Understanding the Infodemic and Misinformation During COVID-19 Pandemic

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Abstract

Infodemics is over flood of information, some accurate while some misinformation, which makes it difficult to identify a solution. Misinformation, disinformation and rumours can be spread easily in infodemics which can impact the effectiveness of public health response. Imfodemic can also result in building mistrust in governments, health agencies and create confusion and distrust among people. The affect of infodemic is amplified multifold in this information age with the availability of social networks. Misinformation can greatly impact people life by altering decision making processes. Every individual has an important role to play in restricting the spread of infodemic.

Keywords: Information; misinformation; disinformation; COVID-19; pandemic; social media

1. Introduction

During a disease epidemic, an infodemic is defined as an abundance of information, including incorrect or misleading information, in both digital and physical settings. It creates perplexity and risk-taking behaviours that might be harmful to one's health. It also fosters scepticism of health authorities and hinders public health efforts. When individuals are unclear about what they need to do to safeguard their health and the health of others around them, an infodemic can exacerbate or extend outbreaks. Information can travel more quickly as a result of increasing digitalization, such as the usage of social media and the internet This can help cover knowledge shortages

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more quickly, but it can also amplify negative messages. The systematic application of risk and evidence-based analyses and techniques to manage the infodemic and limit its influence on health behaviour during health emergencies is known as infodemic management.

Misinformation is deceptive information that is intentionally incorrect or erroneous. In the context of the present epidemic, it has the potential to have a significant impact on many parts of life, particularly people's mental health, since searches for COVID-19 updates on the Internet have increased by 50% to 70% across all generations. In a pandemic, misinformation can have a harmful impact on human health. Many fake or misleading tales are made up and distributed without any background or quality checks. Much of this disinformation is based on conspiracy theories, with some of these beliefs being introduced into what appears to be mainstream conversation. For example, 361,000,000 videos were posted to YouTube under the "COVID-19" and "COVID-19" classifications in just 30 days, and about 19,200 articles were produced in Google Scholar since the epidemic began. Around 550 million tweets in March 2020 contained the words coronavirus, corona virus, COVID-19, COVID-19, COVID-19, or pandemic (WHO 2021).

The information crisis is getting worse. The Covid pandemic makes it more difficult for decision-makers and ordinary public health professionals to identify reliable sources in an emergency. Certain news can make people feel emotionally drained, feel anxiety, overwhelmed, depression etc affecting their decision making ability. Due to very high advancement of technology and social media anyone can publish or write anything without any filters which might be misused very extensively.

2. Global Scenario of COVID-19

Globally, as of 10 September 2021, there have been 223,022,538 confirmed cases of COVID-19, including 4,602,882 deaths, reported to WHO (Figure 1). As of 5 September 2021, a total of 5,352,927,296 vaccine doses have been administered (WHO 2021).
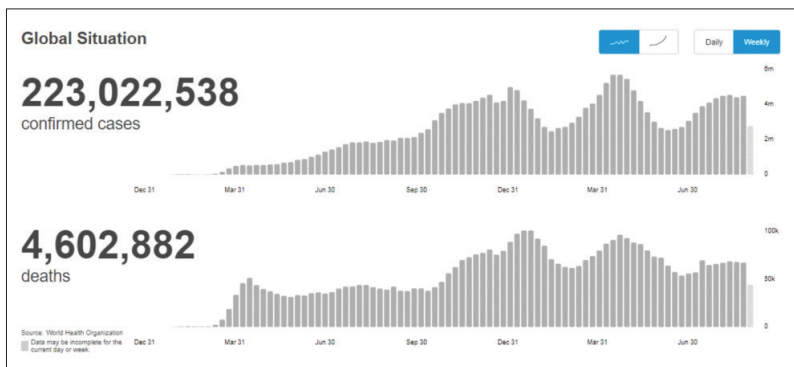

Figure 1: Global Situation of COVID-19 Confirmed and Death Cases by WHO as of 10 September 2021

(Source: WHO, 2021)

In India, from 3 January 2020 to 10 September 2021, there have been 33,174,954 confirmed cases of COVID-19 with 442,009 deaths, reported to WHO (Figure 2). As of 30 August 2021, a total of 651,214,767 vaccine doses have been administered.
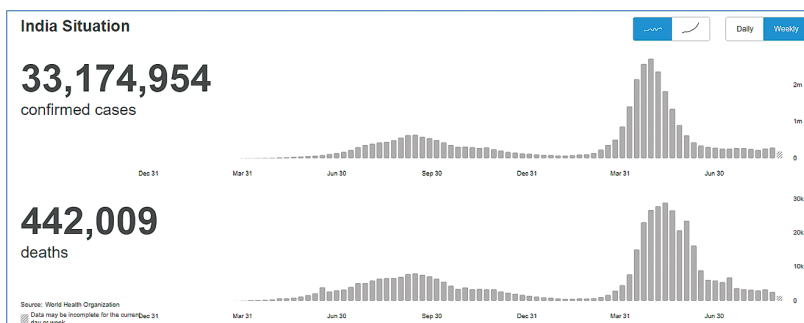

Figure 2: India Situation of COVID-19 Confirmed and Death Cases by WHO as of 10 September 2021

(Source: WHO, 2021)

3. Existing Challenges

India is a developing country and a large section of population resides in rural areas (Pan American Health Organization, 2020). There will be a challenge to include everyone and leaving no one especially those who lack connectivity or knowledge. Management of overloaded information and the vast technological tools can pose a great threat. With the advancement in information and technology, cyber safety poses a huge threat considering crucial issue such as ethical use, privacy, confidentiality of personal data. Technology is improving and advancing day by day which also puts big challenge in getting acquainted with new technological concepts. There is also a need to nurture a judgment skill for selecting tool and develop skills to use them.

4. 5W and 1H for Information Hygiene

Like appropriate behaviors such as masks, hand washing, physical distancing, vaccination can slow down the spread of COVID-19, spread of disinformation and misinformation can be slowdown by practising some information hygiene. To do so, before believing and sharing something we need to follow the 5W and 1H rule as follows (Figure 3):

- What am I sharing?
- Why am I sharing this?
- Where did it come from?
- Whose agenda might I be supporting by sharing it?
- When did the information took place
- How do I know if it's true?

Figure 3: The 5W and 1H for Information Hygiene

5. Navigating the Infodemic

To navigate this wave of information and decide who and what to trust we can follow seven steps i.e., assess the source (WHO, 2021)

a. Assess the source: Assessment of source of information needs to be carried out such as who shared the information with you and where they did get it from. We have to make a habit of verifying the authenticity of images or videos. For example, we can use google's reverse image search tools for verifying image.

b. Go beyond headlines: We have to read between the lines and not judge news by their headlines because sometimes to produce provocative and sensational news, headlines are framed intentionally. We have to access diverse sources to differentiate trustworthy news from misinformation.

c. Identify the author: Before trusting any news of any authors, we need to search the details of the authors to understand their credibility and to know whether they are real or fake.

d. Check the date: We need to check whether the news is relevant to current events and is it up to date

e. Examine the supporting evidence: We need to check for the references or facts that are presented along with the credible stories.

f. Check your biases: We need to evaluate our own biases to understand why we may think or favor and why to a particular headline or story.

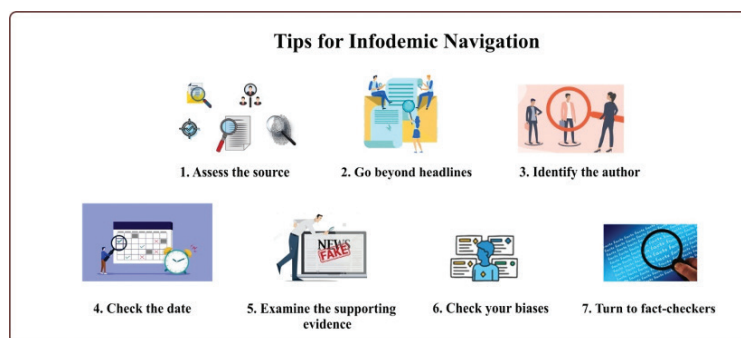g. Turn to fact-checkers: We need to check, refer and consult reliable fact-checking organizations whenever in doubt.

Figure 4: Navigating the Infodemic

(Source: WHO, 2021)

6. Public Participation in the Fight Against the COVID-19 Infodemic

We need to continuously upgrade our skills to cope with the technological advancement. We need to incorporate critical thinking for well-informed, balanced decision-making that distinguishes between content and presentation. We have to build the ability to search for information using multiple sources, including social networks. It is very important to enhance skills in reading, writing, and comprehension in the current digital context, which is dynamic and increasingly hyper connected. Active participation in virtual communities in order to contact other people, discuss issues, share lessons learned, and ask for help needs to be sharpened. People have a very important role to play in the fight against the COVID-19 infodemic. Some of the key actions that can be considered are as follows (Pan American Health Organization, 2020):

- people needs to trust its government, WHO etc for accurate information
- there is a need to identify evidence for all information
- Misinformation and disinformation needs to be avoided
- We have to be open minded and ready for acceptance for upcoming science
- Every information must be determined if the information really adds up
- We must report harmful rumors to the hosting social media platform
- We have to protect privacy
- Do not share any information if you are not sure about source of information and its usefulness
- Confirmed that the information is secure and has been shared before by other people
- In any social conversations, we need to participate responsibly
- Keep yourself updated by learning new skills and information
- The over-abundance of Covid-19 related information has turned up as a big challenge that the world is facing today. Not all information that we come through are true and some are misinformation or disinformation which can be potentially harmful if further disseminated. As said by Mark Twain, "A lie can travel around the world and back again while the truth is lacing up its boots." This holds quite true in case of infodemic regarding Covid-19. Misinformation or disinformation spreads to a wide population very quickly, which make it very difficult for the people to differentiate false and fake news from accurate and trusted sources information. Everyone needs

to do their part to stop the spread of misinformation (Figure 5). If you happen to come through misleading and false information, we must report it to the hosting social media platform.
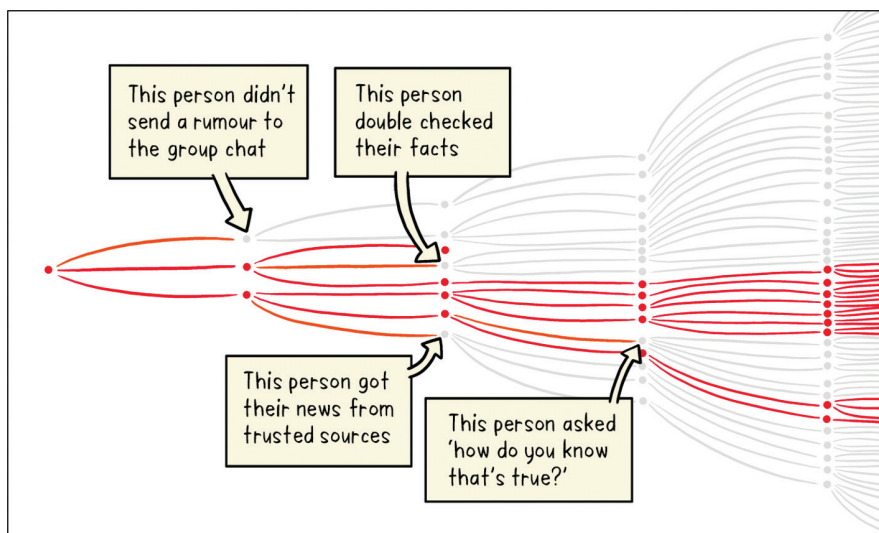

Figure 5: Flattening the Infodemic and Disinformation Curve (WHO 2021)

Conclusion

An infodemic is over load of information which includes accurate information along with misleading or false information in digital and physical environments during a disease outbreak. Overabundance of disinformation or misinformation can create a sense of confusion in people leading to risk-taking behaviours that have a potentiality of causing harm.

Reference

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