

## BOOK CHAPTER | Misinformation and Disinformation

## Misinformation and Disinformation of Cyber Content about Covid-19 and Its Vaccine as an Underlying Factor to Its Hesitancy among Adults

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### Abstract

The Corona virus outbreak which originated from China has become pandemic as declared by the World Health Organisation (WHO) in February, 2020. The media across the globe have given extensive coverage to the new virus helping people to have an understanding of the emerging ravaging disease. As useful and transformative the internet is, in providing credible information on several discourses of concerns including health issues; it has also increased the rate of misinformation and disinformation about the corona virus and its vaccine. The spread of mis- and disinformation during the disease outbreak has become a global public health challenge, as it created a greater threat towards its prevention and control. Invariably, it has also affected the uptake of the vaccine by majority of adults who are susceptible to the virus. Both misinformation and disinformation have been proven to have created social discredit around COVID 19 and thereby resulting to low compliance to preventive measures; most especially vaccine hesitancy and adoption by the populace. The amount of online misinformation surrounding the vaccine has been tagged the “second pandemic” which invariably sabotages the efforts to get people to vaccinated. The World Health Organization defines this practice as “infodemic”. There is an urgent need for a myth buster approach to reduce vaccine hesitancy caused as a result of mis-and disinformation in order to forestall further resurgence of the deadly corona virus disease.

**Keywords:** COVID 19, Misinformation, Disinformation, Hesitancy, Vaccine, Infodemic

### Introduction

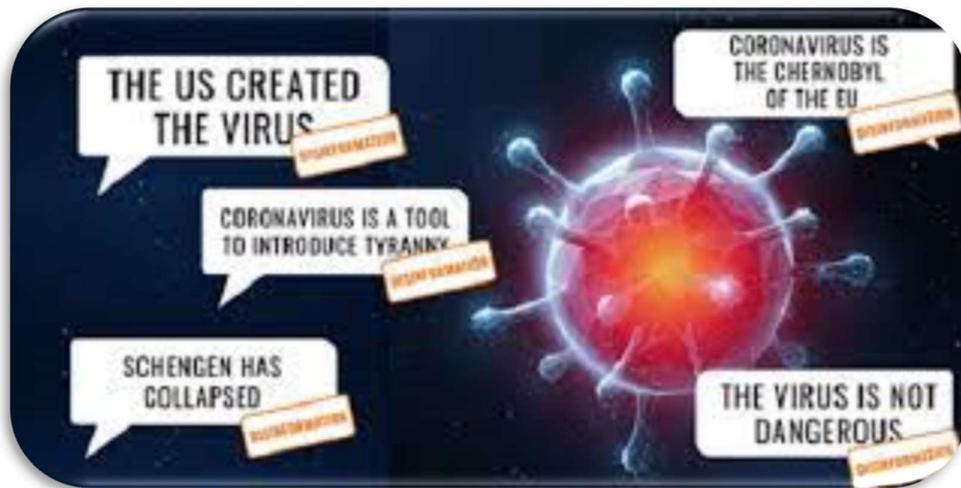
The advent of novel virus called Corona virus (Covid 19) which originated from China in 2019 (Shereen, Khan, Kazmi, Bashir, & Siddique, 2020) and as at today spread all over the world has made it impossible for formal education to continue with their physical classes as Government shut all schools.

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The World Health Organization was notified about a possible emergence of a novel coronavirus infectious disease in Wuhan, Hubei Province, China in December 2019. The virus was thereafter named COVID-19. The epidemic spread to 19 countries with 11,791 confirmed cases and 213 deaths as of 31/01/2020 which prompted the World Health Organization (WHO) to declare it a Public Health Emergency of International Importance. However, due to the widespread of the virus from China to other countries, the COVID-19 virus was declared a pandemic on 11/03/2020 (Adegboyeet. *al.*, 2020). The first case of the virus in Nigeria was announced by the Nigeria Centre for Disease Control (NCDC) on the 28/02/2020. As at 30/05/2020, the total global cases of the pandemic was 5,968,693 confirmed cases with 365,796 deaths, the United States of America recorded 1,749,846 confirmed cases with 102,900 deaths while Nigeria recorded 9855 confirmed cases and 273 deaths attributed to the pandemic (Charles, 2021).



**Fig. 1: Misinformation on COVID-19 Virus**

**Source:** <https://www.consilium.europa.eu/en/documents-publications/library/library-blog/posts/disinformation-during-the-covid-19-pandemic/>

WHO on 19 April 2020 warns that any country trying to resume the economy either somewhat or completely should follow guideline laid in six stages. Firstly, there ought to be a complete affirmation that the transmission is well taken care of which includes both individual and local area transmission channels.

Secondly, there is a significant need to guarantee that the wellbeing framework is at its full abilities to distinguish, test, seclude, and treat each announced case and follow the related contacts. Third, the significant wellbeing houses focus, and nursing homes ought to be fit for limiting the pandemic. Fourth, cognizant plans and executions ought to be set up to forestall disease transmission in working environments, schools, places of love, and other fundamental spots. Fifth, sufficient plans ought to be set up to guarantee the dangers of COVID-19 importation are all around observed. Sixth, dynamic training, commitment, and strengthening in the light of the "new standard" ought to be taken as really important (WHO, 2020b).

However, guideline of Effective Preventive Measures through the administration of the vaccine to the general populace has received low acceptability due to the fear and a lot of false or misinterpreted information on the air. Vaccines are considered as one of the greatest achievements in attaining community and global health (Olson *et al.*, 2020). Vaccination represents basic public health interventions aimed to mitigate the severe epidemiological and economic burden generated by communicable disorders, thus, recognized globally as a key strategy for improving health outcomes and life expectancy (Kayodeet *al.*, 2021).

A lot of information has flooded the internet regarding the deadly severe acute respiratory syndrome corona virus 2 (SARS-Cov 2) and by extension the only intervention that has been provided; the COVID vaccine which are not all true. As useful and transformative the internet is in providing credible information on several discourses of concerns including health issues; it has also increased the rate of misinformation and disinformation about the corona virus and its vaccine. The spread of misinformation during the disease outbreak has become a global public health challenge, as it created a greater threat towards its prevention and control. Invariably, it has also affected the uptake of the vaccine by majority of Nigerians who are susceptible to the virus.



### Disinformation During COVID-19 Pandemic

**Source:** <https://en.unesco.org/covid19/communicationinformationresponse/visualresources>

Misinformation and disinformation are two words used interchangeably with the basic distinction of "intent". According to dictionary.com, spreading false information regardless of the intent to mislead is misinformation. Arrays of information are available from different sources on COVID 19; most especially on social media, some of which are questionable and still spreading widely. Southwell BG, Niederdeppe J, Cappella JN, et al (2020) affirms that Misinformation is often a technically correct fact that is taken out of context, creating a narrative on its own. Disinformation on the other hand is an act of spreading fake news; an inaccurate content with the intention to deceive. Both misinformation and disinformation has been proven to have created social disgrace around COVID 19 and thereby resulting to low compliance to preventive measures; most especially vaccine hesitancy and adoption by the populace (Tasnim S, Hossain MM & Mazumder H, 2020).

Interestingly, this act is not limited to Nigeria as a country alone; it is a global menace with different degree of negative impact on the efforts to arrest the virus since it had been declared a pandemic. Roozenbeek, Schneider, Dryhurst & Kerr John et.al, (2020) opined that misinformation about COVID 19 is a major threat to public health. The study revealed some of the misinformation around three conspiracy statements to include the virus being bioengineered in a Wuhan laboratory, its being part of a plot to enforce global vaccination and 5G towers exacerbating COVID-19 symptoms. This conspiracy theory can be specifically regarded as disinformation going by the definition of deliberate spreading of misinformation and has ultimately eventually affected the acceptability rate of the vaccine among the study participants.

A misinformation prevalence of 8.9% to 38.9% was reported in a study conducted by Bitar, Zawiah, Al- Ashwal&Kubas (2021) for different statement being asked from the study participants in Yemen. Such misinformation statement which were either agreed or strongly agreed to by a significant number of respondents included “COVID 19 is human made for pharmaceutical company financial gains; the virus was created by human as a biological weapon; COVID 19 cannot be transmitted in areas with hot climates; children will not be infected with the virus; most people who gets the corona virus will die, antibiotics is effective against the virus.

Lastly the virus can be prevented by eating raw garlic and drinking hot tea”. The findings from this study showed a clear relationship between misinformation susceptibility and the willingness to vaccinate. Conclusively, the acceptance rate to vaccinate by this study group was suboptimal due to misinformation.

Vaccine hesitancy, the refusal or delay to get vaccinated even if there is an effective vaccine available, may be instrumental in the reviving of vaccine-preventable disease with online misinformation serving as an underlying factor (Garett & Young, 2021). The amount of online misinformation surrounding the vaccine has been tagged the second pandemic which invariably sabotages the efforts to get people to vaccinate (Kaur & Thomas, 2020). Several other studies had also been conducted in line with those reviewed above on the effects of misinformation arising from cyber contents and its effects on vaccine hesitancy among the adults (Burki 2020; Funk & Tyson 2020; Loomba, de Figueiredo, Piatek, de Graaf et. al., 2021).

The World Health Organization also airs her voice as the apex health organization on this discourse by defining infodemic as “as the spread of false or misleading information in digital and physical environments during a disease outbreak”. The outgoing National Institutes of Health Director Francis Collins had been quoted to have said “I think we underestimated the vaccine hesitancy issue.... I wish we had somehow seen that coming and tried to come up with some kind of a ‘Myth Buster’ approach to try to block all of the misinformation and disinformation that’s gotten out there, all tangled up with politics, and which is costing lives” (Health Affairs Forefront, 2021).

This statement further buttresses misinformation is a global menace and its effects is felt worldwide. Finally, the health belief model is underpinned on peoples’ “perception” which is also influenced by the credibility of information they are exposed to. A wrong perception about a disease will no doubt affects the acceptance and uptake of its prescribed solution despite being offered free.

To counter the effects of mis- and disinformation, and to increase the spread and uptake of accurate health information, a three year global research consortium – The Mercury Project has been recently launched by the Social Science Research Council with the aim of building an evidence based for infodemic response informed by behavioural science. Until this is achieved, the daunting impacts of infodemic will continue to water down the efforts to arrest the outbreak of diseases like the corona virus 2019 (COVID 19).

## Conclusion

The article is a review work that examined the misinformation and disinformation about covid 19 and its vaccine as an underlying factor to its vaccine hesitancy among adults. Researchers have established that lots of young and old adults have blindly believed and accepted cyber contents without verifying its source and credibilities; this in turn has affected their attitudinal behaviors toward the acceptance of Covid-19 Vaccine as an intervention. This work hereby suggests a long term global campaign and awareness about the importance of health interventions among adults, both old and young.

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