

# The Negative Impact of Social Media during COVID-19

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## ABSTRACT:

It has been observed that social media platforms have had both a positive and negative effect on how India has dealt with the COVID 19 pandemic. As the coronavirus took over the world, many took to social media to learn about how the virus spreads and what it is. Although this helped inform everyone on how to take precautions against this deadly virus, a lot of the information that users were reading was not verified or fact-checked and labeled as "fake news".

In the modern world, information is spread very quickly through a variety of social media platforms. Because of this, there was widespread panic even before the COVID-19 virus had even reached India. Many citizens bought an excessive surplus of supplies such as masks, hand sanitizers, and food, which ultimately led to a shortage of these supplies for the 1.3 billion people in this country. The shortage of supplies along with the lockdown process which severely impacted the economy has led to an increase in price to the majority of essential products such as food, hand sanitizers, masks, etc. The most affected were the average day workers.

Social media has caused widespread panic and hogging of essential supplies along with false facts of the virus itself, however, there are some things that we have benefited from due to social media. For example, social media has shown us the importance of social distancing and activities that we can do to keep our mental health in check while under lockdown.

In short, I believe social media should be regulated and kept under watch by the government in certain aspects when it comes to spreading information about pandemics like covid19. If regulated properly we can avoid mass panic and anarchy and will be able to survive this pandemic as one.

**KEYWORDS:**Social Media;Coronavirus;Pandemic; COVID 19;Fake News;

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## INTRODUCTION:

The coronavirus is also known as COVID 19 is a respiratory tract illness that is caused by a form of acute resp syndrome. It is a derivative of the SARS-CoV-2 infection. The widespread of the disease made it a major health challenge for the public, worldwide. The effect of COVID 19 upon the world has been exaggerated due to numerous rumours, hoaxes, and information that has not been fact-checked.<sup>1</sup> The first few cases of COVID 19 were seen in late December 2019, that's when this mysterious disease was reported in Wuhan, China which has now become a pandemic.<sup>2</sup>

These bits of fake news have managed to spread more rapidly through all sources of social media than the reliable sources,

causing an imbalance and damage to the authenticity within the news ecosystem. The disease has sparked many debates and has shaken the health care system worldwide.<sup>3</sup> It has led to a cynical effect on people, through social media within a country of over 350 million social media users and a large population that isn't aware of factful resources.<sup>4</sup>

Over the last decade, people have been using social media platforms for self-awareness and knowledge about health care. In the initial few months of COVID-19, it was observed that people from various countries were found dependent on social media to seek information about the virus.

Unfortunately, the same social media platforms that many used to learn about the virus also contained information that

was not fact-checked. These unchecked bits of information were labeled as "fake news".<sup>4-8</sup>

Recent analysis has proved that in the 2016 presidential election in USA fake news was more spread than authentic sources.<sup>8</sup> Even before the virus affected India, the widespread panic was instigated across the country through social media, which reduced the availability of sanitizers and masks to a point where a majority of the population was lacking these essential products. The country was in chaos because of rumours like transmission of the virus by air and its survival on different surfaces.<sup>9</sup> These rumours coupled with the fear and stress of lockdown, isolation, and quarantine affected the mental health of individuals, in form of depression, anxiety, phobia, trauma, etc.<sup>10</sup> Considering the positive aspects of Social Media that is awareness of people, most people started implementing isolation, social distancing and quarantine to combat COVID 19.<sup>11</sup> Many started wearing masks such as cloth masks, surgical masks, and N95 masks. However, a greater number of N95 masks being purchased and used by normal people during daily routine work led to its shortage of frontline health care workers.<sup>12</sup>

COVID-19 being the less researched disease has caused a lot of confusion about its treatment and prevention among people. Discovery of ayurvedic immunity booster medicines and even religious ways of prevention of COVID 19 was spread among the people which caused confusion at a wide scale and the rumours created social stigma which resulted in people into reduced compliance with proper safety procedures.<sup>9</sup>

There were many incidents where hundreds and thousands of people got infected due to the negligence of one person, ignoring the social distancing protocols.<sup>13</sup> People were scared of COVID 19 because of fake news like, COVID-19 patients and suspects are getting killed in China in mass numbers and the possibility

of extension of lockdown<sup>9</sup> which also led to social stigma towards travelers from abroad and their contacts. Even northeast Indians were facing racial discrimination as being considered the cause of the outbreak of the disease.<sup>12</sup> The fear of infection among people also led to suicide, the first suicide case in India took place on 12<sup>th</sup> February,<sup>14</sup> followed by two more cases<sup>15</sup>

The first study on the impact of social media can be traced back to the 2009 H1N1 pandemic when the misinformation was found to be 4.5% and usage of terms like Swine Flu was more often than H1N1 Virus.<sup>17</sup>

WHO declared that they are not just fighting the worldwide pandemic but also a social media infodemic.<sup>18</sup>

ABC News reported a Poll from social media claiming the spread of anxiety from Coronavirus faster than the virus itself.<sup>19</sup>

Brewer on BBC News said a lot of misinformation about COVID-19 has created panic, anxiety among society.<sup>20</sup>

Rothschild and Fischer stated that social media is the cause of fear and panic among its users.<sup>21</sup>

Mollasays in 24hours there were 19 million acknowledgments of COVID 19 on social media and various new websites.<sup>22</sup>

Victor says that Chinese citizens struggle to get adequate facts about COVID 19, making them dependent on social media for it.<sup>23</sup>

Similarly, Emmottas claimed by European Union Document, Russian media published a "significant disinformation campaign" to create chaos and panic among the public of western countries.<sup>24</sup>

Devlinsays there was one another cause of panic noticed, which was pictures of empty shops on social media.<sup>25</sup>

El-Treksays this is an era where everyone is an expert and wants to be heard. Therefore, they send various messages and pictures related to COVID-19.<sup>26</sup>

Garrettsays we have given the power to social media, which caused chaos.<sup>27</sup>

La et alsays The Vietnamese case is a perfect example of how to establish an authentic network with the citizen, using social media. The country's ministers made specific accounts where they published all the information about COVID-19 to the people.<sup>28</sup>

The above-mentioned facts signify the utmost need for the Indian government to control the freedom of social media and making sure of an appropriate balance of use and misuse. Keeping in mind that the complete banning of social media will cause disliking of the current governing power, leading to distrust.<sup>8</sup> Researchers claim a negative impact of the Ebola virus suggested to understand the importance of making people aware educate so to channel the use of social media in a positive direction to build better adherence and compliance to control measures.<sup>6,7</sup> Legal provisions were completely overlooked by the experts who demanded amendments in 123- years old 'The Epidemic Diseases Act 1897'.<sup>16</sup>

So, I strongly believe there is a need for legal provisions in this Act to enforce regulations on social media with a plan keeping in mind the measures mentioned above during COVID 19 and future epidemics.

### **Vaccine content on social media:**

Information about the vaccine is available on social media and the internet with various studies showing how the vaccines are depicted on these platforms.<sup>29-34</sup>

Basch et al. did an investigation on 87 YouTube videos using two keywords "vaccine safety" and "vaccines and children".<sup>35</sup>

65% of the videos portrayed the anti-vaccine sentiment.

5.6% were published by government officials

And 6.8% had no relation to science.<sup>35</sup>

When looked for top searched YouTube videos of COVID-19, 27.5% of those videos had no scientifically accurate

information and has 60 million views.<sup>36</sup> Studies depict anti-vaccine content have more engagement. Anti-vaccine tweets are found to be 4.13-fold more likely to be re-tweeted than any normal tweets.<sup>37</sup> Also 150 posts were found on Instagram with #HPV with a substantially higher average number of likes.<sup>30</sup> Gunaratne et al. proven anti-vaccine tweets saw a declamatory surge in 2015 which occurred with the measles outbreak. Also, the release of a film called *vaxxed* and the publication of a book called *vaccine whistleblower*.<sup>31</sup> Antivaccine subject matter on Twitter comes together into a specific community which consists of like-minded people and mostly are around #cdcwhistleblower and #vaxxed proponents.<sup>38</sup> Subject matter related to Anti-vaccination is found to be channelized among people who share the same opinion and portrays a structure of debate among these people, strengthening the prior ideas than reinforcing new ones.<sup>39</sup> The spread of COVID-19 has led to severe social media discourse, with tweets related to covid-19 every 45millisecond and hashtag #coronavirus becoming 2<sup>nd</sup> most popular in 2020.<sup>40,41</sup> Unfortunately, the number of misleading information about COVID-19 is increasing by every day and is becoming dangerous for treatment purposes.<sup>42,43</sup>

Basch et al. and Nan et al. investigated that approach to vaccine-critical websites have a negative affect to vaccinate.<sup>44,45</sup> A short interval of exposure to such websites, like 5 to10 minutes lead to an increase in ideologies of vaccine risk among the population.<sup>44</sup> Bhattacharyya et al. made a social network stimulation model which shows a significant impact from a small vaccine adverse event.<sup>46</sup> The model also depicted that the cause of the outbreak of vaccine-preventable disease is spreading misleading information on the adverse effect of vaccines on social media platforms.<sup>46</sup>

Social media users show a greater number of skewed populations who are not

familiar with the consequences of vaccine-preventable diseases<sup>47</sup>

Social media gist on vaccination tend to be shared more frequently than well explained medically justified information. Few social media users suffering from cognitive impairment, low literacy rate, and old age have been found more emotionally taken towards these social media appeals.<sup>48</sup>

The Cultural, religious Background and Political beliefs of users have also been shown to modify their reaction towards social media appeals.<sup>47</sup>

Helge et al. did a study of 400 participants with different ideologies related to flu vaccines.

This study helped us understand how the information is channeled, perceived, and manipulated. It has been observed that participants frequently alter the information based on their attitude, for example, the information was better received if it aligns with the person's baseline attitude.<sup>49</sup>

A Case-control study depicted that parents of both, vaccinated and non-vaccinated children seek information from an anti-vaccine organization and considers it reliable.<sup>50</sup>

In a similar study done on a group of students, they were exposed to all the vaccine-related websites and 59% of them weren't able to identify the fake/misleading websites and 50% accounted for statements that were inaccurate in relation to vaccination after thorough exposure.<sup>51</sup>

### **Leveraging social media platforms:**

Medical professionals are considered to be the most trusted source of information to vaccine-hesitant parents who tend to approach anti-physicians.<sup>50,52,53,54</sup>

Direct communication should be built between medical professionals and the patients to reduce the anxiety and concerns of patients.<sup>52,55</sup> Health care professionals should communicate directly to the

patients using the social media platform.<sup>56,57</sup> Also Medical Professionals should also build a better profile and improve their reach on social media accelerating the promotion of authentic evidence-based information.<sup>57</sup> Shoup et al. discovered that the effective intervention of social media is the one where there is balanced information which would acknowledge patients concerns but also avoid scientific jargon.<sup>58</sup>

It is a necessity that social media should identify, flag, and block potential harmful misinformation and promote advertisement of information from health agencies.<sup>59</sup>

Social media platforms should redirect vaccine-related researches to handpicked information from health agencies like WHO and CDC. additionally, should have disabled COVID and vaccine-related advertisements to avoid user-driven misleading information.<sup>59</sup>

### **DISCUSSION:**

The article was written to emphasize the need for fact-checking the news on social media before being released so that there's no intended chaos. It has been observed that a high volume of information spread through social media can lead to media fatigue compromising the needful behaviors essential for an individual's protection. False information that has been promoted through social media include improper washing techniques, social distancing, and false facts of how the virus spreads. Many people have been infected with COVID-19 due to following these improper techniques, believing that they were true. These unchecked facts have affected both the physical and mental health of numerous people. For example, an Indian father of three was reported to commit suicide upon hearing the diagnosis of COVID-19 because he had come to believe that there was no hope of recovery from this disease.<sup>60</sup>

In Nigeria, Doctors and scientists have found many cases of death due to overdose

of chloroquine (a drug primarily used to treat a malarial parasite) after hearing about the efficacy of the drug which spawned and circulated through multiple social media outlets.<sup>61</sup>

One of the main effects that social media has had on people was observed in the united states. Due to rumours of national lockdown (before the government decided to address the nation about the upcoming lockdown) which was leaked by unknown sources through social media, it fueled a mass panic of buying groceries and this in turn disturbed the supply chain because of increasing insecurity of availability of food in people, especially among the low-income individuals. Many healthcare workers that dedicated their time and energy to handle the situation were not able to acquire enough food and provisions for themselves since the majority of the stores were out of stock.<sup>62</sup>

A resident of Tirunelveli city of Tamil Nadu, Hari Singh, owner of 110 years old Iruttu Kadai died on June 25. Mr. Hari Singh was admitted to the hospital for his Urinary tract infection when he found that he is COVID-19 positive. His family members informed vice news that he was very scared and stressed watching the news about the disease and that very day he was found dead by the hospital staff. The superintendent informed the Indian Express that Mr. Singh died by suicide.<sup>63</sup>

Researchers tracked all non-COVID-19 deaths and found out of 884 deaths recorded 125 were suicide cases reason of death being fear of infection, quarantine, loneliness, and lack of freedom.<sup>63</sup>

Mr. Himanshu Vaswani, a resident of Mumbai and a businessman was found COVID-19 positive on June 1<sup>st</sup>. He told vice news "conflicting news online" that COVID19 has caused him confusion and made him paranoid. Reading about the disease daily made him crazy.<sup>63</sup>

Dr. Harjit Singh Batii, a doctor in Delhi at Manipal Hospital said he had a 27-year-old patient who was COVID 19 positive. When she was informed about her

condition "she started crying and shouting. She asked, "how did I get it? How will I be saved?", Batti said. He also mentioned that the panic in emergency wards are "Human nature" even the counselling has been found of no use to such patients because of the misleading news about the disease they have been reading online.<sup>63</sup>

A farmer in Chittoor district in Andhra Pradesh was reported dead on February 11<sup>th</sup> by suicide because he assumed, he was suffering from COVID-19 and could not be saved. Another farmer in Uttar Pradesh committed suicide because he wanted to save his village from getting infected by COVID-19.<sup>63</sup>

All these cases got the attention of the government and the government in Kerala and Maharashtra employed mental health counsellors to counsel the patients going through isolation and even quarantine to keep a track of their anxiety and depression.<sup>63</sup>

Social media has made it hard to differentiate fact from fiction. Since COVID 19 is a new disease there is very little we know about it. New research about the disease may carry less legitimacy. It has been observed that a new social stigma around this infection has reduced compliance with home quarantine and social isolation. There have been many reported incidences in which one person that is infected, infects a multitude of people who chose not to take the advice of healthcare workers and visit churches and events.<sup>14</sup>

Journalists have mentioned an alarming rise in fake, misleading news online. Many conspiracy theories, herbal cures, one being Patanjali's COVID-19 cure which was flagged as misleading- are the cause of chaos.<sup>63</sup>

Potential strategies to ensure effective health communication on COVID 19

Living life under quarantine, isolation, and at risk of contracting an infectious disease may alter the mental status of many individuals which may affect their physical health as well. Because of all these



compiling stress factors, it may evoke interest in learning how to live with the disease and learning about the virus itself.<sup>64</sup> The world health organization acknowledged that the flow of correct information may help with these everyday stresses. The WHO has decided to partner up with several social media platforms such as Facebook, Twitter, Instagram, Google, YouTube, Microsoft, etc. to eradicate the fraud and unchecked information about coronavirus, and in turn, promote actual critical updates from healthcare agencies.<sup>65</sup>

### **To promote accurate information certain steps must be followed:**

First and foremost frontline providers should be kept updated by real not reel information so that they can use it for better caregiving and can have better communication with the patients, relatives, and the population at risk. Integration of technology has been proven beneficial in giving proper patient care and in the management of mass casualty.<sup>66</sup>

Secondly, mass media, government, and non-government groups and organizations may lead to the spread of fake news. It is crucial to building a strong partnership at local and global levels in a planned manner so that needful and accurate information is shared between various platforms.

Online platforms should focus more on removing all hoaxes and rumours. The modern-day data mining algorithm is more than capable of detecting the unique characteristics of all kinds of fake news and removing them from said platform.<sup>9</sup> Twitter, Reddit, Amazon, and few more social media platforms are using it to remove fake accounts. All social media platforms should consider adopting such measures to eliminate potential harmful misinformation and rumours.

People who are the cause behind the spread of such fake news should be tracked and asked to answer for it.

Authorities and law enforcement agencies should be made aware of the changes proposed and be able to deal with them. Many countries have already initiated a change within their government and enforcement.<sup>67</sup> The first step before enforcing these regulations worldwide is to conduct proper planning and investigation to ensure the legal rights of the convicts.

Along with these regulations, the strategies planned for filtering news on social media should be considered and implemented. The news should be circulated in various languages to reach more people<sup>68-70</sup>.

Measures should be taken to provide medical care and provision of information, easily to people living in a rural area and the elderly population by the Telemedicine approach. This way people will stay at home following social distancing and there will be a decrease in the risk of hospital-acquired infection.

Lastly, everyone should avoid any sort of promotion of misleading, fake information related to COVID-19 for the betterment of the population<sup>71-72</sup>.

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