NEWS FRAMING OF COVID-19 VACCINES AND AUDIENCE RESPONSE TO VACCINE UPTAKES IN NIGERIA

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ABSTRACT

This study analyzed news framing of Covid-19 vaccines and audience response to vaccine uptakes in Nigeria. The duration of the study was five months (March to August, 2021). This period encompasses critical stages of vaccine rollout and public discourse, offering a comprehensive view of how news framing influenced audience response. The study used Framing Theory. The research adopted content analysis and in-depth interview, while three widely read Nigerian newspapers; The Guardian, Daily Trust and The Nation were content analyzed. A total of 102 stories were coded from the three newspapers under review, while each newspaper had 34 stories. Statistical Package for Social Sciences (SPSS) software was used to analyze the data. Also, interview was presented using thematic analysis. The study found that the vaccine stories were not given enough prominence they deserved. It was also found that framing of Covid-19 vaccines had negative impact on the audience. This was evident as conflict frame was emphasized among the frames through which information on Covid-19 vaccines were disseminated. The study concluded that the negative attitude news media portrayed towards the safety concerns were most of the reasons for Covid-19 vaccines low uptake in Nigeria. The study, recommended, among others, that the newspapers should present Covid-19 vaccines information on the front pages of newspapers to attract audience attention and the stories should be presented in fair and objective manners to address the negative impact of frames on audience response.

Keywords: *News Framing, Covid-19 Vaccines, Response, Newspaper.*

1. Introduction

As at December 2019, in Wuhan community in China, a rapidly infectious respiratory disease caused by a novel virus belonging to the coronavirade family was identified and named Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-Cov-2) or the disease called coronavirus disease 2019 (Covid-19). Due to the nature of the outbreak, the World Health Organisation (WHO) on January 30, 2020 declared that Covid-19 is a public health emergency of international concern. The first known case in Africa's sub-Saharan region was on February 28, 2020, in Nigeria. The index Covid-19 case was an Italian citizen who returned to Nigeria from Milan (Kretchmer, 2022). Since then, Nigeria has recorded thousands of Covid-19 infections, recoveries and deaths. In April 2021, India reported nearly 350,000 daily infections with the country witnessing a large surge in Covid-19 infections occasioned by a second wave of the infections. The Chinese are said to have faced a lot of discrimination since the pandemic was first reported in Wuhan, China. Anti-Chinese and Asian xenophobia were also reported in countries including US, Canada, Europe, Malaysia, Australia and the UK (Wen, Aston, Liu & Ying, 2020).

However, the situation of Covid-19 vaccines is not peculiar to Nigeria. In Sierra Leone, the availability of media outlet and the framing of Covid-19 vaccine stories contributed to 32.4% willingness of people to take the vaccine, as shown in survey of 2,146 people. In Ethiopia, a correlation between higher Covid-19 vaccination rates and access to media, underscoring that even optimal messaging is only effective if media are available and accessible (Mtewa, Ndege, Atela, Alam & Kinyanjui, 2021).

Similarly, in South Africa, it was reported that the vaccine uptake was influenced by factors such as age, education, sex, race, and politics (Kiptiness & Okoye 2021). According to Cooper, Royeen and Wysonge (2021), young people had a lot of concerns regarding the safety of the vaccine as compared to the older demographic. Vaccination against the Covid-19 disease has been reported to be one of the most effective ways of fighting the pandemic. Meanwhile, Herman, Wallace, Tanja, Chikezie and Rachel (2021), observed that newspaper coverage of the pandemic in the country was largely alarmist leaving many citizens struggling for understanding of the disease. According to Kiptiness, and Okoye (2021) the framing of Covid-19 pandemic by the Tanzanian newspapers was more of a global problem and this confused the citizens who believed that they were immune to the disease, while in Kenya, it was framed as a national issue. This explains how different frames were used in the coverage of the Covid-19 disease.

Framing is an unavoidable reality of the public communication process. The choice

as a journalist, expert, or advocate is not whether to employ framing, but rather how to effectively frame a message for your audience (Nisbet, 2010). Journalists are in the middle of the dynamic process of creating meaning construction in that they present additional layers of interpretation of issues and events in the form of a news story. How the media presents vaccines could have impacted vaccination stakeholders' attitudes towards the vaccines and eventually influenced audience decision to vaccinate (Tianan, 2023).

Despite this fact, there are studies regarding Covid-19 vaccines in Nigeria such as Soyemi, Ewedairo and Olomofe (2021) who investigated newspaper coverage of the side effects of the vaccine in Nigeria, Nwakpu, Ezewa and Ogbodo (2020) examined Nigeria media framing of coronavirus pandemic and audience response; this study was carried out before the introduction of Covid-19 vaccination drive. In the same vein, Apuke and Omar (2021) investigated television coverage of Covid-19 pandemic in Nigeria: missed opportunities to promote health due to ownership and politics but the study did not take newspapers and vaccination into considerations. Also, Igboeli and Ezebuenry (2021) examined influence of newspaper framing of Covid-19 pandemic on readers' perception of the virus but did not take into account the Covid-19 vaccines. Edafe and Okoro (2022) investigated factors associated with Covid-19 vaccine hesitancy among residents of a semi-urban setting in Bayelsa State-Nigeria. There are no known empirical studies that have focused essentially on framing of Covid-19 vaccines and how it influences audience response to accept the vaccines or not. This is a gap this study attempts to fill.

The following specific objectives guided the study:

i.   Find out how Covid-19 vaccines were framed in Nigeria by *The Guardian, Daily Trust* and *The Nation.*
ii. Examine specific frames *The Guardian, Daily Trust* and *The Nation* newspapers used on Covid-19 vaccines in Nigeria.
iii. Find out how news framing affected Covid-19 vaccine responses in Nigeria.

2. Review of Literature

Framing has been explored by various scholars and has been defined in various ways. According to Chong and Drunckman (2007), an individual's attitude has a major influence on how one interprets media messages. In addition to attitude, selection and salience are categorized within framing. Entman (1993) explained that to frame a story is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation. The press highlights a certain piece of information about the main

topic of a news story, which raises the salience of the issue. The term salience mans "making a piece of information more noticeable, meaningful, or memorable to the audience" (Entman, 1993, p.53). An increase in salience improves the probability that the audience will remember the information. Information can be added or taken out according to the message that the media are to communicate to the public.

Similarly, Ugondo (2015) argued that framing is the creation and presentation of strategic frames that influenced people's choice, their decisions and how they perceived others and issues. For a better understanding of the press framing, Entman (1993) explained four illustrations of the theoretical debates in the study of communication; the first illustration discussed was audience autonomy. One of the key concepts to the framing concept was the notion of dominant framing. From a framing perspective, dominant meaning consisted of the problem, causal evaluative and treatment interpretations with the highest probability of being noticed, processed, and accepted by the most people. The dominant meaning could be identified by a particular framing of a situation that was frequently mentioned in the text and was the most common opinion among the audience.

Next, journalistic objectivity was discussed. "Journalists may follow rules for 'objective' reporting and yet convey a dominant framing of the news text that prevented most audience members from making a balanced assessment of a situation" (Entman 1993, p. 56). Since, some journalists lacked the understanding of framing; they can unknowingly impose their dominant frames on the news. If they had a better understanding of the difference between "including scattered oppositional facts and challenging a dominant frame," they might be better prepared in building news stories that made each issue equally salient (Entman 1993, p.57).

The next item discussed was content analysis. Content analysis had "the major task of determining textual meaning and the identity of frames in the media. Entman (1993) warns that coders needed to be aware of drawing conclusions about dominant meanings. Proper coding instruction and agreement could result in valid results about issues and the frames that were being portrayed in the media.

Public opinion and normative democratic theory was the final element mentioned. The framing of any topic could influence public opinion and this specific topic discussed the democratic process. The democratic process could be influenced by how issues were framed in the press (Entman, 1993). Media framing could potentially have an effect on any issue that was portrayed in the press. In view of this, Hallahan (1999) posited that the media limit or define the story's meaning and thereby shaped people's interpretation of that story.

In the same vein, Claes (2005) classified frames to be either generic or issue-specific. Generic frames "transcend thematic limitations and could be identified in

relation to different topics, some even overtime and different cultural contexts" (Claes, 2005, p.54). Generic news frames focused on coverage of politics, for instance, and could be further particularized to a specific election. On the other hand; issue-specific news frames "were pertinent only to specific topics or events" (Claes, 2005, p.54). Such issues could be terrorism, women's movement, social justice movements, labour disputes, health, immigration, et cetera. Therefore, depending on the research area, underscoring media frames can help determine a news material's particular focus.

2.1 Theoretical Framework
Framing Theory

Framing theory was used in this study. A sociologist by name Erving Goffman, propounded the theory in 1974. Goffman posited that human beings typically make meaning of events around them with the use of key points called frames. The fundamental point in framing is not on the number of stories, but the angle that the media use in reporting an issue (Marcus, Alom & Joseph, 2020). According to Entman (1993), to frame a text or message, is to promote certain facets of a perceived reality and make them more salient in such a way that endorses a specific problem definition, causal interpretation, moral evaluation and/or treatment recommendation.

This theory was found relevant to the current study because frames have the potential to impact the way the media audiences think about Covid-19 and accepting the vaccination being introduced by the Federal Government. News framing acknowledges the ability of the media message to define a situation like Covid-19 and deter misinformation and rumours about taking the vaccine through their presentation. Public health advocates can use the media to influence decision makers and the audience in order to develop and support health policies.

3. Methodology

This research adopted mixed-methods research design by using quantitative and qualitative approaches to finding answers to the research questions. Content analysis was used to analyze how Nigeria newspapers framed/depicted Covid-19 vaccines, while in-depth interview was employed to further determine how the frame patterns shaped audience response.

3.1 Sample Size Determination

The sample size determination for this study comprised of two categories-one for content analysis and the second for interview. For content analysis, the researcher used purposive sampling method to determine the sample size of 102 editions of

selected newspapers (*The Guardian, Daily Trust* and *The Nation*) starting from March-August, 2021 (34days). In choosing days of reports by the three newspapers, the researcher chose days those newspapers under review reported Covid-19 vaccines' stories and arrived at 34 days per newspaper that is, one newspaper for 34 days multiplied by the three newspapers which yielded 102 editions that were content analyzed. The researcher used purposive sampling because it allowed the researcher to intentionally select specific elements that were relevant to the study.

For in-depth interview, the sample size was determined through conventional wisdom as Cobern and Adams (2020) posited that conventional wisdom suggests the number of people to be interviewed is between 15-20 people in which saturation can be reached. Therefore, eleven (15) interview participants among the Covid-19 vaccines stakeholders were chosen such as Nigerian Medical Association (NMA) one, National Centre for Disease Control (NCDC) one, National Primary Health Care Development Agency (NPHCDA) one, Religious/Traditional leader (two) public servant (one), civil servant (one), those who took the vaccines (two) and those who did not take the vaccines (two) formed the interview participants of this study. The researcher thus, used the purposive sampling technique and selected the eleven (15) participants for in-depth interview. Purposive sampling according to Asemah, Gujbawu, Ekhareafor and Okpanachi (2012) suggests that it is deliberate and the researcher believed that the sample was typical and representative of a particular group. Purposive sampling was used for both categories of this sample size determination because it allowed the researcher to intentionally select specific elements that were relevant to the study.

3.2 Data Presentation and Analysis
Research Question One: How were Covid-19 vaccines framed by *The Guardian*, *Daily Trust* and *The Nation* newspapers from March to August in Nigeria?

Table 1: Placement of stories on Covid-19 vaccines

Placement	The Guardian	Daily Trust	The Nation	Total
Front page	6	3	1	10 (10%)
Inside page	27	30	32	89 (87%)
Back page	1	1	1	3 (3%)
Total	34	34	34	102 (100%)

Source: Field Survey, February 2024

Table 1 revealed placement of stories on Covid-19 vaccines. 10(10%) stories were reported on the front page of the selected newspapers of which *The Guardian* had 6, *Daily Trust* had 3 and *The Nation* had 1. The table also revealed that 89(87%)

were reported inside the pages, of which *The Guardian* had 27, *Daily Trust* had 30 and *The Nation* got 32. The table also indicated that 3(3%) stories were reported at the back page of the selected newspapers. *The Guardian*, *Daily Trust* and *The Nation* had one (1) each. This implied that most Covid-19 vaccine information was presented on the inside page of newspapers under study. The front and back pages were given less attention in its presentations. This finding implied that the vaccine stories were not given enough prominence they deserved.

Research Question Two: What specific frames *The Guardian*, *Daily Trust* and *The Nation* newspapers used on Covid-19 vaccines in Nigeria?

Table 2: Frames through which information on Covid-19 vaccines were disseminated

Frames	The Guardian	Daily Trust	The Nation	Total
Conflict	17	18	22	57 (56%)
Human interest	10	7	6	23 (22%)
Reassurance	5	4	5	14 (14%)
Religious	1	3	1	5(5%)
Economic	1	2	0	3 (3%)
Total	34	34	34	102 (100%)

Source: Field Survey, February 2024

Table 2 showed specific frames which information on Covid-19 vaccine response was disseminated. Data revealed conflict frame as 57(56%) out of 102 stories that were reported. Human interest frame had 23(22%) out 102 stories reported, Reassurance had 14(14%) out of 102 stories reported. Religious frame had 5(5%) out of 102 stories reported, while Economic frame had 3(3%) out 102 stories reported. This implied that information on Covid-19 vaccines was reported through conflict frame, human interest frame, reassurance frame, Religious news frame and Economic frame but conflict frame was emphasized, which implied that news framing had negative impact on audience response to vaccine uptake in Nigeria.

Research Question Three: What impact did the framing of news have on responses to Covid-19 vaccines in Nigeria?
Findings from the in-depth interview were presented in themes that addressed the research question 3 below:

3.3 Vaccine Safety and Efficacy

It was discovered that the participants faulted the news media on Covid-19 vaccine safety and efficacy issues surrounding the recommended vaccines in Nigeria. The reports were characterized by vaccine risks, hazard and potential harm to people. It equally showed that Covid-19 vaccine side effects like pain at the injection site, fatigue, headache and nausea posed safety threat to the campaign against the vaccination. Participant 4 observed that: "It was reported in *The Nation* newspaper that in Kano State, convincing the people that the vaccine is safe was the major headache of the former Governor Abdullahi Umar Ganduje and his taskforce on Covid-19 because the news media earlier reported that the vaccine was intravascular coagulation, a factor which means that the blood clot within the vessels; if it blocks any part of your body and it is no longer vacuolated, that is paralysis for that side because there is no blood in circulation."

Sometimes, news coverage of Covid-19 vaccines caused more confusion as regards the vaccines, its efficacy, and the various conspiracy theories. Participant 6 explained that "We have seen on the pages of media that the suspension of Astra Zeneca Covid-19 vaccines by European nations was due to its safety doubt and hours later, the news media would tell us the same countries are going back to the use of the vaccines. It is therefore worrisome for the press to cause such confusion in the peak of decision making on the vaccination campaign."

3.4 Production of Vaccines, Types and Approvals

The news media as observed by Participant 2 raised the issue on approved vaccines (Oxford/Astra Zeneca, Johnson & Johnson, Moderna), and required doses. It was also revealed by Participant 5 that: "The media reported the production of Covid-19 vaccine as 'speedy' and did not follow due process before human consumption. This showed that the vaccine has been used to prevent infectious disease like small pox, yellow fever, measles, polio, etc these vaccines took 8-10 years to be developed unlike Covid-19 vaccines that undergone speedy development. Vaccines are being introduced less than a year of Covid-19. There is no vaccine yet for HIV, malaria, cancer, headache and for several other diseases that are killing people." Example was cited about a newspaper that reported the speedy production of the vaccine. Participant 5 maintains that *The Nation* justifies the report that the speedy development of the Covid-19 vaccine was quite significant and underscores the collective resolve of humanity to overcome the pandemic.

Participant 11 avers that a number of countries in Europe suspended the use of Covid-19 vaccines beginning with Denmark, in which vaccinated patients developed blood clots or embolism, stroke or even death from the types of vaccines recommended for use in Nigeria.

3.5 Influence of News Media on Vaccines Acceptability

It was discovered that the news media coverage of Covid-19 vaccines encouraged confidence, other bred skepticism and fear, calling for enhanced efforts in education and awareness to build trust and improve vaccine uptake among Nigerians. Participants explained that they noticed from the media that the benefit of taking the vaccine far outweighs any issue surrounding it. The influence of the media according to Participant 1: "Was positive and a number of people got vaccinated since the recommended vaccines were robust and met the criteria for efficacy and quality. Through the media, it was discovered that the news media influence on vaccines' response was positive; it fosters confidence and trust in vaccine programmes."

However, other participants viewed media reports on vaccines as negative. As Participant 3 posits, the government was using the vaccine as a ploy to siphon money and that when vaccinated, you would have the sign of a beast (666) on your body or would be micro shipped for government control. The implication of this report was that people were skeptical about the campaign of Covid-19 vaccination thereby affecting the acceptability rates.

Similarly, Participant 7 buttressed this point further citing instances of undue fear, panic and reluctance among people, eroding public trust and affecting vaccine acceptance. In line with this assertion, Participant 10 explains that the press has portrayed Covid-19 vaccines negatively as it emphasized mandatory vaccination policies by some governors because of the low uptake in their states. This showed that it is not only unconscionable making jabs mandatory for citizens; it is particularly obnoxious with fundamental human rights. It was deduced from the report that the vaccines were authorized only for emergency or experimental use as reported.

4. Discussion of Findings

One of the findings from this study indicated that audience responses to Covid-19 vaccine are framed by the placements of the Covi-19 vaccines' stories. These news stories as revealed from the findings were buried on the inside pages of the selected newspapers and it could be said that newspapers did not give adequate promotion to Covid-19 vaccination response. This was based on the data presented in Table 1. Findings from this study revealed the placements of Covid-19 vaccines' stories where inside pages had 89(87%) stories. This placement shaped how news reports were framed. Stories placed on the front page of newspapers usually considered as important because it captured audience attention. Supporting this

finding, Thuesen (2020) asserts that the press involvement in news story could be noticed in terms of 'where' on the pages of the newspapers (front, inside or back page). The decision on where a news item appears on the pages of newspaper and through which format can make such stories salient. Cater (2013) also emphasizes that the most important pertinent stories are usually located on the front page. Entman (1993) also illustrates this finding that text can make bits of information more salient by placement. It can be deduced from the above data that Covid-19 vaccine stories were not given the adequate attention they deserved.

Findings from this study have also shown that the specific frames used by the selected newspapers to present Covid-19 vaccine stories were conflict frame followed by human interest frame and the next is reassurance frame. However, economic and religious frames were given less attention by the newspapers. It was observed from the conflict frame that items such as disagreements between the recipients of the vaccines, group agencies and government on the safety and side effects were emphasized. Findings showed that some Nigerians disagreed with the Federal Government that the Coronavirus does exist and strongly hold that it was a scam; hence, there was no need for any vaccination against the virus. Data from the conflict frame also demonstrated that many other people rejected the vaccines out of fear for the side effects. In contrast, this perception was countered by *The Guardian* (2021) describing the side effects as too marginal to blight the efficacy of the vaccine. They added that the risk of not getting the vaccines far-outweighs the side effects.

Similarly, the human interest frame as found by the study showed for instance, some of the stories that are emotional such as "all Covid-19 vaccines carry certain amount of risk", "government would not be responsible for the safety or efficacy of the vaccines given outside the framework of government", "Astra Zeneca vaccine has continued to face safety doubt and many Nigerians have been inoculated", "Covid-19 vaccines do not cause infertility and shorten life span" (Gursoy, Ekinci, Can & Murray, 2022, p.2). These stories captured the gory tales of human-interest frame on Covid-19 vaccines as presented by the selected newspapers.

The data further showed reassurance frame used by the selected newspapers in presenting Covid-19 stories. Amidst the safety concerned, there were still cases of reassurance in promoting the vaccination. For instance, "Astra Zeneca vaccine is safe and Nigerians have been urged to ignore the conspiracy theories and fake news being pushed on social media, stressing that no known adverse effect of the vaccine has been recorded", "Nigerian citizens have been urged to disregard any unfounded theory about the efficacy and possible side effect of the vaccines", "PTF assured Nigeria to accept Covid-19 vaccines despite a few misguided comments on its safety

and efficacy" (Taiwo, Akomolafe & Adaku, 2021, p.2). It is apparent from the findings that framing makes some ideas in news stories more salient than others, while making some ideas visually invisible to an audience.

Findings from the interview showed that the news framing of Covid-19 vaccines had affected vaccination response in Nigeria. The media frames showed that vaccines were not safe as reported in the news media, lack of trust in the government and unequal distribution of Covid-19 vaccines were issues surrounded the vaccines. Responses from the interview indicated that the production of Covid-19 vaccine was presented as 'speedy' and did not follow due process before human consumption. The press revealed that vaccines that had been used to prevent infectious disease like smallpox, yellow fever, measles, polio, etc. these vaccines took 8-10 years to be developed unlike Covid-19 vaccines that were speedily created.

5. Conclusion and Recommendations
5.1 Conclusion
It can be deduced from the findings that most of the Covid-19 vaccine information was presented on the inside page of newspapers under study. This finding implied that vaccine stories were not given enough prominence they deserved. The audience's negative attitudes towards the safety concerns were most of the reasons for Covid-19 vaccines low uptake in Nigeria. From the data, framing of Covid-19 vaccines had negative impact on the audience. This was evident as conflict frame was emphasized among the frames through which information on Covid-19 vaccines were disseminated. Therefore, audience response to the vaccination uptake was low.

5.2 Recommendations
  i. Nigerian newspapers should consider giving prominence to vaccines' stories by placing vaccine information on the front pages of newspapers.
  ii. In an effort to promote vaccination response in Nigeria, continuous improvement in human impact, reassurance and religious news frames in presenting vaccine efficacy and safety standards are needed.
  iii. The media should be objective and fair in their coverage to address the negative impact of frames on the vaccination campaign in order to improve the rate of acceptance across the county.

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