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## REVIEW ARTICLE

### Negative impact of social media panic during COVID 19

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#### ABSTRACT:

Coronavirus is an RNA virus consisting of positive-sense single-stranded RNA of approximately 27–32 kb. Coronavirus belong to the family Coronaviridae, which comprises of alpha, beta, delta, and gamma coronaviruses. As the name indicates, the spherical external spike protein displays a characteristic crown shape when observed under an electron microscope. Mass media have long been recognized as powerful forces shaping how we experience the world and ourselves. Hence: the present review was planned for summarizing the data on negative impact of social media panic during COVID 19.

**Key words:** COVID 19, Social Media

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#### INTRODUCTION

According to the World Health Organization (WHO), viral diseases continue to emerge and represent a serious issue to public health. In the last twenty years, several viral epidemics such as the severe acute respiratory syndrome coronavirus (SARS-CoV) in 2002 to 2003, and H1N1 influenza in 2009, have been recorded. Most recently, the Middle East respiratory syndrome coronavirus (MERS-CoV) was first identified in Saudi Arabia in 2012. Coronaviruses (CoVs) belong to the subfamily

Orthocoronavirinae in the family Coronaviridae, Order Nidovirales. There are four genera within the subfamily Orthocoronavirinae, namely Alphacoronavirus ( $\alpha$ -CoV), Betacoronavirus ( $\beta$ -CoV), Gammacoronavirus ( $\gamma$ -CoV) and Deltacoronavirus ( $\delta$ -CoV). The CoV genome is an enveloped, positive-sense, single-stranded RNA with a size varying between 26 kb and 32 kb, the largest genome of known RNA viruses. Both  $\alpha$ - and  $\beta$ -CoV genera are known to infect mammals, whilst  $\delta$ - and  $\gamma$ -CoVs infect birds.

Two recent outbreaks of viral pneumonia caused by  $\beta$ -CoVs are severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). In 2002, an outbreak of SARS was first reported in China and then

spread quickly worldwide, resulting in hundreds of deaths with an 11% mortality rate.<sup>1-3</sup>

#### PRIMARY RESERVOIRS AND HOSTS OF CORONAVIRUSES

The source of origination and transmission are important to be determined in order to develop preventive strategies to contain the infection. In the case of SARS-CoV, the researchers initially focused on raccoon dogs and palm civets as a key reservoir of infection. However, only the samples isolated from the civets at the food market showed positive results for viral RNA detection, suggesting that the civet palm might be secondary hosts. In 2001 the samples were isolated from the healthy persons of Hongkong and the molecular assessment showed 2.5% frequency rate of anti-bodies against SARS-coronavirus. These indications suggested that SARS-coronavirus may be circulating in humans before causing the outbreak in 2003. Later on, Rhinolophus bats were also found to have anti-SARS-CoV antibodies suggesting the bats as a source of viral replication. The Middle East respiratory syndrome (MERS) coronavirus first emerged in 2012 in Saudi Arabia. MERS-coronavirus also pertains to beta-coronavirus and having camels as a zoonotic source or primary host. In a recent study, MERS-coronavirus was also detected in

Pipistrellus and Perimyotis bats, proffering that bats are the key host and transmitting medium of the virus. Initially, a group of researchers suggested snakes be the possible host, however, after genomic similarity findings of novel coronavirus with SARS-like bat viruses supported the statement that not snakes but only bats could be the key reservoirs. Further analysis of homologous recombination revealed that receptor binding spike glycoprotein of novel coronavirus is developed from a SARS-CoV (CoVZXC21 or CoVZC45) and a yet unknown Beta-CoV. Nonetheless, to eradicate the virus, more work is required to be done in the aspects of the identification of the intermediate zoonotic source that caused the transmission of the virus to humans.<sup>4-10</sup>

### DIAGNOSIS

A suspect case is defined as one with fever, sore throat and cough who has history of travel to China or other areas of persistent local transmission or contact with patients with similar travel history or those with confirmed COVID-19 infection. However cases may be asymptomatic or even without fever. A confirmed case is a suspect case with a positive molecular test. Specific diagnosis is by specific molecular tests on respiratory samples (throat swab/ nasopharyngeal swab/ sputum/ endotracheal aspirates and bronchoalveolar lavage). Virus may also be detected in the stool and in severe cases, the blood. It must be remembered that the multiplex PCR panels currently available do not include the COVID-19. Commercial tests are also not available at present. In a suspect case in India, the appropriate sample has to be sent to designated reference labs in India or the National Institute of Virology in Pune. As the epidemic progresses, commercial tests will become available.<sup>11</sup>

Other laboratory investigations are usually non specific. The white cell count is usually normal or low. There may be lymphopenia; a lymphocyte count <1000 has been associated with severe disease. The platelet count is usually normal or mildly low. The CRP and ESR are generally elevated but procalcitonin levels are usually normal. A high procalcitonin level may indicate a bacterial co-infection. The ALT/AST, prothrombin time, creatinine, D-dimer, CPK and LDH may be elevated and high levels are associated with severe disease.<sup>12</sup>

The chest X-ray (CXR) usually shows bilateral infiltrates but may be normal in early disease. The CT is more sensitive and specific. CT imaging generally shows infiltrates, ground glass opacities and sub segmental consolidation. It is also abnormal in asymptomatic patients/ patients with no clinical evidence of lower respiratory tract involvement. In fact, abnormal CT scans have been used to diagnose COVID-19 in suspect cases with negative molecular diagnosis; many of these patients had positive molecular tests on repeat testing.<sup>13, 14</sup>

### NEGATIVE IMPACT OF SOCIAL MEDIA

Mass media have long been recognized as powerful forces shaping how we experience the world and ourselves. This recognition is accompanied by a growing volume of research, that closely follows the footsteps of

technological transformations (e.g. radio, movies, television, the internet, mobiles) and the zeitgeist (e.g. cold war, 9/11, climate change) in an attempt to map mass media major impacts on how we perceive ourselves, both as individuals and citizens. Are media (broadcast and digital) still able to convey a sense of unity reaching large audiences, or are messages lost in the noisy crowd of mass self-communication? Do social media provide solace or grounds for misinformation, (de)humanization, and discrimination? Can we harness the flexibility and ubiquity of media technologies to increase the public's adherence to the safety measures suggested by global health organizations to combat the spread of COVID-19?<sup>15</sup>

Over the last decade, social media has played a crucial role in spreading awareness and knowledge about public health; however, it has also been misused for spreading fake news, hatred and creating racism during epidemics and civil unrest. Even before the detection of first case of COVID-19 in India, the epidemic of social media panic hit India, which led to stock out of masks and sanitizers from the market. Further, fake claims about transmission of virus through air and its survival on different surfaces created a panic. Though people started wearing different types of masks such as N95, surgical and simple cloth masks, many had lack of knowledge about their appropriate use and disposal which was evident from actions such as frequent touching to mask, use of same mask for more than a day, reuse of disposable masks and throwing the masks on the roads or in regular dust bins.<sup>16-20</sup>

Brewer on BBC News posits that hearing a lot of information and news about COVID-19 has affected the public and created panic, causing people to live with anxiety. Similarly, Rothschild and Fischer claimed that social media is spreading fear and panic among social media users. Correspondingly, in the discussion on social media, Cellan-Jones stated that people depend on social media to gain information and facts about COVID-19, as some countries use filters, which is why social media gives some information but not all the facts.<sup>21-23</sup>

After COVID-19 appeared and was transmitted to other countries outside of Mainland China, people turned to social media to know more about the virus. According to Molla, in just 24 hours, there were 19 million mentions of COVID-19 across social media and news sites worldwide. The mass media has been called on to take responsibility for providing correct information and aiding comprehension among citizens. Frenkel et al reports that after the WHO claimed that social media companies were fueling misinformation on COVID-19 worldwide, some social media companies tried to remove false information from their platforms.<sup>24-26</sup>

Victor claims that in today's digital age, Chinese citizens could not get enough facts about COVID-19, which is why they depended on social media and widely shared their information, photos, and videos, sometimes inaccurately. Likewise, in India, the government has asked top social media companies like Facebook, YouTube, TikTok, ShareChat, and Twitter to stop

publishing misinformation, as it creates panic among people. Similarly, Emmott noted that, according to a European Union document, Russian media has published a “significant disinformation campaign” about the COVID-19 outbreak to create panic among the public in Western countries.<sup>27, 28</sup>

The public sphere in the 21st century has undergone a transformation generated by the adoption of online communication technologies. New media has become an important source of health information and a platform for discussing personal experiences, opinions, and concerns regarding health, illnesses, and treatment. Similarly, Dillon noted that people spend a lot of time on social media and may see cases of panic buying in various countries during the COVID-19 pandemic, which can spread panic further. In addition, El-Terk showed that nowadays everyone is an expert because everyone tries to have a voice and send a message about COVID-19. Correspondingly, Garrett explained that we gave power to social media to create fear about COVID-19, as we all publish panic-inducing information and it circulates.<sup>29-32</sup>

Merchant and Lurie found that at present, due to the development of social media, many methods of communicating and disseminating information and news are available to the public. These are fast and effective and can spread true information as well as misinformation. In addition, La et al said that many countries did not circulate information to the public about the COVID-19 outbreak or were unable to provide the public with the information they needed; thus, people relied on the information they could find on social media. The Vietnamese case is a successful example of dealing with social media in the right way. The country's Ministry of Health created accounts on social media networks, and through those accounts, they published information about COVID-19 to the public.<sup>33</sup>

Mian and Khan argue that there has been a worldwide increase in the spread of fake news and misinformation about COVID-19, with misinformation such as the lab theory on the origin of the virus allegedly "originating" on social media. Correspondingly, Petric and others believe that “media coverage has highlighted COVID-19 as a unique threat, rather than one of many, which has added to panic, stress.” Depoux and others determined that social media has played three main roles in the COVID-19 outbreak in most countries. First, facts about the outbreak were published on social media. Second, misinformation, fake news, and inaccurate information about the outbreak was published on social media. Third, social media created fear and panic about the outbreak worldwide.<sup>34-40</sup>

## CONCLUSION

Social baker's data also highlights fan and audience behavior and brand communication about coronavirus during these critical times. The goal is to help marketers understand what's happening so that they can weather this current crisis and come out strong on the other side.

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