

# Publics' Perception of the Role of Social Media on Covid-19 Conspiracy Theories and Science

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**Abstract:** This study examined public perception of the role of social media on COVID-19 conspiracy theory and science focusing on Akure South Local Government. The objectives of the study is to examine public awareness of COVID-19 conspiracy theories; to determine public knowledge on the role of social media on COVID-19 conspiracy theories; and to ascertain impact of the role of social media in covid-19 conspiracy theories on the public about vaccination. The research adopted quantitative research method with the use of survey design. A sample size of 425 was selected through Relief Application sample size calculator with a confidence level of 95% and a precision rate of 0.05 out of a population of 130,765 according to the 2006 population census. However, 15% (62) of the sample size was used for the study due to low response encountered using online questionnaire. The study used online questionnaire for data collection through googleform. The online questionnaire was administered on residents of Akure South via whatsapp. Data gathered was analysed in simple frequency and percentage distribution table. Results then revealed that the public awareness level of COVID-19 conspiracy theories is very high; the public have knowledge on the role of social media in COVID-19 conspiracy theories; and that the role of social media in conspiracy theories about COVID-19 does not negatively impact the public about vaccination. Study then recommended that government should strive to build public trust as this will go a long way in disabusing the minds of the public even as the social media is feeding them with lies and conspiracies; and that there is need for government to regulate the social media so as to prevent continuous spread and dissemination of conspiracies particularly in situations of pandemic or epidemic diseases which may have serious consequence on national advancement.

**Keyword:** Social Media, Conspiracy theory, COVID-19, Public perception, Impact

## INTRODUCTION

The level of devastation that has been caused by COVID-19 pandemic on the world cannot be overemphasized across nations. Record at the period of this study reveals that the world has witnessed about 164,342,171 cases of coronavirus 2019 (COVID-19). Meanwhile, about 143,119,194 have recovered from the virus, and 3,406,543 mortality have been recorded (Worldometer, 2021; Elfein, 2021). What this simply translates to mean is that out of the world population of 7,865,472,338 (world population review, 2021), 2.08% have been affected with COVID-19, and 0.04% of those affected have been recorded dead while 1.81% affected with the virus have recovered. Though this percentage seems insignificant considering world population, nonetheless, one begins to consider not only the impact of the virus on population vis-à-vis the percentage affected alone, but also its implications on the socio-economic, religious and political life of the people.

The International Monetary Fund Report (2020) on finance and development asserts that the outbreak of COVID-19 has seriously affected the world as a result of the unpreparedness of most governments throughout the world, many of which were focused on their selfish political interest despite early warnings from scientists of the possible outbreak of the virus. Consequently, the political, economic and social effects of COVID-19 on the people further deepened the prevalent poverty level in the various societies across Africa (Ozili, 2020). All of these conditions cumulates to the opinion and perceptions of the people and groups with vested interest across board on the emergence of coronavirus 2019 (COVID-19) and the likely political situations surrounding its emergence in the first place.

Suffix to this on one hand is the fact that the media, particularly social media have continued to play a significant role in educating the public on COVID-19 through various awareness campaigns which constitutes public knowledge of this virus thereby becoming the catalyst for adherence to taking proactive health measures (Olagoke, et al., 2021; Rehman, et al., 2020). On the other hand are the facts while the social media is efficiently creating awareness on COVID-19 the misinformation about it was fast becoming a *siamese* phenomenon in relation to its emergence and trend thereby becoming a serious issue among the people not only in Nigeria but all over the world. To this end, this has constituted a build-up on how the virus is perceived by the public and dictating how they handle every piece of information available in the public domain about the virus and government policies on preventive

measures. It is therefore on this background that this study tends to investigate publics' perception of the role of social media on covid-19 conspiracy theories and science so as to know the possibility of the public accepting vaccination.

### Research Questions

Drawing from the arguments above, the research investigates the following research questions:

1. What is the level of public awareness of COVID-19 conspiracy theories?
2. What is the publics' knowledge on the role of social media in COVID-19 conspiracy theories?
3. What impact does the role of social media in covid-19 conspiracy theories have on the public about vaccination?

## LITERATURE REVIEW

### Social Media, the Health Environment and COVID-19 Pandemic

The evolution of social media is product of scientific and technological advancement in human history which has its earlier projection by Marshal McLuhan when he declared his "global village" idea resulting from globalization (McPhail, 2006). Considering the term- social media, it will go a long way to have a clear grasp of social media, particularly for the sake of general knowledge. Many have defined social media, but this definition falls within their experience and professional capacity vis-à-vis communication. Social media, according to Siddique & Singh (2016) is the electronic tool which is relatively in inexpensive that allows anyone to post or publish and access information to fast track relationship for personal and business activities, and collaborates on efforts. More so, Manning (2014) posit that social media is a new type of interactive media that encourages interactive participations. Drawing views from the social media definitions given by both scholars' social media is a new from electronic tool that creates interaction among the people or public for the purpose of creating relationship which could either be personal or economic gains.

The social media over the years have served a very crucial role in our society since it created interactive platforms for different categories of people and purposes at the same time. Apart from the romantic relationship aspect that the social media have really increased human participation, its contribution to development in the area of education and learning cannot also be jettisoned (Ulanova, 2020; Butler & Matook, 2015). Most importantly is the fact that the social media have encouraged and developed a new style of communication in the business environment and given a facelift to how marketing, advertising and promotions are done in the business world today thereby establishing more bound between the consumers or audience and the producers of goods and services (Mahoney, 2021; Manning, 2014). In the health environment, one cannot overemphasis the sacrosanct implication, contribution and influence that the social media have brought to this section of humanity. Although the social media contribution to health environment have been scholarly perceived in a positive and negative light owing to the public free and uncensored access that have constituted the many reasons why it has been perceived on a negative note when it comes to health issues. On the positive ground however, social media have increased health communication through different health campaigns and information dissemination, and allowed a direct links between health givers, health communicators and professionals and patients (Lau, Gabarron, Fernandez-Luque, & Armayones, 2012).

To this end, it is just to argue that the social media have been a very crucial and helpful tool in our society today in all ramifications and have contributed immensely particularly to the health environment both negatively and positively. Lau et. al (2012) argued that many literatures have examined social media in relation to its importance and influence on health, but on the contrary many have failed to examined the credibility of most of these social networks on the health consumers until recently when some scholars began to focus scholarly perspectives towards the negative implications of social networks on consumers health decision making, behavioral patterns and outcome vis-à-vis the quality of information being shared by health information experts and are accessed by the public via the various social networks, this however tells on the safety of publics on health issue. Akram & Kumar (2017) in their argument on the negative implications of social media on health pointed out two major negative effects which include: incorrect diagnoses that are often rampant among the public; and the public's potential breach of privacy.

These two negative effects can however be linked to the fact that the internet and social media networks have made the public an active audience thereby reflecting on the uses-and-gratifications approach theory where the public have control over information they get and can at the same time change their roles in communication process- *Interactivity*, and the opportunities or abilities made available to the public through the various social media networks which allows public to select form the wide menu of information available to them thereby allowing the public tailor health information or messages to their health needs- *Demassification*.

The public use of social media has continued to increase on a yearly basis. Dean (2021) argues that about 3.96 billion people currently use the social media across the globe compared to the 2.07 billion usages in 2015 thereby depicting an increase of 12.5% usage from 2015 to 2021. This statistics and increase cut across all forms of social media usage even to the health system. For

instance, Chaffey (2021) asserts that there was a serious increase in online and digital activities during Covid-19 pandemic in 2020 where 54% of the public worldwide watched and streamed video contents online, 43% spent much time using social media, 42% spent more time on messaging services, 37% listened to music online, 36% spent more time on mobile app, 35% spent more time playing games online, 16% created and uploaded videos online etc. what this statistics implies is that almost half of the worlds' population now use the social media considering the world population amounting to 7,865,472,338 (world population review, 2021).

Consequently, it is no more a debatable matter that the social media provided an avenue for all and sundry to disseminate opinion, create relationship within the sphere of romantic interaction and business environments. During the outbreak of covid-19 pandemic in 2019 and till now, social media contributed greatly to public health campaign awareness about the virus for the purpose of informing, educating and raising consciousness about the virus in all nooks and cranny of the world considering the dangers associated with contracting the virus since there was no cure at the early stage of this virus. Aside this function, while the government across nations declared lockdown to avoid the spread of COVID-19 social media became a very crucial tool for the public which occupied their time during this period since people were not able to meet face-to-face. In fact, many religious organisations adopted various social media platforms for their activities since they were not allowed to congregate during the lockdown (Tudor, Benea, & Bratosin, 2021).

### Understanding Conspiracy Theories

The conceptual definition of conspiracy theories itself has been a controversial phenomenon amongst scholars across all fields of human practices. However, it becomes expedient in this condition and more compelling to have a clear, precise understanding of the concept or definition of conspiracy theories. To this end, in an attempt to create a background for conspiracy theory definition, Byford (2011) asserts that studies into the definition of conspiracy theories have been characterised in the context of social, historic, and ideological functions. Therefore, summing up these characteristics within the definition of conspiracy theories reflects the place of psychology, political and social factors involved in the phenomenon. Investigating into the definition of conspiracy theories, Byford states that the word conspiracy emanated from the Latin word – “*conspirate*” which means to “breathe together”. In the context of conspiracy theory, it means the coming together of two or more individuals in other to achieve a common goal or target plan. To this end, conspiracy theory according to Douglas, Sutton, & Cichocka (2017) is a secret plan or plot which is often strategically disseminated by the powerful and malevolent groups about some important events.

Meanwhile, Prooijen & Vugt (2018) assume this definition as a commonly applied definition of conspiracy theories thereby pointing to the argument of Hofstadter, 1966 who argued that conspiracy theory is more of a pathological phenomenon than just a mere gathering of some element of people around a particular event. Drawing their perspective from assumption of the generality of this definition, Prooijen & Vugt viewed conspiracy theory to be more of a culturally universal condition, a condition that seem general or universal, particularly when it bothers on issues that concern the epistemic, existential and social condition of majority such as in the case of COVID-19, and some political events of the past such as that of September 11 bombing of World Trade Centre. Considering the historical perspective of conspiracy theories, its use and application has been felt in all areas, ranging from economic situation to social life of the people, from politics to war, from scientific or technological advancement to economic sphere.

In many cases, conspiracy theories have been mostly applied in politics than any other events around the world, and this is probably the reason Peter (2020:1) argued that:

*“One way to look at conspiracy is to consider it a deliberately enhanced political weapon cultivated by those who push fake news in post-truth media environment”.*

In a nut shell, Peter (2020) is of the view that conspiracy theories has been a practice that is politically motivated, and being a tool or mechanism in the hands of those who engages in this act people or interest groups will continue the spread of conspiracy theories on nay issues as long as people continues to feel insecure in the world. In other word, conspiracy theories will continue to surface as events that constitute universal, group, or individual insecurity, instability, and unrest persists in our world. Furthermore, Douglas, Uscinski, Sutton, Cichocka, Nefes, Ang & Deravi (2019) argued that what conspiracy theories tend to typically achieve is to takeover political power vis-à-vis government and economic, right violation, infringing upon established agreement. In line with this, Douglas et al. (2019) in establishing a clearer definition of conspiracy theory referred Aaronovitch, 2010; Grimes, 2016 as they posited that conspiracy theory are deliberately planned efforts of groups or individuals with the attempt t explain the main cause of a social and political events and conditions with claims of secret plans. More so, looking at this perspective, and from the very empirical facts available conspiracy theories do not only reflect in social and political matters, but also reflects on economic events.

### Theoretical Framework

This work is premised on two theories which are the social responsibility theory and diffusion of innovation theory. The social responsibility theory explains that the media, be it traditional or new is responsible to providing information, education and

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entertainment to the public. This explains further the role of the press to both the people and the government, it is one of the normative theories propounded by Siebert, Pertson, & Schramm in 1963. Anaeto et al. (2012:57) argued that this theory postulates that the media serve the political system by making information, discussion and consideration of public affairs generally accessible; inform the public to enable it take self-determined action; protect the rights of the individuals by acting as watch-dog over the government; serve the economic system, for instance by bringing together buyers and sellers through the medium of advertising; and preserve financial autonomy in order not to become dependent on special interests and influences. From the forgoing, the theory in a clearer term mandates the media to be responsible to both the public and the government by making information and happening in the society available as they relate to COVID-19 pandemic as the press help to further set-agenda for the government base on the aspirations of the society.

Also, diffusion of innovation was propounded in 1986 by Everett Rogers. The theory is thus concerned with using communication in the transferring of technological innovations from development agencies to their clients to create change. Demer (2005, p.84) defines diffusion as “the process through which an innovation is adopted and spread through an organization or society. Diffusion research suggests that the process for many innovations follows the shape of an s-curve: slow at first, followed by rapid growth, and then leveling off”. Demer further posits that diffusion research suggests that mass media influence early adopters (people who adopted an innovation first), but later adopter are more influenced by change agents by the early adopters or people specifically hired to promote an innovation.

Anaeto, et.al. (2015, p.178) while discussing this theory posits that “the adoption and diffusion processes are conducted in social and cultural contexts, which can make them aspects of dependency or modernization. It is to distinguish among five phases in the diffusion process: awareness, interest, evaluation, trait and adoption. The role of the mass media is concentrated on the first stage of the process (awareness stage), whereas, personal sources are most important in the adoption process. Furthermore, Anaeto, et.al (2015, p.178) states that “people who apply innovation diffusion ideas to developmental planning usually adopt a two-step flow approach by combining mass media and interpersonal communication channels. The internet and the social media however, are thus innovations playing vital roles in mass media operations and as such is been adopted by health givers and the various stakeholder in the health sector. This however states the relevance of this theory to our research work as a result of the adoption of social media in giving health information to the public.

## METHODOLOGY

### *Design, Population, Sample size*

This study adopts a quantitative research method with the use of the survey design. Meanwhile, the population of the study is drawn from Akure South local government council of Ondo state. According to the 2006 Census, Akure South has a total population of 360,268 people where 178,672 are male and 181,596 are female (*citypopulation*, 2020). From this population, a sample size of 426 is selected using Relief Application sample calculator with a confidence level of 95% and precision rate f 0.05.

### *Study Procedure, and Data Collection*

To gather data, an online questionnaire was structured using *googleform* as the research instrument. The questionnaire is divided into two sections: psychographic and demographic. While the former addresses respondents’ personal information, the latter examines the research questions. This instrument therefore is administered on respondents who are residents of Akure South local government council. The link of the online questionnaire is administered on respondents through *facebook* and *whatsapp* social media platforms.

## Results

As a result of the coverage area, and the short period for this study, the researcher decided to use 62 (15%) of the 426 sample selected from the population. Therefore, a total of 62 online questionnaires was attended and used for the study.

Table 1: Demographic Characteristics of Respondents

Characteristics	Frequency (n-62)	Percentage (100%)
<b>Sex:</b>		
Male	25	40.3%
Female	37	59.7%
<b>Age:</b>		
18-22 years	0	0%
23-27 years	13	21%
28-32 years	8	12.9%
33-37 years	19	30.6%

38 years & Above	22	35.5%
<b>Marital Status:</b>		
Single	24	38.7%
Married	37	59.7%
Divorced	1	1.6%
<b>Employment Status:</b>		
Employed	33	53.2%
Self-employed	25	40.3%
Unemployed	4	6.5%
Retired	0	0%
<b>Educational Status</b>		
SSCE/Technical	3	4.8%
ND/NCE	3	4.8%
HND/BSc/PGD	40	64.5%
MA/MScM.	9	14.5%
Phil/Ph.D	5	8.1%
None	2	3.2%

Source: Researcher's field survey, 2021

Sequel to the above table 1 which shows the demographic characteristics of respondents, it is established going by the sex characteristics of respondents that 25 (40.3%) were male, and 37 (59.7%) were female. This simply means that majority of the respondents were female. More so, considering characteristics the table, reveals that 0 (0%) of the respondents were between 18-22 years, 13 (21%) were between 23-27 years, 8 (12.9%) were between 28-32 years, 19 (30.6%) were between 33-37 years, while 22 (35.5%) were 38 years and above. Invariably, this states that majority of the respondents are 38 years and above. Furthermore, on respondents' marital status, table shows that 24 (38.7%) are single, 37 (59.7%) are married, and 1 (1.6%) is divorced. In other words, majority of the respondents are married. On employment status, table shows that 33 (53.2%) of the respondents are employed, 25 (40.3%) are self-employed, 4 (.5%) are unemployed, and 0 (0%) is retired. This however shows that majority of the respondents are employed. In continuation, the table also considers respondents' educational background as it shows that 3 (4.3%) of the respondents possess SSCE/technical qualification, 3 (4.3%) have ND/NCE qualification, 40 (64.5%) possess HND/BSc/PGD qualifications, 9 (14.5%) have MA/MSc certificate, 5 (8.1%) have M.Phil/Ph.D certificate, and 2 (3.2%) do not have any qualification. Going by this manifestations, the table reveals that majority of the respondents are HND/BSc/PGD holder.

Table 2: Response to determine if respondents understand what conspiracy theory is

Response	Frequency (n-62)	Percentage (100%)
Yes	45	72.6%
Maybe	11	17.7%
No	6	9.7%
Total	62	100%

Source: Researcher's field survey, 2021

Table 2 above depicts responses to determine if respondents understand what conspiracy theory is. To this end, the table shows that 45 (72.6%) respondents chose yes, 11 (17.7%) chose maybe, and 6 (9.7%) chose no. Therefore, majority of the respondents understand what conspiracy theory means.

Table 3: Response on respondents' awareness of the different conspiracies about COVID-19

Response	Frequency (n-62)	Percentage (100%)
Yes	52	83.9%
Maybe	5	8.1%
No	5	8.1%
Total	62	100%

Source: Researcher's field survey, 2021

Table 3 above shows respondents' response on awareness of the different conspiracies about COVID-19. Consequently, 52 (83.9%) respondents chose yes, 5 (8.1%) chose maybe, and 5 (8.1%) chose no. In other words, majority of the respondents are aware of the different conspiracy theories concerning COVID-19.

Table 4: Response to item 8,9,10

Items	SA (%)	A (%)	D (%)	SD (%)	Mean
COVID-19 was actually created as a biological weapon to reduce world population.	4 (6.5%)	15 (24.2%)	33 (53.2%)	10 (16.1%)	2.21
Bill Gate sponsored the outbreak of COVID-19 so as to vaccinate everyone to increase his financial status.	1 (1.6%)	6 (9.7%)	39 (62.9%)	16 (25.8%)	1.87
COVID-19 was scientifically created to function with 5G technology in order for some secret societies to have control of the people through some world leaders	1 (1.6%)	9 (14.5%)	39 (62.9%)	13 (21%)	1.97

Source: Researcher's field survey, 2021

Table 4 shows the respondents' responses on items 8, 9 and 10 on the research instrument which was constructed to test respondents' awareness on the various COVID-19 conspiracy theories. To this end, item 8 which sought to know the views of respondents on COVID-19 being a biological weapon, 4 (6.5%) of the respondents strongly agreed, 15 (24.2%) of them agreed, 33 (53.2%) disagreed, and 10 (16.1%) strongly disagreed. Therefore, it means that majority of the respondents disagree on the theory that COVID-19 was created as a biological weapon to reduce world population.

Furthermore, item 9 shows the respondents views on the conspiracy theory that Bill Gate sponsored the outbreak of COVID-19, to this end, 1 (1.6%) strongly agreed to this theory, 6 (9.7%) agreed, 39 (62.9%) disagreed, and 16 (25.8%) strongly disagreed. Therefore, majority of the respondents disagreed with the conspiracy theory that Bill Gate sponsored the outbreak of COVID-19 so as to vaccinate everyone to increase his financial status.

More so, item 10 on table 4 shows respondents' notion on COVID-19 having connection with 5G technology. To this end, the table reveals that 1 (1.6%) of the respondents strongly agreed, 9 (14.5%) of them agreed, 39 (62.9%) of them disagreed, and 13 (21%) of them strongly disagreed. Drawing from this data, it shows that majority of the respondents disagreed on the conspiracy theory that COVID-19 was scientifically created to function with 5G technology in order for some secret societies to have control of the people through some world leaders

Table 5: Respondents' response on if most people around often discuss the various issues of science and conspiracy theories on COVID-19

Response	Frequency (n-62)	Percentage (100%)
Yes	44	71%
No	10	16.1%
Undecided	8	12.9%
Total	62	100%

Source: Researcher's field survey, 2021

Table 5 shows the Respondents' response on if most people around you often discuss the various issues of science and conspiracy theories on COVID-19. As a result, it appears that 44 (71%) of the respondents say yes, 10 (16.1%) say no, and 8 (12.9%) say no. This means that majority of the respondents are of the view that most people around them often discuss the various conspiracy theories on COVID-19.

Table 6: Response to item 12, 13, 14.

Items	SA (%)	A (%)	D (%)	SD (%)	Mean
Of all the media, social media played significant role in informing and	40 (64.5%)	20 (32.2%)	2 (3.2%)	0 (0%)	3.61

creating awareness on COVID-19 pandemic when the virus emerged in 2019					
Aside awareness campaigns. The social media contributed immensely to misinforming the public about COVID-19.	18 (29%)	32 (51.6%)	10 (16.1%)	2 (3.1%)	3.06
Most of the misrepresented COVID-19 information on social media spurred fear in the people thereby creating a state of confusion in the society about the virus	19 (30.6%)	36 (58.1%)	5 (8.1%)	2 (3.2%)	3.16

Source: Researcher’s field survey, 2021

Table 6 shows items 12, 13, and 14 that were raised to investigate the publics’ knowledge of social media roles in COVID-19 conspiracy theories. On item 12 which sought to the views of respondents on the impact of social media in creating awareness on COVID-19, 40 (64.5%) of them strongly agreed, 20 (32.2%) agreed, 2 (3.2%) disagreed, and 0 (0%) strongly disagreed. This means that majority of the respondents strongly agreed that of all the media, social media played significant role in informing and creating awareness on COVID-19 pandemic when the virus emerged in 2019.

More so, the table revealed respondents’ views on social media contribution to misinforming the public on COVID-19 issues where 18 (29%) of them strongly agreed, 32 (51.6%) agreed, 10 (16.1%) disagreed, and 2 (3.1%) strongly disagreed. Therefore, majority of respondents agreed to the statement that aside awareness campaigns. The social media contributed immensely to misinforming the public about COVID-19.

Furthermore, on item 14, the table 6 above reveals that 19 (30.6%) respondents strongly agreed, 36 (58.1%) agreed, 5 (8.1%) of them disagreed, and 2 (3.2%) strongly disagreed. This means that majority of the respondents agreed that most of the misrepresented COVID-19 information on social media spurred fear in the people thereby creating a state of confusion in the society about the virus.

Table 7: Respondents’ response on if they agree to the fact that many bought into the various conspiracy theories on COVID-19 due to their consistent exposure to social media

Response	Frequency (n-62)	Percentage (100%)
Yes	43	69.4%
Maybe	13	21%
No	6	9.7%
Total	62	100%

Source: Researcher’s field survey, 2021

Table 7 shows responses of respondents on if they agree to the fact that many bought into the various conspiracy theories on COVID-19 due to their consistent exposure to social media. Sequel to the data on the table, 43 (69.4%) say yes, 13 (21%) say maybe, and 6 (9.7%) say no. Therefore it means majority of the respondents say they agree that many bought into the various conspiracy theories on COVID-19 due to their consistent exposure to social media.

Table 8: Respondents’ response on if they have been vaccinated.

Response	Frequency (n-62)	Percentage (100%)
Yes	18	29%
No	44	71%
Total	62	100%

Source: Researcher’s field survey, 2021

Table 8 shows the responses of respondents on if they have been vaccinated. To this end, 18 (29%) chose yes, and 44 (71%) say no. Therefore, the table reveals that majority of the respondents have not been vaccinated.

Table 9: Respondents’ response on if as a result of the different conspiracy theories on COVID-19 through the social media, respondents are likely to take or advise someone to take the vaccine

Response	Frequency (n-62)	Percentage (100%)
Yes	17	35.4%
Maybe	15	31.3%

No	16	33.3%
Total	62	100%

Source: Researcher's field survey, 2021

Table 9 shows the response of respondents on if they are likely to take or advise someone to take the vaccine as a result of the different conspiracy theories on COVID-19 through the social media. To this end, the table reveals that 17 (35.4%) of the respondents say yes, 15 (31.3%) say maybe, and 16 (33.3%) say no. Consequently, it is revealed that majority of respondents are likely to take the vaccine and even advise people to take it despite the various conspiracy theories on COVID-19.

Table 10: Respondents' response on why respondents may not take or advise someone to take the vaccine

SN	15 Responses
1.	I am risk averse
2.	Because I do not believe in the efficacy of vaccine
3.	Because I am not sure the vaccine is ok to be taken
4.	Because of the negative effects to the body system
5.	I do not trust the government
6.	I do not believe the vaccine is an antidote to curing the virus
7.	Because the vaccine may not cure the virus
8.	I do not feel I need it
9.	Due to the reports from other countries that the vaccine changes DNA
10.	I have no reason
11.	I just feel comfortable not taking it
12.	Because I feel prevention on COVID is better than cure
13.	Reason is best known to me, so I will rather not state why
14.	the reason is still based on end-time theory associated with the virus as it offers those involved with the evolution of the virus to controlling people
15.	I have no reason, I just chose not to get vaccinated

Source: Researcher's field survey, 2021

Table 10 shows the reasons why some respondents may not take or advise someone to take the vaccine. Resulting from this table, it shows that those who may not take the vaccine still believe in the various conspiracies surrounding covid-19 such as the vaccine changing of DNA, and the religious many religious conspiracy theories. More so, many are of the view that there is no need to take the vaccine once it is possible for people to prevent themselves from contracting the virus, and government insincerity to the issues of COVID-19.

Table 11: Response to item 19

Items	SA (%)	A (%)	D (%)	SD (%)	Mean
The recent COVID-19 vaccination across the world is a pointer to the fact that the COVID-19 conspiracy theory about Bill Gate was true	0 (0%)	12 (19.4%)	43 (69.4%)	7 (11.3%)	2.8

Source: Researcher's field survey, 2021

Table 11 shows response of respondents of if the introduction of COVID-19 vaccination was a pointer to say that the conspiracy theory about Bill Gate was true. To this end, 0 (0%) of respondent strongly agreed, 12 (19.4%) agreed, 43 (69.4%) disagreed, and 7 (11.3%) strongly disagreed. Therefore, the table shows that majority of the respondents disagreed with the statement that the recent COVID-19 vaccination across the world is a pointer to the fact that the COVID-19 conspiracy theory about Bill Gate was true where mean aggregate is 2.08 which is LESSER than 2.5 (the bench mean value) confirms the result.

## Discussion of Findings

### RQ1: What is the level of public awareness of COVID-19 conspiracy theories?

To address research question one, 6 items were raised in the questionnaire to address this research question. These 6 items were represented in tables 2-5. Therefore, investigation into the research question reveals that majority of the public are aware of COVID-19 conspiracy theories. This is shown in the data collected as majority of the respondents have understanding of what conspiracy theory means. As a result of their understanding of what conspiracy theory means, many became alive to the various conspiracy theories about COVID-19 and often discuss it amongst themselves. To be sure of the publics' awareness level about COVID-19 conspiracies, study presented three conspiracy theories about the virus and investigation revealed that the public



awareness level is very high in the public domain as a result of the knowledge many have about issues concerning conspiracy theories. One major factor that might have contributed to the public knowledge about conspiracy theory is the fact that majority of the Nigerian public are educated just as shown in the demographic characteristics of respondents.

### **RQ2: What is the publics' knowledge on the role of social media in COVID-19 conspiracy theories?**

Consequent upon findings on research question two, three items were raised in the research instrument to address this research question. Therefore, study reveals that majority of the public attest to the social media played serious role in informing and educating the public on COVID-19 by creating awareness about the virus. This means that the social media was an effective tool for media professional, health givers and other stakeholders within the health sector which was efficiently deployed to create awareness on COVID-19 pandemic. However, despite the positive impact of social media in covid-19 awareness creation, its contribution to the spread of COVID-19 conspiracy theories cannot be overemphasised, particularly as it concerns the national security in the area of health. Coming from this point, study reveals that social media contributed immensely to the spread of COVID-19 conspiracies in the public domain by misinforming the people about what COVID-19 is not. In other words, the social media was an effective tool in the hands of those involved in the concoction and spread of the various COVID-19 conspiracies. Moreover, most of the misrepresented information leading to these conspiracy theories spurred fear in the people and created serious confusion in the society. Also, investigation shows that majority of the public bought into the various conspiracy theories as a result of their consistent exposure to the social media during the heat of COVID-19 as many stayed at home due to the lockdown which became one of the measures against the spread of the virus. Drawing conclusion from findings, it clear that the public have knowledge on the role of social media in COVID-19 conspiracy theories, and the public knowledge of this condition is very high considering their recognition of the positive and negative role the social media played and still playing on issues surrounding COVID-19 pandemic.

### **RQ3: What impact does the role of social media in COVID-19 conspiracy theories have on the public about vaccination?**

Sequel to research question three, four items were raised in the research instrument to probe this research question. These items are contained in table 8-11. Therefore, inquiries into research question three reveal that although majority of the public have not been vaccinated. Nonetheless, there is certainty that majority of the public are willing to take the vaccine and also encourage other despite their constant exposure to the various conspiracy theories on COVID-19 through the social media. However, although there are militating factors such as the religious perspective on the various conspiracies, lack of public trust for government, the public belief that prevention is rather better than cure are some of the many reasons some minority may decline taking the vaccine or even encouraging someone else. Conclusively, it is clear enough from findings to state that the impact of the role of social media in COVID-19 conspiracy theories on the public on vaccination is low. In other words, despite the various misinformation and conspiracies about covid-19 been spread across various social media platforms, and couple with the knowledge of the public on the negative implication of conspiracy theories on COVID-19, the public will not hesitate taking the vaccine when opportunity to do so presents itself.

### **Conclusion**

This study investigates publics' perception of the role of social media on covid-19 conspiracy theories and science with the intention to uncover the likely reaction of the public on the introduction of COVID-19 vaccination. It is obvious from available literatures that the social media has played and still playing both a positive and negative role amongst the people, these roles cannot be jettisoned considering its impact on the public decision of health related matters. As a result, though the social was an effective tool which was deployed by the various stakeholders in the health sector, nonetheless, it also served as a tool for societal confusion in the hands of the conspiracy theorist particularly in the current COVID-19 scenario that the world have been faced with since December, 2019. However, despite the role and place of the social media in conspiracy theories on COVID-19, the public seems to have a better understanding of the negative implications of the conspiracy theories relating to covid-19, and as such may not take to the misrepresented information being spread around about the virus, and that this conspiracies may not stop majority of the public from taking the vaccine when they have the opportunity.

### **Recommendations**

Considering the various findings from the research work, it is evident that the social media is an effective tool in creating awareness on health related matters, that notwithstanding, it also has the capacity to misinform the public considering their access to it. Although the public are becoming more conscious of the dangers of misrepresented social media information about health matters such the issues relating to covid-19 and evolving conspiracy theories. Therefore, it expedient to recommend at this juncture that:

1. Although the public is not driven to taking negative actions as a result of the various conspiracy theories they are exposed to through the social media about COVID-19. But this does not rule out the fact that government political activities around COVID-19 and the conspiracies is not a concern to the public. The public seems not to trust the government, and this might influence the public in believing in some of these conspiracies about COVID-19. Therefore, the government should strive to build public trust as this will go a long way in disabusing the minds of the public the more even as the social media is feeding them with lies and conspiracies.
2. More so, there is need for government to regulate the social media so as to prevent continuous spread and dissemination of conspiracies particularly in situations of pandemic or epidemic diseases which may have serious consequence on national advancement.

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