marketing and advertising strategies. This approach, like most other theories about persuasion and attitude change, is not perfect. This method is a basic framework under which research was performed, rather than a comprehensive theory concerning persuasive communications. The Yale researchers did not establish degrees of significance among the variables of a persuasive message. They stressed examining the features of the attitude change over comparing them. The Yale theory does a better job of identifying elements that impact persuasion, such as competence, organisation and evidence, than it does of explaining how or why such things matter (Anwumabelem & Asemah, 2023).

Regarding changing people's attitude concerning an issue, the theory adopted a six-step

process. The steps are presentation, attention, comprehension, yielding, retention and behaviour. Presentation describes a persuasive message; messages presented must be persuasive and well presented. Secondly, people cannot be persuaded by messages they ignore, so after the message is presented to the audience. The third step in the persuasion process is paying attention. Fourthly, the audience must comprehend the message before it can influence their attitudes; yielding is a term for acceptance, the point at which attitude change occurs. When a persuasive message succeeds at changing a listener's attitudes, the receiver has yielded to the message. The fifth step is retention, and it concerns how long the attitude change lasts. The last stage in the process of change is behaviour which is the ultimate goal of persuasion discourse. This is because the essence of every communication is aimed at positively affecting the behaviours of the receiver. The six-step model of persuasion is an essential point of view on the nature of persuasion. However, the elaboration probability model successfully advocates for additional steps, the audience's reaction to the message and its issue (Asemah et al. 2017).

The major flaw according to Asemah et al (2017), is that it is a theory about the step in the persuasion process, but not about how persuasion occurs. This theory is relevant to this research because it describes how radio campaigns may be used to persuade nursing mothers and possibly potential mothers to exclusively breastfeed their infants from birth to six months because of its health benefits.

Methodology

The researcher adopted a cross-sectional design which made use of a triangulation method involving Survey research design and Focus Group Discussion (FGD). Questionnaire was used to collect data. Data generated was collated and analysed using Statistical Package for Social Science (SPSS) version 24.0 software. The analysed data was presented in tables. The study population consists of nursing mothers with children aged 6 months to 2 years that visit the primary health centers for child immunization and growth monitoring clinics in Nassarawa state of North Central State of Nigeria. Women of reproductive age group constitute 22.6% of the total population [Federal Ministry of Health (FMoH), 2001]. The projected population for Nasarawa as at 2019 was 2,632,239 (NBS, 2020). Hence the women of reproductive age in Nasarawa state is estimated to be 22.6% of 2,632,239, which is 594,886 that constitute the population of this study. The procedure for

drawing out a representative sample for the study was basically done using 5 multistage sampling techniques. The study was purposely conducted in Nasarawa State due to low practice of EBF observed by the researcher in those areas and for conveniences.

From the 13 LGAs in the state, two LGAs; Keffi and Kokona were purposely selected. The two (2) LGA purposely selected were divided into two groups on the basis of its location either in an urban or rural area. Keffi LGA was randomly selected for Urban while Kokona LGA was selected to represent the rural settlement. Therefore, Angwa waje ward and Sabon Garin ward were selected from Keffi LGA while Garaku ward and Kokona ward were randomly selected from Kokona LGA. Two Primary Health Centres (PHCs) were then selected from the list of PHCs in each selected ward by simple random sampling to have an equal allocation of PHC across Nassarawa State. In each of the wards, one PHC was used for the quantitative survey while the second PHC was used for FGD. In total, 8 PHCs were selected via simple random sampling method for the study out of which 4 PHCs were used for the survey while the remaining 4 was for FGD. In each of the wards selected, mothers of children aged 6 months to 2 years that registered for postnatal care in the facility were consecutively recruited from the PHC as they brought their children for immunization until the sample size for the study in each PHC was attained. The researcher and trained research assistants administered questionnaires to the mothers of children aged 6 months to 2 years of age after giving consent. The FGD group of 6 selected nursing mothers with children from 6 months to 2 years of age visiting primary health care centres for children immunization in two LGA from Nasarawa State, discussed questions about exclusive breastfeeding in the group.

The estimated sample size for the entire study was determined by calculation using the Fisher formula below.

$$N = \frac{Z^2 PQ}{D^2}$$

Where

N= minimum sample size

Z = 95% confidence level = 1.96

P= the proportion in the target population = 0.5

Q= 1-P = 0.5

D = Level of precision = 0.05

Hence, $N = \frac{(1.96)^2 \times 0.5 \times (1-0.5)}{(0.05)^2}$

$$N = \frac{3.8416 \times 0.5 \times 0.5}{0.0025}$$

$$N = 384$$

A minimum sample size of 400 was used to give allowance for non-response

Hence N = 400.

To determine the number of women that will be recruited in each PHC for the survey,

The following assumptions were made.

T = total number of immunization registration in the past 3 months in all the 4 PHCs for the survey.

t = total number of immunization registrations in the past 3 months in each PHC to be surveyed.

$$\text{Therefore, Sample for each PHC} = \frac{t}{T} \times 400$$

Table 1: Break down of Population

Wards	PHCs	May	June	July	Total	Total Calculated for Distribution
Angwa waje	Angwa waje PHC	119	59	113	291	189
Sabon Gari	Sabon Gari PHC	45	41	60	146	95
Garaku	Garaku PHC 1	61	34	41	136	88
Kokona	Kokona PHC 1	22	3	17	44	28
					617	400

Source: Immunisation Register (May - July 2024)

Ethical clearance

Ethical approval was obtained from the Medical Research and Ethics Committee, Federal Medical Centre, Keffi while verbal consent was obtained from nursing mothers with children from 6 to two years in the study areas after informing them of the essence of the study.

Results

From the result generated, out of the 400 copies of the questionnaire distributed, a total of 252, representing 63%, were correctly filled, returned, and found usable. Therefore, two hundred and fifty two mothers of children aged 6 to 24 months were recruited into the study from 4 different health facilities (two from rural base location and two from urban base location from each of the LGA; Keffi and Kokona). Other details of the results of the study are presented in the tables below:

Table 2: Socio-demographic characteristics

Variable	Frequency (N)	Percentage (%)
Name of facility		
Angwa Waje PHC	153	60.7
Garaku PHC	38	15.1
Kokona PHC	28	11.1
Sabon Gari PHC	33	13.1
State of Resident		
Nasarawa	251	100
Location		
Urban	186	73.8
Rural	66	26.2

Mother's age		
18- 20 years	22	8.7
21- 25 years	87	34.5
26- 30 years	96	38.1
31- 35 years	38	15.1
> 35 years	9	3.6
Mean ± SD	26.93 ± 4.508	
Child's age (in months)		
6-8	54	21.4
9-11	130	51.6
12-18	38	15.1
19- 23	30	11.9
Mean ± SD	11.15 ± 5.535	
Religion		
Christianity	82	32.5
Islam	169	67.1
Traditional	1	0.4
Marital status		
Divorced	1	0.4
Married	251	99.6
Mean ± SD	2.91 ± 1.45	
Mother's educational status		
Illiterate or can either read/ write	70	27.8
Primary education	70	27.8
School certificate or grade I teachers' certificate or equivalent	67	26.6
School certificate with teaching other professional training	36	14.3
University graduate or equivalent	9	3.6
Mother's occupation		
Intermediate grade public servant, senior school teacher	13	5.2
Junior school teacher, artisan	28	11.1
Petty trader, laborer, messenger similar grade	127	50.4
Senior public servant, professional manager, large scale trader, business, or contractor	6	2.4
Unemployed, full-time housewife, students, subsistence farmer	78	31.0
Employment status		
Full time	204	81.0
Part time	48	19.0
Total	252	100

The demographic data in Table 2 indicate that there were 186(73.8%) and 66(26.2%) respondents from urban and rural region respectively. Majority of the participants were between ages 26 - 30, 96(38.1%). The mean age of the respondents was 26.93 ± 4.51 while the mean age of their index children was 11.15 ± 5.51. Their academic qualifications indicate that majority of the respondents 70(27.8%), were illiterate or can either read or write while University graduates or equivalent were 9(3.6%). Similarly, an overwhelming majority of them, 251(99.6%) were married with Islam as the most practiced religion 169(67.1%). Majority of respondents' occupation were Petty traders, laborers, messengers and similar grade with 127(50.4%). This was followed by Unemployed, full-time housewife, students, subsistence farmer who were 78(31.0%). The least

under occupation were Intermediate grade public servant, senior school teacher with 13(5.2%) and senior public servant, professional, manager, large scale trader, business, or contractor 6(2.4%).

Table 3: Awareness of EBF through Radio Broadcast Campaign

Awareness	Extremely aware	Moderately aware	Somewhat aware	Slightly aware	Not at all aware
Aware of EBF radio broadcast Campaign	41 (16.3)	83 (32.9)	37 (14.7)	8 (3.2)	83 (32.9)
	Always Engaging	Engaging	Sometimes Engaging	Less Engaging	Not Engaging at all
How engaging was the radio broadcast campaign on breastfeeding?	10 (4.0)	124 (49.2)	21 (8.3)	14 (5.6)	83 (32.9)
	Very informative	Informative	Neutral	Rarely informative	Not informative at all
How informative was the radio broadcast campaign on breastfeeding?	23 (9.1)	123 (48.8)	15 (6.0)	11 (4.4)	80 (31.7)
	Very high	High	Neutral	Low	Very Low
How do you rate your level of exclusive breastfeeding awareness through radio broadcast campaigns?	13 (5.2)	100 (39.7)	33 (13.1)	28 (11.1)	78 (31.0)

Data in Table 3 indicate that 83 (32.9%) respondents were reported to be moderately aware of EBF radio broadcast Campaign, 41(16.3%) were extremely aware while 83 (32.9%) respondents were not at all aware of EBF radio broadcast Campaign. Majority of the respondents 123(48.8) accepted that the EBF radio broadcast campaign was very informative. Out of the total percentage of respondents that revealed awareness of the EBF radio broadcast campaign, 124 (49.2) respondents indicated radio broadcast campaign to be engaging. Also, the majority of the respondents 100(39.7%) rated awareness of EBF through radio broadcast campaign to be high with 78(31.0%) respondents rating the EBF awareness through radio broadcast campaign to be very low.

Table 4: Language and type of radio campaign program EBF awareness was received from

Variable	Urban F (%)	Rural F (%)	Total F (%)
The language for the radio campaign programme			
Hausa	92 (49.5)	25 (37.9)	117 (46.4)
Fulani	-	2 (3.0)	2 (0.8)
English	30 (16.1)	4 (6.1)	34 (13.5)
Hausa and English	10 (5.4)	3 (4.5)	13 (5.2)
Fulani and Hausa	-	2 (3.0)	2 (0.8)
Not specified	53 (28.5)	29 (43.9)	82 (32.5)
Hardly/Doesn't listen to radio	1 (0.5)	1 (2.5)	2 (0.8)

Type of radio campaign program EBF awareness was received from

Discussions	141 (76.2)	52 (80.0)	193 (77.2)
Educational talk shows	11 (5.9)	1 (1.5)	12 (4.8)
Public service announcements	17 (9.2)	4 (6.2)	21 (8.4)
Interactive call shows	-	-	-
Health awareness programs	34 (18.4)	15 (23.1)	49 (19.6)
Jingles	28 (15.1)	3 (4.6)	31 (12.4)
Musical campaigns	-	1 (1.5)	1 (0.4)
Radio drama	5 (2.7)	20 (15.4)	15 (6.0)
Panel discussions	1 (0.5)	-	1 (0.4)
Interviews	10 (5.4)	5 (7.7)	15 (6.0)

The results in Table 4 show that the majority of the respondents' 117(46.4%) listened to EBF radio broadcast programmes in Hausa language with most of the respondents from the urban areas while 82 (32.5%) did not specify language. Also, the majority of the type of EBF radio campaign awareness programme that were listened to by the respondents were discussion programme 193(77.2%). An average of 49(19.6%) indicated health awareness programmes while Musical campaign 1(0.4%) and Panel discussion 1(0.4%) programmes have the least respondents.

Table 5: Breastfeeding practices

Breastfeeding practices	Urban F (%)	Rural F (%)	Total F (%)	P-value
Time of first feed to child after birth (in hours)				
Less than or equal to 1 h	44 (23.7)	23 (34.8)	67 (26.6)	0.354
2-6 hours	90 (48.4)	26 (39.4)	116 (46.0)	
7-12 hours	13 (7.0)	4 (6.1)	17 (6.7)	
Above 12 hours	39 (21.0)	13 (19.7)	52 (20.6)	
Months the child was exclusively breastfed				
1 month	2 (1.1)	1 (1.5)	3 (1.2)	0.016
2 months	2 (1.1)	1 (1.5)	3 (1.2)	
3 months	13 (7.0)	1 (1.5)	14 (5.6)	
4 months	24 (12.9)	-	24 (9.5)	
5 months	25 (13.4)	13 (19.7)	38 (15.1)	
6 months	104 (55.9)	39 (59.1)	143 (56.7)	

The data presented in Table 5 indicate that the majority of the respondents 116(46.0%) breastfeed their children for the first time within 2-6 hours after birth, 67(26.6%) respondents breastfeed Less than or equal to 1 hour while 52(20.6%) respondents breastfeed above 12 hours after birth. Also, 143(56.7), were reported to have full adherence to the practice of EBF for 6 months in both urban and rural locations of the study area. 38(15.1%) of the respondents practiced EBF for 5months while other respondents did not practice exclusive breastfeeding at all.

Data for Focus Group Discussion

Table 6: Distribution of Focus Group Discussion (FGD) Respondents Based on the selected Wards from the LGAs:

S/N	Local Government Area	Ward	No. of Respondents
1.	Kokona	Kokona	6
2.	Kokona	Garaku	6
3.	Keffi	Angwa Ward	6
4.	Keffi	Sabon Garaku	6
	Total		24

The health workers in the Facilities help the researchers to get the target sample for the FGD (nursing mothers with children aged from 6-24 months). The age range of the respondents was between 19-38 years. For the educational background of the participants, most of them were illiterate with few that have leaving certificates and secondary school Certificates. In terms of occupation, there were predominately housewives, farmers, petty traders and few teachers. The structured questions of the FGD were as follows:

- 1) Are you aware of radio campaigns on exclusive breastfeeding?
- 2) Did you practice EBF?
- 3) What is the importance of exclusive breastfeeding to the baby?
- 4) What is the importance of the first yellowish breast milk released from mothers' breast to the baby (colostrum)?
- 5) Why are you not interested in practicing exclusive breastfeeding? (question to those who are not practicing exclusive breastfeeding)

Findings from the FGD showed that most of the nursing mothers are aware of the EBF radio campaign and they have knowledge of the importance of EBF. The awareness rate has really improved because the radio EBF campaign programmes are in different types to educate women on its importance, especially pregnant women and nursing mothers. One nursing mother in Garaku (Participant 1) said: "Talking about awareness, I am fully aware of EBF and I got to know about it through the media such as radio and have been practicing it".

A respondent in Kokona (Participant 3) added that the radio educated her more on EBF:

My knowledge of exclusive breastfeeding and the recommended duration of six months was through radio from a discussion programme I listened to. The six months duration is actually what makes it exclusive aside the no water and other feeds rule. So, I practiced the six months

recommended duration for my first child and this second child.

Some of the respondents indicated that Health workers in Primary Health Centres were their main source of EBF awareness. Respondent 5 in Kokona attest to this:

I got to know about exclusive breastfeeding in the hospital during antenatal visits, I received breastfeeding education during antenatal in this PHC and privileged to receive adequate information because; it is health professionals that dish out the information to us.

The statement above was supported by Participant 3 nursing mother in Sabon Gari:

I was aware of EBF through Health workers. Majority of the women in Kokona here, especially pregnant women and lactating mothers, heard about exclusive breastfeeding in the hospital because, during antenatal visits, we are taught on issues like family planning and hygiene so exclusive breastfeeding is no exception. There are women who do not go to the hospital when they are expecting. They allow traditional birth attendants to attend to them throughout their pregnancy. So, such women may not be privileged to hear about it and even if they do, they get half-baked information.

Concerning the importance of EBF and awareness of colostrum, most of the nursing mothers affirmed that children that are exclusively breastfed are healthier and very intelligent because of the colostrum. Though most nursing mothers do not have much knowledge of the importance of colostrum, the practice of feeding babies with it is high. However, Participant 2 of the nursing mother in Angwa Waje said:

When children are given colostrum and are exclusively breastfed, illness rate is minimized and that will reduce spending on hospital treatments especially on illnesses like diarrhea which is mostly caused by unclean water. In fact, the child will be automatically protected from contaminated foods and from unsafe methods of preparation. Most women do not sterilize their feeding bottles and these things are harmful to the child. Breast milk is also cheaper and saves money from treating diseases.

The statement above was supported by Participant 6. Nursing mother in Sabon Gari who said that:

Children that are exclusively breastfed grow up to be more intelligent. We were told that exclusive breastfeeding enhances brain development and learning readiness. Some mothers who practiced exclusive breastfeeding before, come back to say that they have noticed the differences between their children who were not exclusively breastfed and the ones that were breastfed exclusively, in terms of intelligence. Especially the yellowish milk, we were told not to throw it away as culture demands but to feed our babies with it.

Participant 4 in the Garaku session said that:

I heard from the radio discussion programme that mothers should breastfeed their babies for 6 months without giving them water and we should give them the first milk which is yellowish in colour (colostrum), it is very healthy for babies and we should not throw it away. That is what I heard from the radio programme, but I do not know the exact importance of it. I did practice it because of what I heard from the radio and health workers.

Most women complained that the six-month duration is a long time for them to breastfeed exclusively due to health challenges and non-support from family members, but others complained that it is too stressful and demanding. For some of the mothers, culture is another strong reason for their noncompliance with EBF. Some women actually start but stop before six months. They give several reasons why they were not able to continue to the end, they actually start breastfeeding exclusively but then, they do not complete it and that automatically makes it mixed feeding and not exclusive because exclusive requires six months with no alternative food. Furthermore, Participant 3 of nursing mother in Garaku responded that:

A close relative told me that exclusively breastfed infants have difficulty in adjusting to other meals when introduced. This discouraged me not to practice because I felt that it can make my baby not adjust and eat well.

One of the experienced mothers, Participant 4 in Angwa waje agreed with the previous mother by stating that culture is a strong reason for the non EBF practice:

In my culture breast milk is not the first thing the baby is being fed with but honey and in my cousin husband's culture, babies are first fed with date fruit. I was also taken to a

traditionalist for consultation because I previously lost an infant child and I was told that I have bad milk and should not breastfeed.

There are cases where babies are born doing fine but their mothers become really sick and might not be able to breastfeed. There are also cases where the breast is infected, some women's nipples do not have pores (holes) where breast milk will be drained from. So, all these health reasons hinder the practice. Findings from Participant 2 from Garaku revealed that health challenges were what limited her from six months practice.

My medical conditions actually delay lactation. I had a traumatic delivery, I gave birth through a caesarean section and had an infection. I had to look for an alternative which makes the practice of exclusive breastfeeding impossible.

Some nursing mothers want to practice exclusive breastfeeding but their mothers, their mother in-law or both of them kick against it saying they are starving babies or the baby is dehydrated. So, most times the mothers are helpless especially when complaints are coming from their mother in-law and since they do not want problems they succumb.

Participant 1 from Kokona affirm to this:

My mother-in-law, who came to cater for me and my child after delivery, questioned the EBF method because of her experience in child care. My husband's family members do not support EBF at all, whenever they come around, they come with cultural ways of childcare that do not conform to the rules of exclusive breastfeeding at all.

Support is a strong tool of motivation especially from husbands, mother in-law and close relatives but then, support can be in a negative or positive form. Relatives who approve of exclusive breastfeeding will, of course, support the mothers and relatives who do not approve will support otherwise.

Discussion of Findings

Interpretatively, the data analysed indicated that 45 % of the respondents are highly aware of radio broadcast campaigns on exclusive breastfeeding in Nasarawa state. There's no doubt that the nursing mothers of children aged 6-24 from rural and urban locations are aware of exclusive breastfeeding campaigns on the broadcast media but their percentage is low. This revelation is similar to the findings of Uwalaka & Nwala (2020) which revealed that breastfeeding mothers in Port Harcourt received information about and learning about exclusive

breastfeeding through social media platforms.

The women in this study were majorly illiterate 28% and primary school certificate holders, those with school leaving certificate or grade II Teachers or equivalent 27%, had, an average, completed their secondary education. This result is contrary to the finding in a study conducted by Udujih, et al. (2023) on Breastfeeding practice and awareness among women of childbearing age in Abia state, which reveal that Women high levels of education, influenced their awareness of exclusive breastfeeding.

Also in table four, it showed that 117 of the respondents agreed that they listen to exclusive breastfeeding radio broadcast campaign programmes in Hausa language which created awareness on the benefits of breastfeeding exclusively. The implication of this is that the higher percent of the respondents agreed that exclusive breastfeeding campaign has been helpful to them since they frequently listen to the radio broadcast campaign on breastfeeding. However, this means that the women hold a positive perception towards exclusive breastfeeding radio broadcast campaigns because it is disseminated in common language they understand, which makes it quite engaging (53.2%) and informative (58.9%). This finding is similar to Utalor (2019), who found that women had a favourable attitude about broadcast media messages on maternal health. This finding is contrary to the findings of Eze (2020), who stated that despite the well-established benefits of exclusive breastfeeding and massive campaign on awareness about the need to exclusively breastfeed babies, the social structure of communities and social interaction within the community influence mothers' perceptions and acceptability of the practice

Analysis of findings revealed that 57% of the respondents agreed that they practice exclusive breastfeeding for 6 months as stated by UNICEF (2018) and WHO (2017). 15% and 10% indicated a level of commitment as they breastfed their children with only breast milk for 4 months and 5 months without food or water respectively. Though this is not definite as exclusive breastfeeding, mothers in FGD revealed that health challenges and non-support from family members limited them from six months practice. This implies that the respondents practice exclusive breastfeeding as a result of the knowledgeable information obtained from the discussion programme (77% from radio broadcast media campaigns on exclusive breastfeeding). This result is similar to Utalor's (2019) findings, which found that women agreed with the statement that broadcast media favourably affect their attitudes regarding maternal

health.

Data from FGD sessions revealed that the source of most nursing mother's awareness of EBF and its importance was through radio broadcast campaigns and from Health Workers. Some of the women also indicted religious leaders as sources of their awareness of EBF. The knowledge of the importance of colostrum is low but the practice of feeding babies with it is high. For instance, most of the mothers that participated in the sessions showed a significant awareness level of EBF through radio and the need to breastfeed infants with colostrum but they cannot outline the importance. However, in the course of discussion, participant 4 in the Garaku session said:

I heard from the radio discussion programme that mothers should breastfeed their babies for 6 months without giving them water and we should give them the first milk which is yellowish in colour (colostrum), it is very healthy for babies and we should not throw it away. That is what I heard from the radio programme, but I do not know the exact importance of it. I did practice it because of what I heard from the radio and health workers.

Her submission apparently shows that her awareness of EBF was both from radio broadcasts and Health workers which led to her practicing it. Through these sources (Health workers and radio broadcast) she was informed about EBF and she did practice it, by feeding her child with Colostrum even though she lacked the full knowledge of its importance.

Some of the mothers who participated in the discussion from Kokona LG indicated that the information obtained from the radio broadcast is in Hausa which explains that colostrum should not be discarded as culture advised, but emphasis on the healthy content for their babies as it serves as medicine and keeps children healthy.

Conclusion

Consequential upon the foregoing findings, the study concluded that less than half of the respondents are highly aware of exclusive breastfeeding practice radio campaigns in Nasarawa State. The importance of Exclusive breastfeeding is communicated to women through various types of programmes to create awareness for a positive attitude towards EBF but there is more need to intensify awareness through radio broadcast campaigns. Therefore, to actualise the desired behavioural change (Exclusive breastfeeding), it is necessary to fully utilise the radio broadcast media since it has the capacity to reach a wider audience.

Recommendations

Having established the findings that the nursing mothers are aware of EBF through radio broadcast campaign and hold a positive perception towards exclusive breastfeeding campaign, the study therefore is recommending the following:

1. Since the radio has power to influence people, the right communication strategies should be developed for more publicity on exclusive breastfeeding campaigns, so as to achieve the goals of exclusive breastfeeding campaigns.
2. Public and Private radio organisations should Intensify radio campaigns to promote exclusive breastfeeding practices among nursing mothers.
3. All radio organisations should conduct regular monitoring and evaluation of their EBF media campaigns to assess their effectiveness.

References

1. Alade T. T., Bamidele T. O., Owoeye S. T. (2021). Factors Affecting Exclusive Breastfeeding among Nursing Mothers in Ekiti State, Nigeria. *World Journal of Innovative Research (WJIR)*, 10 (2) , 16 - 19 . <https://doi.org/10.31871/WJIR.10.2.23>
2. Andy, E. (2015). A literature review of the factors that influence breastfeeding: an application of the health belief model. *International Journal of Nursing and Health Science*, 2 (3) , 28 - 36. <http://hdl.handle.net/123456789/1010>. Retrieved 13th November, 2023
3. Anwumabelem, A.C. & Asemah, E.S. (2023). Exposure and responsiveness to covid-19 media campaigns among Edo state Residents. In E.A. Asemah, O.D. Ekharefo. & T. Santas. (Eds.), *Insight to behavioural change communication* (pp.). Jos: Jos University Press.
4. Asemah, E. S. (2012). The reach and impact of television communication on reproductive health in Anyigba, kogi state Nigeria: a critical analysis. *Journal of Linguistic and Communication studies*, 2(1), 219-230.
5. Asemah, E. S., Nwammuo, A.N., & Nkwam-Uwaoma, A.O.A. (2017). *Theories and model of communication*. University Press.
6. Chineke, H., Iwu, A., Diwe, K., Duru, C., Uwakwe, K., Emmanuel, E., Oluoha, U., Madubueze, U., Ndukwu, E. & Ohale, I. (2017). The Practice of Exclusive Breastfeeding and Its Sociodemographic Determinants amongst Nursing Mothers at a Tertiary Health Care

- Institution in South East, Nigeria. *Open Journal of Preventive Medicine*, 7(3), 63-73. Doi: [10.4236/ojpm.2017.74006](https://doi.org/10.4236/ojpm.2017.74006). Retrieved 20th November, 2023.
7. El-Houfey, A.A., Saad, K., Ahmed, A.M., Mahmoud, S.R. & Wadani, M. (2018). Factors that influence exclusive breastfeeding: a literature review. *International Journal of Nursing, Midwife and Health Related Cases*, 4(2), 16-28. DOI: 10.15520/ijnd.2017.vol7.iss11.264.24-31.
 8. Eze, N.C. (2020). Media campaign on exclusive breastfeeding: Awareness, perception, and acceptability among mothers in Anambra State, Nigeria. Information Resources Management Association. In K.P. Mehdi (Eds). *Media content review s y* <https://www.researchgate.net/publication/338302173-media-campaign-on-exclusive-breastfeeding/>.
 9. Ezeah, H.G. & Odionye, M. C. (2021). Exclusive breastfeeding media campaigns among nursing mothers in Imo state, Nigeria. *International Journal of Research in Arts and Social Sciences*, 10(1), 308/325. <https://www.researchgate.net/publication/356718243-exclusive-breastfeeding-media-campaigns-among-nursing-mothers-in-imo-state-nigeria>. Retrieved 15th August, 2023.
 10. Ezegwu, D. & Madaki, W.M. (2023). Building sustainable health behavior values among men in rural areas through mass media enlightenment campaign on prostate cancer in Nigeria. In E.S. Asemah, D.O. Ekharefo & T. Santas. (Eds). *Insight to behavioural change communication*. Jos University Press. 192-202.
 11. Federal Ministry of Health. (2017). National health policy and strategy to achieve quality reproductive and sexual health for all Nigerians. https://clr.afrcanchildforum.org/policy%20per%20country/nigeria/nigeria_reproductivehealth_2001_en_pdf/
 12. Federal Ministry of Health. (2017). National health accounts: Technical report. <https://www.health.gov.ng/>. Retrieved 18th August, 2023.
 13. Fatile, A. (2022). Knowledge, perception and practice of exclusive breast feeding among women of reproductive age in selected clinics of Ondo state. *Nigerian Medical Journal*, 58 (4), 532-555. Doi: 10.4103/nmj.NMJ_289_16. Retrieved 20th September, 2023.
 14. Holtzman O, Usherwood T. (2018). Australian general practitioners' knowledge, attitudes and practices towards breastfeeding. *PLoS ONE*, 13 (2), doi: 10.1371/journal.pone.0191854 Retrieved 5th November 2023.
 15. Iheanacho, O. C., Anyaegbu, I. & Etumnu, E. W. (2021). Influence of broadcast media campaigns on creating awareness on exclusive breastfeeding: a study of Owerri urban. *American Journal of Humanities and Social Sciences Research*, 5 (9), 168-175. <https://hal.science/hal-04135418>.
 16. Ihudiebube-Splendor, C. N., Okafor, C. B., Anarado, A. N., Jisieike-Onuigbo, N. N., Chinweuba, A. U., Nwaneri, A. C., Arinze, J. C., & Chikeme, P. C. (2019). Exclusive breastfeeding knowledge, intention to practice and predictors among primiparous women in Enugu south-east, Nigeria. *Journal of Pregnancy*, 1 - 8. <https://doi.org/10.1155/2019/9832075>. Retrieved 5th August, 2023.
- Jama**
17. A., [Gebreyesus](#), H., [Wubayehu](#), T., [Gebregyorgis](#), T., [Teweldemedhin](#), M., [Berhe](#), T & [Berhe](#), N. (2020). Exclusive breastfeeding for the first six months of life and its associated factors among children age 6-24 months in Burao district, Somaliland. *International Breastfeeding Journal*. 15 (5), 2-8. <https://doi.org/10.1186/s13006-020-0252-7>. Retrieved 18th November, 2023.
 18. Jati, H. F., Darsono, S. N. A. C., Hermawan, T., Yudhi, W. A. S., & Rahman, F. F. (2019). Awareness and knowledge assessment of sustainable development goals among University students. *Jurnal Ekonomi & Studi Pembangunan*, 20(2), 163-175. DOI: 10.18196/jesp.20.2.5022. Retrieved 13th October, 2023.
 19. Meme FC, Oche MO. (2019). Awareness and attitude of men towards exclusive breastfeeding in Sokoto Metropolis. *Yen Med Journal*, 1(1), 10-14
 20. Motilewa, O.O. Ekanem, A. M. & Iyanam.V.E. (2019). Awareness and determinants of exclusive breastfeeding practices among nursing mothers attending Primary Health Care facilities in Uyo, Nigeria. *AJMAH*, 14 (4), 1-14
 21. Mwiza, T., Chanda, D. & Musenge, E. (2023). Determinants of Breastfeeding Practices among Working Mothers in Solwezi District of Zambia. *Open Journal of Obstetrics and Gynecology*, 13(3), 465-480. Doi:

- [10.4236/ojog.2023.133043](https://doi.org/10.4236/ojog.2023.133043). Retrieved 26th November, 2023.
22. National Bureau of Statistics. (2020). *Demographic statistics bulletin 2020*. Abuja, Nigeria; NBS.
 23. National Population Commission (NPC) (Nigeria) & ICF. (2019). [Nigeria Demographic and Health Survey 2018](#). NPC and ICF, Rockville.
 24. Naugle, D. A. (2016). The Evaluation of a Mass Media Campaign to Promote Exclusive Breastfeeding in Vietnam. Publicly Accessible Penn Dissertations. <http://repository.upenn.edu/edissertations/1911>. Retrieved 12th August, 2023.
 25. Neji, O.I & Chidiebere, C. C. (2019). Exclusive breastfeeding perception and practice among nursing mothers attending infant welfare clinic in a secondary health facility in southern Nigeria. *African Journal of Health, Nursing and Midwifery*, 2(1), 22-34. DOI: 10.13140/RG.2.2.30453.63200. Retrieved 13th October, 2023.
 26. Nnabuenyi, U. M. (2023). Seasonal disease and the limitations in creating behavioural change awareness in Nigeria. In E.A. Asemah, O.D. Ekhareafu. & T. Santas. (Eds.). *Insight to behavioural change communication*. Jos University Press.
 27. Ogbo, F.A., Page, A., Agho, K.E & Claudio, F. (2015). Determinants of trends in breastfeeding indicators in Nigeria, 1999-2013. *Public Health Nutr.* 18(18), 3287-3299. Doi: 10.1017/S136898001500052X. Retrieved 16th August, 2023.
 28. Ogbo, F.A., Page, A., Idoko, J., Claudio, F. & Agho, K.E. (2017). Have policy responses in Nigeria resulted in improvements in infant and young child feeding practices in Nigeria? *International Breastfeed Journal*, 8(12), 1-10. DOI: 10.1186/s13006-017-0101-5
 29. Ogbodu, M., Ogunyemi, O.E. & Asemah, E.S. (2023). Attitude of Benin residents towards media campaigns against land grabbing. In E.S. Asemah, D.O. Ekhareafu & T. Santas. (Eds). *Insight to behavioural change communication*. Jos University Press.
 30. Sholeye, O.O., Abosede, O.A & Salako, A.A. (2015). Exclusive breastfeeding and its associated factors among mothers in Sagamu, southwest Nigeria. *Journal of Health Science*. 5(2), 25-31. Doi: 10.5923/j.health.20150502.01. Retrieved 12th August, 2023.
 31. Santas, T. (2013). Radio educational programme as tool for learning among Secondary School students in Lafia Metropolis. *Kogi State University Journal of Mass Communication*. 2. Pp 164-155.
 32. Santas, T. & Ogoshi, J.D. (2015). Mass Media and Challenges of Sustainable Development in Nigeria: *International Journal of Research and Development Studies*. (13) 1. Pp51-61.
 33. Udujih, G. O., Elekanachi, H., Udujih, H. I., & Iwuala, C. C. (2023). Breastfeeding practice and awareness among women of child bearing age in Abia State Nigeria. *British Journal of Healthcare and Medical Research*. 10(4), 79-84. DOI:10.14738/bjhm.104.14393. Retrieved 15th October, 2023
 34. United Nations International Children Emergency Fund (UNICEF). (2016). The state of the world's children 2016: a fair chance for every child. New York: UNICEF. https://www.unicef.org/media/50076/file/UNICEF_SOWC_2016-ENG.pdf. Retrieved 15th August, 2023.
 35. United Nations Educational, Scientific and Cultural Organisation (UNESCO). (2017). World radio day 2017: the audience is at the heart of the broadcast. <https://www.unesco.org/en/articles/world-radio-day-2017-audience-heart-broadcast> United Nations International Children Emergency Fund (UNICEF). (2016). The state of the world's children 2016: a fair chance for every child. New York: UNICEF. https://www.unicef.org/media/50076/file/UNICEF_SOWC_2016-ENG.pdf. Retrieved 15th August, 2023
 36. UNICEF. (2018). *State of the world children 2018*. UNICEF.
 37. UNICEF. (2024). Child survival and the Sustainable Development Goals (SDG). <https://data.unicef.org/topic/child-survival/child-survival-sdgs/>.
 38. Utalor, J.C. (2019). Influence of broadcast media messages on awareness, perception and attitude of maternal health among reproductive women in Ilorin. *African Journal of Social Sciences and Humanities Research*, 2(1), 57-116. <https://abjournals.org/ajsshr/papers/volume-2/issue-1/influence-of-broadcast-media-messages-on-awareness-p...>
 39. Uwalaka, T. & Nwala, B. (2020). Social media influence on exclusive breastfeeding among expecting mothers in Port Harcourt. *The*

- Nigerian Journal of Communication (TNJC)*, 17 (2) , 1 9 1 - 2 1 0 .
https://www.researchgate.net/publication/344710060_social_influence_on_Exclusive_Breast_Feeding_amongexpecting_mothers_in_Port_Harcourt...
40. Vera, N. O. & Ufuoma, E. (2020). Awareness of information and communication technology based information resources in library user education programmes in colleges of education in Southern Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 11(4), 156-171, DOI: <https://dx.doi.org/10.4314/ijikm.v11i4.15>. Retrieved 13th October, 2023.
 41. World Health Organization (WHO). (2017). Protecting, promoting and supporting maternity and new born services. Switzerland: World Health Organization. apps.who.int/iris/bitstream/hanssdle/10665/2593869789241550086. Retrieved 17th August, 2023.
 42. WHO. (2023). Promoting baby - friendly hospitals. <https://www.who.int/activities/promoting-baby-friendly-hospitals>. Retrieved 13th October, 2023.