

**SOCIAL MEDIA SHARED FAKE NEWS ON COVID-19 AND ITS IMPLICATION ON THE
HEALTH OF UNDERGRADUATES IN SELECTED TERTIARY INSTITUTIONS**

PROF. CORNELIUS AGHADIEGWU UKWUEZE (PhD)

Department of Mass Communication

Faculty of Social Sciences

Nnamdi Azikiwe University, Awka

Anambra State

Email: ca.ukwueze@unizik.edu.ng

Phone Number: +2348063694405

&

ONYISHI, LOVELYN IJEOMA

PhD Student

Department of Mass Communication

Faculty of Social Sciences

Nnamdi Azikiwe University, Awka

Anambra State

Email: Onyishiloveje2@gmail.com

Phone Number: +2348064713651

Abstract

The social media sites has increasingly been popular and appealing to youths, who are so absorbed in the media that they spend much time navigating across various platforms. While social media eases the consumption of online news, it nurtures the spread of fake news leading to damning behaviour, particularly during the period of Covid-19 pandemic. The purpose of this study is to examine “social media shared fake news on covid-19 and its implication on the health of undergraduates in selected tertiary institutions in South East Nigeria”. The study was anchored on Uses and Gratification theory of Mass communication. The study used the survey research method to sample the opinion of 390 respondents that are exposed to social media shared fake news on COVID-19 pandemic. It was discovered through the data generated, using structured questionnaire, that undergraduates are really exposed to social media especially on information shared on Covid-19 pandemic and that undergraduates are significantly influenced by social media shared fake news on COVID-19 in Nigeria as that they lost trust on health workers and government, abandoned all the precautionary measures by health workers and government agencies and equally find it difficult to differentiate the truth from falsehood. In line with the findings in this study, the researcher recommends that social media platform should ensure that their platforms are guarded against the spread of unverified and public misleading information in any form for the safety of the masses. More so, the paper recommends that governments and stakeholders should converge to find solutions to the spread of fake news and ensure that excesses are checked to curtail any ugly incidence and retribution that may arise again in the near future.

Key words: Social media, Fake news, COVID-19, Implication, Health

Introduction

The year 2020 ushered in the outbreak of Coronavirus disease (COVID-19) in Nigeria and most parts of the world. The virus formerly referred to as 2019 novel Coronavirus emerged as a respiratory infection with significant concern for global public health hazards. The virus is transmitted through human-to-human contact via droplets from saliva or contact with affected persons (Sahu, Mishra and Lal, 2020). Nigeria recorded its first case on February 28, 2020. Due to the deadly nature of the virus, there are anxiety, fear and tension in minds of people to the extent that many people believe that the world has come to an end. Since

then, there has been an observed increase in the exploitation of various social media platforms to share information about the disease (Sulaiman, Adeyemi, and Ayegun, 2020).

In the Nigerian context, social media is a means of keeping up with occurrences all over the globe and is used to shed light as regards the Nigerian situation. The ability to sieve authentic information from an avalanche of half-truths and fake news available on social media networks is a challenge in Nigeria. However, Aondover (2020) adds that the outbreak of COVID-19 in Nigeria spurred a digitalized reaction with citizens especially youths surfing about COVID-19 content to gather information about the virus. Considering the belief system attached to social media shared fake news on COVID-19 in minds of its users, the influence of such fake news on the peoples' life. Thus, there is a need to conduct an empirical study of this nature to examine the social media shared fake news on COVID-19 and its implication on health of undergraduates in South-East Nigeria.

Statement of the Problem

Fake news sharing has become common in today's social media communication. Although, fake news is not novel in area of human communication, it becomes a source of worry now that social media has made everybody information creator, anybody can sit at the comfort of his/her bedroom or anywhere and send information/news to millions of people in a second without any gate keeping process unlike conventional media.

At the outbreak of Coronavirus pandemic in Nigeria, there were fear and anxiety everywhere as a result of the deadly nature of the virus. In the midst of these fears and anxieties, there existed all sorts of information/news through the social media concerning the origin, cause, effect of the virus and probable preventive home remedies. The implications of these shared news on audience means a lot and needs to be investigated in case of future pandemic or epidemic.

Objectives of the Study

The major objective of this study is to investigate social media shared fake news on covid-19 and its implication on the health of undergraduates in selected tertiary institutions

Specifically, the objectives are;

1. To ascertain the extent to which undergraduate students have been exposed to social media shared fake news on COVID-19 in South East Nigeria.
2. To ascertain the social media platforms mostly used by undergraduate students to get fake news on COVID-19 in South East Nigeria
3. To determine the extent to which undergraduate students are influenced by social media shared fake news on COVID-19 in South East Nigeria.

Research Questions

In line with the objectives of this study, the following research questions are set to guide the study.

1. To what extent do undergraduates exposed themselves to social media shared fake news on COVID-19 in South East Nigeria?
2. What social media platforms do undergraduate students mostly use to get fake news about COVID-19 in South East Nigeria?
3. To what extent do undergraduates get influenced by social media shared fake news on COVID-19?

Scope of the Study

The scope of this study centres on South-East Nigeria. It covers undergraduate students of Federal University of Technology, Owerri and Institute of Technology and Management, Enugu and Federal College of Education (Technical), Umunze which are in South-East Nigeria. The study focuses on the first phase of COVID-19 pandemic in Nigeria. The study focuses on the undergraduates because they are the active users of social media especially during the period of COVID-19 pandemic.

Significance of the Study

This study will be important to the following areas;

The study will be beneficial to social media users to understand the power of social media in fast transmission of fake news and its implication on health related issues. It will help them to understand the importance of filtering information on social media thereby not accepting information on social media line, hook and sinker.

The study will contribute to existing knowledge on the social media shared fake news on COVID-19. The study will hopefully be beneficial to scholars especially students who will be carrying out research work in nearby future. The study besides adding to the literature may offer new grounds through expansion of horizon of knowledge for further studies.

Concept of Social Media

Social media is that means that employs mobile and web based technology to create highly interactive platforms via which individuals and communities share, co-create, discuss and modify user-generated content (Kietzmann, 2012). Ogayi (2016) opined that social media refers to activities, practices, and behaviours among communities of people who gather online to share information, knowledge and opinions using conversational media. According to them conversational media are web-based applications that make it possible to create and easily transmit content in the form of words, pictures, videos and audios.

Social media are the various online platforms that are used for social interaction. They use highly accessible and scalable publishing techniques and include the various online technology tools that enable people to communicate easily via the Internet to share information and resources Greenhow in (Asemah, 2014).

Curtis 2013 cited in Ogayi (2016) describes the social media as an internet site where people interact freely, sharing and discussing information about one another and live, using a multi-media mix of personal words, pictures, videos and audio. At these web-sites, individuals and groups create and exchange content and engage in person-to-person conversations.

Social media appear in varied but related forms including blogs and micro blogs, forums and message boards, social networks, Wikis, virtual worlds, social book-marking, tagging and news, writing communities, digital storytelling and scrapbooking and data, content, image and video sharing, podcast portals, and collective intelligence (Ogayi, 2016).

Neuman (2012) in Amana and Attah (2014), highlighted fivefold functions executed by the social media, in the prism of his analysis, geographical distances have been eclipsed, there is considerable increase in the volume of data communicated, it allows provision of increased speed, opportunity of intention by and convergence of media. Social media have turned down the boundaries between authorship and readership, Agber, (2012) in (Amana et al. 2014). Under the regime of the social media, the gap between information consumption and dissemination is collapsed.

The mobile nature of the social media permits its ubiquitous and scalable communication technique. Kist (2010) in Amana et al. (2014) conceives of social networking sites as distinct from other forms of communication by virtue of the online character and employment of web based platforms. The employment of the SNS is basically dual, to foster already existing lines of networking relationship or to create newer ones. It is informative to note that the social networking sites are highly interactive.

Asemah and Edogoh (2012) posit that social media as a group of Internet-based applications that build on the ideological and technological foundations of web 2.0 which allow the creation and exchange of user-generated content. Thus, social media guarantee greater interactive conversation between and among users. Social media makes it possible for people to generate and publish content as well as engage in online interaction. Social media are Internet sites, which allow people to interact freely, exchange information, ideas, views, pictures and lots more with friends. These sites are user-friendly; they allow users to generate their own content and consume these contents as well as order from friends. However, what differentiates the social networking sites from the traditional media is the flexibility of these sites. Users create, edit, distribute, and remove their own customized contents. They are also free to share information with friends/other users privately or publicly. The flexible nature of the new media can be referred to as the democratization of the new media.

Concept of Fake News

Scholars have conceptualised fake news in many ways, but with almost the same meaning. McGonagle (2017) described fake news as deliberately fabricated information that is circulated to misinform and deceive individuals into accepting lies or uncertain verifiable facts. Consistent with this view, Duffy, Tandoc and Ling (2019), categorised fake news as any information that mimics legitimate news story but has false and misleading content. In this current research, fake news is viewed as untrue information, including myths, rumours, conspiracy theories, hoaxes as well as deceptive or erroneous content intentionally or unintentionally disseminated on social media platforms (Wang, Mckee, Torbica and Struckler, 2019). Based on this definition, there is a divergence between the creation and dissemination of fake contents on social media platforms. By implication, fake news sharing may be unintentional, but its creation could be highly intentional (Egelhofer and Lecheler, 2019). This view is related to the issue of COVID-19, where people may share false content with the intention of helping.

According to Pulido, Villarejo-Carballido, Redondo-Sama and Gomez (2020), an obvious act of false information dissemination has been reported in the field of health. The spread of falsified health news could jeopardise the safety of people, suggesting that people could be lured into taking some fake precautionary measures that lead to severe health damage.

Theoretical Framework

This study is anchored on theory of mass communication which includes Uses and Gratification of Mass communication. The theory was propounded by Elihu Katz, Jay Blumler and Michael Gurevitch in 1974 which centres its focus on media effects. Uses and gratification theory focus on why people use a medium and what they use it for as well as gratification or satisfaction obtained. According to Folarin (1998), Uses and Gratification theory centre on the questions of whom, which media, which content, which condition a user stands to get by using a particular medium. Severin and Tankard (1997) hold that this theory emphasizes audience choice for using a particular medium over others as well as the gratification derived from the use of it, which is mostly based on an individual's psychological and social needs.

The initial development of the Uses and Gratification theory addressed the use of traditional media, however, in recent years; its application has been extended to internet studies especially social media studies (Thompson, Wang and Daya, 2019). Therefore, the Uses and Gratification theory has been adopted by social media researchers to realise the gratifications an individual gain from the usage of social media platforms. This theory is relevant to this study especially now that we are in digital age, the era of social media. Social media has different platforms that a user can choose from in order to satisfy his or her social and psychological needs. So, a user of social media can choose to use Facebook, Whatsapp, Twitter, 2 go, Instagram, YouTube etc so far they give him or her the information that satisfies his/her need on COVID-19 pandemic.

Empirical Studies

In a bid to ascertain the influence of social media shared fake news on COVID-19 and the perception of health realities among South-East Nigerians, the researcher reviewed some empirical studies by different scholars that are related to the study;

Kurfi, Msughter and Mohamed (2021) conducted a research titled “Digital images on social media and proliferation of fake news on COVID-19 in Kano, Nigeria.” (A paper presented in Galactica media: Journal of media studies). The study stressed that misinformation becomes rampant in the digital age and social media provide people with the opportunities for engaging more actively in society. The rationale behind the study is to find out the extent to which residents of Kano have been exposed to digital images on COVID-19 that often accompany fake news in social media. The paper was anchored on two theories namely; Technological Determinism and perception theories. The survey research method was adopted, employing the questionnaire as an instrument of data collection. However, the paper reviewed and the present study was both centred on the social media shared fake news on COVID-19. The difference is that the paper focused on images that spread fake news. The findings show that Kano residents were significantly exposed to digital images that often accompany fake news in social media. Findings also show that Kano residents are influenced by fake news with digital images on COVID-19 to a very great extent, especially on Facebook. The study also found out that factors responsible for proliferation of fake news on social media

include: perception or instinct, eagerness to be the first to share images and lack of knowledge about image verification tools. Based on the findings, the paper concludes that ignorance and the old belief that pictures do not lie were responsible for this.

Apuke and Omar (2021) conducted a research titled “Social media affordances and information abundance: Enabling fake news sharing during the COVID-19 health crises. (A paper presented in Health information Journal). The study modelled factors that predict fake news sharing during the COVID-19 health crisis. The rationale behind the study was to examine how social media enhance its users’ capability to seek status, share information and express themselves online which in turn lead to fake news sharing and to investigate the extent that news-find-me, information overload and online information trust affect fake news sharing on social media. The paper was anchored on two theories namely; the perspective of the affordance and cognitive load theory. The survey research method was adopted, employing the questionnaire as an instrument of data collection. The findings show that the news-find-me perception was the strongest predictor of fake news sharing related to COVID-19 pandemic among Nigerian social media users. Findings also showed that there is a positive relationship between information overload and fake news sharing related to COVID-19 pandemic. Findings equally show that status seeking leads to fake news sharing behaviour related to COVID-19 pandemic. Based on the findings, the paper concludes that news-find-me perception, information overload, trust in online information, status seeking, self-expression and information sharing predicted fake news sharing related to COVID-19 pandemic among social media users in Nigeria. To this end, the work recommends that relevant authorities should inform the public on the right way to tackle the pandemic as well as remind the public on the essence of consuming appropriate information they come across.

Sulaiman, Adeyemi and Ayegun (2021) conducted a research titled “Information sharing and evaluation as determinants of fake news on social media among Nigerian youths: Experience from COVID-19 pandemic”. (A paper presented in International Journal of Knowledge Content Development & Technology, vol.10, No. 4, 65-82 December 2020). The study examined information sharing and evaluation as determinants of the spread of fake news among Nigerian youths on social media using experience from COVID-19 pandemic. A descriptive survey design was adopted for the study and a Web-based questionnaire (Google Forms) was used to collect data for the study. The findings of the study revealed that most Nigerian youths used Facebook, Twitter, WhatsApp and Instagram to share information on COVID-19. Findings also show that only a few Nigerians used LinkedIn and other types of social media to share information on COVID-19. The findings also indicate that building a relationship with social media communities, enjoyment and risk taking, and political inclination influence the sharing behaviour of Nigerian youths during the COVID-19 pandemic. Based on the findings, the paper concludes that there is a positive relationship between information evaluation and the spreading of fake news on COVID-19 among Nigerians. To this end, the paper recommends that the Information sharing and evaluation should be done with the utmost level of objectivity and sincerity.

Methodology

The study adopted a descriptive survey research design. The population of the study comprises of 51, 722 of Federal University of Technology (FUTO), Owerri and Institute of Technology and Management (IMT), Enugu and Federal College of Education (Technical), Umunze which are in South-East Nigeria. The instrument used to collect data for this study was questionnaire. The sample size of 390 students was determined using Taro Yamane’s formular. A purposive and convenience sampling techniques were employed. This was to enable the researcher to study only the students who are exposed to different social media shared news on COVID-19. Out of 390 copies of questionnaires distributed, 341 copies were fully completed and returned.

Data Presentation and Analysis

Table 1: Analysis on Exposure to Social Media Shared Fake News

SN	Variable	SA	A	I	D	SD	Remarks
1	Some recognized social media handle/page are often found to share fake news	310 (90.9%)	31 (9.1%)	-	-	-	Agreement
2	I have come across fake news on social media which I initially taught it was genuine	296 (86.8%)	45 (13.2%)	-	-	-	Agreement
3	There are large number of fake news on COVID-19 cases on social media	236 (69.2%)	91 (26.7%)	-	9 (2.6%)	5 (1.5%)	Agreement
4	There are large number of fake news on the origin of COVID-19 on social media	55 (16.1%)	28 (8.2%)	-	182 (53.4%)	76 (22.3%)	Disagreement
5	There are large number of fake news on symptoms of COVID-19 on social media	160 (46.9%)	158 (46.3%)	-	21 (6.2%)	2 (0.6%)	Agreement

Source: Computation from SPSS 26 Analysis

The column for remarks as shown in the table above indicates the overall decision of the respondents on each of the question items (row) in the table. The data obtained from the respondents showed that some students recognized that social media handle/page are often found to share fake news. These are shown in the percentage scores of 90.9% and 9.1% for strongly agree and agree respectively. Again, the students agreed that they have come across fake news on social media which they initially thought was genuine. 69.2% and 26.7% of the students strongly agreed and agreed respectively that there are large numbers of fake news about COVID-19 cases on social media. While about 4.1% of the students disagreed that there are large numbers of fake news about COVID-19 cases on social media. In addition, some of the students (53.4% and 22.3%) disagreed that there are large number of fake news on the origin of COVID-19 on social media, while about 24.3% of them agreed that there are large number of fake news on the origin of COVID-19 on social media. Furthermore, over 93.2% of the students agreed that there are large numbers of fake news on symptoms of COVID-19 on social media. With the data from the students, it is evident that students are really exposed to information on social media especially shared fake news on Covid-19 pandemic.

Table 2: Analysis on Social Media Platform Students mostly exposed to

S/N	Variables	Frequency	Percentage
6	Exposure to Social Media Network		
	Facebook	122	35.8
	WhatsApp	156	45.7
	Twitter	25	7.3
	YouTube	8	2.3
	Instagram	14	4.1
	Others	16	4.7
	Total	341	100
7	Medium of Accessing Social Media		
	Computer	90	26.4
	Smart Phone	118	34.6
	Tablet	25	7.3
	I-Phone	38	11.1
	Others	70	20.5
		Total	341

Source: Computation from SPSS 26 Analysis

Table 2 above depicts that 45.7% of the students are mostly exposed to WhatsApp. This is followed by Facebook which has 35.8%. Others like twitter and Instagram recorded 7.5% and 4.5% respectively. It was also observed that majority of students used their smart phone 34.6% and computer 26.4% to access the net. From the analysis, it is obvious that students are more exposed to WhatsApp and Facebook than any other social media network and they use their Smart phone and computer to access the net.

Table 3: Analysis on the Influence of Social Media Shared Fake News

SN	Variable	SA	A	I	D	SD	Remarks
8	I found it difficult to differentiate the truth from falsehood	83 (24.3%)	101 (29.6%)	-	118 (34.6%)	39 (11.4%)	Agreement
9	It brought lots of fears, confusion and anxieties in my life	160 (46.9%)	78 (22.9%)	-	53 (15.5%)	50 (14.7%)	Agreement
10	I lost trust on health workers and government	154 (45.2%)	80 (23.5%)	-	39 (11.4%)	68 (19.9%)	Agreement
11	I abandoned all the precautionary measures by health workers and government agencies	145 (42.5%)	95 (27.9%)	-	49 (14.4%)	52 (15.2%)	Agreement
12	I consumed an overdose of orthodox and unorthodox medicine	47 (13.8%)	83 (24.3%)	-	166 (48.7%)	45 (13.2%)	Disagreement

Source: Computation from SPSS 26 Analysis

Table 2 shows that majority of the students strongly agreed that they lost trust on health workers and government (24.3%) and (29.6%), majority strongly agreed and agreed that it brought lots of fears, confusion and anxieties in their lives (46.9%) and (22.9%). More so, (45.2%) and (23.5%) of students strongly agreed that they abandoned all the precautionary measures by health workers and government agencies and some strongly agreed (42.5%) that they find it difficult to differentiate the truth from falsehood while (48.7%) strongly disagreed that they consumed an overdose of orthodox and unorthodox medicine as a result of social media shared fake news on COVID-19. With the data from the students, it is evident that students are really influenced by social media shared fake news on Covid-19 pandemic.

Discussion of the Findings

The outcome on research question one shows the extent to which undergraduate students have been exposed to social media shared fake news on COVID-19 in South East Nigeria. From the study, it was evident that some students recognized that social media handle are often found to share fake news. Majority of the students maintained that they have come across fake news on social media which were initially believed to be genuine. They also assert that greater large number of fake news on COVID-19 cases, its origin and symptoms are found in social media space. Analysing further through a statistical tool, the study found that social media platforms are mostly exposed by undergraduates to getting fake news about COVID-19 in South-east Nigeria. This is in line Hussain, Loan and Yaseen (2017) who observed that in recent times that students have unlimited access to the internet as well as the social media. Students connect with computer to send and receive information anywhere on the globe. Hussain et al. (2017) further maintained that most students exposed to social media because they use it to share information in order to promote social, religious, political, and environmental awareness.

The findings from research question two revealed that the social media platforms mostly used by undergraduate students to get fake news on COVID-19 are WhatsApp and Facebook. It is quite natural because nobody can deny the fact that WhatsApp and Facebook and they use use their smart phone and computer to access the net. From the study, it is clear that social media platforms enable the spread of fake news in digital communication because social media being one of the digital era innovations offers modern communication platforms where information spread like wild fire with just the use of “share” option across platforms.

The findings on research question three revealed the extent to which undergraduate students are influenced by social media shared fake news on COVID-19 in South East Nigeria. From the findings, it is demonstrated that undergraduates are significantly influenced by social media shared fake news on COVID-19 because they lost trust on health workers and government, abandoned all the precautionary measures by health workers and government agencies and equally find it difficult to differentiate the truth from falsehood. This aligned with Onwujekwe et al. (2019) that social media influence the shared fake news on Covid-19.

Conclusion and Recommendations

Based on the data presented, this study concludes that the students are not only exposed to social media shared fake news on COVID-19 but are also influenced by their exposure to the information shared. Therefore, the implication of this is that, regardless of who is responsible or behind any piece of information, there is the need to always relax, think and fact-check before embarking on an action as a result of viral information. By so doing, the person can be rest assured of not taking unscientific measures at fighting a virus – which could most times turn out to be perilous to one’s health.

The study therefore recommends that social media platform should ensure that their platforms are guarded against the spread of unverified and public misleading information in any form for the safety of the masses. The paper recommends that governments and stakeholders should converge and brainstorm to find solutions to the spread of fake news and ensure excesses emanating from this are checked to curtail any ugly repercussions that may arise again in the near future. The paper also recommends that, there is need for individuals, most especially youths, to verify the authenticity of information they come across before sharing or spreading it. More so, it is important to educate young people about social media literacy and critical thinking, which would enable them to differentiate between credible and fake news. Also encourage fact-checking, skepticism, and a healthy dose of skepticism can help reduce the spread of false information online that is inimical to peoples’ health in Nigeria

References

Amana, D. and Attah, C. (2014). “Social media and security challenges: The

- relationship between security messaging, believability and social alarm” in Ikeh S. Ndolo (ed.) *International Journal of media, security & development (IJMSD) vol. 1 Number 1*. Enugu: Phyce kerex publishers.
- Aondover, M. E. (2020). Internet meme as a campaign tool to the fight against COVID-19 in Nigeria *Global Journal of Human-Social Science Research*.
- Apuke O.D., Omar B. (2021). Fake news proliferation in Nigeria: Consequences, motivations, and prevention through awareness. *Humanities & Social Sciences Reviews*. 2020;8(2):318–327. doi: 10.18510/hssr.2020.8236
- Asemah, E.S. (2004). “Social media strategy, for better customer relationship Management in banking industry”. In Okon Godwin (ed.) *ICT, communication and society: Trends and issues*. Nigeria: Accuracy prints.
- Asemah, E. S. and Edogoh, L. O. N. (2012). Social media and insecurity in Nigeria: A critical appraisal. Being a paper presented at the 15th *National conference of African council for communication education*, which took place at the conference hall of federal university of technology, Minna, Nigeria.
- Blumer, J. and Katz, E. (1974). *Uses and gratification Research*. The public opinion quarterly, vols. 19–32. Sage, Beverly Hills, CA
- Duffy, A, Tandoc E. And Ling R. (2019). Too good to be true, too good not to share: the social utility of fake news. *Information Communication and Society*. doi: 10.1080/1369118X.2019.1623904.
- Egelhofer, J. L. and Lecheler S. (2019). Fake news as a two-dimensional phenomenon: a framework and research agenda. *Annals of the International Communication Association*.
- Folarin, B. (1998). *Theories of mass communication*. Ibadan: Sceptre publishing ltd pp. 67
- Hussain, M., Loan, F. A., and Yaseen, G. (2017). The Use of Social Networking Sites (SNS) by the Postgraduate Students. *International Journal of Digital Library Services*, 7(1), 72-84. <http://www.ijodls.in/uploads/3/6/0/3/3603729/7ijodls7117>.
- Keitzamann, H. (2012). “Social media? Get serious! Understanding the functional building blocks of social media” *Business Horizons*. .
- Ogayi, J. O. (2016). *Mass Media: Organizational structure, strategies and management*. Enugu: Phyce kerex publishers.
- Pulido, C.M., Villarejo-Carballido B., Redondo-Sama G., and Gómez A. (2020). COVID-19 infodemic: More retweets for science-based information on coronavirus than for false information. *International Sociology*.
- Sahu, K.K., Mishra A.K. and Lal A. (2020). Comprehensive update on current outbreak of novel coronavirus infection (2019-nCoV) *Annals of Translational Medicine*. doi: 10.21037/atm.2020.02.92.
- Severin, W. and Tankard, J. (1997). Uses of mass media in Severin et al. (Eds.) *Communication theories origins methods and uses in the Mass media (4th ed.)* New York: Longman.

Sulaiman, K.A, Adeyemi, I.O. and Ayegun, I. (2020). International journal of knowledge content development and technology

Wang Y., Mckee M., Torbica A., Stuckler D. (2019). Social Science & Medicine Systematic Literature Review on the Spread of Health-related Misinformation on Social Media. Social Science & Medicine. doi: 10.1016/j.socscimed.