

**INFLUENCE OF CORONAVIRUS BROADCAST MEDIA CAMPAIGNS ON THE KNOWLEDGE,
ATTITUDES AND PRACTICES OF RESIDENTS OF EDO STATE, NIGERIA**

By

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Abstract

Preventive measures have been found to have great potential in curtailing the spread of infectious diseases like COVID-19. However, these measures are only as effective as the proportion of the population that knows and adheres to them. Against this backdrop, this study evaluated the influence of broadcast media campaigns on the knowledge, attitudes and practices of residents of Edo State, Nigeria, in relation to the COVID-19 pandemic. Anchored on the Agenda Setting Theory and Health Belief Model, the survey method was adopted for the study, using questionnaire as the instrument for data collection. A sample size of 385 was statistically determined using the online Australian calculator but 342 respondents formed the eventual sample. Analyses were done using, frequency tables and percentages. The weighted mean of the knowledge, attitudes and practices question categories was also calculated. Findings revealed an impressive influence of media campaigns on the knowledge, attitudes and practices of the respondents. However, the results also showed a general hesitancy towards the COVID-19 vaccines indicated in refusal to take them. This was due to lack of trust in the Nigerian government and information emanating from it. Thus, it was recommended that there should be well articulated collaboration between key health institutions, particularly the NCDC, and the Nigerian media in the dissemination of information which will go a long way in improving believability of coronavirus statistics and other health information in the country.

Key words: *coronavirus, media campaigns, health communication, behaviour change*

Introduction

The coronavirus pandemic has demonstrated how devastating pandemics can be to nations across the globe, claiming millions of lives and bringing economies to their knees. A pandemic has been defined as “a disease outbreak that spreads across countries or continents” and “takes more lives than an epidemic” (WebMD Editorial Contributors, 2022). By virtue of their international spread, pandemics attract dire consequences for affected countries, thus making them issues of international focus and emergency. Huremovic (2019) opines that they have powerfully shaped the economic, political, and social aspects of human civilisation, with their effects often lasting for centuries. From as far back as 430 B.C. during the Peloponnesian War in Athens, nations across the globe have been plagued with different episodes of pandemics. According to Huremovic (2019), the Athenian plague that occurred in 430-26 BC during the Peloponnesian war originated in Ethiopia, and from there it spread throughout Egypt and Greece, killing

tens of thousands. Some other pandemics that shook history, according to Huremovic, include the mid-sixth century AD Justinian plague, the 1334 Black Death plague (which lasted for 50 years), HIV/AIDS (which has existed since the early 1980s), the 2009 Swine flu and Ebola disease (2014 – 2016).

Coronavirus, like other pandemics, has made a sad impact, so much so that it has been grouped amongst the ten most devastating pandemics in history with the 1918 flu topping the list. Piper (2021, para. 3) stated that COVID-19 grew so much as to become comparable to the other horrific pandemics of history, adding that:

It is not as bad, of course, as the 1918 flu pandemic, or as notorious as the Black Death. But it has long surpassed the death toll of SARS (2002-2004), MERS (2012, 2015, and 2018), the 1957-58 and the 2009 swine flu. By sheer number of casualties, Covid-19 ranks among the 10 deadliest plagues in history.

The ravaging impact of this virus is best explained by the sad state of world economies following an initial lockdown, a containment measure that kept citizens locked in their homes with commerce put on hold, thus making the pandemic not only a health pandemic but also an economic pandemic. According to Jones *et al.* (2021), the International Monetary Fund (IMF) estimates that the global economy shrunk by 4.4% in 2020 which the organisation described as the worst decline since the Great Depression of the 1930s. In Nigeria, Andam *et al.* (2020) observe that the country's GDP fell by 23% during the lockdown.

As part of efforts to see to the extinction of the virus, the Federal Ministry of Health and the National Centre for Disease Control (NCDC) in collaboration with the various state ministries of health and private organisations (including media organisations) carried out sensitisation campaigns on the disease via various media platforms, particularly the broadcast media, which are the focus of this research. This is in cognisance of the powerful effect of enlightenment messages on health consciousness and behaviours which echoes the indispensable place of the mass media in the fight against diseases. Tabassum *et al.* (2018) explain that behaviour-changing interventions are key to prevention and management of diseases and mass media campaigns owing to their broad reach have the potential to influence target audiences' attitudes towards healthy behavioural changes. The campaigns on coronavirus in the country were focused on creating awareness on the mode, symptoms and transmission of the disease and sensitising Nigerians on the established non-pharmaceutical measures required to curtail the spread of the disease.

Statement of Problem

There appeared to be a general skepticism regarding the existence of coronavirus in Nigeria. Many Nigerians disregarded coronavirus messages as mere media-popularised hoaxes concocted by the government. They questioned the authenticity of reports disseminated via the Nigerian mass media and the necessity for health communication via the media. This skepticism of broadcast media reports occasioned by counterfeit information disseminated on social media platforms by peddlers of 'fake news' posed a huge challenge to the impact of the campaigns on coronavirus disseminated via the mass media responsible for the daily updates on the virus in the country. Perhaps this skepticism re-echoed or even exacerbated the longstanding issues of corruption and distrust of the people in the Nigerian government and the unenvied place of the mass media as the underdog in the government-media relationship. The implication could be the utter disregard of sensitisation campaigns resulting in gross negligence of COVID-19 precautionary protocols and resistance to vaccination and, an increased coronavirus-susceptible nation, making the virus more dangerous than it should be. Mbamalu (2020) notes that as of June 2020 in Lagos, life returned to how it once was – carefree and overcrowded. The foregoing made it imperative to evaluate the influence of coronavirus campaigns on the residents of Edo State, Nigeria which was achieved by studying their knowledge, attitudes and practices (KAP) as influenced by the campaigns. This was expected serve as a gauge to measure the influence of the campaigns with regards to making COVID-19 public agenda and influencing behavioural change. The study also hoped to identify factors interfering with the intended influence of the campaigns and to point out what needed to be done to better achieve the objectives of these and future communication campaigns to fight disease outbreaks.

Research Questions

The study sought to find answers to the following questions:

- 1) What is the level of audience exposure to the broadcast media campaigns on coronavirus in Edo State, Nigeria?
- 2) What is the level of knowledge of coronavirus disease from broadcast media campaigns among residents of Edo State Nigeria?
- 3) What is the extent to which broadcast media campaigns on the coronavirus have influenced the attitudes of Edo State residents towards curtailing the spread of the disease?
- 4) What is the level of influence of coronavirus broadcast media campaigns on health practices of Edo State residents?

Literature Review

Coronavirus Disease or COVID-19 Explained

COVID-19 is a highly transmittable and pathogenic viral infection that primarily targets the human respiratory system. The symptoms include fever, chills, coughing, shortness of breath, sore throat, congestion or a running nose, fatigue, headache, muscle pain, loss of taste or smell, nausea and diarrhea (Rothan & Byrareddy, 2020). The symptoms of COVID-19 infection appear after an incubation period of approximately 52 days.

The virus gets its name from the Latin word “corona” which means crown. This is because of the crown-like projections on the pathogen’s surface (Fehman, 2021). It has also been discovered that the virus is more potent in relatively cold weather conditions or climate which explains why its effect in Africa is minimal compared to other continents, like North America and Europe. The virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, as such, it is medically advised that individuals practise respiratory etiquette (for example, by coughing into a fixed elbow), practise proper hygiene by washing hands regularly or using an alcohol-based rub frequently and avoiding touching one’s face (WHO, 2020a).

The fight against COVID-19 has resulted in the production of vaccines against it. According to the Director General of the National Agency for Food and Drug Administration and Control (NAFDAC), Prof. Mojisola Adeyeye, the approved vaccines for COVID-19 in Nigeria include Moderna and AstraZeneca (Obinna, 2021).

Media Health Campaigns

Health campaigns are effective tools of the media in health communication. Health communication revolves around using communication to create and increase public awareness of a disease and foster social norms that favour healthy living. Health communication is "the study and use of communication strategies to inform and influence individual and community decisions that enhance health" (The Community Guide, 2022). Health campaigns are activities through which series of information are targeted at a certain or general audience with the aim of expanding their health knowledge and influencing their health attitudes and behaviours in certain ways. Typically, these campaigns are paid for and are expected to run for a certain timeframe which could be extended depending on the results. According to Community Preventive Services Task Force. (2011), health communication campaigns “apply integrated strategies to deliver messages designed, directly or indirectly, to influence” target audiences’ attitudes about changing or maintaining health-related behaviours.

Newbold and Campos (2011) observe that mass media campaigns are widely used in public health for various reasons and have indicated positive outcomes in terms of reach and public awareness. Some notable health campaigns in Nigeria, include; the HIV/AIDS “*Zip Up*” campaign sponsored by the Society for Family Health (SFH) in conjunction with some of Nigeria’s faith-based organisations and the National Action Committee on AIDS (NACA), the ‘*GREEN DOT*’ Family planning campaign launched by the Federal Government and the Pap Smear “*A Smear in Time Saves My Woman*” a one-month cervical cancer campaign sponsored by Chain Reactions Nigeria in partnership

with St. Ives Specialist Hospital. Another is the “Mosquito Free Nigeria” Malaria elimination campaign launched by the Corporate Alliance on Malaria in Africa (CAMA) in conjunction with Etisalat Nigeria. There have also been campaigns on polio immunisation, breast cancer, exclusive breast feeding, Lassa fever and Ebola.

Some Coronavirus Broadcast Campaigns in Nigeria

(a) Take Responsibility (February 2020 to 2022)

As part of government’s effort to galvanise Nigerians in the battle to stop the spread of the COVID-19 disease in the country, the NCDC launched a campaign against the disease with the theme “*Take Responsibility*.” The campaign was designed in multi-media formats and targeted at all age groups in the country. The campaign messages disseminated non-pharmaceutical methods prescribed by the world Health Organisation (WHO) to stop the spread of coronavirus in English, Igbo, Hausa, Yoruba and Pidgin English. The NCDC used an integrated media approach, including print, radio, social media platforms and outdoor media (handbills and banners) in spreading the key NCDC guidelines and safety precautions. NCDC also declared that the campaign emphasised the responsibility of Nigerians, the government, private sector, institutions, associations, communities and individuals in implementing and adhering to the COVID-19 prevention and response measures (NCDC and NNPC-IPPG Reinforce #TakeResponsibility Theme ..., 2020).

(b) Celebrate Responsibly (December 1st, 2020 to January 1st, 2021)

In line with the aim of the *Take Responsibility* campaign, the NCDC launched a corollary campaign during the yuletide season in 2020 with the theme “*Celebrate Responsibly*.” According to the NCDC, this campaign focused on reminding Nigerians not to let down their guards while celebrating. The campaign message was disseminated via radio, television, newspapers, SMS and social media platforms (Twitter (now X to be precise) and translated into different languages for a wide reach (NCDC, 2020).

(c) Wear It for Me (September 1st to 30th, 2020)

As part of their Corporate Social Responsibility (CSR), one of Nigeria’s major telecommunications service provider, Mobile Telecommunications Network (MTN), launched the *Wear It for Me* campaign on September 1st, 2020. Richard Iweanoge, GM, Brand and Communications Marketing Division of the telecommunications brand, explained that the campaign was aimed at encouraging Nigerians to use face masks in an active and responsible manner to prevent spreading the infection to others. MTN used diverse media platforms to spread the *Wear It for Me* message. It aired a commercial on several television stations in the country which featured teens and children. Furthermore, enormous billboards were erected in major cities in Nigeria. The brand also employed print media with feature articles appearing in *The Punch*, *The Vanguard*, *ThisDay*, *TheCable*, and other publications. Social media were also not left out of the campaign, particularly then Twitter. MTN further disseminated series of short service messages (sms) to the network’s subscribers on the need to use a face mask. The brand designed facemasks with names of individuals on them and had them delivered to their doorsteps to their utter surprise. However, the recipients of these custom-made masks were mainly celebrities and influential Nigerians. (MTN Group, 2020).

(d) Mask-up Naija (August 7th to 14th, 2020)

As an effort against coronavirus, the Pandemic Action Network (PAN) in conjunction with the WHO, African Centre for Disease Control and Prevention (Africa CDC) and private companies working to curb the spread of COVID-19 globally, set aside August 7th-14th 2020 to commemorate World Mask Week, with each day used to campaign for the regular use of face masks. According to the Director General of the NCDC, Dr. Chikwe Ihekweazu, the campaign was aimed at reinforcing the importance of wearing a face mask to reduce the spread of COVID-19. Dr. Ihekweazu further explained that the use of face masks is a key component of infection, prevention and control (IPC), adding that given the widespread community transmission of the disease in Nigeria, strict adherence to the use of masks in public spaces particularly, where physical distancing may not be practical, can help slow the spread of the virus. In order to achieve the aims of the campaign, the WHO Risk Communication team sponsored the production of jingles, talk shows and TV animations aired across major traditional media stations in the country, all emphasising on the necessity of having a face mask and using it appropriately. Also, graphic designs of people wearing face masks were created

and posted on social media. Unlike the other campaigns which were country specific or continent specific, the *Mask-up* campaign was a worldwide affair, so, just as we had *Mask up Naija*, in the US, there was *Mask up America* and according to a WHO report on the launching and execution of the campaign, Nigerians applauded it (WHO, 2020b).

(e) Hand Hygiene Campaign (January 2020 – 2021)

Based on the efficacy of hand hygiene in curtailing the spread of diseases, WaterAid group launched the Hand Hygiene Campaign as a contribution to the fight against COVID-19 in Nigeria. The Group had two primary and secondary target groups.

- **Primary target:** the general public, with special attention to the elderly, socially excluded and people with underlying medical conditions.
- **Secondary target:** Health care staff, students, factory workers, CSO and social leaders (as change agents).

The campaign took a two-phased approach. The first phase involved the use of traditional mass media, digital media and social media platforms to disseminate the message to the public. It also involved siting hand washing facilities in strategic towns and villages. The activities in phase two involved all phase one activities and some additional activities, such as ramping up existing hygiene behaviour change campaigns and community activities. Radio and television campaign messages took the form of jingles, PSAs, debates, storytelling and quizzes. On newspapers, illustrations focusing on key promotional behaviours were published. The group also employed posters, stickers, leaflets and handbills for the campaign. On social media, particularly WhatsApp, Instagram, Facebook and Twitter, miniseries and short messages were designed and disseminated to the users (WaterAid, n.d).

(f) FG's Public Enlightenment Advocacy Campaign (April 2020)

In view of the coronavirus pandemic, the Nigerian government created a campaign to enlighten Nigerians on the disease and the prescribed safety measures. The then Nigerian Minister of Information and Culture, Alh. Lai Mohammed, explained that the campaign ran on TV and radio focusing on the NPIs, i.e., social distancing and mass gathering restrictions, regular use of face masks and good hygiene. The campaign messages were in the form of jingles and skits packaged in English, Pidgin, Igbo, Yoruba and Hausa played on Nigeria Television Authority ((NTA), Radio Nigeria, News Agency of Nigeria (NAN) and Voice of Nigeria - VON (Adeyemi, 2020).

Challenges to the Effectiveness of Broadcast Media Health Campaigns on Coronavirus in Nigeria

1. Government and NCDC's secrecy

Kapur and Suri (2020) posit that one approach to efficient management during a pandemic is transparency in communication. But there were issues of secrecy in the activities of the Nigerian government and the NCDC which seemed to hinder the efforts of the media in gathering information (Ohaja *et al.* 2023). One instance was when the owner of Africa Independent Television (AIT), Raymond Dokpesi, and his family were released from an isolation centre and he said he did not know the difference between malaria and COVID-19 because he was given headache and malaria treatment while in the isolation centre. The federal government charged that he was breaching national security because he narrated the situation in Nigeria's isolation centre where reporters had scarcely been allowed entry (Video: Help! I don't know difference between malaria and COVID-19 – Dokpesi, 2020).

The death of then Chief of Staff to the President, Abba Kyari, is another example. One month after Kyari's death, Lagos State Health Commissioner, Akin Abayomi, revealed he died in a private hospital in Lagos. The same commissioner initially denied knowledge of Kyari's whereabouts. Furthermore, the said hospital had earlier denied treating Kyari and just a day before the commissioner's revelation, the Minister of Health had said that no private hospital was permitted to treat coronavirus patients in Nigeria (Mojeed, 2020).

The situation is summed up in Martins Ifijeh, health correspondent for *THISDAY* newspaper's lamentation that there is a knowledge gap between journalists and critical stakeholders in the health sector (Onyeji, 2019).

2. Fake news

Fake news is a false or misleading information presented as news. It is a fabricated story peddled as authentic. Many rumours and false news stories circulated about COVID-19, making it difficult to distinguish fake news from reports whose veracity should not be questioned. In Nigeria, some people doubted the existence of COVID-19, some said it was a scheme for politicians to loot money, a segment of the public linked the disease to 5G network while some Christians linked it to rapture or the Second Coming of Christ (Wonodi *et al.*, 2022).

Consequently, misinformation on social media fuelled panic among members of the public regarding COVID-19, prompting the government to urge citizens to confirm the genuineness of stories before circulating them and the NCDC to launch a chatbot in collaboration with UNICEF to debunk fake news about COVID-19 (NCDC and UNICEF Launch Chatbot ..., 2020).

3. Lack of trust in the government

Many Nigerians are often in doubt of the sincerity of their leaders and media, especially government-owned ones, which are seen as the appendages of the ruling class and government in power. The citizens also believe that for every "truth" told by mainstream media, there are other "facts" that are being shielded from the public glare. The Nigerian media are, therefore, perceived as a compromised institution that provides remarkable examples of partisanship and recklessness. Lamenting its implication on the current decline in newspaper purchase, Idris (2020) reported that a 2006 poll found that 75% of Nigerians believed that the government interferes with the media resulting in reduced public trust in the media.

Following the index case of COVID-19 announced on March 27th, 2020 in the country, government officials in turns began to declare their COVID-19 status: infected, in self-isolation and recovered, which is why the disease was pegged as a preserve for the rich. Rather than create awareness, most Nigerians interpreted it as a calculated gimmick to milk the financial gains from the COVID-19 situation (Nwozor & Okudua, 2021).

4. Paucity of reports from the perspective of infected individuals

During the lockdown, President Muhammadu Buhari included media practitioners among the frontline workers or as the Presidential Task Force (PTF) called them, "essential services." They were expected to convey reports as seen and heard. But as was the case during epidemics such as Ebola, Lassa fever and Avian Flu, media reports were usually centered on government action, stakeholders' reactions, international and national health organisations and not necessarily on the actual state of the patients. Although print-related, in a study conducted on newspaper reportage of the pandemic in Nigeria, using the *Vanguard* and *The Guardian* newspapers, reported that stories from the patients angle were few, comprising 2 stories on recovery and stigmatisation, an interview on how it felt to be infected and a story titled, "Covid-19 patient delivers twins in LUTH."

5. Psychological factors

Several researches have shown that mass media audiences are not a set of robots that are passive as far as media content is concerned. The minimal effect theories of the media, as exemplified by the selective theory of the mass media, point out that the media audience intentionally make decisions to expose themselves to a message, pay attention to a message and decide what information to retain based on their perceptions and cognition (Kastenmuller *et al.*, 2010).

The implication of this is that if coronavirus campaign messages are largely at variance with the beliefs of the media audience, there is a high probability that such messages will be ignored by the audience.

Empirical Review

This review looks at previous studies on how media campaigns and messages influence audience attitudes and behaviour towards diseases. A survey by Odionye *et al.* (2019) found that Lassa fever media campaigns positively influenced the knowledge, attitudes and practices of residents of South-East Nigeria towards prevention and control of the disease, thus confirming the fact that mass media messages are far-reaching and beneficial for public sensitisation.

In another study (Agudosi, 2007) data gathered from respondents revealed that media campaigns reached a large portion of the target audience and exposure to the campaigns not only increased their knowledge of the disease in question (HIV/AIDS), but also influenced their health behaviours, particularly with regards to preventing contracting the disease.

Similarly, results from a survey by Anorue and Nwanguma (2015) on the influence of media campaigns on Ebola virus disease (EVD) on residents of South-South Nigeria showed that respondents were highly exposed to the EVD campaigns in the media which improved their knowledge of the disease, evident in their observation of the prescribed precautionary measures. The campaigns on EVD in the media had formidable ratings by the respondents as the majority of them held that the campaigns presented a summary of what Ebola virus was all about in order to promote adjustment of behaviour to aid prevention and control of the disease.

However, Agu (2013)'s study on the influence of broadcast media campaigns on Vesico Vagina Fistula (VVF) and control in South-East Nigeria reported contrary findings. While 50% of the respondents indicated they had knowledge about the disease, in terms of attitude, only 40% indicated that their attitude had been influenced by the VVF media campaigns and in terms of practice, 60% indicated that they have not taken up new practices based on the campaigns. By implication, high knowledge does not necessarily guarantee influence on attitude and behaviour.

More related to this study's theme, Al-Hanawi *et al.* (2020) did a KAP study on the public in Saudi Arabia with regards to COVID-19. The results revealed that the majority of the participants had a good knowledge about COVID-19 which in turn influenced their health practices. The findings conform with the findings of Reuben *et al.* (2020). In their study titled, "Knowledge, Attitudes and Practices towards Covid-19: An Epidemiological Survey in North-Central Nigeria," the data obtained indicated an impressive knowledge of the disease which positively influenced the respondents' attitudes towards messages on the disease and their control practices.

Similarly, a Geo poll on 1,350 individuals from Kenya, Nigeria and South Africa showed that the majority of the respondents (75%) were knowledgeable about the spread and symptoms of COVID-19. Overall, 70% believed they were at risk of being exposed to the disease, while 73% indicated they were adhering to the safety measures, with increased hygiene being the most cited preventive measure. According to the researchers, findings revealed misinformation spread on social media was a major challenge to the efforts against the disease (Elliot, 2020).

From the empirical literature reviewed, the knowledge of coronavirus with regards to its mode of spread, symptoms of infection and preventive measures has relatively increased by virtue of media messages. However, some results showed that knowledge does not necessarily translate to adherence and practice. The reviewed studies on COVID-19 were mostly undertaken by scientists with a focus on the general knowledge, attitude and practice of people based on series of information disseminated by various media not particularly focused on the traditional mass media or on media campaigns as information tools. The alarming number of deaths and records of infected cases in Edo State made it imperative to determine the KAP information of the residents of the state on COVID-19, with the aim of ascertaining the effectiveness of the broadcast media campaigns in boosting anti-COVID behaviours.

Theoretical Framework

The study is anchored on the Agenda Setting Theory and the Health Belief Model.

First propounded by McCombs and Shaw (1972), Agenda Setting Theory describes the powerful influence of the media in setting agenda for public discourse through the importance they attribute to certain issues. It refers to media audiences' acceptance of important issues, events and people because the media have highlighted them for people to think and talk about. According to Baran and Davies (2009), the theory establishes an important relationship between media reports and people's ranking of public issues. With constant media campaigns on COVID-19, the disease is bound to become an issue of public concern in the society and could make Nigerians not only aware of the disease but also willing to adhere to the established measures to curtail the spread of the disease.

Health Belief Model (HBM) is a social psychological health behaviour change model propounded by Irwin M. Rosenstock, Godfrey M. Hochbaum, S. Stephen Kegeles, Howard Leventhal and their associates in the 1950s. HBM considers fear appeal as an effective strategy in influencing health behaviour change. Odionye *et al.* (2019) state that the theory follows the assumption that higher perceived threat leads to higher likelihood of engagement in health-promoting behaviours. Erubami *et al.* (2022) explain that the theory assumes that a person's perceived health-related behaviour depends on his perception of critical variables, which include: perceived susceptibility and perceived severity of a health condition, perceived benefit, perceived barriers and self efficacy. In other words, individuals are bound to be affected by a health-related message if they perceive that the health condition it is about is relatively serious and highly contagious. In the same vein, if health campaigns on coronavirus are so designed that individuals are informed on the deadly nature of the virus, their susceptibility to contracting the disease and the availability of safety measures to prevent contraction and spread of the disease, they are most likely to adhere to such measures.

Research Methodology

In this study, the survey method of data collection was adopted. It is appropriate because of the need to obtain primary data from a representative sample. Structured questionnaire was used as the instrument of data collection. Both close and open-ended questions were included in the questionnaire, some of which were structured in a 5-point Likert scale, i.e. Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD) (coded from 5 to 1 in a descending order) with the grand mean used to determine the weight of responses. In this study, the mean criterion value was 3.00. Thus, any statement with a mean that falls below the criterion value shall be deemed insignificant, while any statement with a mean value above the criterion value shall be regarded as significant. It shall be regarded neutral if the mean value equals the criterion value.

The population of this study consists of residents of Edo State Nigeria. The choice of this state for the study is based on NCDC statistics that show that it recorded the highest number of coronavirus infections in the South-South zone. The state also had the highest number of deaths after Lagos (cited by Okoroiwu *et al.*, 2021). The estimated population figure of the state as provided by the National Population Commission (2016) is 4,235,595. From the estimated population figure, a sample of 385 was statistically determined using the Australian Online Calculator. Multi-stage sampling technique was used in selecting the sample for the study. First, the cluster technique was used to divide the state into three based on its senatorial districts; Edo South, Edo Central and Edo North. Thereafter, one local government was purposively chosen from each district, except Edo South where two local governments were selected based on the large population of the district which makes up about 57% of the state's population. The researchers then chose two wards each from the four local governments which gave a total of 8 wards studied. The last stage was the selection of individual respondents from the various wards, using the convenience sampling technique. At this stage, copies of the questionnaire were distributed to respondents at the University of Benin, Ambrose Alli University, Auchu Polytechnic, commercial centres and motor parks. The survey was conducted in the third quarter of 2021 when some of the media campaigns studied were ongoing and others had been concluded.

Answering the Research Questions

Only 342 of the 385 copies of the questionnaire distributed to respondents. were found worthy of use. This gave a return rate of 88% which was considered adequate for analysis.

Research Question One: What is the level of audience exposure to the broadcast media campaigns on coronavirus in Edo State, Nigeria?

To answer this question, data on Table 1, 2 and 3 will be analysed.

Table 1: Responses on whether the respondents have functioning radio and television sets

Variables	Frequency	Percentage
Radio:		
Yes	161	47%
No	133	39%
Undecided	48	14%
Total	342	100
Television:		
Yes	249	73%
No	46	13%
Undecided	47	14%
Total	342	100

Table 2: Responses on how regularly the respondents listen to/watch their radio and television sets

Variables	Frequency	Percentage (%)
Radio:		
Very Often	61	18%
Often	51	15%
Occasionally	149	43%
Never	51	15%
Undecided	30	9%
Total	342	100
Television		
Very Often	107	31%
Often	80	23%
Occasionally	110	32%
Never	6	2%
Undecided	39	11%
Total	342	100

Table 3: Responses on whether the respondents are aware of the major coronavirus campaign themes and the frequency of mention of the themes on radio and television

Variables	Frequency	Percentage (%)	
Have you heard about the “stay safe” “take responsibility” “hand wash” “social distance” and “face mask” coronavirus campaign themes on your radio or television?			
	Yes		
	No		
	Undecided		
	337	98%	
	2	1%	
	3	1%	
Total	342	100	
How often do you hear the above mentioned themes on your radio or television?			
	Very often		
	Often		
	Occasionally	160	46%
	Never	117	34%
	Undecided	57	17%
		6	2%
	2	1%	
Total	342	100	

Pertaining to whether or not the respondents have heard any coronavirus sensitisation campaign on radio and television, the majority of the respondents (92%) responded in the affirmative. In terms of whether or not they have heard about the major coronavirus campaign themes, i.e., “Stay safe, Social distance, Hand hygiene and Mask-up.”

98% of the respondents indicated they have heard about them. With regards to how often they have heard the themes on radio or television, while 46% of the respondents stated that they heard the themes very often, 34% answered that they heard the campaign themes often. Cumulatively, both results equal 80%, and an additional 17% said they heard the themes occasionally. It is thus evident that the residents of Edo State, Nigeria were highly exposed to the major coronavirus campaign themes publicised by the broadcast media. This result substantiates the claim of Iyorza and Ojorgu (2020) that most Nigerians have been exposed to some form of enlightenment about COVID-19 in the media. The finding is also in tandem with the finding of Odionye *et al.* (2019), Agudosi (2007) and Anorue and Nwanguma (2015) in their various KAP studies on media campaign influence on respondents with regards to Lassa fever, HIV/AIDS and Ebola virus which showed that exposure to campaigns were impressively high. This lends credence to the postulation of Newbold and Campos (2011) that mass media campaigns are widely used in public health for various reasons and have indicated positive outcomes in terms of reach and public awareness.

Research Question Two: What is the level of knowledge of coronavirus disease from broadcast media campaigns among residents of Edo State Nigeria?

Table 4: Respondents’ level of knowledge about the coronavirus disease from broadcast media campaigns

ITEMS	SA	A	U	D	SD	\bar{x}	Dec
a. Based on the health campaign messages, coronavirus can be spread through contact with the respiratory droplets, (i.e. sputum and mucosa) and body of an infected person.	163	133	21	12	13	4.2	Sig
b. Based on the health campaign messages, the symptoms of COVID-19 include: fever, difficulty in breathing, dry cough, tiredness, chest pain, loss of taste or smell, headache and body pain.	193	120	18	7	4	4.4	Sig
c. Based on the health campaign messages, coronavirus infection can be prevented through: proper hand hygiene, avoidance of body contact by maintaining social distance, regular use of face mask, practicing self isolation for 14 days upon one’s return from a trip.	196	117	18	6	5	4.4	Sig
d. Based on the ongoing health campaigns, I am aware that although coronavirus has no cure, vaccines could help reduce chances of getting infected by the virus.	119	129	55	12	27	3.9	Sig
Grand mean						4.2	Sig

Key: SA- Strongly Agree, A- Agree, U- Undecided, D- Disagree, SD- Strongly Disagree, \bar{x} – Mean, Dec- Decision, Sig- Significant.

Taking cognisance of the weighted means of the responses on Table 4, it can be deduced that the respondents were quite knowledgeable of the virus. In the order of weights; 4.4, 4.4, 4.2 and 3.9, the respondents were most knowledgeable about the symptoms and preventive measures of the disease. They also had a good knowledge of the mode of transmission of the disease, and were least knowledgeable about the ability of vaccines to reduce the chances of getting infected by the virus. The value of the various means is greater than the mean criterion value of 3.00 (i.e. $\bar{x} > 3.00$) which points to the fact that the respondents have a significant knowledge of the mode of transmission, symptoms, preventive measures of the disease and ability of vaccines to prevent contraction and spread of the disease. Overall, the grand mean (\bar{x}) of the responses under the knowledge variable is 4.2. Based on the decision rule, since 4.2 is significantly higher than the mean criterion value, the researchers conclude that media campaigns on coronavirus significantly improved the knowledge of residents of Edo State on the virus. This finding could be attributed to the

agenda-setting influence of the mass media; i.e. the more focused they are on a certain issue, the more such an issue dominates public discourse.

This finding confirms the findings of Reuben *et al.* (2020) which revealed Nigerians in the North-Central zone have a relatively high knowledge of the disease and the transnational poll reported by Elliot (2020) which showed that Nigerians had high knowledge of the disease.

Research Question Three: What is the extent to which broadcast media campaigns on the coronavirus have influenced the attitudes of Edo State residents towards curtailing the spread of the disease?

Table 5: Respondents’ attitudes on curtailing coronavirus gained from the broadcast media campaigns

ITEMS	SA	A	U	D	SD	\bar{x}	Dec
a. From the coronavirus campaign messages, I believe coronavirus is in Nigeria.	55	111	73	48	55	3.2	Sig
b. I perceive radio and television health campaign messages against coronavirus as a good initiative.	136	159	32	9	6	4.2	Sig
c. Based the health campaign messages, I feel coronavirus is deadly, highly infectious and a threat to all humans.	170	130	28	7	7	4.3	Sig
d. Based on the health campaign messages, I believe the COVAX AstraZeneca vaccine and the newly NAFDAC approved vaccines in Nigeria are safe and can save me from getting infected by the virus.	55	78	134	35	40	3.2	Sig
Grand mean						3.7	Sig

Key: SA- Strongly Agree, A- Agree, U- Undecided, D- Disagree, SD- Strongly Disagree, \bar{x} – Mean, Dec- Decision, Sig- Significant.

Table 5 contains data showing opinions of the respondents on the issues factored to ascertain their attitudes toward the broadcast media campaigns on coronavirus. Since the value of the weighted means of each item; 3.2, 4.2, 4.3 and 3.2 respectively, were above the mean criterion value of 3.00, the researchers concluded that the attitudes of residents of Edo State to coronavirus have been significantly influenced by the broadcast media campaigns. This conclusion is substantiated by the value of the grand mean (3.7) which is above the mean criterion value. However, only about 38% of the respondents were in favour of the vaccines, (i.e. the sum of those who agreed and those who strongly agreed) while 22% was the sum of those who disagreed and those who strongly disagreed with the safety of the vaccines. The other respondents (39%) were undecided. Clearly a point of indecision is a point of hesitancy implying little or no conviction. These results align with those of Erubami *et al.* (2022) which showed low vaccine uptake even with high exposure to vaccine messages in the media and knowledge of the potential risks of contracting coronavirus. This finding is also similar to that of Kayode *et al.* (2021) who reported that despite the increased awareness and discussions among the general populace and scientists regarding the important role of vaccines, there was still a considerable apathy and hesitancy around the acceptance and use of the approved vaccines in Nigeria. Meanwhile, the grand mean of 3.7 >3 points to the fact that the respondents had positive attitudes towards the coronavirus broadcast media campaigns.

Research Question Four: What is the level of influence of coronavirus broadcast media campaigns on health practices of Edo State residents?

Table 6: Influence of the coronavirus broadcast media campaigns on the health practices of the respondents

ITEMS	SA	A	U	D	SD	\bar{x}	Dec
a. As a result of coronavirus media campaigns, I avoid crowded environments, including crowded banking halls, classrooms and vehicles that carry above the stipulated seating capacity.	107	138	39	41	17	3.8	Sig

b.	As a result of coronavirus media campaigns, I never step outside my house without using a face mask.	82	117	49	56	38	3.4	Sig
c.	As a result of the ongoing coronavirus health campaigns I wash my hands regularly.	109	134	64	24	11	3.9	Sig
d.	As a result of the ongoing coronavirus health campaigns I shall take the free COVAX AstraZeneca vaccine and the other newly approved vaccines.	54	50	96	46	96	2.8	In sig
Grand mean							3.5	Sig

Key: SA- Strongly Agree, A- Agree, U- Undecided, D- Disagree, SD- Strongly Disagree, \bar{x} – Mean, Dec- Decision, Sig- Significant.

Table 6 above contains information of respondents' response to questions framed to test the influence of the knowledge obtained from coronavirus media campaigns on the respondents' health practices. The items are focused on the COVID-19 preventive measures recommended by the WHO. Based on the figures of the weighted means (3.9, 3.8, 3.4 and 2.8), it can be deduced that the broadcast media campaigns resulted in making the respondents practise the recommended preventive measures, especially imbibing the culture of washing their hands regularly, followed by their new habit of avoiding crowded environments and wearing face masks. However, according to the data collected, 69% of the respondents indicated they were not sure of taking the vaccines or totally disagreed with taking the vaccines. The data collected show a mean value of 2.8 for that item. Based on the decision rule, since the obtained mean value is below the mean criterion value of 3.00, practice in this category is insignificant. The implication of this is that the campaigns did not significantly influence the decision of the residents of Edo State Nigeria to take the vaccines.

Overall, the grand mean (\bar{x}) of 3.5 is clearly above the mean criterion value. Thus, the researchers conclude that the broadcast media campaigns on coronavirus significantly influenced the health practices of the residents of Edo State towards preventing the spread of virus. The positive influence of the campaigns on the health practices of the respondents corresponds with the assertion of Iyorza and Ojorgu (2020) that disease prevention campaigns are believed to influence the audience through messages, appeals, and narratives. It also confirms the observation of Freimuth et al. (2011) that every disease prevention media campaign aims to inform and influence individual and community decisions and appeal for healthy attitudes and behaviours that enhance healthy living.

This finding gives weight to the finding of Reuben *et al.* (2020) whose data indicated an impressive correlation between knowledge, attitude and practice. It is also consistent with the findings of Al-Hanawi *et al.* (2020), who concluded that their study's participants were highly knowledgeable about COVID-19 which translated into good and safe practices during the lockdown. In the same vein, Anwar *et al.* (2020) corroborated that the media allowed for timely interventions by the CDC and WHO, enabling rapid spread of information, resulting in an upward trend for the promotion of health and hygiene practices. However, they contradict the findings of Agusi et al. (2020) and the observations of Mbamalu (2020) which pointed out limited observance of the non-pharmaceutical measures for curtailing the spread of COVID-19 like social distancing and face masking.

However, these results uphold the tenets of the Agenda-setting Theory and Health Belief Model in that the more people learn about a disease, the more they are exposed to the severity of the disease and the more they want to protect themselves from it.

In the literature review of this study, it was established that numerous reports have pointed to the existence of a high degree of skepticism towards messages related to COVID-19, the researchers sought for likely factors that may be responsible for such skepticism. Findings revealed that although media credibility is thought to be low in Nigeria and thus negatively influences the believability of media messages, the majority of the respondents indicated that the Nigerian traditional mass media were credible. They blamed government corruption and fake news on the

social media. Other factors listed by the respondents were religious beliefs and conspiracy theories such as China's purported desire to cripple world economies.

Conclusion

COVID-19 is rated among the most deadly pandemics in history. So to curb the adverse effects of the disease the world over, there have been series of sensitisation campaigns carried out on various media. In Nigeria, there have been quite a number of such campaigns. However, the scholastic observation of skepticism regarding the existence of the virus in the country in spite of these campaigns gave rise to this research. The research was focused on evaluating the knowledge, attitudes and practices of the residents of Edo State Nigeria as influenced by coronavirus health campaigns on the broadcast media.

Although the results of the study pointed to great skepticism regarding the safety of vaccines, reflected in the respondent's hesitancy to take coronavirus vaccines, overall, the results revealed that broadcast media campaigns on the disease have positively influenced the knowledge, attitudes and practices of the residents of Edo State Nigeria.

Recommendations

Based on the findings of this study, the Nigerian government must see itself as first obligated to Nigerians which should be reflected in its firm resolve to fulfill all campaign promises which will help build public trust for government. There should also be well articulated collaboration between key health institutions, particularly the NCDC, and the Nigerian media in the dissemination of information. This will go a long way in fostering believability of coronavirus statistics in the country.

To deal with the issue of social media popularised fake news, members of the public must match messages disseminated on social media platforms with those of the traditional media. The Nigerian media on their part must ensure they leave no information gap because peddlers of fake news will quickly fill it with their own narratives. They could also take cues from the BBC by having special reporters devoted to identifying and debunking fake news.

Although the KAP results of the study seem impressive, the practice results appear at variance with day-to-day observations. There is need for NCDC and the media to incorporate information about healthy diet, rest, exercise, exposure to sunlight and intake of vitamins (known facts on how to boost one's immunity) because suppression of such basic knowledge that virologists have proven to be efficacious over the years makes people suspicious of calls to be vaccinated.

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