Social media platforms and health misinformation in India during the COVID-19 pandemic: A phenomenological study

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Abstract

In the present times, social media platforms are commonly perceived as rapid and efficient means of searching, sharing, and disseminating health-related information to the public. This became much more evident during the COVID-19 pandemic that brought about a surge in health misinformation on social media platforms, leading to an "infodemic" that caused panic, confusion, and agitation among the public. While social media played a crucial role in disseminating health information during the pandemic, it also facilitated the spread of false information and fake news. This "double-edged sword" effect of media has created a need to understand the impact of misinformation and disinformation on the general public. This study aims to investigate the role of social media in disseminating news related to COVID-19 and its impact on the public. The study employs a qualitative data collection methodology to collect data on how social media has influenced the public's perception of health information especially during the pandemic. The paper explores the extent to which false information and fake news on social media have contributed to confusion and anxiety among the public. It also evaluates the impact of critical thinking and fact-checking skills on mitigating the effects of health misinformation. The findings of the study will contribute to a better understanding of the impact of health misinformation on social media during a pandemic.

Keywords: Social media platforms, health misinformation, infodemic, critical thinking, fact-checking, fake news, COVID-19 pandemic.

Introduction

During COVID 19 Pandemic large number of people across the globe with easy access to technology and internet became highly dependent on social media platforms for acquiring information related to health and disease. Information related to the spread of COVID diseases, its various variants, the availability of vaccines, the death rate, the precautions, the side effects of vaccines, and various conspiracy theories were rampant during 2019 and 2020.

However, it has to be noted that prior to COVID pandemic, various diseases like cancer, diabetes, depression, anxiety have been much searched for seeking information related to prevention and cure. This includes false claims, natural cures, home-made medicines etc with little factual and scientific back up. The abundance of information available makes it difficult to sift through right and wrong misinformation often leading to self medication, panic and confusion. The extensive spread of false information through social media has garnered significant academic attention.

Although the issue of misinformation on social media has been extensively researched, but health misinformation and disinformation came to forefront when COVID-19 pandemic hit the globe. While misinformation and rumours regarding health have always existed, the active utilization of social media

platforms by an expanding online community has significantly amplified their impact. In an era where medical information was typically regarded as tedious and unexciting, the incorporation of audiovisual elements and the convenience of internet transmission, particularly through social media platforms, have facilitated the dissemination and popularity of various forms of misinformation and disinformation 1.

Cultivation Theory and Resonance: It has been evident through several researches that cultivation theory is quite helpful in assessing the long term impact of media exposure on public. Especially with the advent of social media platforms, the role of traditional media of disseminating news and information has now been overshadowed by social media platforms like twitter, facebook, and others which are customised according to the likes and choice of the news consumer. During the pandemic, more and more people were dependent on social media platform, owing to several reasons like spending more time in isolation, working from home and also sometimes owing to addiction or depression².

The cultivation theory also focuses on 'resonance' aspect, where in this case a particular experience during the pandemic lined up with the media message (misinformation/disinformation) that was being spread online³.

A huge number of media messages on anti-vaccine content is frequently shared across social media. Like for example, vaccine hesitancy was on the rise during the pandemic and lots of videos and messages surfaced on social media platforms where certain fatality cases were seen that were wrongly shown in context of vaccine. Such vaccine hesitancy is often fuelled by health misinformation and easy access to internet, followed by public discourse that further reinforces the belief that such a thing exist in real⁴.

Methodology

This study is a phenomenological investigation that specifically examines the experiences and fundamental aspects of living through the pandemic. In phenomenological research, the concepts of lived experiences and essences play a significant role. Lived experiences, as articulated by the participants, serve to define the essential structures or universal qualities of the phenomenon⁵. Lived experiences encompass the various ways in which individuals engage with and relate to a particular phenomenon. The phenomenological studies are more interested in exploring how an individual personally experiences the experience and the subjective significance they attach to it. Therefore the study used survey method of 100 people from different age groups in India. Out of these 25 were chosen for unstructured interview. The interview was divided into three main categories: the experience during pandemic in context to media usage, the use of social media platforms to gather information and the use of social media platforms to share information.

Misinformation and Disinformation or 'Fake News' in context of health and disease: If one traces the history of misinformation then following 2016 election in US, concerns over fake news on social media emerged. It was then the term 'Fake News' was used and became part of public discourse. A study done in the past has also operationalised the term fake news. The researcher studied 34 academic articles analyzed "fake news" and identified its typology: news satire, news parody, fabrication, manipulation, advertising, and propaganda. The classifications are based on factuality and deception⁶.

People tended to believe stories favouring their preferred candidate. Research on the economics of fake news revealed that social media played a significant but not overwhelming role in election news for 14% of Americans. False news stories favouring Trump were shared 30 million times on Facebook, while those favouring Clinton were shared 8 million times⁷. This clearly reflects the extent to which social media platforms can act as a catalyst to spread false information.

In context of health misinformation, one of the researchers found that health misinformation was most prevalent on Twitter, particularly concerning smoking products and drugs. However, significant misinformation also existed on important public health topics like vaccines and diseases⁸.

During the COVID-19 pandemic, misinformation spread rapidly through various channels. Social media platforms played a significant role in amplifying false information. Misinformation about the origin of the virus, potential cures or treatments, and the effectiveness of preventive measures circulated widely⁹.

Conspiracy theories and hoaxes also contributed to the spread of misinformation. Additionally, the lack of reliable information sources, the rapid pace of information sharing, and the public's heightened anxiety and desire for information created an environment conducive to the rapid dissemination of false information ¹⁰.

Several studies have been done to assess the impact of emotions and trust while believing on misinformation and results have shown interesting results. However, the role of emotions and trust also plays crucial role in falsely believing into health misinformation and disinformation that one witnessed during the corona outbreak. Emotions like fear, anxiety and panic are also to be seen and studied for further intervention.

Results and Discussion

Several finding have been discussed about the ways in people interacted with social media platforms during COVID-19 pandemic. Some of the important and useful insights have been shared in this paper.

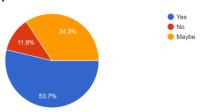


Figure-1: Do you think there is more of health misinformation than correct information available online on social media platforms?.

As per the findings it was observed that 58% of the respondent felt that there is more of health misinformation on social media platforms as compared to correct information available on these sites. While 12% of the respondents felt that correct information is being disseminated on social media platforms. The finding reflects that people have come to realise that not all information available online isn't true especially related to health and diseases like pandemic. It is also to be noted that majority of the respondents were dependent on social media platforms for their source of information yet their belief in it was not absolute. Many respondents during the interview revealed that they "...end up being more confused and scared when I see my friends on social media platforms sharing about a particular disease". While another respondent said, 'the panic is so heightened that often i start to feel and sense the symptoms of the disease as if it is happening to me! And this was the case in Covid too."

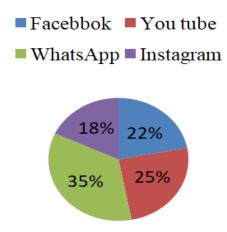


Figure-2: According to you which social media platforms have most untrustworthy information in regard to health and diseases?

Since majority of the respondents used social media platforms for gathering information, it was also found that 35% felt that WhatsApp was among the most untrustworthy source of information in regard to health and diseases. This was followed by YouTube being 25% Facebook being 22% and Instagram being 18%. During the interview a 42 year old female also revealed that ".....undoubtedly WhatsApp became the source of information for all sorts of information during covid. During Covid the, the family groups was the only way to stay connected but it also became a hub for lots of false claims and conspiracy theories about covid".

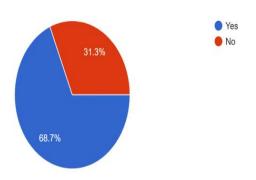


Figure-3: Is it difficult for you to understand any health claim that you see on social media platforms?

An interesting finding that also surfaced during that survey that most of the respondents found it difficult to understand or asses any sort of health claim that they saw or read on social media platforms. While only 31% of the respondents felt that it wasn't a difficult task. A 70 year old retired official revealed that, ... it is very difficult to sift through right and wrong. Everyone is sharing opinion and sometimes based on false facts. It becomes a cumbersome task to check and verify and sometimes we tend to believe those things without checking".

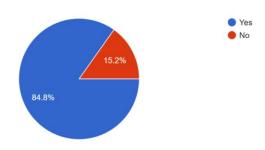


Figure-4: Do you believe it is possible to unknowingly become susceptible to health-related misinformation?

Interestingly 85% of the respondents said that it was very likely for them that they unknowingly became susceptible to health misinformation related to covid while only 15% claimed they didn't. During the in depth interview many respondents admitted that they often shared posts that they thought was true only to later realise that it was false claim. One of the respondents said that she "... shared a video of a doctor claiming that certain herbs in ayurveda is a sure shot method to keep the virus away. But my interaction with some doctors in the comment section led to backlash and i had to remove the post".

Conclusion

False information, particularly concerning health and diseases, tends to spread more rapidly than accurate information. This can lead to misguided medical treatment, instill fear and panic among the public, and in some cases, create hesitancy towards vaccines or specific medical treatments. Given the context of the pandemic and the abundance of misinformation on social media platforms, it becomes increasingly crucial for media researchers and public health experts to comprehend the phenomenon of health misinformation, its root causes, and the reasons behind its propagation.

In many instances, various psychological factors such as belief systems, religious influences, community practices, traditional beliefs, and cognitive biases come into play when individuals process health-related misinformation. As social media serves as the central hub for information dissemination, concepts like 'echo chambers,' 'filter bubbles,' and deep fakes present additional challenges to the persistent issue of misinformation and disinformation. People often search for content that is simplified and easy to understand. The use of photos and graphics makes it more attractive and compelling. Several participants admitted that they follow media influencers for health and wellness on Instagram and facebook. Here it was found that 'trust' and 'credibility' of the media influencer was more important rather than the content that he/she is providing. Also, often attractive headlines, picturesque visuals and beautifully shot and edited videos were more attractive visa via other factual content that lack these.

There is a huge amount of cost attached to health. Therefore it is paramount that health misinformation should be tackled by filling the knowledge gaps where information is saying. The reason why misinformation was increased during the pandemic is because there was lack of information regarding the COVID and its precautions. The COVID-19 pandemic has left a digital pandemic which is health misinformation. There is a need for medical innovation in public health sector. With AI, technology is growing faster and so are several social media platforms. This indeed will also give rise to misinformation but it can be tackled using technology, innovation and creativity in the public health sector. The present study gives useful insights on how people interact with the present social media platforms for health related information and what interventions are possible at technology and public health level.

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