

# We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

Open access books available

185,000

International authors and editors

200M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index  
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?  
Contact [book.department@intechopen.com](mailto:book.department@intechopen.com)

Numbers displayed above are based on latest data collected.  
For more information visit [www.intechopen.com](http://www.intechopen.com)



# COVID-19 Infodemic and Indian Media: An Evaluative Study

*Kinshuk Pathak*

## Abstract

The global widespread of novel COVID-19 also witnessed fake news being circulated in social media. Dealing with these infodemic and providing authentic information was a big challenge for the government and media professionals. The present chapter is an attempt towards this direction to evaluate the role and initiatives of Indian media in dealing with fake news and providing authentic information to the people. A desktop analysis approach of news channels, news websites will be used to conduct the study. The study also lists various credible sources, myth busters and fact checkers on COVID-19.

**Keywords:** COVID-19, infodemic, fake news, media, journalism

## 1. Introduction

The outbreak of novel COVID-19 across the world, parallelly witnessed various misleading information, rumors, fake news and misinformation referred as infodemic by WHO [1]. A study of PAHO (Pan American Health Organization) reveals that about 361,000,000 videos were uploaded on YouTube with keyword “COVID-19” and “COVID 19”; 19,200 articles have been indexed by Google Scholar on COVID-19; and 550 million tweets have been found in March with keywords “coronavirus,” “corona virus,” “covid19,” “covid-19,” “covid\_19” or pandemic [2]. The overabundance of information generated on COVID-19 especially scientific and medical information and its rampant sharing without being vetted is critical for a pandemic. Fake information often dissolves the available authentic information. The uncertainty and anxiety arising from COVID-19 has provided the perfect base for immediate and widespread sharing of fake information.

Newspapers, News channels, News websites are potential medium for people to seek information on latest topics and events. News stories and articles published in these channels generate awareness, guides and inform people in many ways. According to Schmidt et al. [3] news coverage aims to report any event effectively and present various perspectives of the event. Amidst the current pandemic situation news agencies are continuously serving people with information on COVID-19, its preventive measures, guidelines issued by the government and fake information being circulated. A need was henceforth identified to study the role of news agencies in controlling the fake information.

According to WHO [4] myths related with COVID-19 are scattered on various domains. Some of the most common myths are:

1. Hydroxychloroquine and chloroquine used for malarial patients can be used to cure COVID-19.
2. Masks should be used during exercising also.
3. COVID-19 can spread through shoes.
4. COVID-19 is caused by bacteria.
5. Use of mask for longer duration can cause CO<sub>2</sub> intoxication.
6. Alcohol consumption can prevent from COVID-19.
7. Thermal scanners can identify COVID-19 infection.
8. COVID-19 is transmitted through flies.
9. 5G mobile networks are spreading COVID-19.
10. Sun exposures prevent from COVID-19.
11. Pneumonia vaccines prevent from COVID-19.
12. Using saline water to rinse nose prevents COVID-19.
13. Garlic consumption reduces the risk of COVID-19.

According to Naeem and Bhatti [5] “in such a rapidly changing situation, with millions on lockdown, social media outlets such as Twitter, Facebook, WhatsApp, Instagram, and WeChat, have become major sources of information about the crisis.” Another study of Islam et al. [6] points out that “Facebook, Twitter, and online newspapers have been identified as the best platforms for monitoring misinformation and dispelling rumors, stigma, and conspiracy theories among the general people.” A need was therefore felt to analyze the websites of news channels to study the approach adopted to control the fake information. Researcher identified two key roles of media professionals in the current pandemic situation: (a) To generate awareness among the people; (b) To disseminate authentic information and filter fake information.

## **2. Scope of study**

The scope of study was limited to the websites of Indian news channels. Future studies can be carried on news programmes focusing on mis-information, comparative study of print and electronic media, larger samples can also be considered for study.

## **3. Methodology**

Desktop analysis approach validated in earlier studies of Nash and Churchill, 2020 [7]; Yuvaraj, 2020 [8] was used in the study. WHO has notified some misinformation related with COVID-19. In the present study researcher evaluated the

S. No	News channel	URL
1	AAJ TAK	<a href="https://www.aajtak.in/">https://www.aajtak.in/</a>
2	ABP NEWS	<a href="https://www.abplive.com/">https://www.abplive.com/</a>
3	ZEE NEWS	<a href="https://zeenews.india.com/">https://zeenews.india.com/</a>
4	Republic BHARAT	<a href="https://bharat.republicworld.com/livetv">https://bharat.republicworld.com/livetv</a>
5	NDTV India	<a href="https://www.ndtv.com/">https://www.ndtv.com/</a>
6	NEWS18	<a href="https://www.news18.com/">https://www.news18.com/</a>

**Table 1.**  
*Websites of news channels.*

coverage of Indian news channels on the misinformation topics notified by WHO. The official websites of news channels was considered for the study. Each topic notified by WHO was searched on the news websites and the information obtained was subjected to analysis. **Table 1** shows the websites considered for study.

Researcher used the fake news segments enlisted on WHO myth busters [4] webpage to evaluate the fake news covered by the news channels. The criteria are listed below:

- 5G Mobile networks
- Alcohol
- Antibiotics
- Bleach
- Cold weather, snow
- Drugs
- Garlic
- Hand dryers
- Holding your breath
- Hot and humid climates
- Hot baths
- Hot peppers
- Houseflies
- Hydroxychloroquine
- Masks, CO2 intoxication
- Masks, exercise

- Medicines
- Methanol, ethanol
- Mosquitos
- Older people, younger people
- Pneumonia vaccines
- Recovery
- Saline
- Shoes
- Sunny and hot weather
- Thermal scanners
- Ultra-violet (UV) lamps
- Viruses, bacteria, antibiotics

#### **4. Findings**

The findings of the study are summarized below.

**Table 2** and **Figure 1** shows the coverage of news by the news channels where Aaj Tak channel webpage had more news articles or post (38) than other channels followed by ABP News (35).

It can be seen from the analysis that Aaj Tak covered 38 issues followed by ABP News 35 issues, 33 issues by Zee News, 29 issues by News 18 and Republic Bharat out of 28 major misinformation topics identified by WHO. These channels covered 2–3 news stories on a misinformation related with COVID-19. At times when print media is also suffering, as most people have stopped subscribing to print newspapers due to fear of COVID-19, Indian media is responding through electronic media and news websites to cater to the information needs of the people.

#### **5. Conclusion**

The current study found the active role played by the News channels in combating fake news and making people aware about authentic information. Media has to play an important role in pandemic situation as there is no any proper vaccine or drug to treat COVID-19. Only awareness and following preventive measures is the key to overcome the current health crisis. The study also validates that the key role identified by researcher (a) to generate awareness among the people; (b) to disseminate authentic information and filter fake information is actively being carried by the Indian media. Also, tackling infodemic is a big challenge. In order to control the rapid spread of fake information through social media there is a need to monitoring or regulatory body to filter information on the web. Also, government should authorize institution or organization who can issue information so that people can also identify

S. No	Segments	AAJTAK	ABP NEWS	ZEE NEWS	Republic Bharat	NDTV	News 18
1	5G Mobile networks	3	2	2	2	2	2
2	Alcohol	5	4	3	2	4	3
3	Antibiotics	1	1	0	0	0	0
4	Bleach	0	0	0	0	0	0
5	Cold weather, snow	0	0	0	0	0	0
6	Drugs	1	2	1	2	1	1
7	Garlic	2	2	2	2	2	1
8	Hand dryers	0	1	1	0	0	1
9	Holding your breath	0	0	0	0	0	0
10	Hot and humid climates	1	1	1	1	1	1
11	Hot baths	2	2	2	1	1	1
12	Hot peppers	0	0	0	0	0	0
13	Houseflies	2	2	2	2	2	2
14	Hydroxy chloroquine	2	2	2	1	1	1
15	Masks, CO2 intoxication	0	0	0	0	0	0
16	Masks, exercise	1	1	1	1	1	1
17	Medicines	2	1	1	1	1	2
18	Methanol, ethanol	2	2	2	2	2	2
19	Mosquitos	1	0	0	0	0	1
20	Older people, younger people	2	2	2	2	2	2
21	Pneumonia vaccines	2	2	2	2	1	1
22	Recovery	1	1	1	1	1	1
23	Saline	1	1	1	1	1	1
24	Shoes	1	1	1	1	1	1
25	Sunny and hot weather	2	2	2	1	2	1
26	Thermal scanners	2	1	2	1	1	1
27	Ultra-violet (UV) lamps	1	1	1	1	1	1
28	Viruses, bacteria, antibiotics	1	1	1	1	1	1
		38	35	33	28	29	29

**Table 2.**  
*Coverage of news post on fake news.*



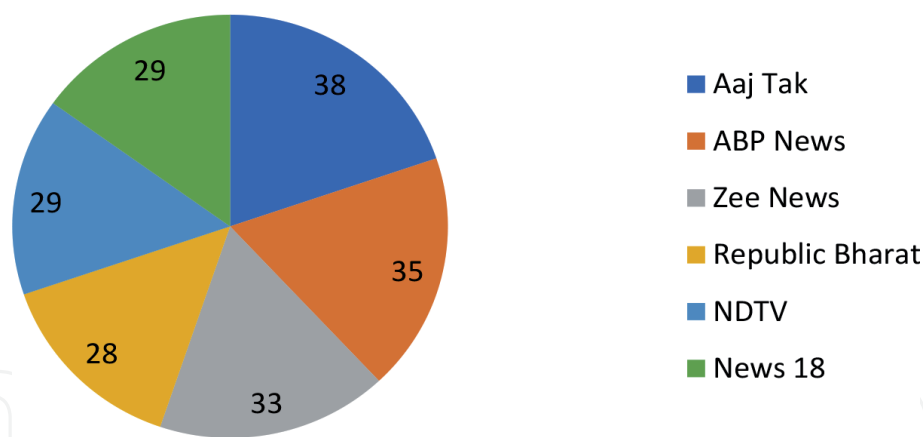


Figure 1.  
An overview of coverage of each channel.



Figure 2.  
IFLA guidelines on fake news [9].

credible, authentic information and easily figure out fake information. Similar research can be carried to evaluate the role of media. The present study was limited to the websites of news channels. It would be interesting to conduct a study of news programmes focusing on fake information and carrying a comparative study of print

and electronic media. One can follow the recommendations below to evaluate the information and overcome infodemic.

## 6. Guide to identify fake news

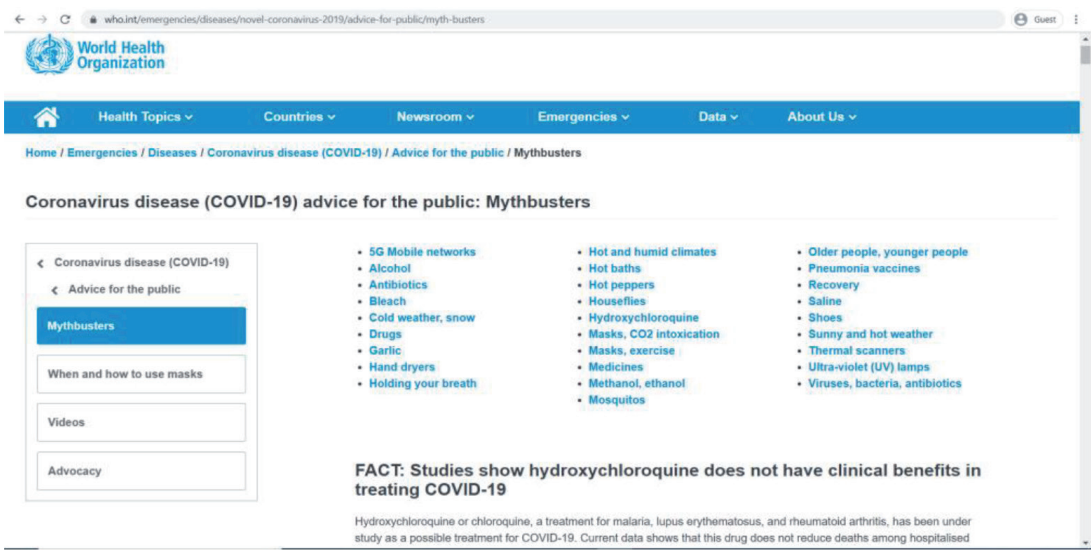
Global library association IFLA has released an infographic to spot fake news shown in **Figure 2**.

Alternatively, WHO mythbusters website (**Figure 3**) can also be used to get authentic information related with COVID-19.

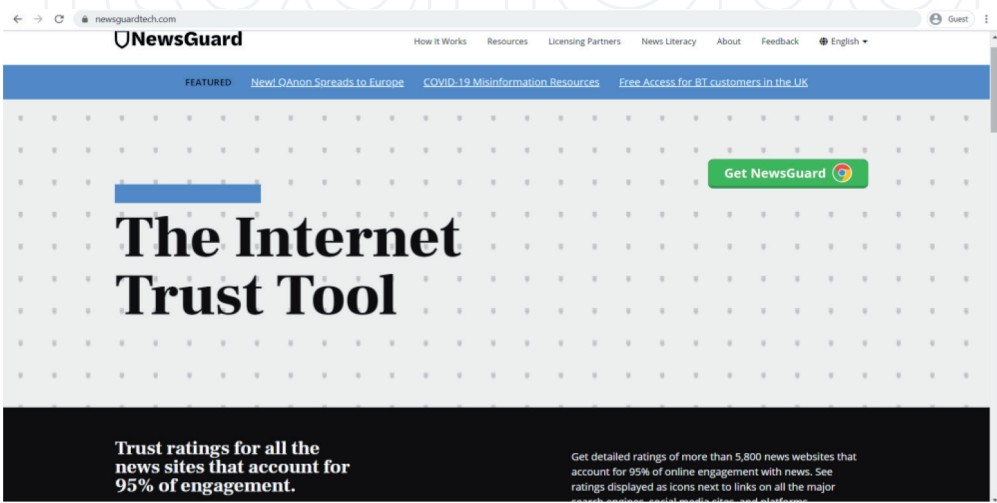
News Guard (**Figure 4**) can also be used to get trusted information from the Internet.

Some of the trusted information sources on COVID-19 are:

1. <https://www.who.int/emergen.../diseases/novel-coronavirus-2019>
2. <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>



**Figure 3.**  
*WHO mythbusters on COVID-19 [1].*



**Figure 4.**  
*NewsGuard [10].*



3. <https://experience.arcgis.com/.../685d0ace521648f8a5beeeee1b9...>
4. <https://www.arcgis.com/apps/opstdashboard/index.html...>
5. <https://pages.semanticscholar.org/coronavirus-research>
6. <https://www.kaggle.com/allen-ins.../CORD-19-research-challenge>
7. <https://www.mohfw.gov.in/>

### **Conflict of interest**

The authors declare no conflict of interest.

### **Author details**

Kinshuk Pathak  
Central University of South Bihar, Gaya, India

\*Address all correspondence to: [kinshukpathak@gmail.com](mailto:kinshukpathak@gmail.com)

### **IntechOpen**

© 2020 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. 

## References

- [1] WHO. Immunizing the public against misinformation [Internet]. 2020. Available from: <https://www.who.int/news-room/feature-stories/detail/immunizing-the-public-against-misinformation> [Accessed: 2020-08-01]
- [2] PAHO. Understanding the infodemic and misinformation in the fight against COVID-19 [Internet]. 2020. Available from: [https://iris.paho.org/bitstream/handle/10665.2/52052/Factsheet-infodemic\\_eng.pdf?sequence=14](https://iris.paho.org/bitstream/handle/10665.2/52052/Factsheet-infodemic_eng.pdf?sequence=14) [Accessed: 2020-08-01]
- [3] Schmidt A, Ivanova A, Schäfer M S. *media* attention for climate change around the world: A comparative analysis of newspaper coverage in 27 countries. *Global Environmental Change*. 2013. 23(5), 1233-1248.
- [4] WHO. Coronavirus disease (COVID-19) advice for the public: mythbusters. Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters> [Accessed: 2020-08-01]
- [5] Naeem SB, Bhatti R. The COVID-19 'infodemic': a new front for information professionals. *Health Information and Libraries Journal*. 2020. DOI: <https://doi.org/10.1111/hir.12311>
- [6] Islam MS, Sarkar T, Khan SH, Kamal Abu-Hena M, Hasan SMM, Kabir A, Yeasmin D, Islam MA, Chowdhury KIA, Anwar KS, Chughtai AA, Seale H. COVID-19-related infodemic and its impact on public health: a global social media analysis. *The American Journal of Tropical Medicine and Hygiene*. 2020. DOI: 10.4269/ajtmh.20-0812
- [7] Nash M, Churchill B. Caring during COVID-19: a gendered analysis of Australian University responses to managing remote working and caring responsibilities. *Gender, Work & Organization*. 2020. DOI: <https://doi.org/10.1111/gwao.12484>
- [8] Yuvaraj M. Global responses of health science librarians to the COVID-19 (Corona virus) pandemic: a desktop analysis. *Health Information and Libraries Journal*. 2020. DOI: <https://doi.org/10.1111/hir.12321>
- [9] IFLA. How to spot fake news. 2020. Available from: <https://www.ifla.org/publications/node/11174> [Accessed: 2020-08-01]
- [10] News Guard. Available from: <https://www.newsguardtech.com/> [Accessed: 2020-08-01]