

## Editorial

# The pandemic of social media panic travels faster than the COVID-19 outbreak

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Within weeks of the emergence of the novel coronavirus disease 2019 (COVID-19) in China, misleading rumours and conspiracy theories about the origin circulated the globe paired with fearmongering, racism and mass purchase of face masks, all closely linked to the new ‘infomedia’ ecosystems of the 21st century marked by social media. A striking particularity of this crisis is the coincidence of virology and virality: not only did the virus itself spread very rapidly, but so did the information—and misinformation—about the outbreak and thus the panic that it created among the public.<sup>1,2</sup> The social media panic travelled faster than the COVID-19 spread.<sup>3</sup> In many ways, we could identify here a metonymic principle, where the images directly related to the physical epicentre crisis (the archaic imagery of quarantine and confinement) were often associated to places and people connected with this archaic imagery: Chinese restaurants, Chinese tourists, goods from Asia, etc. leading to widespread distrust and outburst of racism.<sup>4</sup> Chinese-looking residents who have never set foot in China were one of the first victims of such viral racism.

World Health Organization (WHO) Director General Dr Tedros calls this the fight against ‘trolls and conspiracy theories’. Misinformation causes confusion and spreads fear, thereby hampering the response to the outbreak. ‘Misinformation on the coronavirus might be the most contagious thing about it’, he says.

The impact of media reporting and public sentiments may have a strong influence on the public and private sectors in making decisions on discontinuing certain services including airline services, disproportionate to the true public health need. Travel restrictions are one example, and we need to unpack the influence of social media on such measures that carry a huge economic loss. The spatiotemporal variability in the discussions on social media, specifically Twitter, is often not in line with the spatiotemporal occurrence and intensity of the outbreak.

In addition to addressing the urgent need to scale up public health measures to combat the outbreak, we need to combat the pandemic of social media panic.<sup>5</sup> To this end, it is important to conduct spatiotemporal analyses of the discourse and its association, or disassociation, with the epidemiological situation as this will allow spatiotemporal-targeted communication and intervention campaigns to be executed by public health authorities. We need to rapidly detect and respond to public rumours, perceptions, attitudes and behaviours around COVID-19 and

control measures. The creation of an interactive platform and dashboard to provide real-time alerts of rumours and concerns about coronavirus spreading globally would enable public health officials and relevant stakeholders to respond rapidly with a proactive and engaging narrative that can mitigate misinformation.

At a time when we have no other tools at hand to combat COVID-19 other than non-pharmaceutical interventions such as quarantine and social distancing,<sup>6</sup> social media intelligence should be harnessed to enhance the needed mobilization of the public and local communities to follow quarantine procedures, quickly decrease the spread of fears and uncertainty and enhance public trust in public health measures. Only by collaborating with concerned communities and citizens and by providing careful guidance for public participation can we ensure the efficacy of quarantine orders during emerging epidemics.<sup>7</sup>

Analyses of discussions on social media with regard to the epidemic situation geographically (geocoded tweets/messages) and over time (timestamped tweets/messages) can result in real-time maps. Such real-time maps could then be used as a source of information on where to intervene with key communication campaigns.

A communication strategy with toolkits would need to be developed urgently as a contribution to the immediate needs for a public health response and important groundwork for improving frameworks for response in the face of future global outbreaks. This is especially important for countries that are lacking well-developed media listening techniques or are in need of more efficient yet ‘controlled transparency’ regarding the epidemic and for populations that are more vulnerable during the outbreak due to lack of information. The impact of deploying a toolkit would enhance efforts to empower the public and enable them to become more informed consumers who can make decisions and act from a more knowledgeable and personally confident position—in line with public health measures. The main component for positive impact is an emphasis on the exchange of balanced information presented as much as possible to promote ‘learning’ and positioning of the consumer as a necessary active participant in a much more complex health information environment (compared to public health messaging of the past). A digital toolkit could be also harnessed to build future tools for rapid deployment and engagement where multilingual and

sociocultural responses are needed. The WHO has created a WHO myth busters webpage to address and correct misinformation about the COVID-19 outbreak. The mass panic can only be fought with information.<sup>8</sup>

Social media can and should be harnessed to support the public health response. For example, in China during the massive community-wide quarantine, it is particularly important to use social media wisely as social media provide an opportunity to communicate the reasons for quarantine, providing reassurance and practical advice in order to pre-empt rumours and panic. Digital technologies can overcome the social distancing constraints during mass quarantine and provide mental health support resources and solidarity with those persons in a lock-down situation. A well-planned analysis of global online conversations could provide a rapid assessment of the spread and possible changes in public attitudes and behaviours (e.g. self-isolating, handwashing, accessing health care) and awareness about the disease and its symptoms and the impact of important decisions taken during the outbreak (e.g. quarantine measures, development of new vaccines, internationally coordinated responses) on public perceptions and attitudes.

The previous work in this area includes the EBODAC project (Ebola vaccine Deployment, Acceptance and Compliance initiative) in 2014.<sup>9</sup> This included the development of country-level communication and engagement strategies to deal with problems that arose around quarantine measures across multiple African countries in the deployment of Ebola vaccine trials, as well as guiding the implementation of a rumour management strategy and community listening networks and social media monitoring and development of tools and mobile technologies to promote the acceptance and uptake of new Ebola vaccines.

For the current COVID-19 crisis, we call for the development of a real-time information sharing system, drawing from data and analyses from a range of social media platforms, in multiple languages and across the global diaspora. This will enhance the ability of public health bodies and relevant stakeholders to respond to and understand the social dynamics of the increasingly fast and evolving spread of information and misinformation about the coronavirus and the outbreak and control measures. It will also reduce community panic and unhelpful measures disproportionate to the cause.

## Contributions

All authors are part of the CoV-IMPACT consortium and contributed equally to this manuscript.

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