Effective communication during public health events can be critical to public health response efforts. Public health messages help inform the public about risks and protective actions and, done correctly, are a critical component of community engagement and the buildup of public trust. Yet, true information about public health concerns is increasingly competing with false messages that can damage public confidence in health interventions and health authorities. These false messages are often defined as misinformation, erroneous information shared through various channels, and disinformation, purposefully spread false or misleading information. The information environment is increasingly made up of a mix of information coming from web sources and other media, in addition to historical sources such as print and TV news media. However, the influence of social media has made the spread of false information even more pernicious.

Over the past 15 years, there has been a global surge in the adoption of social media technologies. In 2019, 6 social media companies had more than 1 billion active monthly users. Although originally designed for virtual engagement with personal networks, social media platforms have grown rapidly to share major roles in the economy and the transfer of information. According to the Pew Research Center, social media officially outpaced print newspaper as a source of news among the entire United States population. Furthermore, across countries, regardless of a nation’s socioeconomic status, younger populations rely even more heavily on social media as a news source.

Disinformation campaigns are widely recognized in the political world but have been identified in the public health realm as well. In the fall of 2018, a team of researchers systematically identified a concerted effort to spread disinformation and discord about vaccine safety. Public health response efforts for the currently ongoing Ebola outbreak in the Democratic Republic of the Congo (DRC) have been challenged by disruptive rumors that have occasionally targeted public health responders. Misinformation during a public health emergency is a particularly concerning threat, because of the time-dependent nature of outbreak response and the corrosive effect misinformation can have on public trust. Current solutions to the spread of mis- and disinformation are limited. Social media platforms have attempted to change their algorithms to limit the spread of false
information and promote correct information, but the problem of misinformation continues.\textsuperscript{7,8} Many misinformation response actions have been developed to be used against political misinformation and disinformation but may be applied in response to an epidemic. More than 50 countries globally have taken different government-led actions that, in theory, aim to combat misinformation.\textsuperscript{9} These actions can range from media literacy campaigns and fact-checking websites to more extreme measures, such as jailing users for publishing content deemed to be misinformation. In some cases, authorities have shut down social media sites or the internet entirely.\textsuperscript{10-12}

However, censoring social media content and denying a population access to the internet has serious consequences. In addition to ethical considerations, there is mounting evidence to suggest that there are serious economic consequences to shutting down the internet. According to the Indian Council for Research on International Economic relations, the estimated 16,000 hours of international internet shutdown in India resulted in around US$3 billion in economic losses.\textsuperscript{12}

Misinformation and disinformation are likely to be serious threats during a public health emergency. Unfortunately, thus far, there are limited ways to control the propagation of misinformation, leading to potentially draconian methods to manage this problem.

References


