Exploring the Relationship Between Exposure to Media Messages on Covid-19 and Compliance with Its Preventive Measures Among Residents of Delta State, Nigeria

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Abstract

The Covid-19 pandemic that started from Wuhan, China in 2019, has attracted significant scholarly input. Some scholars postulate that the media played a positive and negative role to control and prevent its spread. Nigeria is not left out of this as the pandemic is also prevalent in the country. Therefore, this study examines media coverage of the pandemic in Nigeria and the correlation between the messages and compliance with the pandemic preventive measures. We used the Agenda-Setting theory, which describes how the media brings up specific issues to public discourse and prioritise them above other matters, making the audience perceive some critical topics more than others. We used the survey method and questionnaire to gather the data and used descriptive and inferential statistics to analyse them. We found that the people had frequent exposure to media messages on Covid-19; despite the regular exposure, they complied partially with the Covid-19 preventive measures; there was a significant relationship between exposure to media message on Covid-19 and compliance with its preventive measures. Furthermore, the respondents had a high rating for the media coverage of the pandemic. We recommend that the public sustain the increased exposure of the media messages on Covid-19.

Keywords: Media messages on covid-19, compliance with covid-19 preventive measures, Covid-19 in Nigeria, Covid-19 pandemic, Covid-19 in Delta State

1. Introduction

The coronavirus, which struck the world in 2019, has become a global health concern and challenge. The condition code-named Covid-19, which started in a Wuhan's laboratory in China, was first reported in December 2019 (Pollett & Rivers, 2020). The world media subsequently widely publicised it. The disease spread very fast to different countries and soon assumed the status of a pandemic. Medical News Today (2021) reports that at the end of 2020, the pandemic had infested over 96 million people, and over 2 million people had died globally from its complications. Nigeria recorded her index case on 27 February 2019, in Lagos, when an Italian man working in Nigeria returned from Milan to Nigeria.
through the Murtala Mohammed International in Lagos (Smith, Smith & Ajayi, 2020). Soon afterwards, the pandemic spread through the entire country, and Lagos became the epicentre. In the second quarter of 2020, the federal government and the different state governments declared a total lockdown across the country.

The mass media rose to the challenge of massively reporting the pandemic to create awareness and prevent its spread. The frequent media reportage of the pandemic made it one of the major news items in mainstream media and social media. Thus, people had regular exposure to media reports on the pandemic (Nwakpu, Ezemu & Ogbodo, 2020). Scholars such as Casero-Ripollés (2020) and Genver & Ezeah (2020) posit that the media created awareness about the pandemic through frequent reportage and analysis. Concerning Nigeria’s case, the mass media provided solutions and suggestions on curtailing the disease’s spread. For instance, in Nigeria, Nwakpu, Ezemu & Ogbodo (2020) found that the people patronised the mass media extensively to get information and directions on the pandemic. They submit that the media helped government and health authorities disseminate information on controlling and preventing the pandemic’s spread in Nigeria.

One significant role of the media during a disease outbreak is to influence the public’s attitude, perception, and behaviour to adopt the right measure to prevent them from contracting the disease and preventing the disease’s spread. Findings by Adekun & Adnam (2016) and Ufuophu-Biri (2017) reveal that Nigeria’s mass media have always helped through their reportage to prevent the spread of diseases. They assert that the media demonstrated this role during the Ebola disease outbreak in 2014. During the Ebola outbreak, the mass media influenced the public to believe information about the disease and to comply with the measures adopted to control, manage, and prevent its spread.

In respect of the current pandemic, Gever & Ezeah (2020) found that Nigeria’s mass media has played enormous roles in managing its Covid-19 crisis. The members of the public frequently accessed information about the pandemic through the media. Corroborating Gever and Ezeah’s finding, Smith et al. (2020) discloses that the Nigerian media facilitated the massive dissemination of information by government and health authorities to prevent the disease’s spread. The messages included wearing a face mask, hand washing, social distancing, avoiding crowded places, staying in-door, practising good respiratory hygiene, reporting to designated hospitals of a person suspected of having contracted the disease, avoiding handshakes and obeying all other protocols on the pandemic.

Despite the mass media’s role in curtailing the spread, some scholars postulate that the media also played a negative role in causing panic and spreading fake news about the pandemic. Such scholars include Hartley & Khuong (2020), Tasnim, Hossain & Mazumder (2020). They posit that the mass media propagated fallacies, misinformation, and myths about the Covid-19 pandemic and caused panic among the public and spread fake news about the pandemic. Similarly, Smith et al. (2020), Casero-Ripollés (2020), Mourad, Srour, Harmanani, Jenainati & Arafeh (2020) found that the mass media, especially the social media, disseminated misinformation about the Covid-19 pandemic. As a result, some people received fearsome information on the pandemic through the social mass media.

Waszak, Kasprzycka-Waszak & Kubanek (2018) found that fallacious reports created severe fear about any pandemic instead of providing hope and direction. Similarly, scholars including Sommariva, Vamos, Mantzarlis, Đào & Tyson (2018); Fung, Fu, Chan, Chan, Cheung & Abraham (2016) & Waszak et al. (2018) found the spread of misinformation about disease outbreaks contributes to its widespread. Zheng, Goh & Wen (2020) observe that some mass media organisations disseminated conflicting information about the Covid-19 pandemic to the extent many people were confused about the right information.

Meanwhile, some studies have suggested no relationship between the pandemic’s adequate media coverage and compliance with its prevention protocols. For instance, Paykani, Zimet, Esmaeili, Khajedaluee & Khajedaluee (2020) studied how people complied with the stay–at–home in Iran. They found that many people did not abide by the guidelines and measures on preventing the Covid-19 pandemic. In a similar study, Huynh (2020) found that people had different perceptions of the pandemic’s mass media messages. The perception affected their compliance with preventive measures on the pandemic as disseminated through the media. Many people also questioned the authenticity of
some of the messages. As a result, many people did not comply voluntarily with some necessary measures such as wearing face masks, keeping social distance, washing hands, and sanitising them.

The findings of Amzat, Aminu, Kolo, Akinyele, Ogundairo, & Danjibo (2020) on response to the Covid-19 pandemic in Nigeria generally indicated low compliance by members of the public.

Thus, this work aims to examine exposure to media message on Covid-19 and compliance with measures to prevent its spread as contained in the media messages; and the public rating of the pandemic's media coverage.

2. Research Questions

We used the following research questions to interrogate the study:

1. How frequently were residents of urban areas in Delta State exposed to the mass media messages on Covid-19?
2. What is their compliance level with the Covid-19 preventive measures as disseminated by the media?
3. What is their rating of the media coverage of the Covid-19 pandemic in Nigeria?

3. Hypothesis

We formulated the following hypothesis to test the relationship between exposure to media messages on Covid-19 and compliance to the prevention protocols

1. There is no significant correlation between exposure to media messages on Covid-19 and compliance with its preventive measures among the resident of Delta State, Nigeria.

4. Theoretical Framework

We adopted the Agenda Setting theory for this study. The theory explains the mass media’s capability to influence the audience attention on issues of public interest. The theory is concerned with the emphasis the mass media place on topical issues of general interest and how they raise public discourse. It describes the mass media activities in playing up a particular topic to public prominence and influencing public discourse.

Folarin (2001) postulates that the theory is motivated by media bias on specific issues. When the mass media publish or broadcast certain subjects frequently, such matters remain on the agenda for public discourse. The audience thus regards the issues as topical and Discusses them often. Once the mass media discontinue publishing such cases, they soon disappear from the public space of discourse. The public discourse then shifts to other current issues that the media put on the agenda. Folarin (2001) thus posits that the media greatly determine what the audience discusses as a general topic of public interest at a particular time.

Max McCombs and Donald Shaw, who developed the theory from their study of the 1968 American presidential election, postulate that the media possess enormous power to influence what the audience should think about rather than what the audience thinks. Another aspect of the theory is that the media create awareness of issues, prioritise a particular subject, excite it to public importance, and become public discourse. Consequently, the public tends perceives such a matter as more relevant than other topics. The theory is significant because the study is concerned with exposure to media messages on the Covid-19 pandemic and the influence on reaction to Covid-19 protocols.

5. Literature Review

The Covid-19 pandemic that affected different countries worldwide has attracted significant attention and coverage by the mass media. The mass media reported the Covid-19 pandemic through straight news reports, opinion articles, news analysis, interviews (Smith et al. 2020). The social media also

The mass media usually play a substantial role during the outbreak of any disease. In this regard, Collinson, Khan & Heffernan (2015) assert that the media provide health information to the public on preventing the spread of diseases.

Corroborating the above assertions, Elmahdawy, Elsisi, Carapinha, Lamorde, Habib, Aggie-Baffour, Soualmi, Ragab, Udezi, Usifo & Usifoh (2017) observe that inadequate media coverage of disease could increase its spread. They cite the handling of the outbreak of the Ebola outbreak in some African countries in 2014. They disclose that an inadequate information-sharing system worked against the effective control and management of the Ebola disease. Insufficient information could, therefore, lead to disbelief in the existence of the condition. Similarly, Adebowale (2020) explains that lack of information dissemination hampers management and disease control.

As to the role the mass media played in preventing the spread of Covid-19 in Nigeria, Obi-Ani et al. (2020) found that both the mainstream media and social media created significant awareness of the Covid-19 pandemic in Nigeria. Their finding indicated that the country’s National Centre for Disease Control (NCDC) and other relevant government institutions used the mass media to enlighten the public about the disease and persuade the public to take the right measures to avoid the spread of Covid-19. They also found that apart from the NCDC, the Presidential Task Force on the Covid-19 pandemic in Nigeria and the different states’ ministries of health provided information online to help the public control and prevent the spread of Covid-19.

The findings of Togun (2020) deviate slightly from that of Obi-Ani et al. (2020). For instance, Togun found that though the mass media played a vital role in disseminating information on the Covid-19 pandemic in Nigeria, some of them, especially the social media, propagated fake and inaccurate information about the pandemic. Though the NCDC also updates information on the pandemic online, especially on Twitter, Facebook and Instagram, many people still use social media to discredit such information, thus hampering compliance.

Paykani et al. (2020) found that many people in Iran did not comply with the government’s guidelines for controlling and preventing the pandemic’s spread because of its negative perception. Similar findings by Apuke & Omar (2021) showed that many people relied on fake information that emanated mostly from social media in Nigeria. Consequently, they did not comply significantly with the government’s protocols on Covid-19. Furthermore, the finding of Ladan, Haruna & Madu (2020) suggested a failure in official information dissemination in Nigeria, which aggravated the spread of fake information on the pandemic through social media and negatively affected compliance with preventive measures for the pandemic.

In another dimension, scholars including Hamzat & Otulugbu (2020), Casero-Ripollés (2020) and Mourad et al. (2020) found that some persons trivialised the pandemic on social media, which hurt compliance with preventative measures. Some people prescribed herbal remedies on the pandemic and used social media to propagate such prescriptions. Mourad et al. (2020) report that some people administered such herbal medications on themselves or family members and ignored the government prescribed protocols. While some people believe that the government manipulated information on the pandemic through the mainstream media, many other people relied on the mainstream media for news and guidelines on the Covid-19 pandemic. In the same way, some people relied on social media for information on the pandemic. As a result, there was no significant correlation between exposure to media messages on the pandemic and compliance with its prevention protocols.

Asnakew, Asrese & Andualem (2020) also found no significant relationship between exposure to mass media information on Covid-19 and compliance with its preventive measures in Ethiopia. Their finding suggested that Ethiopian people had sufficient exposure to television messages on the pandemic, but the level of compliance was not commensurate with the exposure. A similar study on Ethiopia’s Amhara region, Asemahagn (2020), found no significant correlation between exposure to media information on Covid-19 and compliance with its preventive measures. Also, Austrian, Pinchoff & Tidwell, et al. (2020) found high exposure to information on Covid-19 in Kenya. Still, there was no
significant corresponding compliance with the preventing measures in the country.

Okafor (2020) studied compliance with measures to prevent Covid – 19 in Nigeria universities and found a low level of compliance which the study despite significant awareness about the disease in the country. The finding suggests there is no meaningful correlation between media coverage of the pandemic and compliance with its preventive measures. Similarly, the discovery of Agusi, Ijoma, Nnochini, Njoku-Achu, Nwosuh & Meseko (2020) on compliance with Covid-19 protocols in Nigeria indicates low compliance. Their findings show that in some instances, the law enforcement agents were used to enforce compliance. Such enforcement resulted in fatalities in some places and snowballed into public protests and reprisal attacks, and mob action on law enforcement agents. The findings imply some people did not believe information on the Covid-19 as disseminated by the mass media and government.

Contrarily to the above findings, a study on the compliance with Covid-19 preventive measure in the United Kingdom by Atchison, Bowman, Vrinten, Redd, Pristerà, Eaton (2020) found a significant correlation between exposure to information on the pandemic and compliance with its preventive measures. Another study by Bruine de Bruin (2020) conducted in the United States of America indicated the respondents complied with the pandemic’s preventive measures. The older adults were to comply more with the preventative measure. They were more afraid that they were more likely to contract the virus if they did not adhere adequately to the preventive measures.

6. Methods and Materials

The study covered urban areas of Delta State. We selected three cities from each of the three senatorial districts in the state. We sampled Sapele, Effurun and Ughelli from the Central Senatorial District; Asaba, Aghor and Ogwash – Uku; and Bomadi, Oleh and Koko from the South Senatorial District. We administered the questionnaire to 100 respondents in each of the selected cities. We, therefore, distributed a total of 900 copies of the questionnaire. We took cognisance of gender and age in the administration of the questionnaire. We administered the questionnaire to only adults of 18 years and above.

7. Data Analysis and Presentation

We retrieved 887 copies of the administered questionnaire, which represented a 98.55% return rate. We analysed the data using mean scores, standard deviation, charts and regression analysis.

7.1 Research Question One: How frequently were residents in urban areas in Delta State exposed to the media messages on Covid-19?

As shown in figure 1 above, 86% (760) of the respondents said they were exposed every time to mass
media messages on Covid-19. 13% (120) reported they were exposed to the messages almost every time, while 1% (7) reported not being exposed often to the information. The mean value of 3.84 implies that, on average, most respondents are frequently exposed to mass media messages on Covid-19. The standard deviation (0.37973) indicates that the observed values are clustered around the mean.

7.2 Research question 2: What is the compliance level with the Covid-19 preventive measures as disseminated by the mass media?

We ran a frequency test on the data and obtained a mean value of 2.22. This mean value implies that respondents complied partially with the Covid – 19 preventive measures on average. The standard deviation (0.534630) also means that the observed values are clustered around the mean. The result shows further that 590 (66.5%) respondents reported partial compliance, 247 (27.8%) and 50 (5.6%) said they complied fully and did not comply, respectively.

7.3 Research Question 3: What is the respondents' rating of the media coverage of the Covid-19 pandemic in Nigeria?

As indicated in the figure above, 856 (96.5%) rated the mass media coverage of the Covid-19 as high, 25(2.8%) rated the reportage as average, while 6 (.7%) rated it low. The mean value of 2.95 implies that the average respondents' rating of mass of the Covid-19 pandemic is high. Also, the standard deviation (0.23144) is indicative of the values of the observation clustering around the mean.
7.4 **Hypothesis 1:** There is no significant correlation between exposure to media messages on Covid-19 and compliance with its preventive measures among the resident of Delta State, Nigeria

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<tr>
<td>Total</td>
<td>253.247</td>
<td>886</td>
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</tbody>
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a. Dependent Variable: Compliance with Covid-19 Preventive Measures  
b. Predictors: (Constant), exposure to media coverage of Covid-19

In testing the study’s hypothesis, we analysed the respondents’ data on the correlation between media exposure and compliance with Covid-19 preventive measures. We used the regression technique. The results are as presented in table 1 above. Accordingly, as shown in the table, F (Fcal) ’s computed value is 28.481 with a corresponding p-value of 0.000. Since the F calculated of 28.481 is greater than the critical/table value (F tabulated = 3.84), we reject the null hypothesis. With a p-value of 0.000, we deem the result to be significant. Therefore, we conclude that there is a significant correlation between exposure to media and compliance with Covid-19 preventive measures.

8. **Discussion of Findings**

The finding shows that the respondents had frequent exposure to media coverage of the Covid-19 pandemic. For instance, a total of 86% were exposed every time to the messages. Only 1% was not exposed regularly to the coverage. This finding implies that the people in urban areas of Delta State, Nigeria had adequate exposure to the mass media messages on the Covid-19. This result is in tandem with the findings of Nwakpu et al. (2020), Casero-Ripollés (2020), Gever and Ezeah (2020) and Smith et al. (2020). They found that the public had adequate and frequent exposure to media messages on the Covid-19 pandemic.

The result also shows that the respondents did not comply fully with the Covid-19 protocols. For instance, 27% of the respondents complied fully, and 66.5% complied. The implication is that there was an average compliance with the Covid-19 protocols in Delta State, Nigeria. This finding is in accord with those of Paykani et al. (2020), Amzat (2020), Nnana-Okechukwu (2020), Okafor (2020) and Agusi et al. (2020). They found that many people did not comply fully with the Covid-19 protocols. Meanwhile, the respondents rated the media coverage high. This result implies that Delta State residents regarded the mass media coverage of the pandemic as high. This finding is in tandem with those Casero-Ripollés (2020), Nwakpu et al. (2020) and Gever and Ezeah (2020), which indicated that many people commended the media coverage of the pandemic.

We also found a significant correlation between exposure to media messages on Covid-19 and compliance with its preventive measures among the urban resident of Delta State, Nigeria. The finding implies that sufficient exposure to media messages on Covid-19 translates into compliance with the preventive measures. The finding corroborates those of Atchison et al. (2020) & Bruine de Bruin (2020), who found a significant correlation between exposure to media messages and compliance with Covid-19 preventive measures. However, the finding deviates from those of Asnakew et al. (2020), Asemahagn (2020), Pinchoff et al. (2020), Okafor (2020), Agusi et al. (2020), which postulate that exposure to media messages on Covid-19 is not a significant correlate of compliance with its preventive measures.

9. **Conclusion**

The research shows that the subjects had frequent exposure to media messages on Covid-19. Despite the regular exposure to information on the pandemic, they did not comply fully with the measures designed to prevent the disease’s spread. The respondents also rated high the media coverage of the
pandemic in Nigeria. By implication, Delta State’s urban residents have frequent exposure to mass media messages on Covid-19 but have an average compliance with the preventive measures. Also, there is a significant correlation between their exposure to media messages and compliance with Covid-19 preventive measures.

10. Recommendations

1. We find the frequency of exposure to the mass media messages on Cov-19 to be adequate. Therefore, we recommend the people sustain their high frequency of exposure to mass media messages on Covid-19.

2. The government and other authorities saddled with managing or preventing the spread of Covid-19 should make efforts to win the public’s trust to have confidence in them and the mass media messages on Covid-19. Such an attempt will motivate the public to comply with the Covid-19 protocols.

3. The mass media should strive harder to cover the pandemic to sustain the public’s high rating of their pandemic coverage.

References


