

PERCEPTION OF NEWSPAPER FRAMING OF COVID-19 VACCINATION AMONG SELECT COMMUNITIES IN NIGERIA

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ABSTRACT

Acceptance of COVID -19 vaccines is still low in Nigeria despite a situation of public danger COVID -19 pandemic poses; and the assurance from the World Health Organisation (WHO) that the vaccines have been proven to be safe, effective and life-saving. The way the media reports on the vaccine may influence how the people perceive and respond to it. The study is anchored on Agenda Setting and Framing theories to investigate how residents of Delta state, Nigeria perceived how online and print newspaper framed news on COVID-19 vaccines. The study adopted survey design and sample 385 respondents out of total of 4,112,445 population of Delta state, Nigeria. The study found that newspaper to a great extent created awareness on COVID -19 vaccines but there is no relationship between the awareness created and the respondents' response of the vaccine. Both print and online newspaper adopted mainly "Side Effect" frame in COVID-19 vaccines reportage which negatively affected Delta state residents' perception of the vaccine. The study therefore recommended that the newspaper should strategically frame news and information on COVID-19 vaccination so as to control public perception and decision in a direction that can bring the pandemic under control.

KEY WORDS: COVID-19, Vaccine, Newspaper, Framing, Perception, Nigeria

INTRODUCTION

The novel Coronavirus disease 2019 (COVID-19), first identified in Wuhan China in December 2019, has rapidly spread to almost every region of the world. The disease is caused by a new and severe type of Coronavirus known as Severe Acute Respiratory Syndrome Coronavirus 2 (SARSCoV-2). World Health Organisation (2020) points out that COVID-19, from the family of Coronavirus is a contagious respiratory illness transmitted through the eyes, nose, and mouth, via droplets from coughs and sneezes, close contact with infected person and contaminated surfaces. It has an incubation period of approximately one to fourteen days. The symptoms include cough, fever and shortness of breath, and it is diagnosed through a laboratory test. Sauer (2020) remarks that the contagion could lead to severe respiratory problems or death, particularly among the

elderly and persons with underlying chronic illnesses. Some infected persons however, are carriers for the virus with no symptoms while others may experience only a mild illness and recover easily.

Coronaviruses are zoonotic, meaning they are normally transmitted between animals and people. It is from a large family of viruses that can cause illness in animals and humans. In humans, several coronaviruses are known to cause respiratory infections ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Total Health Trust (2020), states that the virus has a mutative ability of multiplying into various strains. First was the SARS CoV-2, a strain of coronavirus that has not previously been identified in humans. Next strain was Delta strain and the later is the Omicron strain.

With significant spread of COVID-19, many countries have applied different measures of containment of the virus. Besides the mandatory use of face mask and other safety protocols, countries have adopted flight restrictions from countries of significant index cases of COVID-19. Beyond terrestrial consideration of infections of COVID-19, Nigeria has continued to apply different containment strategies to curb the effects of the virus. Since first record of COVID-19 case in Nigeria on the 27th February, 2020 .and gradually, the number of confirmed cases increased with daily cases in different States in Nigeria (Nigeria Centre for Disease Control, 2020). The report led to increase search for control measures of the virus.

Throughout, the world, scientists have been moved to develop safe and effective vaccine that will slow or stop transmission, reduce illness, hospitalization and death associated with COVID-19; and mitigate the impact of the virus on health system, social activities and economics of countries and communities (WHO, 2020). The world is hoping that trials of a possible vaccine against virus will aid to assuage its ferocity among humans (Owuamalam, Ezeh & Eze, 2020). In March, 2, 2021 Nigeria received the first COVID-19 vaccine, shipped via the Covax Facilities, a partnership between UNICEF and WHO (UNICEF, 2021).

Despite government effort to ensure Nigerians receive COVID-19 vaccination for immunity against the virus, it could not positively influence people perception and willingness to accept the vaccines. The role of newspaper reportage of COVID-19 has continued to generate both theoretical foundations and empirical evidence of the mass media as tools for effective health campaigns through effective health communication. They are to play the key role in fostering trust in vaccines, delivering vaccine confidence communication and tracking and addressing misinformation associated with the vaccine.

The perception of Nigerians especially Delta state residents have continued to generate scholarly discourses on newspaper reportage of COVID -19 vaccines. To this end, Igboeli and Ezebuenyi (2021) assert that newspapers have proven to have the capacity to create awareness, accelerate information flow and mobilise members of the society to take part in activities which the newspapers play up before them. The reactions of the public towards newspaper reports of issues in the society are very important. It becomes an evidence of how the messages were perceived and understood. This study, therefore examines the perception of newspaper framing of COVID-19 vaccines among select communities in Nigeria.

Statement of Problem

COVID-19 Vaccine hesitancy is increasing globally, and this threatens the world's ability to bring the pandemic under control. The way the media reports on the vaccine may influence or

affect how the population perceives the safety and efficacy of the vaccine. News coverage of COVID-19 vaccines is generally viewed from different approaches. In news framing, each medium (print, broadcast or social media) has been inundated with news stories, features, editorials and even in graphical representations such as cartoons. Readers analyse these news approaches based on the style requirement in presentation as well the nature of news source. The former comprises of the aspect of reportage of news on COVID-19 vaccine. This may be adjudged when readers look at the frequency and slant of presentation. The latter which is, the nature of news source answers the question on whether traditional print media (newspaper and magazine) carry more news on COVID -19 vaccines than online platforms (in particular, online newspaper).

Newspaper ranks highest for believability for all media, despite that, its readership in Nigeria is still low. The challenge in the study is determining the extent of newspaper readership and its influence to readers' perception of newspaper framing of COVID-19 vaccines.

Although readers' of traditional newspaper enjoy the unique permanence advantage of traditional newspaper, they, however may not enjoy the interactive as well as increased traffic associated with online newspaper. This, therefore, puts to fore which of these sources carry more news on COVID-19 vaccines; how they framed it; and with what degree of effects. It is in attempt to examine the extent of effects that the question of readers' perception could be answered.

Research Objectives

The broad objective is to examine readers' perceptions of newspaper framing of COVID-19 vaccines. The specific objectives include:

1. To find out the type of newspaper mostly used for information on COVID-19 vaccines among Delta state residents.
2. To ascertain the extent newspaper created awareness on COVID-19 vaccine among Delta state residents.
3. To identify major news frames newspaper adopted in reportage of COVID-19 vaccines.
4. To examine how newspaper framing of COVID-19 vaccines affected Nigerian's residents' perception and responses to the vaccines.

Research Hypothesis

Two research hypotheses were formulated for the study as;

H₁ There is a relationship between COVID-19 vaccines awareness based on newspaper reportage and audience responses to the vaccines.

H₀ There is no relationship between COVID-19 vaccine awareness based on newspaper reportage and audience responses to the vaccine.

H₂ Newspaper framing of COVID-19 vaccines positively affected Delta state residents' perception of the vaccine.

H₀ Newspaper framing of COVID-19 vaccines negatively affected Delta state residents' perception of the vaccine.

Significance of the Study

The study would be significant in many ways. First, it will provide empirical evidence on the existent and awareness of COVID-19 vaccines among Delta state populace and by extension, the

entire Nigeria. This is importance as this awareness will boost government efforts towards a COVID-19-free society.

The finding of the study will provide empirical foundations for subsequent studies on COVID-19 and by extension, COVID-19 vaccines. This will also assist Nigeria Centre for Disease Control on effective monitoring of index cases and application of contingency measures towards the management of containment of spread of COVID-19 in Nigeria through vaccines

REVIEW OF RELATED LITERATURE

COVID-19 and Vaccine

Much scholarly studies have been published on COVID-19. With its first case in the city of Wuhan in December, 2019, it has continued to generate serious attention across divides of academic and medical practice. With daily reports of index cases of COVID-19, the world pharmaceutical companies, nongovernmental agencies and researchers have continued the search for effective cure to the virus. Recently, there are doses of approved vaccines such as (a) Moderna vaccine (mRNA-1273), (b) Oxford/AstraZeneca vaccine, (c) Pfizer/BioNTech vaccine (BNT162b2) and (d) Janseen vaccine (NHS, 2021).

Vaccines are assessed to ensure they meet acceptable standards of quality, safety and efficacy using clinical trial data, manufacturing and quality control processes. The assessment weighs the threat posed by the emergency as well as the benefits that would accrue from the use of the product against any potential risks (WHO, 2022). Reactions after getting a COVID-19 vaccine can vary from person to person. Most people in clinical trials experienced only mild side effects, and some of them had no side effects at all. COVID-19 vaccines side effect include; fever, headache, fatigue, and pain at the injection site were the most commonly reported side effects WHO,2022; CSC, 2022). Most side effects are mild to moderate; and serious side effects are rare (CSC, 2022). However, Vaccination protects from severe COVID-19 infection whether or not there is side effects after vaccination (CPC, 2022). WHO (2022) also advised a vaccinated person should continue to with the recommended protective protocols against COVID-19 such as regular hand-washing, wearing of face mask, physical distancing and so on.

COVID-19 Vaccine hesitancy is increasing globally, and this threatens the world's ability to bring the pandemic under control. Despite the wide availability of the COVID-19 vaccine, previous experience suggests huge limitations on vaccination uptake (Troiano & Nardi 2021; Xiao & Wong, 2020). Nigeria is traditionally vaccine hesitant, much more with the doubts and accessibility constraints associated with the coronavirus vaccine (Troiano & Nardi 2021). . Acceptance of COVID-19 vaccine is still very low in Nigeria despite the campaign for it (Mustapha, Lawal Sha'aban, Jatau, Wada, Bala, et al., 2021)

Any process of major change generates its own mythology before such issues that require come into practice before scientist could assess its effects and implication, so there is always a gap between social change and its understanding (Castells, 2022). One of the challenges that have affected audience perception of COVID-19 is associated with truths and myths about COVID-19. Significantly, there are unverified myths that have hampered effective campaign on the existence of COVID-19. The history of myths and misconceptions about health and diseases in the Nigeria society remains historical as culture and religion have gone a long way to influence the Nigerian people (Izekor, Okpuzor, Morka and Nnaji, 2020).

Izekor, Okpuzor, Morka and Nnaji (2020) observe that despite the effort of the government,

researchers and health workers towards curbing the spread of the disease, there are misconceptions held by some people about COVID-19 which is a challenge affecting the control of the disease (Olajide, 2020). Various factors ranging from cultural, educational and religious backgrounds influence the belief system of people over the years. Despite the civilization in our societies, these factors still hold a firm grip over the people who believe in them. Misconceptions over various subject matters on health have been in existence before the onset of COVID-19. Olajide (2020) and Healthwise (2020) agree that many Nigerians believe that COVID isn't real. Both scholars identify social media as being effective in disseminating these ideas to other individuals causing harm to the health care system.

There exists so much confusion among many Nigerians especially the rural dwellers. Limited information about the pandemic has promoted certain misconceptions among the vast majority of rural dwellers in Nigeria. Other myths include the common belief that drinking alcohol protects one against COVID-19. Gargling with salt and warm water will kill COVID practice of swallowing of antibiotics will protect one from the disease. The basic truth of COVID-19 is that it is real and leads to rapid infections through droplets and open areas of the body.

Newspapers: Traditional/Print Vs Online

Akobundu, (2009) as cited in Edegoh, Ezeh & Aniebo (2015) defines newspaper as “written publication containing news, information and advertisements usually printed on low-cost paper called newsprint. It is an unbound, printed publication issued at regular interval, which presents information in words often supplemented with pictures. Of all the print media, newspapers provide the most current information (Agbanu, Chuks & Aliede, 2014). Newspaper provides the most current analysis, debate and criticism of socio-political, economic, health and a host of other issues to inform, educate and entertain readers (Edegoh, Ezeh & Aniebo, 2015).

The permanency, depth and variety of reporting attributed to print media have made information recall, with more lasting impact, possible because they remember its messages and use them for their daily purposes and in decision making. Newspapers give interpretation of societal issues thereby helping members of the society understand issues as well as make right decision (McQuail, 2009).

The emergence of online media has a huge impact on the traditional or print newspaper landscape. There is a decline in the readership of print newspapers as a result of the growth of online media. Newspapers readers are now shifting online to the demands for faster information; however, print publications are still preferred by many audiences. Although online newspaper is easier and faster to be read but lacks depth and deeper interpretation of the content; newspaper content is far more impactful and more likely to be persuasive in terms of attitudinal change (Olainka, 2013). Print newspapers have more attention span than online newspapers. People could spend more time reviewing information on print media unlike online newspapers that have low attention span as a result of several distractions from other contents scrabbling for attention.

Again, print newspapers give stories prominence by placement (Front page, back page, headline placements etc.) based on the editors' perception of the interests of all the readers unlike. This is where perception theory comes in. With this, there is possibility of the readers getting introduced to opinion different from theirs. Online newspapers on the other hand, give the favoured position based on past history of the individual readers; and give the readers selective exposure to contents that conform to their belief (Raymond, 2019)

Print newspaper some authors (Onwe, Chukwu, et al 2020; Raymond, 2019) believe is not

democratic and might serve as a vehicle for propagating the subjective opinion of the copywriter or the editor without giving the readers to inject their own view on the topic/subject. This is where the online newspapers have an upper hand; giving readers the opportunity to comment and air their views on issues of public importance.

Online newspaper can be edited and amended as many time as possible or updated if event has over taken the previous situation unlike the hard copy newspaper one it is printed and circulated it cannot be edited or updated unless new one have to come out. However, print newspapers regarded as “reliable”, since editors cannot easily access to make changes. (Olainka, 2013).

THEORETICAL FRAMEWORK

This study is anchored on Framing theory

Framing Theory

The study employs Framing theory to capture how Delta state residents perceive newspaper framing of COVID-19 vaccine. According to (Morner & Olausson, 2017), framing is largely about salient information, meaning that to frame is to select an aspect of perceived reality and make it more important in a communication text in a way that promotes a particular situation’s definition, “causal interpretation, moral evaluation, and/or treatment recommendation” (Entman, 1993, p. 52). Reese, (2001, p. 11) further defines framing as the way “interests, communicators, sources, and culture combine to yield coherent ways of understanding the world, which are developed using all of the available verbal and visual symbolic resources”. Frame analysis has generally been used in studying news media texts (Morner & Olausson, 2017; Shehata & Hpmann, 2012); and applicable to a wide range of textual materials (Morner & Olausson, 2017). Frames are found in all types of media, from print to broadcast news, and they convey meaning through the interaction between the reader and the text (these meanings are not in the text *per se*, but rather already existent in the mind of the reader of the text). A common feature in most approaches to framing is the assumption that we do not relate to the world in a direct and unfiltered way, but that we recognize and interpret events within existing ideas which we have created through other information sources. There are a number of framing devices used in media framing. “Using certain words or phrases, making certain contextual references...giving examples as typical, referring to certain sources, and so on” are some examples of techniques which journalists use to frame issues (McQuail, 2005, p. 378-379). These play an important role in the way people perceive a topic and consequently form opinions about them.

Kenechukwu (2014) explains that the framing theory holds the idea that the media influence the importance individuals place on public issues and empirically demonstrate links between media exposure, audience motivation to seek orientation and audience perception of public issues. It is believed that though the mass media including newspaper play important role in awareness creation, they are more significant in affirming attitudes and opinions that are already establishes, and less influential than the social environment (Ezeh, 2020).

Jorndrup (2016), notes that there three occasions journalists will abandon the idea of neutral reporting and they include; moment of tragedy; situation of public danger; and threat to national security. COVID-19 pandemic poses a situation of public danger and demand that the newspaper should strategically frame news and information on it so as to control public perception and decision in a direction that can arrest the situation. Audience perception of COVID-19 vaccine largely depends on how the media, in this case newspaper framed the news.

METHODOLOGY

The study adopted Survey research design with questionnaire as the instrument for data collection. This method enables the researcher collect uniform and reliable data from a uniform measuring instrument (Nwuneli, 1991). It is considered apt because the method provides the researcher the opportunity of meeting with the residents of Delta state with the view of finding out their perception of newspaper framing of COVID-19 vaccine. The survey method provides a quantitative means of measuring the variables tested in the study.

The study was conducted in Delta state, a state in the South-south geo-political zone of Nigeria. The area of study in Delta State comprises of three senatorial districts and twenty five (25) local government councils. According to the 2006 population census, Delta state has a total population of 4,112,445. Going by the population growth and time difference between 2006 when the last population was conducted and 2022 when this study is conducted, there is need for population projection. The formula for population projection is put as;

$$PP = GP \times PI \times T.$$

Where PP = Projected Population

GP = Given Population

PI = Population increase index at 2.28%

T = Duration of time between the year the last census was conducted and year of study

Therefore,

$$PP = GP \times 2.28\% \times 2006 - 2021$$

$$PP = 4,112,445 \times 2.28 \times 16$$

$$PP = 4,112,445 \times 0.0223 \times 16$$

$$PP = 1,467,320.37$$

$$AP = 4,112,445 + 1,375,612.85$$

$$AP = 5,579,765$$

Therefore the population of the study is 5,579,765. Using Meyer Sample determination formula, 385 sample size is apt for the study. Multi-staged sampling technique was used to segment the state into local government Areas. There are 25 local government areas in delta state. 6 local government areas were purposively selected. The researcher considered local government areas that are in the urban areas considering the nature of the study which requires some level of literacy to read newspaper and financial viability to purchase or subscribe for data on online newspapers.

Again, purposive sampling technique was used to select one community in each of the six selected Local Government Area from each senatorial district. The researcher considered communities in or close to the administrative/headquarters of each of the selected Local Government Areas. Sixty-four (64) except for Asaba that has 65 respondents were randomly selected from each of the six selected local government areas.

The sample technique is shown on the table below;

S/N	Senatorial District	L.G.A	Community	Number of Respondents
1	Delta Central	Sapele	Sapele	64
		Ugelli North	Ugheli	64
2.	Delta North	Oshimil South	Asaba	65
		Aniocha North	Ogwashi Ukwu	64

3.	Delta South	Warri South	Warri	64
		Warri North	Koko	64

From the table above, Delta Central Senatorial District had Sapele and Ugheli north Local Government Areas selected. Delta North Senatorial District had Oshimili South and Aniocha North selected. Delta South had Warri South and Warri North selected.

In the second stage, Sapele was selected from Sapele local Government Area; Ugheli was selected from Ugheli North Local Government Area; Asaba was selected from Oshimili south local government area; Ogwashi-ukwu was selected from Aniocha North L.G.A.; Warri was selected from Warri South Local Government Area; and Koko was selected from Warri North Local Government Area.

The study used the questionnaire as the measuring instrument for data collection. To ascertain the validity and reliability of the test instrument, Pre-testing of the research instrument was conducted among 10 eligible respondents within each of the communities in the selected local government. The purpose of this initial study is to ensure that questions are not ambiguous to avoid different interpretation by respondents and to ascertain the level of comprehension of the instrument by the respondents and the clarity of the instrument and also help in refining the research instrument. Findings from this pretest were used in structuring the instrument for its use in the field. A post test was conducted two weeks from earlier pre-test as part of pilot study. The result obtained was compared to the earlier one from the same number of respondent within the same selected areas in the study area. A correlation of results was applied so as to justify the measurement as reliable in measuring what it is designed to do. It is the correlation coefficient that certified the validity of the questionnaire used in the study.

The data generated for the study was synthesised and analysed using statistical package for social sciences (SPSS) Version 16. They are classified into categories with specific indices, like frequency, percentage and degree. The simple percentage was used in determining the relationship between a specific unit in the frequency and the total number of respondents.

RESULT

Out of the Three Hundred and Eighty-Five (385) copies of questionnaire administered, 366 copies were retrieved and valid for the study. Below is the detailed presentation and analysis of the findings.

Table 1
Newspaper Readership

Options	Frequency	Percentage (%)
Yes	292	79.9%
No	51	13.9%
Not Sure	23	6.2%
Total	366	100%

Data on result 1 show that 292 (79.9%) of the respondents said that they read newspapers; 23 (6.2%) were not such if they read or not while 51 (13.9%) were said categorically that they don't read. This finding suggests that the respondents read newspapers.

Table 2

Preferred type of newspaper		
Options	Frequency	Percentage (%)
Online Newspapers	283	77.3%
Traditional Newspapers	49	13.4%
Not Sure	34	9.3%
Total	366	100%

The study further sought to know the respondents preferred newspaper. Data on result 2 show that majority 283 (77.3%) of the respondent preferred online newspaper; 49 (13.4%) preferred Traditional newspapers; while 34 (9.3%) were not sure of their choice of newspaper. It means that online newspaper is the respondents' choice of newspaper.

Table 3
The extent of newspaper reportage of vaccines

Options	Frequency	Percentage (%)
Traditional Newspaper	62	20%
Online Newspaper	244	72%
Can't Say	60	8%
Total	366	100%

The result from Table 3 shows that 20 percent of the respondents believed that there is high extent of newspaper reportage of vaccine, 72% believed newspaper reportage is minimal while just 8% believed that the reportage is low. This suggests that there is minimal extent of newspaper reportage of vaccine.

Table 4
Types of newspaper mostly used for news on COVID-19 vaccine.

	Traditional newspaper	Online newspapers
Yes	25 (7%)	286 (78%)
Don't use at all	32(9%)	23(6%)
Total:	366 (100%)	

Table 4 shows that respondents mostly used online newspapers to get news on COVID-19 vaccines than traditional newspaper. It can equally be inferred that there is drop in readership of traditional newspapers as most respondents didn't use the traditional newspapers for news on vaccine.

Table 5
Audience responses to COVID-19 vaccination awareness based on newspaper reportage of vaccine

Options	Frequency	Percentage (%)
Greater awareness	308	84%
Less awareness	50	14%
Undecided	8	2%
Total	366	100%

Table 5 shows that there is increased awareness due to exposure to newspaper coverage of COVID-19 vaccination. There is equally drastic drop in the number of undecided respondent.

Table 6
News frames adopted in newspaper reportage of COVID-19 vaccination

Traditional newspaper			Online newspaper		
Options	Frequency	Percentage	Options	Frequency	Percentage
Safety Frame	110	30.1%	Safety Frame	33	9%
Side Effect Frame	234	63.9%	Side Effect Frame	274	74.9%
Myths and Deception frame	22	6%	Myths and Deception frame	59	16.1%
Total	366	100%	Total	366	100%

Table 6 identified three major frames in relation to traditional and online newspapers. It shows that there are more ‘Safety frames’ in traditional newspaper than online newspapers. Inversely, online newspaper shows more of ‘Side Effect frame’ than traditional newspapers. However, there are more Side Effect frame used in both traditional and online newspapers (63% and 74.9% respectively). The use of “Myths and Deception frame” is generally insignificant but online media shows more “Myths and Deception frame” than in traditional or print newspaper. This findings support the position of (Olajide 2020) that online media have been serious purveyor of myths and deceptions on COVID-19.

Table 7
Delta state residents’ perceptions of COVID-19 vaccination

Options	Frequency	Percentage (%)
Positive	112	31%
Negative	202	55%
Undecided	52	14%
Total	366	100%

Table 7 shows that although significant number of respondents has positive perceptions of COVID-19 vaccination, available statistics show that many Delta state residents still have negative perceptions about the vaccines. Also, the study found that 14% aren’t able to decide on the degree of perceptions.

Table 8
The extent of newspaper reportage of COVID-19 vaccination vis-à-vis effects perception about the vaccine

Option	Frequency	Percentage (%)
High extent	74	20%
Minimal extent	265	72%
Low extent	27	8%
Total	366	100%

On the extent of newspaper reportage of COVID-19 vaccination vis-à-vis effects on Delta state

residents, Table 8 reveals a minimal extent. This is premised on the fact that many Nigerians (including Delta state residents) still nurse some doubts about the reality of COVID-19 and by extension, its vaccine. Significantly too, the Table also showed that a reasonable number of respondents are affected by newspaper reports on the virus.

Testing of Hypothesis

H₁ There is a relationship between vaccines awareness based on newspaper reportage and audience responses to the vaccines.

H₀ There is no relationship between COVID-19 vaccine awareness based on newspaper reportage and audience responses to the vaccine.

Table 9
COVID-19 vaccination awareness based on newspaper reportage * effects on perception about the vaccine
Correlations

			vaccination awareness based on newspaper reportage of vaccine	The extent of Responses based on newspaper reportage of vaccine
Kendall's tau_b	vaccination awareness based on newspaper reportage of vaccine	Correlation Coefficient	1.000	.474**
		Sig. (2-tailed)	.	.000
		N	366	366
	The extent of Responses based on newspaper reportage of vaccine	Correlation Coefficient	.474**	1.000
		Sig. (2-tailed)	.000	.
		N	366	366

** . Correlation is significant at the 0.01 level (2-tailed).

COVID-19 Vaccination awareness as a result of exposure to newspaper report of it was cross tabulated with audience responses to the vaccine. Correlation co-efficient and Chi-square tests were used in testing the hypothesis. The correlated coefficient value shows that there is no relationship the awareness of COVID-19 created by the newspaper and the respondents' responses to the vaccine. This is validated with the data on Table 5 which shows greater (84%) awareness of COVID-19 vaccine based on newspaper reportage of vaccine; capable of influencing responses to a great extent.

However, the insignificant value of .000 obtained in Table 9 against the significant value of 0.01 shows low extent of awareness in triggering responses to vaccination. This result shows that awareness of COVID-19 vaccination did not have a significant effect on the respondents' responses to the vaccines.

Hypothesis 2

H₂ Newspaper framing of vaccines positively affected Delta state, Nigeria residents' perception of the vaccine.

H₀ Newspaper framing of vaccines negatively affected Delta state, Nigeria residents'

perception of the vaccine.

Table 10
Frames Adopted by Print Newspaper * Perception of COVID-19 Vaccine

	Perception of vaccine			Total
	Positive	Negative	Neutral	
Frames adopted by print newspaper	33	0	0	33
Safety Frame	79	200	51	330
Side Effect Frame	0	2	1	3
Myth & Deceptive Frame	112	202	52	366
Total				

Table 11
Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	83.501 ^a	4	.000
Likelihood Ratio	87.840	4	.000
Linear-by-Linear Association	59.701	1	.000
N of Valid Cases	366		

a. 4 cells (44.4%) have expected count less than 5. The minimum expected count is .43.

Chi-square test was used to test hypothesis one that states that “Newspaper framing of COVID-19 vaccines positively affected Delta state residents’ perception of the vaccine”. The print newspaper framing was first tested against respondents’ perception of the vaccine. Data obtained from measuring “Delta state residents’ perceptions of Covid-9 vaccination” on Table 8 show that majority (55%) of the respondents still have negative perceptions about the vaccines; 31% has positive while 14% is undecided. Data on Table 6 also indicate that majority (63.9%) of the respondents were of the opinion that print newspapers used side effect frame in presenting news on vaccination. This could negatively affect their perception on the vaccines.

Applying Chi-square test on the about, the obtained count value is less than the expected value which is the decision point, hypothesis one is rejected while the null hypothesis is accepted. It means then that Print newspaper framing of COVID-19 vaccines negatively affected Delta state residents’ perception of the vaccine.

Table 12
Frames Adopted by Online Newspaper * Perception of Vaccine

	Perception of vaccine			Total
	Positive	Negative	Neutral	

Frames adopted by online newspaper	Safety Frame	33.7	60.7	15.6	110.0
	Side Effect Frame	68.5	123.6	31.8	224.0
	Myth & Deceptive Frame	9.8	17.7	4.5	32.0
Total		112.0	202.0	52.0	366.0

Table 13
Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	561.376 ^a	4	.000
Likelihood Ratio	551.039	4	.000
Linear-by-Linear Association	315.286	1	.000
N of Valid Cases	366		

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 4.55.

Online newspaper’s framing of COVID-19 vaccine was tested against respondents’ perception of the vaccine. It also proved that online newspaper framing of vaccines negatively affected Delta state residents’ perception of the vaccine. Data on Tables 8 and 7 were also used to validate that.

DISCUSSION OF FINDING

The result of the survey showed that generally, newspaper readership amongst the respondents has increased. It means that the respondents are aware of what is happening around them since newspapers contain information related to recent issues in the society; and provide the most current analysis, debate and criticism of socio-political, economic, health and a host of other issues to inform, educate and entertain readers (Edegoh, Ezeh & Aniebo, 2015). The permanency, depth and variety of reporting attributed to print media have made information recall, with more lasting impact, possible because they remember its messages and use them for their daily purposes and in decision making.

The first research objective sought to know the types of newspaper mostly used for news on COVID-19 vaccines. The study found that online newspapers are preferred choice of newspaper as confirmed by 77.3% of the respondents on Table 2. Also, most respondents got newspaper about the vaccines from online newspapers than traditional newspaper thereby pointing to increased adoption of media technology among the respondents. This highlights the role online media have played in the patronage and readership of the newspapers. This is not surprising since online newspaper is fast, easy to read and easily accessible (Olainka, 2013).

The second research objective sought to ascertain the extent newspaper created awareness on COVID-19 vaccine among Delta state residents. Findings show that newspaper created a tremendous awareness on the vaccine. This shows the ability of the newspaper in setting the agenda and raising issues of COVID-19 to the public. However, online newspaper is the most

frequently source of information about the vaccine among newspaper readers in Delta state. This is not surprising considering the easy accessibility and attractiveness of online content. Users could easily come across news on vaccine straight from their tablets or mobile phone at their fingertips as they navigate links, interlinks and page transfer.

Newspaper readers learn how much importance to attach to a topic on the basis of how the message is framed and the emphasis placed on it in a newspaper (Mboso & Ezech, 2020). The third research objective therefore sought to ascertain the frames used by the newspaper in reporting news on COVID-19 vaccine. Both the traditional and online newspapers used three different frames (Safe frame, Side Effect frame and Myth and Deceptive frame) in reporting news on COVID-19 vaccine. The study found that there is generally more (63% and 74.9% respectively) side effect frame used in both the traditional and online newspapers respectively in reporting news on COVID-19 vaccine. However, online newspaper used more of 'side effect' and 'Myth and Deceptive' frames than the traditional newspapers. Research has proved that Nigeria is a vaccine hesitance; and there are a lot of speculations and misconceptions about COVID-19 vaccine in different social media platforms which makes hesitance in taking vaccine even more. The interactivity nature of online newspaper no doubt could influence the side effect framing of the content. Online media allow the users to interact with the paper and inject their own opinion on the subject. As the paper sets agenda for the readers, the readers as well set agenda for the paper. Again, people seek for information that is in consonance with their belief and selectivity nature of online media provides the users the opportunity to go for they desire. As people source and find information on vaccine that is line with their belief, they are more likely to like, comment and share them widely.

There is more Safety frames in traditional than online newspapers. This could be as a result of in-depth information and constructive analysis of issues traditional/print newspapers are known for. This makes message recall possible which would have a lasting impression that would help in informed decision. Traditional newspapers have been more focused in providing every detail that would have aid in understanding of COVID-19 vaccines. Unlike the online newspapers that keep readers distracted with pop up information that intermittently come up as breaking news.

Myths and Deceptive frame is generally insignificant in the two types of newspapers. However, there is more "Myths and Deception frame" frame used in online newspapers than in traditional newspaper. This shows that online newspapers are susceptible to 'myths and deception frames' than traditional newspapers. It goes a long way to support the popular opinion that social media (including online newspapers) are purveyors of fake news on COVID-19. It also means that the online newspapers did not strategically framed COVID-19 vaccine knowing the importance of it in controlling the spread and death associated with the virus. People's perception that COVID-19 isn't real or that the vaccines have negative effects dominates online newspapers because of its interactive nature and unprofessional practices in online media. At the moment of public danger, like COVID-19 pandemic, it is expected that the journalists abandon the idea of neutral reporting (Jorndrup, 2016) and strategically report news that would help in arresting the situation. The fourth research objective sought to examine how newspaper framing of COVID-19 vaccines affected Delta state residents' perception and responses to the vaccines. Although findings show that some respondents have positive perceptions on COVID-19 vaccines, available statistics as shown on Table 7, indicates that majority of Deltans (55%), still have negative perceptions about the vaccine. It means that the newspapers have a minimal effect in the audience perception of the

vaccine. Result of testing hypothesis two also confirmed that both print and online newspaper framing of vaccines negatively affected Delta state residents' perception of the vaccine. The problem could be as a result of a decline in the patronage of print newspaper in recent years. It means that the content of print newspaper is exposed to fewer audiences, therefore might affect readership as well as the contents. Print newspaper is known for its in-depth and interpretative reporting which could put public issue such as COVID-19 vaccine into proper perspective, making a case for its importance in controlling the spread of the virus. Unfortunately, readership of such newspapers have dwindled leaving a sensitive issue as vaccine at the mercy of online media.

Again, Print newspaper is slow in content delivery compare to the online media. By the time print newspaper follows the rigorous processes and eventually publishes, the online newspaper must have successfully framed and set agenda on the issue at stake. This time line shows how early media framing of an incident establishes a frame that could last through the evolving event (Mboso & Ezech, 2020; Bjerke, 2016; Kuypers, 2009).

SUMMARY

Summarily, the following findings are deduced from the analysis:

- a. The study comprised of average respondents who exhibited high knowledge of COVID-19 vaccines
- b. Most respondents got information about the vaccines from online newspapers than traditional newspaper thereby pointing to increased adoption of media technology among the respondents.
- c. There is minimal extent of influence and perception of COVID-19 among the respondents.
- d. Traditional newspaper has been adjudged to have recorded more "safe" frames than online newspapers.
- e. Online newspapers concentrated more of "side effect" frames than traditional newspapers
- f. Online newspapers are susceptible to 'myths and deception frames' than traditional newspapers.
- g. Delta state residents still have negative perception COVID-19 vaccine; however, significant score of those that agreed to positive perceptions, means that there are still informed Delta residents on COVID-19 vaccines.

CONCLUSION

Traditional newspaper patronage has declined as readers now shift attention to online newspaper due to the fact that it is convenience and easily accessible. There is increased awareness of COVID-19 vaccination based on exposure to newspaper (traditional and online newspapers) reportage of. However, online newspaper is the major purveyor of information on COVID -19 vaccine.

There is minimal extent of influence and perception of COVID-19 among the respondents because of the issues on side effect of the vaccine and myths about the vaccine that are yet to be figured out among Nigerian populace. Although newspaper created a tremendous awareness on COVID-19 vaccine, it could not positively influence people's perception and acceptance of the vaccine.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are proffered:

1. Government should continue its campaign for COVID-19 vaccine. They should employ more traditional communication system that will target at grassroots. This is true because, newspaper readership requires average level of literacy and socioeconomic status.
2. Efforts should be made to orientate newspaper operators; especially operators of online newspaper on how to report sensitive health issue like COVID-19. This strategy will reduce the propensity for fake news about the virus and vaccine.
3. Journalists should be encouraged to adhere to professionalism in news gathering, processing and production.
4. Nigerians should be encouraged to key into Federal government's efforts in eradicating the virus in Nigerian society. This is only possible, if Nigerians become responsive to government's efforts in controlling the spread of the virus through vaccine and other safety protocols.

REFERENCES

- Adeyemi A. (2021) Nigeria's Media Framing of COVID – 19 Pandemic: A Content Analysis of Selected National Dailies. *World Scientific News*. 159(1). 167-178
- Apuke, O. D. & Tunca E. A. (2020). The challenges of managing newspaper organizations in Nigeria. *International Journal of Scientific and Technology Research*. 9(3) 5027-5036
- Berkeley, L. (2021). "WHO says delta is becoming the dominant COVID variant globally". CNBC. Retrieved 24 January 2022.
- Castells, M. (2022). <https://www.bbvaopenmind.com/en/articles/the-impact-of-the-internet-on-society-a-global-perspective/>
- Gowrisankar A, Priyanka TM. & Banerjee S (2022). "Omicron: a mysterious variant of concern". *The European Physical Journal Plus*. **137** (1): 100. doi:10.1140/epjp/s13360-021-02321-y.
- Edegoh, Leo O.N., Ezeh, Nkiru C & Samson, Aniebo C. (2015) Evaluation of newspaper reading habits of youths in Anambra State, Nigeria *Journal of New Media & Mass Communication*. 37. 63-71
- Eskild, P., Abubakar, A., Yapi, R. and Seif, A. (2022). Emergence of new SARS-CoV-2 Variant of Concern Omicron (B.1.1.529)- highlights Africa's research capabilities, but exposes major knowledge gaps, inequities of vaccine distribution, inadequacies in global response and control efforts. *International Journal of Infectious Diseases*, 114, 268–272.
- Ezeh N. C., (2020). Media Campaign on Exclusive Breastfeeding: Awareness, Perception and Acceptability among Mothers in Anambra State, Nigeria, in Abiodun Salawu & Owolabi, Toyosi (edited) *Contemporary Issues and Perspectives in Development Journalism: A Focus on Africa*. Pennsylvania (USA): IGI Global. www.igi-global.com/book/Ccontemporary-issues-and-perspectives-in-development
- Healthwise (2020). VIDEO: NCDC debunks popular myths about ; 2020. Available:<https://healthwise.punchng.com/video-ncdc-debunks-popular-myths-about/>. Retrieved 24 January 2022.
- Igboeli and Ezebuenyi (2021). Influence of newspaper framing of pandemic on readers' perception of the virus. *Nnamdi Azikiwe University Journal of Communication and Media Studies*, 2(1), 1-16.

- Izekor, E.D., Okpuzor, V.N., Morka, E. & Nnaji, P.T. (2020). A Review of Pandemic: Myths, Misconceptions, and Role of Media Education in Nigeria. *Asian Journal of Research in Infectious Diseases*, 5(4), 10-19.
- Jorndrup, H. (2016) News framing in a time of terror. In *NORDMEDIA; Media Presence and Mobile Modernities*. Christa Christensen & Anne Jerslev ed. (81-99) Sweden: Ale Tryckteam.
- Kenechukwu, S.A. (2014). Mass communication: An introduction to sociology of mass media. Nnewi: CathCom Press.
- Leonhardt, D. (2022). "Omicron Is Milder". The New York Times. Retrieved 7 January 2022. A few weeks ago, many experts and journalists were warning that the initial evidence from South Africa — suggesting that Omicron was milder than other variants — might turn out to be a mirage. It has turned out to be real. Retrieved 24 January 2022.
- Mboso, A. G. and Ezeh, N. C. (2019) Be Alert and Defend Yourself: News Framing of Danjuma's Comments on Herdsmen Attacks in Nigeria. *Galactica Media: Journal of Media Studies*.1(3),
- Mustapha M, Lawal BK, Sha'aban A, Jatau AI, Wada AS, Bala AA, et al. (2021) Factors associated with acceptance of COVID-19 vaccine among University health sciences students in Northwest Nigeria. *PLoS ONE* 16(11): e0260672. <https://doi.org/10.1371/journal.pone.0260672>
- Nigeria Centre for Disease Control (2020). *Advisory on the use of masks by members of the public without respiratory symptoms*. https://covid19.ncdc.gov.ng/media/files/UseOfMasks_IBdgzHH.pdf. Retrieved on 18-5-2021
- NHS (2021). Coronavirus () vaccines. Retrieved on October 1, 2021 from <https://www.nhs.uk/conditions/coronavirus-/coronavirus-vaccination/coronavirus-vaccine/>.
- Nwakpu, E. S., Ezema, V. O., & Ogbodo, J. N. (2020). Nigeria media framing of coronavirus pandemic and audience response. *Health promotion perspectives*, 10(3), 192–199. <https://doi.org/10.34172/hpp.2020.32>
- Odoemelam, C. (2021). The Health Crisis and Its Framing: Approaches Used by the Print Media for Coverage. *Advances in Social Sciences Research Journal*, , 8(3) 115-142.
- Obike, G. (2021), What Nigerians think of vaccines. *The Nation*. Retrieved on 12th April from <https://thenationonlineng.net/what-nigerians-think-of--vaccines/>
- Ogbonne, I. P. (2021). Health is Wealth: Newspaper Coverage of the Economic Impact of in Nigeria. *DigitalCommons@University of Nebraska - Lincoln Library Philosophy and Practice (e-journal)*. 1-28.
- Olajide, A. (2020). Debunking myths on :United Purpose conducts sensitization tour in Nigeria; 2020. Available:[https://www.wsscc.org/media/res ources/debunking-myths--unitedpurpose-conducts-sensitization-tournigeria](https://www.wsscc.org/media/resources/debunking-myths--unitedpurpose-conducts-sensitization-tournigeria). Retrieved 24 January 2022.
- Onwe, E., Chukwu, J., Nwamini, S., Nwankwo, S., Ogbaeja, N., Nwasum, C., Nwakpu, E. & Ogbodo, J. (2020). Analysis of Online Newspapers' Framing Patterns of in Nigeria. *European Scientific Journal*, 16 (22), 217-237.
- Owuamalam, E. O. Ezeh, N. C. , & Eze, E. (2020). Proper Hand washing Realities in Select Nigerian Communities amidst Covid-19 Pandemic. *NTAtvc Journal of Communication*. 4(2), 47-56
- Raymond L. (2019); What are the pros/cons of getting news from a print newspaper vs. social media?
- Reese, S. D. (2001). Prologue - framing public life In S. D. Reese (Ed.), *Framing public life/*

Perspective on media and our understanding of the social world. Mahwah: Lawrence Erlbaum.

Sauer, L. M. (2020). *What Is Coronavirus?* Available online at <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus>.

Shawn, R. (2021). "The Delta Variant: Here's Everything You Need to Know". Healthline. Retrieved 24 January 2022.

Smith, S. & Ajayi, A. (2020). Content analysis of mass media reportage on coronavirus-19 () in Nigeria from six widely circulated Nigerian newspapers. *Journal of Studies in Social Sciences and Humanities*, 6(3), 88-99

Total Health Trust (2020). *Fact Sheet*. thtcallcentre@totalhealthtrust.com. Accessed on 22-01-2022.

Troiano G.; Nardi A. (2021). understanding of the vaccine's uptake and hesitancy Vaccine hesitancy in the era of COVID-19. *Public Health*. pmid:33965796

UNICEF, (2021) COVID-19. Retrieved o 1st April, 2022 from www.unicef.org

World Health Organisation (2021) WHO labels a COVID strain in India as a 'variant of concern' — here's what we know, CNBC, 11 May. Retrieved 24 January 2022.

World Health Organization. (WHO, 11 March, 2020). *WHO Director-General's opening remarks at the media briefing on —11 March 2020*. Geneva, Switzerland: WHO.

World Health Organisation, 2020. Strategic Preparedness and Response Plan for the Novel Coronavirus. Available at: [https:// www.who.int/publications-detail/strategic-preparedness-and-response-plan-for-the-new-coronavirus](https://www.who.int/publications-detail/strategic-preparedness-and-response-plan-for-the-new-coronavirus). Accessed May 5, 2020.

Xiao X.; Wong R.M. (2020) Vaccine hesitancy and perceived behavioral control: A meta-analysis. *Vaccine* 38, (1), 5131–5138.