

## Assessing the Media for Effective Education towards Attitudinal Change during COVID-19 Outbreak in Lagos, Nigeria

Nelson Okorie

*School of Media and Communication, Pan- Atlantic University, Lagos, Nigeria*

**KEYWORDS** Attitudinal Change COVID-19. Development Communication. Effective Education Health Communication. Nigeria

**ABSTRACT** This study examined the media for effective education towards attitudinal change during COVID-19 outbreak in Lagos, Nigeria. This study was anchored on agenda setting and social marketing theories to understand the potential role of the media for health communication interventions. The survey research method was used, while the online questionnaire served as the data instrument. The results showed that almost half of the study sample indicated that they had read sufficient number of newspaper reports on COVID-19 in Nigeria, while more than 30 percent of the respondents had occasionally read newspaper reports on COVID-19 in Nigeria. It was recommended that television and social media platforms should be used to tailor messages that can demonstrate the nature and dangers of viral disease such as COVID-19 so as to influence positive priority behaviours.

### INTRODUCTION

In recent times, the plague of COVID-19 has disrupted the health architecture and economic security of most nations across the globe. Scholars agree that the advent of COVID-19 reshaped the health systems, social structure and economic planning of most modern societies (Cong and Yi 2020; Ewodage 2020; Marino et al. 2020). Arinze-Umobi and Chiweta-Oduah (2020: 11) observed that “Corona virus (COVID-19), is a pneumonia like virus that was detected in December 2019 in the city of Wuhan in China. On 31<sup>st</sup> December 2019, 27 cases of unknown etiology were identified in Wuhan city, Hubei Province in China”. In the same vein, Ogbodo et al. (2020) asserted that “The world is battling the coronavirus disease 2019 (COVID-19) pandemic, which as of 20<sup>th</sup> April 2020, 01:00 BST, has killed 155 124 with 2 285 210 confirmed cases in 213 countries around the globe”. Importantly, WHO (2020) reported that the threat of COVID-19 may likely subsist after the outbreak has relapsed. Thus, COVID-19 is a global health concern that has negatively affected human existence.

In the realm of health communication, the mass media can serve as frontline suppliers of health information for influencing attitudinal change to curb COVID-19 across the globe. Scholars such as Okorie and Salawu (2016),

Adler et al. (2020), and Marino et al. (2020) believe that the media can serve as a veritable platform for health promotion of public health issues in most modern societies. In the same vein, Ben-Enukora et al. (2019) reasoned that the mass media serve as veritable platforms for influencing individuals towards positives attitudinal changes to curb the spread of viral diseases. Hence, the mass media serve as purveyors of health communication to a heterogeneous audience. Interestingly, reputable and global health institutions such as World Health Organisation and Centre for Disease and Control have recognized the potential role of the media for health education and literacy so as to influence positive health behaviour to curb the spread of COVID-19 across the globe. Thus, the mass media serve as a veritable platform for creating awareness and knowledge about COVID-19 across the globe.

In Nigeria, there have been several media reports, commentaries and campaigns about the nature and danger of COVID-19 pandemic. For example, Television Continental (TVC) reported special news bulletins on COVID-19 outbreak in Nigeria on a daily basis. The Nigeria Centre for Disease and Control (NCDC) with partnership with the Federal Ministry of Information spear-headed media campaigns to enlighten and educate Nigerian citizens to engage in social distancing and personal hygiene to prevent and manage COVID-19 outbreak (Adler et al. 2020). Several corporate organisations such as MTN

*Address for correspondence:*  
E-mail: nokorie@pau.edu.ng

Nigeria, Access Bank Nigeria and Dangote Group created several media activities to sensitize and mobilize Nigerians towards preventive health practices (Onu 2020). For example, MTN Nigeria spearheaded a social advertising campaign titled 'I will tell your mama' to mobilize Nigerians to engage in hygienic practice and social distancing during the outbreak.

Interestingly, there are several studies about COVID-19 outbreak in Nigeria. Some studies focused on the medical epistemology of the disease (Arinze-Umobi and Chiweta-Oduah 2020; Olapegba et al. 2020), while a stream of studies examined the media coverage of the danger of the outbreak (Ogbodo et al. 2020; Shalvee and Sambhav 2020). Nonetheless, there is dearth of empirical studies on media for effective education of COVID-19 outbreak for influencing attitudinal change in West Africa. Thus, this empirical investigation explored the media for effective education towards attitudinal change during COVID-19 outbreak in Lagos, Nigeria. Furthermore, this study explored how the media has influenced attitudinal change to curb COVID-19 in Lagos, Nigeria.

### Study Objectives

1. To determine the intensity of media messages on COVID-19 in Lagos, Nigeria
2. To assess the level of awareness of COVID-19 in Lagos, Nigeria
3. To examine the attitude towards health education for preventive practices of COVID-19 in Lagos, Nigeria

### Research Questions

1. What is the intensity of media messages on COVID-19 in Lagos, Nigeria?
2. What is the level of awareness of COVID-19 in Lagos, Nigeria?
3. What is the attitude towards health education for preventive practices of COVID-19 in Lagos, Nigeria?

### Hypothesis

Hypothesis One (H<sup>1</sup>1): there is a significant connection between the intensity of media messages and the level of awareness of COVID-19

Hypothesis Two (H<sup>1</sup>2): there is a significant connection between the intensity of media messages and the attitude towards the preventive practices of COVID-19 in Lagos, Nigeria

### Theoretical Framework

The agenda setting and social marketing theories were used as theoretical anchorage to understand the power of media for effective education towards attitudinal change during COVID-19. The thrust of the agenda setting theory stipulates that the media has the power to pre-determine issues that are important in any modern society (Folarin 2002). The media can set agenda on perennial issue so as to create awareness and knowledge about the happenings in any society. Theorists expound that the mass media has the ability to tell individuals how to think about issues in the society (McCombs and Shaw 1972). In sum, the agenda setting theory is a theory in media and communication that describe the influence of the mass media by making certain issues become public agenda in most societies.

Importantly, this theory relates with the core objective of this study. The mass media can spearhead an information campaign to create awareness and knowledge about COVID-19 in Nigeria. Furthermore, the media coverage on COVID-19 can lead to a public agenda, whereby Nigerian will create micro media reports on their social media handles such as *Twitter*, *Facebook* and *Instagram* so as to educate and enlighten their friends, colleagues and the general public. In addition, the media can serve as the primary supplier of health information about COVID-19 pandemic by publishing special reports, bulletins, commentaries, documentaries and editorials about the disease.

Also, this study was hinged on the social marketing theory to understand the potential use of the mass media for health education for COVID-19. The locus of the social marketing theory expounds on the promotion of socially valuable information so as to influence societal acceptable behaviour (Folarin 1998). Also, the theory expounds on the integration of marketing ideas and principles to communicate social goods. Furthermore, the 4Ps of marketing are applied to communication approach for societal benefits,

that is, Product- there should be a conception of an idea to enlighten and educate the public. This idea should be tailored to societal valuable information for sustainable development. For example, 'if you don't move, the virus will not move'; Promotion- this focuses on the channel selection that will achieve maximum publicity towards societal benefits; Place- the message should be targeted at locations of significance that are in great need for societal valuable information for sustainable development. For example, several social marketing messages were promoted on Instagram on how to use face mask to prevent COVID-19 virus; Price- this focuses on the cost for creating communication platforms and promotion efforts for societal benefits

### Review of Previous Studies

COVID-19 is a global health concern that has reshaped the socio-cultural relationships in most modern society (Worldometers 2020; WHO, 2021). World Health Organisation (2020) reported that the virus was first identified from Wuhan, China in December, 2019. From a medical perspective, COVID-19 is a type of virus that can trigger severe respiratory disorders that can lead to death. Importantly, the common signs of COVID-19 are cold, abdominal pain, dry cough, challenges in breathing and inability to taste or smell.

Notably, several medical and media reports indicated that almost 35 million people have been infected of COVID-19 within 10 months of the pandemic. WHO (2020) reported that 34 million people had contracted the virus, while more than 1 million persons died due to the virus within 10 months of the pandemic. Furthermore, the countries with the most infected cases were United States (7.2 million cases), India (6.3 million cases), Brazil (4.7 million cases) as at September, 2020 (Worldometers 2020). In Nigeria, there are almost 60, 000 infected cases and more than 1,000 deaths within ten months of the outbreak in the country (Worldometers 2020). In addition, Nigeria Centre for Disease and Control (NCDC) (2020a) reported that community spreading has triggered the increase of cases of the virus in the country. In addition, the Federal Ministry of Health in partnership with the National Centre for Disease and Control (NCDC) developed several health protocols to curb the outbreak.

In the realm of communication studies, the mass media serve as a potent health communication intervention for viral diseases in any modern society. Scholars agree that the mass media serve as important purveyors of health information that can increase the awareness and knowledge of viral diseases (Okorie and Bigala 2017; Okorie and Bwala 2018; Evaristus et al. 2020). Interestingly, the mass media have been regarded as potential health communication platforms for crises response during the COVID-19 pandemic. Scholars such as Arinze-Umobi and Chiweta-Odah (2020) reasoned that the mass media have used to reinforce health communication efforts to curb tension, protest and crises during pandemic across the globe. In the same vein, Cong and Yi (2020) observed that "Media reports deliver large numbers of pieces of pandemic-related information. During March 16–22, the viewing of the big four broadcast networks in the U.S. increased nearly 19 percent versus the same week in 2019, the viewing of cable news networks increased 73 percent versus the same week in 2019; the number of weekly visitors to U.S. news websites reached 630 million, 68 percent higher than that of February". In essence, the mass media have been utilized as sources of health information for COVID-19 across the globe.

In the sphere of health communication, there are empirical investigations on communication imperatives and COVID-19 pandemic across the globe. Shalvee and Sambhav (2020) examined the role of the mass media during pandemics. The study maintained that the mass media should serve as a bridge between national governments and the society during pandemics or health outbreaks. The study also recommended that the different kinds of media such as social media, digital media and print media can be utilized for health promotion and advocacy during pandemics

In a similar study, Olapegba et al. (2020) examined the knowledge and perception of Nigerians towards COVID-19. The study sampled 1357 respondents using a purposive sampling technique. The study found that most of the study population were knowledgeable about COVID-19. The study also indicated that radio and television were the primary source of health information about COVID-19 in Nigeria. The study recommended that stakeholders should adhere

to international and national precautionary measures to curb the pandemic.

In another study, Arinze-Umobi and Chiweta-Odah (2020) explored the use of the mass media for crisis response strategies. The study maintained that the media can serve as crucial crisis response strategies to curb pandemic or health outbreaks in any modern society. Furthermore, the findings indicated that films can be used for health education and advocacy during pandemics. The study recommends that the use of mass media as a crisis response strategy should be simplified and communicated effectively in the globalized world

### METHODOLOGY

The survey method was employed to answer the research questions of this study. The survey research method was appropriate to elicit response on media for effective education towards attitudinal change during COVID-19 in Lagos, Nigeria. Furthermore, the survey research method was advantageous to measure the perception of heterogeneous audience such as Lagos, Nigeria (Anyanwu et al. 2018; Nelson 2020).

Notably, the population of this study was 20 million Nigerians that are residents in Lagos, Nigeria (National Population Commission 2006). This population is appropriate because Lagos State is regarded as the centre point of cases of COVID-19 in Nigeria (Ewodage 2020). Furthermore, more than 50 percent of confirmed cases of COVID-19 in Nigeria were located in Lagos State (NCDC Report 2020b). In addition, Lagos State is the commercial hub of Nigeria.

For this empirical investigation, the sample size was 259 data entries of an online questionnaire. The sample size was suitable for this study because it was in line with Wimmer and Dominick's (2000) requirement for sample size, which stipulates that a sample size more than 259 is reasonable for a population more than 100,000. The purposive sampling technique was adopted to select the respondents in Lagos State. The sampling technique developed three criteria adopted for selection of respondents. These criteria were: (1) The respondent must be a Nigerian (2) the respondent must reside in Lagos State (3) the respondent must be internet savvy.

Importantly, the online questionnaire served as an tool of data collection. The online questionnaire was created with the use of Google forms. Furthermore, the online questionnaire contains classification questions, behavioural questions and attitudinal questions to examine the study objectives (Nelson et al. 2018). The timeline for this research was 30 March, 2020 – 30 September, 2020. This timeline was essential for this study because this period signified the arrival of the index case in Lagos, Nigeria.

Also, different types and levels of statistical analysis were adopted for this study. Inferential statistics was used to generate cross-tabulated data and correlation tests. The bivariate analysis generated data on media reports about COVID-19 in Nigeria. The multivariate analysis was used to test two hypotheses in line with the objectives of the study. For the correlation test, Spearman measurement was adopted to ascertain the significance of a relationship among paired values. In addition, Somer D' measurement was used adopted to ascertain the strength of the variables (Anyanwu et al. 2018, Oduaran and Okorie 2019; Nelson 2020).

### RESULTS

This quantitative-based study examined mass media for effective education towards influencing attitudinal change towards COVID-19 in Lagos, Nigeria. These results were investigated statistically to gather data on the awareness of media reports on COVID-19 and attitudes towards preventive health practices to curb COVID-19 in Lagos, Nigeria.

Table 1 shows that almost half of the study sample indicated that they had read sufficient number of newspaper reports on COVID-19 in Nigeria, while more than 30 percent of the respondents had occasionally read newspaper reports on COVID-19 in Nigeria. Interestingly, almost 87 percent of the respondents had frequently watched television reports on COVID-19, while less than 13 percent of the respondents had seldom watched television reports on COVID-19. Remarkably, a significant majority of respondents had frequently read and watched reports about COVID-19 in Nigeria on WhatsApp groups. In essence, mainstream media platforms such as newspapers and television had

**Table 1: Media reports on COVID-19**

<i>Categories</i>	<i>I have read newspaper report on COVID-19</i>	<i>I have watched television report on COVID-19</i>	<i>I have reports about COVID-19 on Whatsapp group platforms</i>
Extreme Large Extent	19.9%	46.1%	74.2%
Large Extent	27.3%	39.1%	21.2%
Seldom	30.1%	12.1%	4.6%
Never	22.7%	2.7%	0%
Total	100% n=259	100% n=259	100% n=259

created messages on COVID-19 to educated Nigerians about the dangers of the viral disease. Furthermore, the data have deduced that the media intensified the attention level of the prevalence of COVID-19.

Table 2 shows that almost 65 percent of the respondents indicated that media messages had educated them about the symptoms of COVID-19, while more than 25 percent of the respondents believed that media messages had not educated them about the symptoms of COVID-19. Furthermore, more than 66 percent of the respondents believed that media messages had made them more knowledgeable about the harmful nature of the disease. Interestingly, almost 70 percent of the respondents indicated that they engaged in hygiene practices to prevent COVID-19.

**Hypotheses Testing**

**H<sup>1</sup>:** There is a significant connection between the intensity of media messages and awareness of COVID-19 in Lagos, Nigeria

In Table 3, the Spearman measurement shows a link between the variables. Table 3 shows a strong and positive relationship, which depicts .000. The significant value is paired by the con-

cordance of 9.336. Thus, the intensity of media messages have significant connection with the awareness of COVID-19 in Lagos, Nigeria

**H<sup>2</sup>:** There is a significant connection between intensity of media messages and the attitude towards preventive practices of COVID-19 in Lagos, Nigeria

In Table 4, the Spearman measurement shows a linkage between the variables. Table 4 shows a strong and positive relationship, which depicts .000. The result indicates that the connection is substantial and positive at .000. In addition, the significant value is definite with the concordance of 74.813. Accordingly, there is a substantial correlation that exist between the intensity of media messages and the attitude towards preventive practices of COVID-19

**DISCUSSION**

The media can be regarded as a potent channel for health information in any modern society. Scholars believe that the media are regarded as health communication platforms for disease control in high and low resource counties (Nelson et al. 2013; Okorie and Salawu 2017; Oduaran and Okorie 2019; Adesina et al. 2020). This

**Table 2: Attitude towards media education for prevention of COVID-19**

<i>Categories</i>	<i>Media messages have educated me about the symptoms of COVID-19</i>	<i>Media messages have made me knowledgeable about the harmful nature of the disease</i>	<i>I engage in hygiene practices to prevent COVID-19</i>
Strongly agree	10%	36.2%	61.2%
Agree	53.7%	30.3%	8.0%
Strongly disagree	25.1	17%	0
Disagree	0	5.3%	17.6%
Undecided	11.2%	11.2%	13.3
Total	100% n=259	100% n=259	100% n=259

**Table 3: Correlation analysis**

<i>Categories</i>		<i>Intensity of media messages on the nature of COVID-19</i>	<i>I am aware of COVID-19</i>	
Intensity of media messages on the nature of COVID-19	Spearman Correlation	1	.503**	
	Sig. (2 –tailed)		.000	
	N	259	259	
I am aware of COVID-19	Spearman Correlation	.503**	1	
	Sig. (2 –tailed)	.000		
	N	259	259	
<i>Symmetric Measures</i>				
<i>Categories</i>	<i>Value</i>	<i>Asymp. Std. Error<sup>a</sup></i>	<i>Approx. T<sup>b</sup></i>	<i>Approx. Sig.</i>
Pearson's R	.452	.053	8.130	.000 <sup>c</sup>
Spearman Correlation	.503	.046	9.336	.000 <sup>c</sup>
N of Valid Cases	259			

**Table 4: Correlation analysis**

<i>Categories</i>		<i>Intensity of media messages on the nature of COVID-19</i>	<i>I engage in hygienic practices to prevent COVID-19</i>	
Intensity of media messages on the nature of COVID-19	Spearman Correlation	1	.978**	
	Sig. (2 –tailed)		.000	
	N	259	259	
I engage in hygienic practices to prevent COVID-19	Spearman Correlation	.978**	1	
	Sig. (2 –tailed)	.000		
	N	259	259	
<i>Symmetric Measures</i>				
<i>Categories</i>	<i>Value</i>	<i>Asymp. Std. Error<sup>a</sup></i>	<i>Approx. T<sup>b</sup></i>	<i>Approx. Sig.</i>
Pearson's R	.861	.040	27.169	.000 <sup>c</sup>
Spearman Correlation	.978	.010	74.813	.000 <sup>c</sup>
N of Valid Cases	259			

study examined media I for effective education towards attitudinal change during COVID-19 outbreak in Lagos, Nigeria. Furthermore, this study explored media exposure, awareness and preventive practice of COVID-19 in Lagos, Nigeria.

For this quantitative study, the summary of the findings indicates that that more than 75 percent of the respondents were aware of newspaper reports, television reports and social media reports on COVID-19 outbreak in Nigeria. The implication of this result is that the media serve as purveyors of health information on the prevention and control of COVID-19 outbreak in Nigeria. This result supports the positions of

Arinze-Umobi and Chiweta-Odah (2020) and Cong and Yi (2020). They asserted that the mass media have used for health communication efforts to curb pandemic across the globe. Findings of this study also indicated that almost 65 percent of the respondents indicated that media messages had educated them about the symptoms of COVID-19, while more than 25 percent of the respondents believed that media messages had not educated them about the symptoms of COVID-19.

Importantly, correlation analysis was adopted to test hypotheses to establish the likelihood of relationships that subsist between variables.

The first hypothesis confirmed that there is a significant connection between the intensity of media messages and awareness of COVID-19. Table 3 confirmed that a strong and positive connection exists between the paired variables. Importantly, the consequence of the result is that the intensity of media exposure has a direct influence on the level of awareness of disease. This finding affirms the assumptions of the agenda setting theory, which stipulate that the media has the ability to predetermine the importance of public health issues in any modern society. In addition, the media can spearhead a public health agenda so as to increase the awareness of issues in the society. Interestingly, the results of this study affirms the assumptions of Adler et al. (2020), who maintained that the media are major suppliers of health information for effective education about COVID-19 in Nigeria. In line with this position, Marino et al. (2020) asserted that media platforms are instrumental health communication vehicles for disseminating messages on COVID-19.

The second hypothesis confirmed that there is a significant connection between the intensity of media messages and attitude towards preventive practices of COVID-19. Table 4 confirmed that a resilient and affirmative connection between the two variables. The implication of this result is that the intensity of media exposure will positively influence the attitudinal change of Nigerians towards preventive practices to curb diseases. It is this type of thinking that made Shalvee and Sambhav (2020) to advocate that the mass media should serve as a bridge between national governments and the society during pandemics or health outbreaks. The study also recommended that the different kinds of media such as social media, digital media and print media can be utilized for health promotion and advocacy to influence positive health behaviours. The results of this study supports the tenets of the social marketing theory that stipulates that the media should be utilized for disseminating social valuable information about COVID-19 to influence social change in any modern society. In essence, the media has the influence to change the current behaviour of individuals towards a priority behaviour that prevents the spread of COVID-19.

Interestingly, a significant contribution of this empirical investigation is that the media can be used as suppliers of health messages to influence the change of current behaviours towards priority behaviours that engage in preventive health behaviours to curb viral diseases such as COVID-19 pandemic that crippled the economic, political and health architecture in high and low resource countries.

## CONCLUSION

COVID-19 has negatively affected the growth and development of high and low resource countries. In Nigeria, more than 1,000 persons have died due to the outbreak of the viral disease. Importantly, the media serve as suppliers of health information to create awareness and knowledge about COVID-19 in the Nigerian society. Furthermore, media platforms have the capacity to influence a positive priority behaviour that can curb the spread of COVID-19 in Nigeria

## RECOMMENDATIONS

The media serve as health communication interventions for the prevention and management of viral diseases. It is recommended that television and social media platforms should be used to tailor messages that can demonstrate the nature and dangers of viral disease such as COVID-19 so as to influence positive priority behaviours. In addition, media education on COVID-19 should be a continuous enterprise to encourage priority health behaviours

## REFERENCES

- Adesina E, Oyero O, Okorie N, Amodu L, Adeyeye B, Omole F, Yartey D 2020. Assessment of health communication practice on hepatitis B in Southwest Nigeria. *Cogent Social Sciences*, 6(1): 1777814.
- Adler JR, Anwar A, Malik M, Raees V, Anwar A 2020. Role of mass media and public health communications in the Covid-19 pandemic. *Cureus*, 12(9): 1–13. <https://doi.org/10.7759/cureus.10453>
- Anyanwu G, Okorie N, Salawu A 2018. Online advertising influence for promoting preference for e-shopping in Nigeria: A study of jumia. *Academy of Strategic Management Journal*, 17(6): 1-10
- Arinze-Umobi O, Chiweta-Oduah O 2020. COVID-19 crisis response strategies: The place of mass media. *International Journal of Advanced Research*, 8(4): 1102-1109.

- Ben-Erukora C, Amodu L, Okorie N 2019. Health communication and hepatitis health management: A study on the awareness and behavioral practices in Nigeria. *Journal of Health Management*, 21(1): 1-18.
- Cong L, Yi L 2020. Media exposure and anxiety during COVID-19: The mediation effect of media vicarious traumatization. *International Journal of Environment Research and Public Health*, 17: 4720.
- Ewodage R 2020. COVID-19: How We Plan to Implement Social Distancing in Lagos Markets, Transport System–Sanwo-Olu. From <<https://www.channelstv.com/2020/03/22/covid-19-how-we-plan-to-implement-socialdistancing-in-lagos-markets-transport-system-sanwo-olu/>> (Retrieved on 25 March 2021).
- Folarin B 2002. *Theories of Mass Communication: An Introductory Text*. Abeokuta, Nigeria: Link Publications.
- Nelson O, Abiodun S, Glory A, Lanre A 2018. Online advertising influence for promoting preference for e-shopping in Nigeria: A study of jumia. *Academy of Strategic Management Journal*, 17(6): 1-10. From <<https://www.abacademies.org/articles/online-advertising-influence-for-promoting-preference-for-eshopping-in-nigeria-a-study-of-jumia-7729.html>> (Retrieved on 30 October 2020).
- Marino MI, Adogba O, Tilli N, Harper S 2020. Mental health interventions: Reflections on a radio program a alternative for stigma reduction and social integration. *Frontiers in Communication*, 5(October): 1–12. <https://doi.org/10.3389/fcomm.2020.550912>
- McCombs M, Shaw D 1972. The agenda-setting function of mass media. *Public Opinion Quarterly*, 36(2): 176.
- Nelson O 2020. Reality television, African identities and the Big Brother Africa show: An experiential Inquest. *Online Journal of Communication and Media Technologies*, 10(3): e202017
- Nelson O, Kehinde O, Oyero O, Williams OR, Soola EO 2013. Effective Use of Information Sources for Breast Cancer Care: Interplay of Mass Media and Interpersonal Channels. Creating Global Competitive Economies: 2020 Vision Planning and Implementation. *Proceedings of the 22<sup>nd</sup> International Business Information Management Association Conference*, IBIMA 2013, pp. 2231-2243.
- Nigeria Centre for Disease Control 2020a. First Case of Corona Virus Disease Confirmed in Nigeria>. From <Nigeria Centre for Disease Control Website>. From <<https://ncdc.gov.ng/news/227/first-case-of-coronavirus-disease-confirmed-in-nigeria>> (Retrieved on 5 January 2021).
- Nigeria Centre for Disease Control (NCDC) 2020b. 9 October. COVID-19 Case Update. From <<https://twitter.com/NCDCgov/>> (Retrieved on 30 October 2020).
- Oduaran C, Okorie N 2019. Digital media and indigenous edutainment programming for promoting customer engagements in a business world. *Academy of Strategic Management Journal*, 18(3): 1-10
- Ogbodo J, Emmanuel C, Joseph C, Chinedu N, Ekwutosi N, Simon N, Samuel N, Stephen E, Nelson I 2020. Communicating health crisis: A content analysis of global media framing of COVID-19 guide. *Health Promotion Perspectives*, 10(3): 257-269.
- Okorie N, Bigala P 2016. Creating HIV/AIDS awareness through localised communication for health development in South Africa. *Journal of Health Management*, 18(3): 439-446.
- Okorie N, Bwala N 2017. Measuring media campaigns effectiveness for environmental health for Sustainable Development: A study of Ebola outbreak in Lagos State, Nigeria. *Journal of Health Management*, 19(4): 1-10.
- Okorie N, Salawu A 2016. Effective use of media awareness campaigns for breast cancer care among woman: A comparative study. *Journal of International Women's Studies*, 17(4): 160-173.
- Olapegba PO, Ayandele O, Kolawole1 SO, Oguntayo R, Gandi JC, Dangiwa AL, Ottu IFA, Iorfa SK 2020. A Preliminary Assessment of Novel Coronavirus (COVID-19) Knowledge and Perceptions in Nigeria. From <<https://www.medrxiv.org/content/10.1101/2020.04.11.20061408v2>> (Retrieved on 25 March 2021).
- Onu E 2020. Africa's Richest Man Helps Lead The Charge Against COVID-19. From <Aliko Dangote, Access Bank Lead Nigeria Charge Against Covid-19 - Bloomberg> (Retrieved on 25 March 2021).
- Shalvee S, Sambhav S 2020. Role of mass media and communication during pandemic. *IJCRT*, 8(5): 3786-3790.
- Wimmer RD, Dominick JR 2000. *Mass Media Research: An Introduction*. New York, United States: Wadsworth Publishing.
- World Health Organisation 2021. Nigeria: WHO Coronavirus Disease (COVID-19) Dashboard. From <World Health Organisation> (Retrieved on 9 February 2021).
- World Health Organization. WHO, 11 March, 2020. WHO Director-General's Opening Remarks at the Media Briefing on COVID-19-11 March 2020. Geneva. From <<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-themedia-briefing-on-covid-19-11-march-2020>> (Retrieved on 30 October 2020). Switzerland: World Health Organization 2020.
- Worldometers 2020. Coronavirus Update (Live). 11 October. From <<https://www.worldometers.info/coronavirus>> (Retrieved on 30 October 2020).

---

**Papaer received for publication in February, 2021  
Paper accepted for publication in May, 2021**