

Patterns of the Influence of Social Media Reports of Coronavirus on the Residents of Select Cities in Nigeria

Jacob S. Suemo, PhD & Ayabam B. Nyiete, PhD

Department of Mass Communication
Benue State University, Makurdi, Nigeria
ssuemo@bsum.edu.ng; +2348131862360
bayabam@bsum.edu.ng; +2348036555688

Kusugh Ternenge, PhD

Department of Mass Communication
Veritas University, Abuja, Nigeria
kusughternenge@gmail.com; +2347037724337

Abstract

This study is an examination of the patterns of the influence of social media reports on coronavirus on users in select Nigerian cities. Mixed research design comprising quantitative and qualitative methods was adopted with the questionnaire and interview guide schedule used as the research instruments. Thus, a sample size of 1,111 respondents was statistically determined and proportionately distributed across the sampled cities (Bauchi, Kano, Makurdi, Port Harcourt, Awka and Lagos respectively). The findings showed that acceptance of facemasks, personal responsibility in adherence to coronavirus prevention protocols, increased sensitivity to symptoms of the virus, enhanced social distancing and improved hygiene consciousness among the people were the various patterns of influence of social media reports on coronavirus among sampled respondents. The findings further showed that some mediating variables such as knowledge level, cultural values, traditional and religious beliefs and individual interests were core in propelling the effect process of socially-mediated coronavirus reports among the study population. Thus, the researchers concluded that a significant relationship exists between coronavirus reports on social media and behaviour change among Nigerians. The researchers, therefore, recommended a coordinated tactical approach to the conception and production of social media reports on coronavirus with a view to ensuring that only fairly objective, accurate and credible sourced reports are transmitted about the virus on social media to help identify a point of convergence across the identified patterns of effects.

Keywords: Patterns, Influence, Social Media, Reports, Coronavirus, Youths, Nigeria

Introduction

Coronavirus is a novel virus that has taken the world by surprise with such a sweeping impact on economic, social and health sectors across nations of the world. Consequently, all key global health and economic players appear united towards a properly coordinated resistance strategy and management approach at containing the spread of this virus. Thus, the need for proper communication efforts to further educate and mobilise populations of the world to tackle the tricky dimensions of expression the virus aligns itself to for expression is crucial (Suemo, 2020). Consequently, several mass media platforms

particularly social media have taken the challenge of ensuring the diffusion of adequate information on the virus to specific target social systems with in their operational geographical territories to the grassroots.

The relaxed nature of social media as Aamoah (2011) observes, makes its platforms more accessible, penetrative, tolerably invasive and perhaps, convenient in reaching out to huge population, especially youths, most of whom are habituated to social media platforms. The implication here been that, the perceived strategic proximity of social media to populations across the globe enhances its potentials for acculturation and social change thus validating empirical positions of the hypodermic needle theorists on media influence (Siddiqui, Ghazal, Bibi, Amed & Sajjad, 2016). Social media are contextualised as interactive computer-mediated technologies that facilitate the creation or sharing of information, ideas, career interests and other forms of expression via virtual communities and networks. The concept, effect according to Bolonsha (2013) insinuates the result or the final consequence of a sequence of actions or events expressed qualitatively or quantitatively. A pattern for the purpose of this study is conceived to mean a form or nature of effect. A report is a document that presents information in an organised format for a specific audience and purpose (Asemah, 2011). Coronavirus is a mild to severe respiratory illness that is caused by severe acute respiratory syndrome coronavirus 2 of the genus betacoronavirus. It is transmitted chiefly by contact with infectious material such as respiratory droplets or with objects or surfaces contaminated by the virus and is characterised, especially by fever, cough and shortness of breath and may progress to pneumonia and respiratory failure. Nigeria is an African country on the Gulf of Guinea that has many natural landmarks and wildlife reserves.

Epistemologically, a mix of empirical studies on effect of social media exists on various themes across target social systems insinuating that social media contents have the capacity to inspire change. Turgeon (2011) affirms that social media contents wield noteworthy influence on morality across target social systems, thus stimulating acculturation among a given population. The outbreak of COVID-19 in Nigeria and other countries of the world halted academic activities, jettisoned social gatherings and stagnated religious meetings across the globe; thus, perpetuating the relevance of social media platforms among Nigerians hence increase in reliance on these platforms for information on a variety of subjects. This enhanced relevance and vivacious penetration of social media platforms into daily schedules of the people has stirred vigorous research concerns among communication scholars towards ascertaining the current and latent potentials of such platforms on acculturation and social change (Suemo, 2020). Though the question of whether social media contents wield some kind of influence on the target social groups they serve has never been in contention, the specific nature of influence and the various patterns of effect social-media reports of coronavirus bring to bear on the Nigerian population is vague; hence, the study.

Objectives of the Study

The study sought to:

1. Find out the specific social media platforms through which the respondents access coronavirus reports.
2. Ascertain the extent of effect of social media reports on coronavirus on the residents of the select cities.
3. Find out the patterns of the influence of social media reports on coronavirus on the respondents.

Review of Relevant Literature

Social media platforms supply essential information on health, economy, business, sports and entertainment to target audience segments as often as the need for such communication arises. However, to access social mediated messages, one has to be technologically situated by acquiring or hiring internet facilities from identified service providers in order to participate in such communication efforts. Such internet-based social-mediated platforms Barneys (2012) observes, enjoy a significant level of popularity among target populations of the world, especially youth and adults who use such platforms to keep in touch with friends and share contents accordingly. Among the various types of social media platforms commonly used in contemporary times, Basit (2013) identifies bookmarking networks such as Pinterest which help people to discover, save and share visual contents. Also, blogging and publishing networks such as WordPress, Tumblr and Medium are used to either publish, discover or comment on contents online congruently. These networks, therefore, range from more traditional blogging platforms like WordPress and Blogger to microblogging services like Tumblr and interactive media (Young Academic, 2011).

Social publishing platforms like Facebook, Twitter, Telegram and WhatsApp have recently been mobilised by the Nigerian Centre for Disease control (NCDC) and even the Federal Ministry of Health (FMO) to galvanise support from the general public for the federal government's efforts towards the prevention, control and management of the novel coronavirus in Nigeria. Mohammed (2020) explains that such social media platforms contribute immensely to the management and control of coronavirus in Nigeria as they come handy in providing an up-to-date newsflash on the challenges and progress made by both federal and state governments in the fight against the spread of the virus across the country. The purposeful engagement of social media in properly coordinated and sustained publicity of the activities, discoveries and researched findings of the Agencies of Government saddled with the responsibility of managing the coronavirus pandemic in Nigeria has far reaching implications on behaviour change than can be imagined (Mohammed, 2020). According to Altheide & Snow (2018), the efficacy of social media platforms as channels of information dissemination across the globe today though undauntedly constant, the fidelity of such platforms in the meaning sharing process is fugacious and prone to distortions, a situation which exposes its target to precariously dynamic influence protocols capable of stimulating variations of feedback indicators. Nevertheless, the advantages of suppleness and enormous streams of entertainment contents on its broadcast space collectively capture the undivided attention of a significant number of people (The Prevention Researcher, 2019). The implication

here being that the target audience base these platforms control helps to sharpen their overall strategic significance in the media effects chain.

Theoretical Framework

This study is anchored by Health Belief Model (HBM) and the social learning theory. The health belief theory is a model developed to explain and predict health-related behaviours, particularly in regard to the uptake of health services (Siddiqui, Ghazal, Bibi, Ahmed & Sajjad, 2016). The HBM was developed in the 1950s by social psychologists, Irwin M. Rosenstock, Godfrey M. Hochbaum, S. Stephen Kegeles and Howard Leventhal at the US Public Health Service and remains one of the best known and most widely used theories in health behaviour research (Carpenter, 2010). The HBM holds that individual behaviour depends on a number of beliefs about threats to an individual's well-being and the effectiveness and outcomes of particular actions or behaviours (Cerkoney & Hart, 2008; Zaltzman & Leidiliter, 2013). The theory is relevant to this study because it is a guide to developing effective coronavirus intervention messages using social media platforms for behaviour change by targeting various aspects of the model's key constructs. Interventions based on the HBM may aim to increase perceived susceptibility to and perceived seriousness of a health condition by providing education about prevalence and incidence of disease, individualised estimates of risk and information about the consequences of disease (e.g., medical, financial and social consequences). Interventions may also aim to alter the cost-benefit analysis of engaging in a health-promoting behaviour (i.e., increasing perceived benefits and decreasing perceived barriers) by providing information about the efficacy of various behaviours to reduce risk of the pandemic, identifying common perceived barriers, providing incentives to engage in health-promoting behaviours and engaging social support or other resources to encourage health-promoting behaviours.

Social learning theory integrated behavioural and cognitive theories of learning in order to provide a comprehensive model that could account for the wide range of learning experiences that occur in the real world. As outlined by Bandura & Walters in 1963 and further detailed in 1977, learning is not purely behavioural; rather, it is a *cognitive* process that takes place in a social context. Learning can occur by observing a behaviour and by observing the consequences of the behaviour (vicarious reinforcement). Learning involves observation, extraction of information from those observations, and making decisions about the performance of the behaviour (observational learning or modelling) (Goes, 2011). Thus, learning can occur without an observable change in behaviour. Reinforcement plays a role in learning but is not entirely responsible for learning. The learner is not a passive recipient of information. Cognition, environment, and behaviour all mutually influence each other (reciprocal determinism). Social learning theory, therefore, acknowledges the interaction that occurs between an individual and his/her environment (McQuail, 2005). The outside environment is where a person can observe an action, understand its consequences and becomes motivated to repeat it and adopt it. Behaviour is affected by structural factors, such as service availability and policies, as well as by social factors, such as social norms and peer influence (United

States Agency for International Development, 2020). This theory is also relevant to this study because it says the learner (social media user) is encouraged to observe and imitate the behaviour of others; see positive behaviours modelled and practise them; increase his/her own capability and confidence to implement new skills; gain positive attitudes about implementing those skills and experience support from his/her environment to use those skills.

Methodology

The researchers adopted mixed research method where research design involving quantitative and qualitative methods was used. Under the quantitative method, questionnaire was used, while interview guide schedule was used under the qualitative method. The population of the study comprised the social media users who have interfaced with social media reports on coronavirus in select cities in Nigeria. The cities were Bauchi in Bauchi State; Kano in Kano State; Makurdi in Benue State; Port-Harcourt in Rivers State; Awka in Anambra State and Lagos in Lagos State. These cities represented one state from each of the geopolitical zones of the country which has significant number of confirmed cases in that zone as released by NCDC. According to the Social Media Poll Report (2019), the population of this study according to the cities sampled includes the following: Bauchi- 691352; Kano- 901473; Makurdi- 684673; Port-Harcourt- 695179; Awka- 679593, and Lagos- 897163, bringing the total population of the study across the select cities to 4,549,433. The population of this study was, therefore, 4,549,433 social media users in Nigeria.

The sample size of this study was 1111 which was statistically drawn from the population of the study using Taro Yamane (1967) statistical method of sample size determination which provided that when the population of the study is greater than 100,000 the sample size of the study under the precision level of $\pm 3\%$ and the confidence level of 95% will be One thousand one hundred and eleven (1,111) (Kusugh, 2017).

In sampling the 1111 respondents, multi-stage sampling technique involving stratified, purposive and proportionate sampling techniques were used. In the multi stage, using already existing geopolitical strata, stratified sampling technique was used to group the country (Nigeria) into six geopolitical zones. In each of the geopolitical zones, purposive sampling technique was used to sample one state each; bringing the total number of states sampled in the study to six (6) as follows: (a) Bauchi State from North East, (b) Kano State from North West, (c) Benue State from North Central, (d) Anambra State from South East, (e) Rivers State from South-South, and (f) Lagos State from South West respectively. Purposive sampling technique was used to sample the 6 states because it assisted us to select states that have more social media users and significant number of confirmed coronavirus cases across the geopolitical zones of the country. This is consonant with the explanation made by Neuman (2014) that purposive sampling “uses the judgement of an expert in selecting cases with a specific purpose in mind.” After selecting the states, purposive sampling technique was again used to select the state capital of each of the states. The state capitals were selected due to their heterogenous nature and high concentration of social media users. The state capitals or cities were

Bauchi; Kano; Makurdi; Port-Harcourt; Awka and Lagos. In distributing sample to the states under study, proportionate sampling technique was adopted to select the respondents proportionate to the population of each of the cities sampled in the study.

Questionnaire was administered on 1093 respondents who were not social media influencers, but just mere users of social media, while interview was conducted with 18 social media influencers that assisted to elicit in-depth perspectives on the phenomenon being investigated. Both instruments were administered through the use of online platforms such as WhatsApp, Telegram, Email, Skype and Facebook. Data collected were analysed through descriptive method, while multivariate frequency distribution tables and Statistical Package for Social Sciences (SPSS) were the statistical tools used for data analysis under descriptive method in this study.

Data Presentation and Analysis

Table 1: Social Media Platforms People use to Access Coronavirus Reports

Response	No of Respondents						Total	Mean
	Awka	Bauchi	Makurdi	Port Harcourt	Kano	Lagos		
Facebook	36 (31.9)	35 (31.5)	44 (38.3)	63 (42.3)	90 (35.7)	101(33.2)	369 (35.3)	61.5
WhatsApp	25 (22.1)	27 (24.3)	31 (27.0)	34 (22.8)	41 (16.3)	51 (16.8)	209 (20.0)	34.8
Instagram	13 (11.5)	11 (9.9)	7 (6.1)	10 (6.7)	21 (8.3)	30 (9.9)	92 (8.8)	15.3
Twitter	24 (21.2)	26 (23.4)	20 (17.4)	23 (15.4)	70 (27.8)	85(28.0)	248 (23.8)	41.3
YouTube	9 (8.0)	7 (6.3)	6 (5.2)	11 (7.4)	19 (7.5)	20 (6.6)	72 (6.9)	12.0
Blogs	6 (5.3)	5 (4.5)	7 (6.1)	8 (5.4)	11 (4.4)	17 (5.6)	54 (5.2)	9.0
Total	113 (100)	111 (100)	115 (100)	149 (100)	292 (100)	304(100)	1044 (100)	

Table one revealed that Facebook was used by majority (35%) of the respondents as platform for reports on coronavirus, followed by Twitter (24%), WhatsApp (20%), Instagram (9%), YouTube (7%), while Blogs (5%) was least to be used by the respondents for reports on coronavirus pandemic in Nigeria. It implies, therefore, that Facebook is a social media platform used by majority of the people for updates and reports on the coronavirus pandemic.

Table 2: Extent Coronavirus Reports on Social Media Platforms affect Target Audiences

Response	No of Respondents						Total	Mean
	Awka	Bauchi	Makurdi	Port Harcourt	Kano	Lagos		
To a great extent	97 (85.8)	93 (83.8)	104 (90.4)	235 (90.6)	137 (94.7)	294 (96.7)	960 (92.0)	160.0
To a little extent	11 (9.7)	14 (12.6)	9 (7.8)	10 (6.7)	12 (4.8)	7 (2.3)	63 (6.0)	10.0
Difficult to say	5 (4.4)	4 (3.6)	2 (1.7)	4 (2.7)	3 (1.2)	3 (1.0)	21 (2.0)	3.3
Total	113 (100)	111 (100)	115 (100)	149 (100)	292 (100)	304(100)	1044 (100)	

Table two indicated that social media reports on corona virus have influenced users to a great extent (92%). The platforms (social media) have influenced other users (6%) to a little extent. This implies that social media reports on coronavirus influence behaviour change in users to a large extent. The implication of this finding to the study is that it has affirmed the potency of social media in the effects process by the testimonies we harvested from users.

Table 3: Patterns of Influence of Social Media Reports of Coronavirus

Response	No of Respondents						Total	Mean
	Awka	Bauchi	Makurdi	Port Harcourt	Kano	Lagos		
Acceptance of Face masks	28 (24.8)	29 (26.1)	31 (27.0)	41 (27.5)	83 (32.9)	80 (26.3)	292 (28.0)	48.7
Personal responsibility	32 (28.3)	31 (28.0)	36 (31.3)	45 (30.2)	79 (31.3)	104 (34.2)	327 (31.3)	54.5
Sensitivity to symptoms	25 (22.1)	26 (23.4)	25 (21.7)	37 (24.8)	53 (21.0)	90 (29.6)	256 (24.5)	42.7
Social distancing	15 (13.3)	14 (12.6)	13 (11.3)	17 (11.4)	21 (8.3)	17 (5.6)	97 (9.3)	16.2
Hygiene consciousness	13 (11.5)	11 (9.9)	10 (8.7)	9 (6.0)	16 (6.3)	13 (4.3)	72 (6.9)	12.0
Total	113(100)	111(100)	115 (100)	149 (100)	292(100)	304(100)	1044(100)	

The data in the above table show that acceptance of facemasks, personal responsibility, increased sensitivity to symptoms of the virus, enhanced physical distancing and improved hygiene consciousness among the people were the various patterns of influence of social media reports on coronavirus among the people.

Interview Data

From the interview data on social media platforms people use to access coronavirus reports, it was found that Facebook, WhatsApp, Twitter, Instagram and Telegram were their major sources of coronavirus reports among sampled populations followed by discussion forums, then blogging and publishing networks. Thus, corroborating the quantitative data's indication that social media platforms are actually popular among the sampled audience to the extent that people actually receive vital health information especially on corona virus.

On the extent coronavirus reports on social media platforms affected the target audience, interview results showed that such reports affected them to the extent of altering behaviour patterns among the sampled population and reorienting personal attitudes. The interview data also revealed that the frequency of diffusion of such reports on coronavirus on the social media space inspired a significant level of fear on the virus among the people, thereby compelling them to take personal responsibility for their hygiene and social relations.

On the patterns of effect of social media reports of coronavirus, the interview data revealed that the forms of effect of social media reports on coronavirus were not uniform,

hence, peculiar to each of the respondents based on reasons of knowledge level, educational background, cultural values, traditional and religious beliefs, individual interests and individual differences- factors that help shape their disposition to and subsequent influence by such social media reports.

Discussion of Findings

The findings showed that social media platforms are actually popular among the sampled audience to the extent that people actually receive and exchange vital health information, especially on corona virus. Findings, therefore, revealed that Twitter, Instagram, YouTube, google+, Facebook, WhatsApp and Blogs were some of the social media platforms used for communication on coronavirus. However, Facebook was used more often, followed by Twitter and then WhatsApp, while Instagram, YouTube and Blogs recorded lower usage. This finding corroborates the observations of previous scholars such as Mohammed (2020), The Prevention Researcher (2019) among others, who noted that social media platforms like Facebook, Twitter, Telegram and WhatsApp are the platforms used to mobilise people for a cause. For instance, according to Mohammed (2020), social media are platforms used by the Nigerian Centre for Disease control (NCDC) and even the Federal Ministry of Health (FMO) to galvanise support from the general public for the federal government's efforts towards the prevention, control and management of the novel coronavirus in Nigeria.

Finding further showed that social media reports on coronavirus influenced the people to a large extent by stimulating positive personal health attitudes crucial to prevention, management and control of the spread of the virus. This finding aligns with the findings from the studies conducted by Cerkoney & Hart (2008) which showed association between the use of communication channels and the compliance level of patients with illnesses. On the patterns of effect of social media reports of coronavirus in Nigeria, the findings showed that acceptance of facemasks, improved personal responsibility in adherence to the preventive protocols for coronavirus, increased sensitivity to symptoms of the virus, enhancement of the overall social distancing culture among the people and enhanced hygiene consciousness among the people are the various patterns of effect social media reports on coronavirus stimulate among the people. This finding validates the HBM and ultimately upholds Cerkoney & Hart's (2008) submission that intervening variables that mediate individual approaches to health communication messages exists. The researchers found that a significant relationship exists between social media reports of coronavirus and behaviour change among target populations as reflected in the findings where 92% representing the mean score of 160 of the total number of respondents indicated that social media reports on coronavirus have influenced their behaviour. The mix of responses on the patterns of effect such reports generate among target audience members is suggestive of the fact that responses to mass mediated messages are not uniform because of obvious mediating values as revealed from the interviews conducted with social media influencers.

Conclusion and Recommendations

Based on the findings generated from this study, it is safe to conclude that social media platforms like Twitter, Instagram, YouTube, Google+, Facebook, WhatsApp and Blogs are popular among the Nigerian public as viable sources of health information. A significant relationship, therefore, exists between these platforms and behaviour change among the Nigerian public. Therefore, the researchers recommend that:

1. The Federal Ministry of Health (FMOH), NCDC, other parastatals under the FMOH responsible for public health management and the National Orientation Agency should collectively fashion out efficient and carefully coordinated approaches to utilising the popularity of such platforms for health communication purposes.
2. It is instructive for social media influencers, health communicators and social media content generators to adopt a coordinated tactical approach to the conception and production of social media reports on coronavirus with a view to ensuring that only fairly objectively, accurately and credibly sourced reports are transmitted about the virus on social media to help identify a point of convergence across the identified patterns of effects and guarantee accuracy and public confidence.
3. Because the patterns of influence of social media reports on coronavirus are not uniform among the people, but peculiar to individual audience members, it is instructive that health communicators reverence heterogeneity of target audience members in the conception, development and packaging protocols for social media reports on coronavirus. If achieved, this would help enhance the fidelity of such communication efforts and also align the final effect of such contents on target audience segments to specific expected outcomes that prompted such communication initiatives.

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