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Research Article



Social Media Messaging, Fake News, and COVID-19 outbreak in Lagos, Nigeria

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ABSTRACT

Received: 7 Feb 2022 Accepted: 13 Jul 2022 COVID-19 is a public health concern that has negatively affected human development across the globe. This study examined the attitude towards social media messaging on fake news about COVID-19 outbreak in Lagos, Nigeria. This study was hinged on the uses and gratification theory to understand how individuals utilize social media to publish fake news reports on COVID-19. A mixed method approach (survey and ethnographic observation) was adopted to achieve the objectives of the study. The survey method served as a primary method to generalize inferences and also determine individual perception on social media messaging and fake news reports, while ethnographic observation served as the secondary method to generate rich descriptive data that captures the experiences, feelings and behaviors of individuals. In addition, the Spearman correlation analysis and Somer D' measurement were used to test a hypothesis to ascertain the possibility of connection between variables. The results indicated that a significant majority of the respondents were sufficiently aware of social media reports on COVID-19 outbreak in Lagos State. In addition, the findings show that 83.1% of the respondents were adequately aware of fake news reports on social media about COVID-19 outbreak. Furthermore, the results reveal that almost 67% of the respondents had cautioned individuals about the circulation of fake news report about COVID-19 on social media platforms. It was recommended that governments, international agencies and non-governmental agencies should partner to develop a media literacy project on COVID-19 to educate and sensitive individuals about how to detect fake news as well as the importance of priority health practices such as vaccination, healthy lifestyle practices to curb the threat of COVID-19 in Nigeria and other parts of the world.

Keywords: COVID-19, fake news, messaging, Nigeria, social media

INTRODUCTION

The year 2020 has been characterized with the plaque of COVID-19 across the globe. WHO (2020) reported that more than a million persons have died due to COVID-19 pandemic across the globe. In the same vein, Worldometers (2020) has ranked United States, Brazil, India, Spain, Italy, and China as countries majorly negatively affected by the COVID-19 pandemic. Thus, COVID-19 has been regarded as disruptive health concern that has negatively affected high and low resource countries across the globe.

Notably, the advent of COVID-19 has triggered the increase of social media messages on the nature of the pandemic. Scholars such as (Arinze-Umobi & Chiweta-Oduah, 2020; Liu & Liu, 2020) observed that there has been a myriad of social media messages on the symptoms, risk factors and cases of COVID-19 across the globe. Similarly, scholars such as (Ukwuru & Nwankwo, 2020; Zapan et al., 2020) reasoned that social media platforms such as *Twitter*, *WhatsApp*, *Facebook*, and *Instagram* have been used to stimulate conversations and engagements on priority health behaviors to curb COVID-19 in most modern societies. Therefore, social media messages have defined the debate and discussion on the nature of COVID-19 across the globe.

Conversely, the proliferation of social media messages on the nature of COVID-19 has led to the increase of fake news in Nigeria. Scholars agree that there are several fake news reports about COVID-19 in the

Nigerian media landscape (Laden et al., 2020; Ukwuru & Nwankwo, 2020). Interestingly, the Minister of Information, Chief Lai Mohammed had in several press briefing complained about the impact of fake news on the nature of COVID-19 in Nigeria. Hence, fake news has been fuelled by social media messaging on the nature of COVID-19 in Nigeria.

Interestingly, there has been a stream of research investigation on the awareness and knowledge of COVID-19 (Ogbodo et al., 2020; Olapegba et al., 2020), while other studies have explored the intensity of media coverage on COVID-19 (Arinze-Umobi & Chiweta-Oduah, 2020; Liu & Liu, 2020). However, there are few research investigations on how social media messaging has increased fake news on COVID-19. Thus, there is a need to conduct an investigation to determine the influence of fake news on the outbreak of COVID-19 in Nigeria. This study, therefore, examined social media messaging on fake news about COVID-19 outbreak in Lagos, Nigeria.

Objectives of the Study

- 1. To assess the level of exposure of social media messages on Fake news about COVID-19 in Lagos, Nigeria
- 2. To examine the attitude of Nigerians towards fake news on social media platforms about COVID-19 in Lagos, Nigeria

Research Questions

- 1. What is the level of exposure of social media messages on fake news about COVID-19 in Lagos, Nigeria?
- 2. What is the attitude of Nigerians towards fake news on social media platforms about COVID-19 in Lagos, Nigeria?

Hypothesis

H1: There is a significant relationship between exposure of social media messages and the attitude of Nigerians towards fake news on COVID-19 in Nigeria.

THEORETICAL FRAMEWORK

This study was hinged on the uses and gratification theory to understand how social media messages are used to disseminate fake news during pandemics. The thrust of the uses and gratification theory stipulates that individuals utilize social media platforms for specific gratifications (Griffin, 2005). Furthermore, the tenets of the theory propound how active audiences use social media platforms and digital technologies for diverse purposes.

This theory is related to this work in the sense that some individual utilize the use of the social media for publishing fake news for the intent to mislead individuals in most modern society. Conversely, these individuals derive satisfaction by sharing fake news on social media spaces. In another perspective, individuals who have detect fake news on COVID-19, utilize the social media to alert their friends, colleagues and family members about the fake news circulating on the social media. In sum, gratification is derived using the social media in the areas of information sharing, health literacy and communal health protection.

LITERATURE REVIEW

In the realm of journalism studies, fake news is a perennial issue that has a negative ripple effect in most modern society. Scholars agree that fake news is a serious public concern that has affected professional media practice as well as political development. Bharali and Goswami (2018, p. 118) reasoned that "fake news and its repercussion are now a global concern, especially in a wake of incidents that have shook the credibility of the media, be it regional, national or global." In the same vein, Farooq (2018, p. 110) observed that "fake news is also a source of money for many, who run websites to monetize the viewership/ readership."

Importantly, fake news can be conceptualized in different patterns and classifications. Bharali and Goswami (2018, p. 118), classifies fake news into six categories;

- (i) disinformation,
- (ii) propaganda,
- (iii) hoaxes,
- (iv) satire/parody,
- (v) inaccuracies in journalism, and
- (vi) partisanship.

Interestingly, scholars agree that fake news can be regarded as a deliberate effort to mislead individuals. Furthermore, fake news may have commercial, non-commercial and professional forms (Bharali & Goswami, 2018; Reilly, 2012).

In recent times, there have been increasing cases of fake news about the nature and preventive measures to curb the spread of COVID-19 across the globe. Scholars such as Montesi (2020) observed that "The novelty of this new avalanche of fake news goes hand in hand with the novelty of the health crisis caused by the COVID-19 pandemic, which has converted fake news and information into a matter of social concern." In the same vein, Financial Times (2020) reported that Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization, asserted that the world is currently facing and info-dermic because fake news on issues of COVID-19 was spreading faster than the plague of COVID-19 across the globe. In essence, the increasing cases of fake news on COVID-19 have a negative snowball effect on sustainable human development across the globe.

In Nigeria, the increase of fake news has led to misconceptions, controversies and conspiracies about the nature of COVID-19. Ephraim (2020, p. 2) observed that "the spread of misinformation has been described as the single biggest danger Nigeria faces in its fight against COVID-19. Misinformation has created public panic and is inhibiting efforts to stop the spread in Nigeria and across Africa." Similarly, Ukwuru and Nwankwo (2020, p. 3) asserted that "fake news on coronavirus have centered on various conspiracy theories, similarly, resulting in a plethora of incorrect ways of looking at the situation. There are unfounded views that the virus is a biological weapon, created either by the United States (to destroy China) or China (to destroy American) in other to take over world power from America and initiate a new world order." Thus, the rising threat of fake news is an underlying factor that undermine the control and prevention of COVID-19 in Nigeria.

Importantly, scholars agree that there is a strong link between social media messaging and fake news threats during COVID-19 outbreak in Nigeria (Laden et al., 2020; Ukwuru & Nwankwo, 2020). Ukwuru and Nwankwo (2020, p. 3) believe that "the dissemination of misinformation on social media can either be intentional or accidental and can spread quickly as anybody can say almost anything to anyone, with billions of individuals online daily." It is this type of thinking that made Laden et al. (2020, p. 125) to assert that "social media network sites are online platforms through which individuals, groups and organizations create presence and share information through texts, photos, music videos etc. The more worrisome aspect of the social media is its potency to be used to spread fake news with its significant negative effects on the society and on people's decisions and behaviors." In essence, the use of social media to spread fake news about COVID-19 is a bane to sustainable health development.

In recent times, there are several researches on the use of social media to publish fake news about COVID-19 in developed and developing countries. Studies such as Ferreira and Borges (2020) explored media and misinformation during COVID-19 outbreak in Portugal. The locus of this study examined how individuals derived information in the midst of misinformation and a state of emergency in Portugal. The study maintained that the key tenets of the dependency of media system theory underscored the objective realities of individuals relying on the media as primary sources of health information during pandemics. The study also maintained that individuals questioned all consumed information from available sources during the outbreak and the state of emergency.

In another study, Zapan et al. (2020) explored the impact misinformation about COVID-19 towards individual responses for resilience of disastrous consequences due to misinformation. The study pointed out that general misinformation beliefs, conspiracy beliefs and religious beliefs as stimulus for misinformation about COVID-19 pandemic. The study also maintained that credibility evaluation serve as the resilience strategy towards misinformation about COVID-19 pandemic

In a related study, Apuke and Omar (2020) examined user motivation in fake news sharing during the COVID-19 pandemic. The study found that altruism, socialization and instant news sharing are predicators for fake news on COVID-19 pandemic. The study recommended that intervention strategies to positively reinforce individuals to become cynical about health information from social media platforms so as to evaluate the credibility of the news.

In a similar study, Neto et al. (2020) explored fake news in the context of the COVID-19 pandemic. The study analyzed 70 fake news reports about COVID-19 pandemic in Brazil. These fake news reports focused on statements of health authorities, therapy, preventive measures and prognosis of the disease. More than 50% of the fake news reports were about statements of health authorities in Brazil, while less than 1% of the fake news report were about the prognosis of the disease.

METHOD

A mixed method approach (survey and ethnographic observation) was adopted to achieve the objectives of the study. The survey method served as a primary method to make inferences and also determine individual perception on social media messaging and fake news reports on COVID-19 outbreak in Lagos, Nigeria. Also, ethnographic observation served as the secondary method to generate rich descriptive data that captures the experiences, feelings and behaviors of individuals in the social media space. Furthermore, ethnographic observation provides a deeper understanding on the patterns of behaviors towards social media messaging of fake news about COVID-19 outbreak in Lagos, Nigeria.

For this empirical inquest, the population of the study consists of 20 million residents in Lagos State, Nigeria. This study population was selected because Lagos State has the highest contracted cases in West Africa (NCDC, 2020). The sample size was 259 respondents to achieve the objectives of the study. The sample size of 259 supports the solid viewpoints of Wimmer and Dominick (2003), they asserted that a sample size of 200 was reasonable for a population more than 100,000 Therefore, a sample size of 259 was appropriate for this study.

The sampling technique adopted for this study was purposive sampling technique. This is because this study was concerned with the variability of the data during the pandemic. The criteria for the purposive sampling were:

- 1. The respondents must be a resident in Lagos State.
- 2. The respondent must be a Nigerian citizen.
- 3. The respondent must be ICT savvy.

The instrument used for data collection was the online questionnaire. According to Sobowale (2008), the questionnaire was useful for the following reasons:

- 1. This instrument has its popularity as easy to construct.
- 2. The questionnaire is highly appropriate as it elicits background and in depth information concerning fake news and COVID-19.

The online questionnaire adopted closed- ended questions that generated data on the attitudes and behavioral patterns of respondents towards social media messaging and fake news on COVID-19 outbreak in Lagos, Nigeria. Google Form was used to customize and design the questions as well as generate statistical and graphical data for the empirical inquest

Importantly, this study adopted different levels and types of statistical analysis. Descriptive statistics was used to summarize data on the awareness of fake news on COVID-19 outbreak in Lagos, Nigeria, while inferential statistical was used to make generalizations on the influence of social media messaging on fake news. Furthermore, Spearman correlation test was adopted to ascertain the agreement between the ordinal variables. In addition, Somer D' measurement was adopted to ascertain the strengthen and direction between the ordinal variables.

Equally İmportant, there were few limitations for this study. First, it was difficult to distribute the online questionnaire during the pandemic. The researcher had to wait patiently to gather sufficient sample to ensure

Table 1. Social media reports and fake news on COVID-19 (n=259)

Response	I have heard of COVID-19	I have read social media report on COVID-19	I have read fake news on social media about COVID-19
Very large extent	74.1%	57.7.%	39.6%
Large extent	25.5%	34.0%	43.5%
Rarely	0.4%	8.3%	13.8%
Never	0.0%	0.0%	3.1%
Total	100.0%	100.0%	100.0%

Table 2. Respondents' attitude towards fake news of COVID-19 (n=259)

	I have been warned to detect	I have cautioned individuals	I have been engaged in debates
Responses	and avoid fake news report on	e news report on about fake news on COVID-19 in about fake news	
	COVID-19	social media	group chats
Strongly agree	30.3%.	36.2%	48.3%
Agree	23.7%	30.3%	18.2%
Strongly disagree	17.1%	17%	16.2%
Disagree	15.9%	5.3%	8.1%
Undecided	11.0%	11.2%	9.2%
Total	100%	100.0%	100.0%

the validity of the study. Second, there were few comprehensive government reports about the pandemic. This study relied on journal articles to develop the literature review.

RESULTS

This empirical based study explored the attitude towards social media messaging on fake news about COVID-19 outbreak in Nigeria. Furthermore, this study generated quantitative data on the awareness of social media reports on COVID-19 and attitude towards social media reports on fake news of COVID-19 outbreak in Lagos, Nigeria.

Table 1 depicts that 99.6% of the sampled population were sufficiently aware of prevalence of COVID-19 in Lagos State, Nigeria, while less than 1% of the respondents were not sufficiently aware of the disease. The table also indicates that almost 92% of the sampled population were sufficiently aware of social media reports on COVID-19 outbreak in Lagos State, while less than 9% of the respondents were not sufficiently aware of social media reports on COVID-19. In addition, the table shows that 83.1% of the respondents were adequately aware of fake news reports on social media about COVID-19 outbreak, while less than 14% of the respondents were inadequately aware of fake news reports on social media about COVID-19 outbreak. More importantly, ethnographic data reveal that several individuals published social media posts on *Facebook, Twitter*, and *Instagram* to create awareness of the dangers of COVID-19 in Nigeria, while other individuals shared their experience of contracting the virus on social media handles. Interestingly, some Nigerians shared pictures and videos that depict how they use face masks and hand sanitizers in public places.

Table 2 shows that 54% of the respondents had been admonished to detect and avoid fake news report about COVID-19 on social media platforms, while 33% of the respondents indicated that they had never been admonished about the detecting and avoiding fake news about COVID-19 on social media. **Table 2** also show that almost 67% of the respondents had cautioned individuals about the circulation of fake news report about COVID-19 on social media platforms, while less than 23% of the respondents had not cautioned individuals about the about the circulation of fake news report about COVID-19 on social media platforms. More importantly, ethnographic data reveal that there are several inaccurate and incomplete social media posts about COVID-19, which many individuals allege to be fake news. For example, there were social media posts on *Facebook* that chroloquine drugs can cure COVID-19. These posts raised debates on *Facebook* groups whether chroloquine can cure the virus or manage the ailments of the virus. In another example, there were incorrect *Facebook* posts that COVID-19 vaccines were designed to implant microchips in human beings so as to control and manipulate their lives.

H1: There is a significant relationship between exposure of social media messages and the attitude of Nigerians towards fake news on COVID-19 in Nigeria.

Table 3. Correlation test

Response		I have read social media report on COVID-19	I have cautioned individuals about fake news on COVID-19 in social media	
I have read social media	Spearman correlation	1	.614**	
report on COVID-19	Sig. (2-tailed)		.000	
	n	259	25	9
I have cautioned individuals	Spearman correlation	.614**	1	
about fake news on COVID-	Sig. (2-tailed)	.000		
19 in social media	n	259	259	
Symmetric measures				
Categories	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Pearson's R	.479	.053	8.749	.000°
Spearman correlation	.614	.054	12.471	.000°
Number of valid vases	259			

Table 3 indicates a Spearman correlation analysis that ascertains an agreement between the variables. It depicts that there is an affirmative connection between the two ordinal variables at .000, which is less than 0.05. Furthermore, the Somer D' measurement authenticates the linking between the paired ordinal values. The significance is also defined by the concordance of 12.471. Hence, the exposure of social media messages has significant relationship with the attitude of Nigerians towards fake news of COVID-19 in Lagos, Nigeria.

DISCUSSION

Social media serve as a major driver for information gathering, engagement and involvement in this digital age. In the realm of health communication, social media is a crucial supplier of health information in high and low resource countries (Nelson et al., 2013; Nelson & Bwala, 2017). Conversely, the spread of fake news on COVID-19 has been trigged by the proliferation of social media platforms. This study explored how social media messaging influenced fake news during the COVID-19 outbreak in Lagos, Nigeria.

For this empirical inquiry, the summary of the results depicts that a significant majority of the respondents were sufficiently aware of social media reports on COVID-19 outbreak in Lagos State, while less than 9 % of the respondents were not sufficiently aware of social media reports on COVID-19. In addition, the findings show that 83.1% of the respondents were adequately aware of fake news reports on social media about COVID-19 outbreak, while less than 14% of the respondents were inadequately aware of fake news reports on social media about COVID-19 outbreak. Furthermore, the results reveal that almost 67% of the respondents had cautioned individuals about the circulation of fake news report about COVID-19 on social media platforms. These results support the finding of Ferreira and Borges (2020), they asserted that individuals questioned all consumed information from available sources during the outbreak.

Notably, the Spearman correlation analysis and Somer D' measurement were used to test a hypothesis to ascertain the possibility of connection between the paired variables. The hypothesis (**H1**) which tested that there is a significant relationship between the exposure of social media messages and attitude towards fake news on COVID-19 was upheld. **Table 3** confirmed that a positive and strong correlation between the ordinal values. The table indicates that there is a strong connection between two variables at .000, which is less than 0.05. The implication of this result is that the intensity of social media messaging has an unswerving link with the attitude towards fake news on COVID-19 outbreak in Lagos, Nigeria. In essence, fake news is substantially increased by the exposure of social media messaging. This result is in line with the key tenets of the uses and gratification theory, which stipulates that individuals utilize social media platforms for the motivation and satisfaction to publicize fake news reports about COVID-19 outbreak in Lagos, Nigeria.

Conversely, the two key contributions of this study to the fountain of knowledge are, as follows:

- 1. The upsurge of fake news on health information has been influenced by the proliferation of social media platforms across the globe. Fake news, misinformation and disinformation on the prevalence of COVID-19 have been increased due to social media messaging.
- 2. The prevalence of fake news has led to the importance of media literacy, which helps individuals to distinguish between facts and opinions. Media literacy has helped individuals to detect fake news and

caution their colleagues, friends and family members about the harmful nature of fake news on COVID-19.

CONCLUSION

This study examined social media messaging on fake news about COVID-19 outbreak in Lagos, Nigeria. The exposure of fake news was significant on social media and negatively affected their health security of Nigerians. It can also be noted that fake news about COVID-19 outbreak rekindled debates about the need to regulate the social media space in Nigeria. It is suggested that governments, international agencies and non-governmental agencies should partner to develop a media literacy project on COVID-19 to educate individuals about how to detect fake news. Furthermore, the media can be utilized as platforms for discussions about the importance of priority health practices such as vaccination, healthy lifestyle practices to curb the threat of COVID-19 in Nigeria and other parts of the world. In addition, emerging social media platforms such as Tik Tok can be used to broadcast digital stories about pandemics.

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