

# Chapter 95

## General Awareness and Responses to COVID-19 Crisis: A Sentiment Analysis of Twitter Updates

**Dipima Buragohain**  
*Jilin University, China*

### **ABSTRACT**

*The ongoing pandemic situation of COVID-19 has impacted people across nations while taking social media by storm with its massive pool of information. As social media platforms are full of horse race reporting and uncritical or even fake updates most of the time, users should respond carefully during a crisis like COVID-19 pandemic while consuming and sharing updates. The current study presents an exploratory analysis of and highlights language use in terms of users' general awareness of the crisis and their responses on social media platforms through a sentiment analysis of 805 Twitter messages related to the COVID-19 pandemic in India. The findings reported users' varied sentiments while expressing their general awareness about the crisis and its widespread outbreak. It also reported their use of cognizant verbal expressions and abusive words as an expression for dealing with panic of the crisis.*

### **INTRODUCTION**

The ongoing pandemic situation of COVID-19 has impacted people across nations at so many levels of everyday life. World Health Organization (WHO) has defined COVID-19 or the coronavirus disease as an infectious disease of respiratory illness caused by the most recently discovered corona virus. The common symptoms of COVID-19 include fever, fatigue, dry cough, nasal congestion, runny nose, sore throat, body pain, headache, and diarrhea. It can cause a range of symptoms from mild illness to even pneumonia or in extreme cases, difficulty in breathing and death. While constant medical attempts of controlling the situation are on the go, the global outbreak of COVID-19 is taking social media by storm with its massive pool of information. There are numerous COVID-19 information updates on various social media platforms such as Facebook, Instagram, and Twitter. There are information, misinformation,

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rumors, and hoaxes being written, updated, and circulated on these platforms regarding the outbreak, outcomes, prevention, and cure of this disease. This further raises pertinent questions on the nature and authenticity of the information that has been circulated across these platforms. It is undeniably true that these social media platforms are full of horse-race reporting and uncritical or even fake updates at times, or most of the times. What is even worse is the fact that such fake news spread faster on social media than the updates from reliable sources, which can adversely impact the authenticity of reliable sources. That is why it is important for the users of social media platforms to respond carefully and responsibly during a crisis like COVID-19 pandemic when it comes to consuming and sharing updates related to the pandemic situation. Apart from the concern of the accuracy of disseminated information on various social media platforms regarding the ongoing situation, another issue to take into serious account is the need for constant monitoring of the expressions and stylistics of the content used, posted, and shared on these platforms. It is important to identify whether and how language is utilized or misused in the communication process on such social media platforms.

One of the primary challenges of receiving and sharing information on various social media platforms during a pandemic outbreak is to react and respond to the panic associated with the adverse health outcomes. Panic among public during a pandemic outbreak is common, but it may further influence the dissemination of information on social media platforms in both positive and negative sentiments. To be specific, such news gets more media attention and coverage due to which these updates become most or frequently searched trending topics on the internet along with more shares and tweets on social media. This further can help health authorities as well as public to identify real-time prediction of the outbreak. However, the viral updates can adversely impact health systems by spreading fake news, misinformation, and hoaxes on the pandemic, thus instigating more panic. In other words, such posts or tweets on social media can identify multiple issues that the outbreak may prompt. Such concerns are of grave nature during the time of any epidemic or pandemic outbreak. Fu et al. (2016) reported several issues which were identified from the tweets during the outbreak of the Zika virus in early 2016 when it first spread outside of Africa and Asia regions where the virus had formerly been restricted. This has led to a variety of information and misinformation disseminated across social media platforms. However, it also spreads information through tweets raising various concerns, including social impact of the outbreak, issues of pregnancy and unborn child, actions of government and health authorities, and geographical expansion of the virus across regions.

In the light of this introduction, the current study explores and highlights several concerns of Twitter users related to the virus outbreak and other health information caused or impacted by it. While Twitter users across India demanded the practices of social distancing and lockdown extension, they were found to be misinformed about the causes and cures of the pandemic outbreak as well. While lockdown hampered the economy of the country, people were heard advocating as well as discouraging an extension. Twitter updates showed that Assam and most of the northeastern states demanded an extended lockdown since they believed it would curb the pandemic from outbreaking in that region which still showed low intensity and across the country as it will be addressed and discussed later in the study.

Social media platforms play a significant source for disseminating, collecting, and updating information when it comes to updating public knowledge on a pandemic or any infectious disease outbreak. While public health authorities can utilize these platforms for notifying people on health hazard prevention notices and recommendations to avoid travelling to the virus-affected sensitive areas, dissemination of misinformation on the same can result in adverse consequences. The content posted and shared on Twitter is viewed widely across the Internet by a sizeable global human population on a daily basis.

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