

**INFLUENCE OF NEWSPAPER FRAMING OF COVID-19
VACCINES ON THE PUBLIC PERCEPTION OF THE
CONTROVERSIES IN ENUGU STATE, NIGERIA**

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ABSTRACT: This paper aimed to ascertain the influence of newspaper framing of COVID-19 vaccine controversies on the public perception of these controversies. It was a mixed design of content analysis and cross-sectional survey research methods, anchored on the frameworks of media framing and information processing theories. A multistage sampling technique was employed to select samples. Purposive sampling was used to select two national newspapers for the content analysis study. For the survey, Enugu State was purposively selected and yielded a sample size of 630, 700 from which 384 samples were obtained via Cochran's sampling formula to obtain a representative sample. The quantitative data generated are presented in tables as frequencies and percentages, and chi-square and logistic regression analyses were employed for the inferential analysis. Chi-square tests were used to test the significant associations between variables, and logistic regression was used to examine the influence of the key independent variable on the dependent variable. At $p \leq 0.05$, the null hypothesis could not be rejected as there was no relationship between COVID-19 vaccine controversy framing and perceptions in the study area, among other factors. The study therefore concluded that newspaper framing of COVID-19 vaccine controversies did not influence public perceptions of these controversies.

Keywords: Public Opinion, COVID-19 Vaccines, Media Framing, Controversies, Perceptions, Attitudes, Enugu State

INTRODUCTION

Public opinion about and reactions to COVID-19 vaccines are not uniform across all social, religious, demographic, geographical and ideological settings. While many received the vaccines with joy and relief, others were sceptical for reasons that were both general and personal. The power of the media to initiate and direct public discourse and action on social phenomena has been established, and the process of selecting, organizing and interpreting media information has also received much research attention (Happer & Philo, 2013; Tenenboim-Weinblatt, 2015; Watts, nd;). This process of perception can be applied to study how the public perceives COVID-19 vaccine controversies through the news frames in which the media presents stories. COVID-19 pandemic and its vaccines expectedly received heavy media salience owing to the huge health, social and economic implications. Although this salience was undeniable, whether the media succeeded in influencing public perceptions and attitudes towards the vaccines could not be easily deciphered from the suspicions and speculation that caused contentions that may have fuelled vaccine hesitancy among the public.

These contentions focused on the development, distribution and administration of the vaccines. The most popular of these controversies are the claims that the vaccines were meant to alter the human DNA and create a more docile society; that the vaccines had magnetic properties that manifested when a piece of metal was placed on the jab spot; and that the vaccines left electrical properties on the jab spot that lit electric bulbs.

Other controversies include the following: that the vaccines took a very short time to develop, against the normal trial period (WHO, 2020; Charda et al, 2021; Efuntoye et al, 2021). In fact, Kaul (2021) reports that there were “concerns regarding accelerated approval given to one of the vaccine candidates without completion of a phase 3 trial”. Others were that the vaccines were hastily distributed (Feltor, 2021); and the vaccines were political weapons. These issues led to questions of protective efficacy and the relationship between the vaccines and some side effects especially cardiovascular side effects (Yan et al, 2020). Guzman, et al (2022) also found displeasure with worldwide and government response to COVID-19 among the factors causing negative perception and exacerbating vaccine hesitancy. However, the WHO (2023) assures that although the COVID-19 vaccines took a short time to develop, they maintain high safety standards.

These controversies were actually public suspicions against the vaccines or what Onwuka (2021) termed “conspiracy theories spread through the social media and word of mouth” that fuelled vaccine apathy and hesitancy among the people (Ibenyenwa, et al, 2023). The negative effects of hesitancy, triggered by these controversies, include persistent virus transmission, poor health, reduced work output, reduced economic strength at the personal and societal levels, and at worst, severe infection and heavy mortality among unvaccinated individuals.

This study is significant as a tool to measure media response to issues surrounding vaccine controversy and offer suggestions for further action. News media, including newspapers, are important instruments in the education of the populace on the perception of vaccine controversies. The media in Nigeria were reported to have given adequate coverage to COVID-19 vaccine issues. This is as expected as the very job of the media has placed them in a position to mediate information, especially on intricate issues such as COVID-19 to present them to the public in ways that produce informed opinions. Proper information curbs fake news or the types of speculations that surround COVID-19 vaccines. The world and its events have become complex, requiring the media to go beyond providing of information to explain issues in a way that provides understanding (Ndolo, 2006). Thus, the COVID-19 vaccine is a subject that requires media interpretation for proper public understanding and action. The media do this by presenting news and information in frames that are expected to aid public perception and guide informed choices.

Frames are valuable tools for addressing relatively complex issues (Schuefele & Tewskbury, 2007) such as COVID-19 vaccines. In this light of the power of the media to highlight social phenomena, this work aims to examine how newspaper framing of COVID-19 vaccine controversies in Nigeria has influenced the public perception of these controversies. Two Nigerian daily newspapers, *Punch* and *Vanguard* were studied with the aim of establishing a relationship between their framing of COVID-19 vaccine controversies and public perceptions of these controversies.

COVID-19 vaccines have generated much controversy that impedes vaccination willingness. In Nigeria, for example, unwillingness was so much that federal and state governments

considered compulsory vaccination of citizens, a decision that elicited strong newspaper editorials campaigning for individual choice in the vaccination decision (*Daily Trust*, 2021; *The Sun*, 2021). Having, earlier, identified the power of the mass media to influence public perception through salience reporting, it is important to examine the news frames in which the newspapers presented COVID-19 vaccine controversies to the reading public, as well as identify the relationship between these frames and the public perception of these controversies. Therefore, this study aims to examine the influence of newspaper framing of COVID-19 vaccines on the public perception of the controversies in Enugu State, Nigeria with the following objectives:

1. Identifying specific controversial issues in newspaper reports of COVID-19 vaccines
2. Determine the influence of newspaper framing on the perception of COVID-19 vaccine controversies in the study location

Hypothesis

H₀: There is no relationship between perceptions of COVID-19 vaccine controversies and newspaper framing of COVID-19 vaccine controversies in the study location.

REVIEW OF RELATED LITERATURE

Many studies have focused on COVID-19 caused by the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was not known before its outbreak. The disease started in Wuhan, China on December 31, 2019 and was initially thought to be a type of common respiratory disease. However, when it began to spread globally through human movement and contact causing alarming rates of infection and death tolls, the World Health Organisation (WHO) declared it a Public Health Emergency of International Concern on January 30, 2020.

Governments, multilateral organizations and private firms have spent large sums of money trying to develop a vaccine that can offer immunization against the disease. As of December 2020, approximately 200 vaccine candidates for COVID-19 had been developed. Of these, fifty-two were in human trials. The WHO explained that many COVID-19 vaccines are in development because all are evaluated before the selection of any vaccine candidate found to be both safe and effective (WHO, 2021). One year after the outbreak of the disease, the distribution of the first vaccines began (Feltor, 2021).

Nigeria became the third country in West Africa to receive a consignment of COVID-19 vaccines with the arrival of the first batch of 3.9 million doses of the Oxford AstraZeneca vaccine on March 2, 2021; Ghana was the first and Ivory Coast, second. Since then, seven vaccine candidates have been approved for use in Nigeria (Achirga, 2021; Adepoju, 2021; Nigeria – COVID-19 Tracker, 2022). Amid confusion over rollout as noted by Adepoju (2021), health experts and citizens are warned that “sparing, conflicting, and sometimes confusing information on vaccine deployment will hinder the process.” Part of this confusion is the requirement of online registration for COVID-19 vaccination by the National Primary Health Care Development Agency (NPHCDA) (Achirga, 2021; NPHCDA, 2022). This, in a country with a rudimentary internet culture, compared with the well-advanced internet usage in advanced countries, was seen as creating a hurdle for vaccination and disenfranchising those who truly need vaccines (Achirga, 2021). Most adults and elderly individuals, who are listed

among the first vaccination interest, understand the internet only minimally, if at all, and may not know how to go about the registration.

A major topic in the field of COVID-19 vaccine is general vaccine apathy/hesitancy. The WHO (2021) defines vaccine hesitancy as a delay in the acceptance or blunt refusal of vaccines. Hesitancy is an outcome of a negative perception towards the vaccine. The unwillingness to be vaccinated against COVID-19 was widespread, causing governments to consider mandatory vaccination for their citizens, a decision that received several newspaper editorials campaigning for individual choice in the vaccination decision (*Daily Trust*, 2021; *The Sun*, 2021). The general speculations surrounding COVID-19 vaccines might have been the result of the negative perceptions caused by the controversies that have already been identified in this present paper.

Vaccine hesitancy has previously been recorded globally (CDC, 2020). On record, some parents in parts of Europe, the US and Canada rejected or were hesitant toward the measles vaccines. This has resulted in an increase in children's measles infection in these places (Weiss, Schröpfer & Merten, 2016; MacDougall & Monnais, 2017; Sun, 2018; Sun, 2018; Schellenbreg & Crizzle, 2019).

The media in Nigeria is reported to have made adequate reports of virus outbreaks and immunizations in the past (Nwanne, 2014). Ebola, Lassa fever, polio, anthrax, etc. are examples. However, straight news has remained the dominant genre for reporting contemporary issues (Nwakpu, Ezema & Ogbodo, 2020; Smith & Smith, 2016). The implication is a lack of in-depth explanation and interpretation that aid in opinion formation and attitude change. Surveillance is one of the most widely discussed functions of the media. For Ndolo (2005), surveillance entails providing information about local, national and international events and conditions. As social mobilizers, the media are expected to closely monitor news trends to promote positive audience behaviour towards vaccines and reduce negative perceptions through their reports (Dagaci, 2020). This is because the role of the media, according to Strömbäck (2004), is expected to go beyond information dissemination to shape the interpretation of daily occurrences and influence the perception of situations (Cho & Grower, 2006). Because media reports form a key source of public opinion, the media is seen as a powerful tool for influencing public perception, opinion and belief (Strömbäck, 2004). Hence, media effects theories have been developed by mass communication experts to explain and understand how the media can influence public opinion through what they choose to publish and how they choose to present it.

Empirical Review

Although there is a lot of research work on COVID-19 pandemic and its vaccines in different fields, not much can be seen, locally or globally, in the area of media reportage of the controversies that attended the virus and its vaccines. This paucity of empirical attention to this specific angle has somewhat affected the robustness of empirical discussion in the present paper, but not in any significant way. This paper can still serve as a reference material on media reportage of vaccine controversies and media handlers can tap from it in future actions during a disease outbreak.

Igboeli and Ezebuenyi (2021) studied the influence of newspaper framing of the COVID-19 pandemic on readers' perceptions of the virus. Using a mixed design of survey and content

analysis, the researchers hinged the study on the framework of agenda-setting theory. *Daily Sun*, *Vanguard* and *National Light* newspapers were studied with the aim of determining whether the way the papers selected, packaged and presented their stories on the pandemic affected how the readers perceived the virus. They discovered seven patterns of frames and recommended, among other things, that the media use appropriate news angles to report stories on public health to reduce the incidence of rumours and misinformation.

In another study, Asogwa (2021) analysed Nigerian media coverage of medical progress in the development of COVID-19 vaccines. Using content categories of story frequency, story source and story type, the researcher content analysed *Nation* and *Vanguard* newspapers as well as the Nigeria Television Authority (NTA) and African Independent Television (AIT) within a six-month time frame from December 1, 2019 to June 30 2020. Descriptive and inferential statistical analysis revealed that of the 870 stories related to COVID-19 found in selected media, only 202 (23%) were related to vaccines. The researcher concluded, inter alia, that there was a low frequency of reports on COVID-19 vaccine development.

Popoola and Ejiwunmi (2022) reviewed ten Nigerian traditional newspapers to determine the degree of COVID-19 back grounding. The papers studied were *Daily Trust*, *New Telegraph*, *Daily Times*, *Daily Independent*, *ThisDay*, *The Guardian*, *Punch*, *Nigerian Tribune*, *The Nation* and *Vanguard*. Historical and interview methods were employed to ascertain, among other findings, that stories appear more in the straight news format, with scant background information on the pandemic, with only three of the ten papers placing the COVID-19 story on the front page. The paper recommended that the media offer more interpretation, especially of topical issues of social concern such as the COVID-19 pandemic.

Chen, Tower, Zimmerman, Layh, Sparke, Prichard and Mason (2024) examined the perceptions and attitudes toward COVID-19 vaccination of health profession undergraduates admitted to Australian universities during the pandemic. The study included a mixed design of surveys, interviews and focus group discussions. The 6-month study spanning October 2021 to April 2022 used 313 online survey respondents and 17 interviews and focus group respondents. This study revealed serious COVID-19 vaccine perception issues and sentiments among Australian health profession students. Therefore, the need to ensure quality information related to the mandates of COVID-19 is recommended.

Theoretical Frameworks

This paper focused on the frameworks of media framing and information processing theories. Media framing theory is viewed in the media domain as an advanced form of agenda-setting which McCombs (2004) describes as a more refined version of agenda-setting. Framing is a social science concept that first received contributions from economists and psychologists. A psychologist, Gregory Bateson, used a Venn diagram and picture frame to illustrate how framing includes wanted and excludes unwanted materials in news (Ardevol-Abreu, 2015). Erving Goffmann and other sociologists, however, laid the sociological foundation of framing when they assumed that individuals cannot fully understand the world around them, but constantly struggle to interpret their life experiences and piece together events to create meaning. Goffmann explains that individuals apply 'interpretative schemas' or 'primary frameworks' to classify information and interpret it meaningfully to be able to efficiently process new information (Schuefele&Tewskbury, 2007). In view of the basic assumption of this theory, the selected newspapers are expected to choose frames or aspects of COVID-19

vaccines and position these frames as elements/attributes/angles of news highlighted for intended public attention and consumption. In other words, the selected newspapers are expected to add biases to their published news and articles (Entman, 2007) to select the aspects of information to be presented to create the desired effect (Cho & Grower, 2006). For example, the effectiveness of COVID-19 vaccines can be highlighted and presented in ways that reduce speculation and vaccine apathy, and encourage positive attitudes towards vaccines.

The second theory is information processing theory, which is a persuasion theory of the media from which William McGuire in 1968 propounded the information processing model (Anaeto et al, 2012). The theory suggests that attitude change involves six steps, with each previous step being necessary for the development of the next step. The model is represented in the chart below:

Exposure → Attention → Comprehension → Acceptance → Retention → Action

It is a theory that seeks to understand how people handle information once exposed to such information until they are able to take intended action on the basis of the information received (Teh-Runningman, 2011). For the purpose of this study, this theory is employed to measure how the public formed their perceptions of COVID-19 vaccine controversies through the news reports they received in the newspapers.

METHOD

The study adopted an explanatory mixed design of content analysis and a cross-sectional survey. For the content analysis, the population comprised all online editions of *Punch* and *Vanguard* newspapers published in Nigeria between March 2, 2021 and March 2, 2022, with 365 days between the first arrival of COVID-19 vaccines in Nigeria and one year later. This yields a product of 1,460 editions when multiplied by 4 (number of newspapers under study), giving the population of the study. The purposive selection of the newspapers was based on their wide circulation as well as loose regional readership orientation (Suleeman, 2016).

The survey population comprises all persons living in Enugu State (4,690,100). Enugu State is one of the five states that make up the South-East zone of Nigeria. It is rich in coal which was an export resource until petroleum was discovered. Enugu (the capital city) lies at the foot of the rolling Udi Hills from where gentle breeze wafts over the city. Its landmass is 7,161.3km². The State has six universities and other polytechnics and monotechnics. The implication is a well-educated population. The researchers chose Enugu State for reasons that include its proximity to research base, its robust mass media presence and its large literate population that facilitates response to the questionnaire. The State was clustered into its existing seventeen local government areas namely, Aninri, Awgu, Enugu East, Enugu North, Enugu South, Igbo Etiti, Igboeze North and Igboeze South. Others are Isi Uzo, Nkanu East, Nkanu West, Nsukka, the Oji-River, Udenu, Udi and Uzo-Uwani which were further stratified into urban and rural/suburban local government areas for the purpose of adequately representing all social classes. By simple random (ballot), the Enugu North (347,500) and Awgu (283, 200) local government areas were selected to represent urban and suburban local government areas, respectively (Brinkhoff, 2022). Cochran's (1963) sampling formula was adopted to find a representative sample for proportions of a large sample which is 630,700 (the sum of the population of the two selected local government areas). At a confidence level of 95% and precision level of 5%, a sample size of 384 respondents was calculated.

FINDINGS

The findings for the content analysis revealed that, overall, the selected newspapers carried only fifteen stories that had either direct or remote reference to any of the identified controversies. This is represented in the table below.

However, a thematic representation of the reports on COVID-19 vaccines as found in the newspapers is presented below.

Objective One: Identifying specific controversial issues in newspaper reports of COVID-19 vaccines

Table 1: Possible (Expected) controversy frames

Code	Expected controversy Frames	<i>Punch</i>	<i>Vanguard</i>	Total
D (01)	Short development time frame	-	-	0
D (02)	Hasty deployment frame	-	-	0
D (03)	DNA alteration frame	-	1	1
D (04)	Infertility frame	-	-	0
D (05)	Magnetic effect frame	-	-	0
D (06)	Bulb lighting frame	-	1	1
D (07)	Toxicity frame	-	-	0
D (08)	Biological weapon frame	-	-	0
D (09)	Political influence frame	-	-	0
D (10)	Fatality frame	1	2	3
D (11)	Hesitancy frame	-	-	0
D (12)	Stigmatization/boycott frame	-	-	0
D (13)	Fear frame	-	4	4
D (14)	Other frames	1	3	6
Total		2	11	15

The table above shows that only fifteen news items refer to the news frames referred to in this work as controversial frames. This means that the newspapers dedicated approximately 1.3 stories per month to the controversial issues during the study period. It can therefore be said that the newspapers did not give salience to the subjects of the COVID-19 vaccine controversy.

The few stories in the identified frames were attempts to alleviate people's concerns about vaccine issues, rather than escalating them.

On the other hand, the researchers thematized the 414 stories on COVID-19 vaccines found in the newspapers into what they termed observed frames, presented in the table below.

Objective 2: Evaluate the frames used in reporting COVID-19 vaccine controversies

Table 2: Observed COVID-19 vaccine frames

Code number	Story directions	<i>Punch</i>	<i>Vanguard</i>	Total
E (01)	Vaccine development	19	54	73
E (02)	Vaccine distribution	44	121	165
E (03)	Side Effects	5	20	25
E (04)	Post-vaccination mortality	2	19	21
E (05)	Post-vaccination re-infection	3	18	21
E (06)	**Others	33	76	109
Total		106	308	414

**Stories not related to the coded types

From this table of observed frames, it can be seen that vaccine distribution stories take the lead with 204 (42%) news items. Therefore, the newspapers paid more attention to vaccine development and distribution than any other aspect of the news.

Objective 3: Determine the influence of newspaper framing on the perception of COVID-19 vaccine controversies in the study location

Table 3 presents the various COVID-19 vaccine controversies ever heard by the respondents. Between 11% and 36% of the respondents had heard of controversies. The most common controversies are that it took a very short time to develop the vaccine and that it is a political weapon used by superpowers.

Table 3: COVID-19 vaccine controversies ever heard

Controversy heard	Frequency (%) N=296	
	No	Yes
COVID-19 vaccines -took a very short time to develop	190(64.2)	106(35.8)
COVID-19 vaccine was hastily deployed for administration to people	226(76.4)	70(23.6)
COVID-19 vaccine alters the human DNA	264(89.2)	32(10.8)
COVID-19 vaccine causes infertility in women	237(80.1)	59(19.9)
COVID-119 vaccine leaves magnetic effects on the vaccination spot	252(85.1)	44(14.9)
COVID-19 vaccine lights an electric bulb on the vaccination spot	228(77)	68(23)
COVID-19 vaccine introduces toxic substances into the body of a receiver	227(76.7)	69(23.3)

COVID-19 vaccine is a biological weapon used by superpowers	231(78)	65(22)
COVID-19 vaccine is a political weapon used by superpowers	201(67.9)	95(32.1)
COVID-19 vaccine will kill anybody who takes it	231(78)	65(22)

The sources of the controversies (the measure of newspaper framing) ever heard, and the perceptions of the respondents about the controversies are presented in Table 4. Close to 15.9% of the respondents identified newspapers as the source of the controversy they had heard. The majority (77.4%) disagreed with the three statements used to measure the perception of COVID-19 vaccine controversies.

Table 4: Logistic regression models predicting the effect of newspaper framing on attitudes toward media reports related to COVID-19

Variable	Unadjusted model		Adjusted model	
	OR	95% CI	aOR	95% CI
Newspaper framing				
Other media (ref)				
Newspaper	0.94	0.50-1.74	1.12	0.56-2.23
Sex				
Male(ref)				
Female			1.02	0.60 - 1.75
Age (years)				
Less than 20 (ref)				
20-29			0.36*	0.14 - 0.94
30-39			0.71	0.19 - 2.62
40-49			0.75	0.20 - 2.78
50-59			0.53	0.13 - 2.11
60-69			0.51	0.13 - 1.93
70+			0.63	0.11 - 3.59
Marital status				
Single(ref)				
Married			0.93	0.36 - 2.43
Separated			0.49	0.12 - 2.05
Education				
None/less than tertiary(ref)				
Tertiary			3.05***	1.65 - 5.62
Occupation				
Farming/Fishing (ref)				
Technician/Artisan			4.86	0.75 - 31.43
Trading			1.80	0.53 - 6.09
Business/Contractor			2.43	0.69 - 8.58
Civil Servant/Public Servant			1.32	0.54 - 3.26
Retired			2.90	0.88 - 9.58
Student/Apprentice/unemployed			1.08	0.44 - 2.68
Vaccinated				
No(ref)				
Yes			1.40	0.77 - 2.55

Note: *** p<0.001, ** p<0.01, * p<0.05; OR: odds ratio; aOR: adjusted odds ratio; CI: confidence interval; ref: reference category

With no other variable in the equation, the odds of believing the media report on the COVID-19 vaccine were insignificantly lower among respondents whose source of vaccine controversy information was newspapers than among those whose source of information was other media (Table 4). When other factors are held constant in the adjusted model, the odds became greater for those whose source was the newspapers than for those whose source was other media, yet the difference was insignificant. Two covariates were statistically significant. The odds of believing the media report on the COVID-19 vaccine were 64% lower among respondents aged 20--29 years than among younger respondents aged less than 20 years. Relative to having no or less education, having tertiary education predicted higher odds of believing the media report on the COVID-19 vaccine.

Hypothesis Testing

H₀: There is no relationship between perceptions of COVID-19 vaccine controversies and newspaper framing of COVID-19 vaccine controversies in the study location

The results of the chi-square test of association, and logistic regression show that there is no significant relationship between perceptions of COVID-19 vaccine controversies and newspaper framing in the study area. The p-value in both tests is greater than the alpha value (0.05). Therefore, we fail to reject the null hypothesis.

DISCUSSION OF FINDINGS

This study used a mixed design with content analysis and survey methods to ascertain whether newspaper framing influenced the public perception of COVID-19 vaccine controversies. These controversies were identified in the present study. Seven hundred and thirty (730) editions of the *Punch* and *Vanguard* newspapers published in Nigeria between March 2, 2021 and March 2, 2022 were content-analysed, with 365 days between the first arrival of COVID-19 vaccine in Nigeria and one year later. The purposive selection of the newspapers was based on their wide circulation as well as loose regional readership orientation (Suleeman, 2016).

Of the four hundred and fourteen news stories on COVID-19 vaccines found in the newspapers, only fifteen items focused on the controversies from which the researchers concluded that the newspapers failed to highlight the issues under controversy in the context of COVID-19 vaccines. The researchers therefore believe that sustained, authentic and timely information on the vaccines by the newspapers could have helped to douse the suspicions and increase vaccine acceptance. Nevertheless, the few reports found on the vaccine controversies sought to mitigate public suspicions of the vaccine rather than escalate them.

The study also revealed that vaccine development and distribution received the most attention in reports on COVID-19 vaccines. There is an evident paucity of intentional attempts to address the controversies that are raging around COVID-19 vaccines. The stories were mostly in the straight news format, offering no significant interpretation or explanation that could have aided understanding and discouraged speculation.

Among the 305 individuals who responded to the questionnaire, 9 had never heard of COVID-19. These were excluded from the analysis. The analytical population was 296. The percentage of missing values for any variable was less than 1%. One respondent had never heard about COVID-19 vaccines so the number of respondents was reduced to 295. Among these, 122

females and 173 males were included. The majority of the respondents had heard that there were vaccines for COVID-19, yet the majority did not want to take the vaccine. The Respondents had heard about the controversies that followed COVID-19 vaccines. However, newspapers were the second least common source of controversial news, social media was the most common source. The null hypothesis that there is no relationship between newspaper framing of the controversies and public perception of the same could not be rejected. An accidental finding of this study is that social media is the most common source of media information on COVID-19 vaccine controversy. Research findings by Muric and Ferrara (2021) and Onwuka (2021) corroborate this.

The paper concluded that newspapers failed to offer interpretative guidance on the vaccines that would have produced understanding and aided informed action. The implication of this finding is that media failure to present health issues in a proper light to aid public understanding and promote informed action can lead to suspicions, speculations and the type of perception concerns that attended COVID-19 vaccines. This can lead to an increase in infection and mortality. From the ongoing, the study recommended that traditional media, including newspapers, offer adequate interpretative reports on matters of health and social implications to guide public discourse and social action and curb misinformation and speculation.

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