



Infodemic during Pandemic: An empirical study on the current scenario of infodemic during corona pandemic

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Received : January 2021

Accepted : February 2021

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Abstract: The study on Infodemic during Corona Pandemic is a research work done to understand the rise in the number of misinformation during the COVID 19 pandemic and to analyze the reasons behind its occurrence. This research work has been carried out with certain objectives highlighting its existence in the society, the actual reason behind this practice, knowing the government's strategy on fake news, analyzing the success rate of such plans and reaching out to people and making them aware of the magnitude and consequences of the current scenario.

For this, the hypothesis of our research work has been listed below:

1. Infodemic is on the rise.
2. Bystander inaction encourages the proliferation of fake news.
3. Social media is most responsible for the current infodemic scenario.

We have used two major methodologies for our study:

1. Primary research
2. Secondary research

Referring to the Primary Research, we have carried out a survey of our study on the general masses. The required information on infodemic during Pandemic was collected with the help of an online survey. We conducted an online survey of 519 people consisting of ten questions.

In the context of Secondary Research, we read a number of news articles reported by various news organizations and agencies on the internet and we also referred to WHO findings on fake news during the corona pandemic.

After the completion of our Research work, the conclusion would be drawn depending upon the outcome, that is, on the basis of our hypothesis which would either turn out to be correct or incorrect.

Keywords : COVID 19, Pandemic, social media, infodemic, fake news, misinformation, credibility, different forms of media

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Introduction:

"We're not just fighting an epidemic; we're fighting an infodemic."

-Tedros Adhanom Ghebreyesus

Director-General of the World Health Organization (WHO)

WHO explains that infodemics are an extreme amount of information regarding a problem, which makes it hard to identify a solution. They can spread misinformation, disinformation and rumours in a health crisis. Infodemics can hinder an effective public health response and create confusion and disbelief among people.

The COVID outburst came to light on December 31, 2019 when China informed the World Health Organisation of a bunch of cases of pneumonia of an unidentified cause in Wuhan City in Hubei Province. Subsequently the disease spread to more provinces in China, and to the rest of the world. The WHO has finally declared it a pandemic. The virus has been named SARS-CoV-2 and the disease is now called COVID-19.

Managing the "infodemic" has been a serious challenge during the COVID-19 pandemic, said Soumya Swaminathan, Chief Scientist, WHO.

Infodemic is too much information, including false or misleading information, which leads to confusion, risk-taking and ultimately mistrust towards governments and the public health response.

The Covid-19 pandemic has caused social and economic disruptions all around the globe. Moreover, the worrisome situation is not just because of the pandemic but the ease at which fake news has been spreading around it. The World Health Organization (WHO) admitted that humanity is fighting two foes — a pandemic and an "infodemic".

Infodemic is an overabundance of information that makes it difficult for people to identify truthful and trustworthy sources from false or misleading ones. In the present state of emergency, a barrage of information on the virus has deluged the traditional and social media space.

The recent exodus of migrant labourers from NCR (risking spread of virus through community transmission to the rural areas where healthcare infrastructure is in a dismal state) was triggered due to panic created by some fake/misleading news on social media.

Rationale : The world is struggling with the deluge of misinformation about the evolving pandemic. The fake news surrounding the origin of the virus, its subsequent spread and threats it poses has nearly engulfed every nation, although with varied intensity.

For instance, an influential study by the Vaccine Confidence Project (VCP) found more than 240 million digital and social media messages globally on COVID-19 by mid-March, at an average of 3.08 million daily messages. A vast majority of these messages were found to be false or very misleading in their intent.

As per the data compiled by the International Fact Checking Network (IFCN) between January and April, fake news particularly in social media can be put into five broad categories: content about causes, symptoms, and cures, spread of the virus, government documents and misrepresentation of comments, photos and videos of politicians, and conspiracy theories blaming certain country, groups or communities for the spread of the virus.

For instance, in January, a doctored video surfaced about how China is bombing its own citizens in Wuhan. This was followed by a flurry of videos of people prescribing miracle cures, some faking infections and using hot water and alcohol to prevent to develop immunity to virus.

This has led individual countries to come out with appeals and messages to counter such fake news, with even the World Health Organisation (WHO) being compelled to brandish it as an "infodemic", and appealed to people to believe in credible and scientific information.

To sum up, the world has been simultaneously fighting two viruses; one real and the other being the fake one but equally lethal. Fake news and misinformation have created numerous hurdles for governments at all levels; central, state and local, in their fight against the pandemic. Authorities have found repeatedly engaged in issuing clarifications to keep people away from not falling prey to such rumours and

fake news. Even one saw the reports of social media companies such as Google, Facebook and other intermediary platforms in mid-February deciding to create an Information Trust Alliance (ITA) to tackle fake content. But it has borne little fruit if the latest findings from BOOM are to be seen.

Another reason for choosing this topic for our research work is the fact that this has been less researched upon and a large section of the society still remains unaware. Our main motive behind carrying out this research work is to reach out to people and speak to them about it.

Objectives:

The research study aims to achieve the following objectives.

- To know the trend of infodemic : Many would not have imagined fake news becoming a major menace in the time of life-threatening pandemic. Yet, this has become.
- Major causes : People's media consumption, misinformation, and important attitudes and behaviours during the coronavirus may have led to this infodemic situation.
- Measures to control infodemic : Till recently, the onus of curbing the spread of such news and misinformation rested on social media and messaging platforms such as Facebook, Twitter, WhatsApp and others, but now this disparate grouping of people and corporates are doing their bit to sensitise online users about the importance of sharing content responsibly, although fact-checkers doubt the efficacy of these attempts.
- Infodemic catalyst, promoter and all media involved : We have diverse means of media available today for mass communication. And some way or the other they are contributing to this infodemic.
- To analyze the impact : The infodemic has greatly impacted us during the COVID pandemic. We have seen fake news related to the symptoms and cure of the disease, hate being spread for a particular community and then fake news related to vaccine.

Scope :

The area of our study on Infodemic during Corona Pandemic has been less explored and thus requires special attention. This has been in practice in the world since long. With each year passing by, the number of cases of fake news has increased. Some factors can jeopardize trust, including delayed and unclear communication, inconsistency, and the infodemic. The threats posed by infodemics are wide-ranging. In addition to the implications for individual health, they can stoke xenophobia, hatred and exclusion, which may have long-term impact on public health and human rights.

Tackling this threat for current and future generations is part of WHO's broader investment in risk communication and community engagement in preparedness and response over time. WHO is hosting its first Global Infodemiology Conference, starting on 29 June 2020, to identify examples and tools to help manage infodemics and establish a community of practice and research.

Our study includes data from online survey. We received responses from 519 people.

Theme : The infodemic is as real as COVID-19. As with the virus, we must take every precaution to protect ourselves and our loved ones. If it is not stopped quickly, fake news shared on social media quickly gets viral and can influence a large number of users.

An invisible virus, which sometimes causes no symptoms, is difficult to control. While physical distancing, hygienic measures and the wearing of masks currently seem to be the best means of limiting the spread of COVID-19, vigilance is also one of the best ways of eradicating false and fake news.

Remaining critical when overwhelmed by an immeasurable amount of information from thousands of sources is a great challenge. People may wonder how they can play a meaningful role when even multinational corporations and governments are unable to mitigate the scope of the infodemic.

Social media users are spending more time online than ever before. It is imperative that they do their part to stop the spread of false and fake news, which will likely continue to proliferate even beyond the end of this containment.

This vast amount of information can be damaging for people's health in several ways. It can:

- make it difficult to identify accurate, evidence-based public health information and advice
- contribute to anxiety, worry and other mental health issues because of its quantity, accessibility and visibility everywhere;
- lead people to take misleading or even dangerous advice;
- build fatigue, disinterest and animosity towards public health messages; and
- encourage xenophobia, hatred and exclusion.

Methodology:

We started our research work by reading various news articles on internet as hardly any book was available on this issue.

Later, we prepared the questionnaire which consisted of ten questions. We carried out the survey online as we were not allowed to step outside because of the corona pandemic and lockdown.

Data collection :

Primary sources: The required information on Infodemic during Pandemic was collected with the help of an online survey. We conducted an online survey of 519 people consisting of ten questions.

Secondary sources: We read a number of news articles reported by various news organizations and agencies on internet and we also referred to WHO findings on fake news during the corona pandemic.

Data Analysis and Interpretation:

We carried out our survey on 519 people who mainly hailed from different parts of Bihar. People from Jharkhand, Kolkata, Delhi, Mumbai and UP also participated in our survey to put forward their opinion regarding infodemic during pandemic. Majority of them were students (pursuing Bachelors, Masters or preparing for competitive examinations) while others were engaged in professions like Journalism, Academics, Engineering, Banking, Business, Jewellery Manufacturing, Health Professional, Cabin Crew, Advocacy and others.

1. "We're not just fighting an epidemic; we're fighting an infodemic", said World Health Organisation (WHO) Director General. Do you agree with this statement?

Options	Responses (Number)	Responses (Percentage)
Yes	467	91.2%
No	45	8.8%

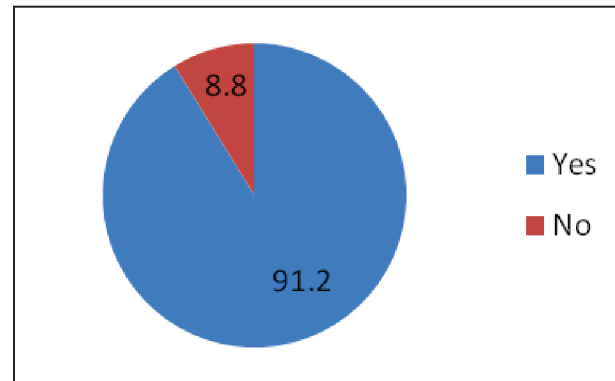


Diagram 1. Majority of the people agreed to the above statement that we're not just fighting an epidemic; we're fighting an infodemic while others don't agree.

2. Which medium do you consume the most to get information about the pandemic?

Options	Responses (Number)	Responses (Percentage)
Newspaper	104	20.1%
Television	150	29%
Radio	9	1.7%
Social Media	253	49.2%

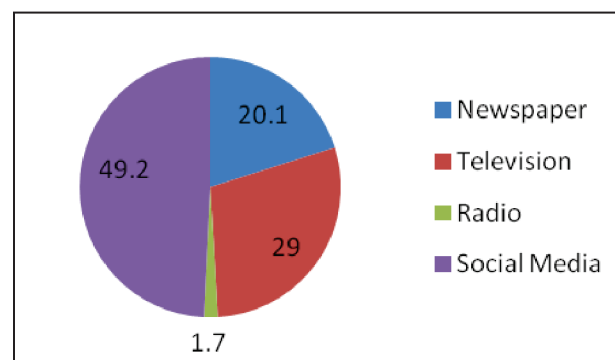


Diagram 2 . Majority of the people consume Social media the most to get the information about the pandemic. The second most consumed media was found to be television and also some people used to depend on newspaper to get the information. Very few people were found to consume radio to get information about the pandemic.

3. Do you simply forward something when you receive it from your friends or family thinking that it must be true or do you cross check it?

Options	Responses (Number)	Responses (Percentage)
Yes	125	24.2%
No	390	75.8%

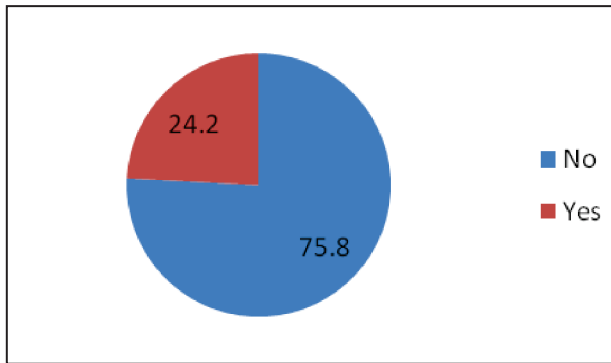


Diagram 3. 390 people agreed that they do not just simply forward something when they receive it from their friends or family thinking that it must be true but unfortunately 125 people are there who just simply forward anything they receive

5. Which media according to you is the least credible?

Options	Responses (Number)	Responses (Percentage)
Newspaper	23	4.4%
Television	104	20.4%
Radio	141	27.4%
Social Media	246	47.8%

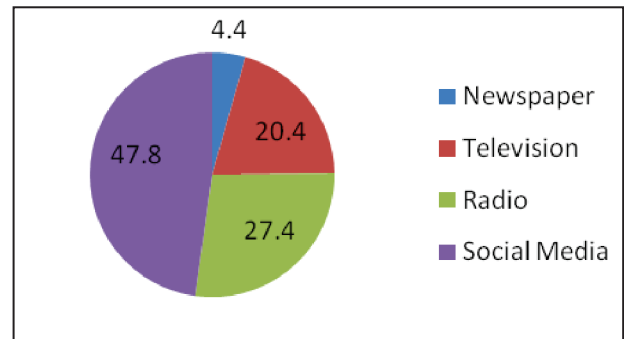


Diagram 5. Majority of the people think social media as least credible media. 141 people voted for radio, 104 people voted for television and 23 people voted for newspaper in the matter of less credibility.

4. Which media according to you provides the most credible information?

Options	Responses (Number)	Responses (Percentage)
Newspaper	233	45.2%
Television	120	23.3%
Radio	26	5%
Social Media	136	26.6%

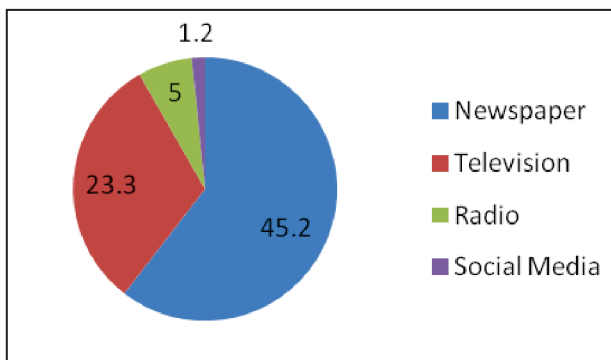


Diagram 4. Majority of the people thinks newspaper as most credible media. 120 people voted for television, 136 people voted for social media and 26 people voted for radio in the matter of more credibility.

6. Which media according to you is most responsible for this infodemic?

Options	Responses (Number)	Responses (Percentage)
Newspaper	55	10.7%
Television	158	30.7%
Radio	13	2.5%
Social Media	289	56%

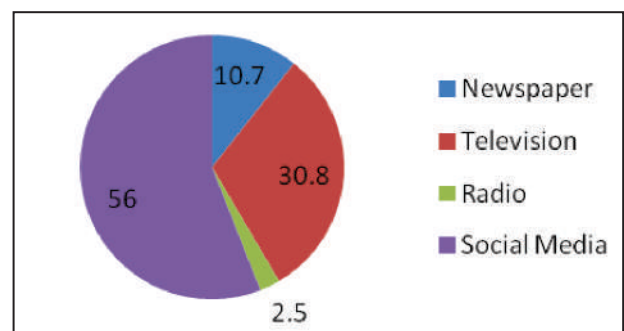


Diagram 6 . According to our research, many people (56%) think that social media is responsible for this infodemic. While they think that after social media, television (30.7%) and newspaper (10.7%) have contributed to it. Also, very less people (2.5%) think that radio is responsible for this infodemic.

7. How often do you come across misinformation during this pandemic?

Options	Responses (Number)	Responses (Percentage)
Never	36	7%
Very rare	191	37%
Every week	151	29.4%
Every day	98	19.1%
More than once a day	39	7.6%

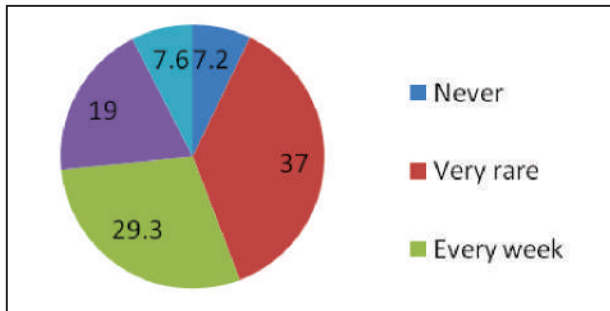


Diagram 7. 37% of the people say that they rarely came across fake information or misinformation during this pandemic while 29.4% of the people came across the misinformation during this pandemic every week. 19.1% of the people says that they came across misinformation everyday during this pandemic. Unfortunately 39% of the people have witnessed misinformation more than once in a day and also 7% of the people never came across misinformation during this pandemic.

8. Do you try to inform people about fake news that is being circulated?

Options	Responses (Number)	Responses (Percentage)
Everytime	206	39.7%
Sometime	226	43.8%
Never	85	16.5%

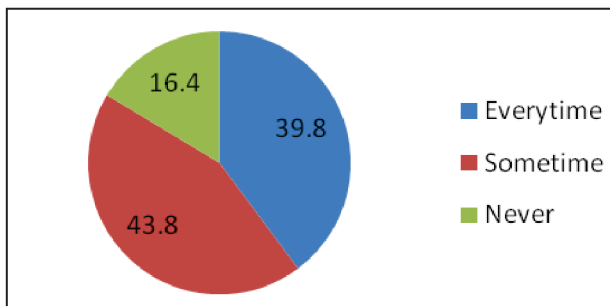


Diagram 8 . 206 people are there who every time try to inform other people about fake news which is being circulated while 226 people sometimes does that and unfortunately there are some people who never inform other people about a fake news which is being circulated.

9. Do you think people would have been affected less during this pandemic if there were a check on infodemic?

Options	Responses (Number)	Responses (Percentage)
Yes	256	49.6%
No	60	11.6%
Maybe	201	38.8%

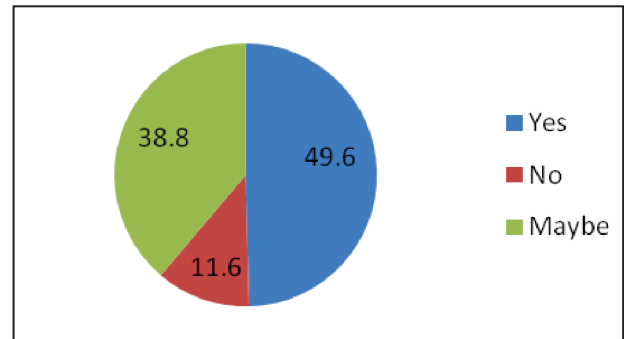


Diagram 9. 256 people believe that people would have been less affected during this pandemic if there was a check on infodemic while 60 people denied with this statement. Also, there are some people who are not sure about this.

10. Do you believe that infodemic is as serious threat like epidemic?

Options	Responses (Number)	Responses (Percentage)
Yes	462	89.9%
No	52	10.1%

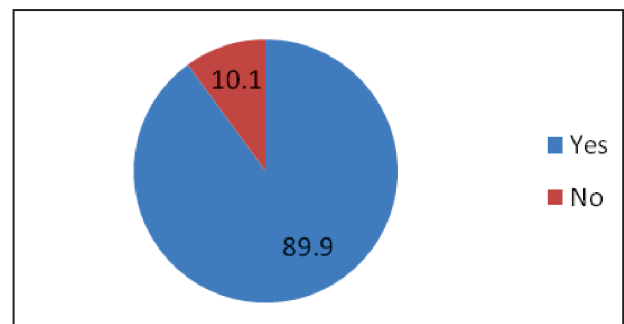


Diagram 10. Majority of the people believe that infodemic is as serious a threat as epidemic while some don't.

Findings:

The objective of our study was to find out the trend of infodemic during the corona pandemic.

As per data analysis of the primary sources, we eventually got to know that infodemic is as serious threat as epidemic, as 469 people out of 514 responses have agreed to this. Surprisingly, people are unknowingly contributing to the infodemic by simply forwarding messages as according to the survey 125 people out of 516 responses simply forward something when they receive it from their family or friends thinking that it must be true. It was found that social media is most responsible for this situation as 289 people out of 516 responses have considered social media as most responsible for this infodemic situation. Even they have considered social media as least credible media among all the other forms of media.

289 people out of 516 responses have voted for newspaper as most credible media among all the other forms of media. They have agreed that newspaper provides the most credible information. The reasons that compelled the ongoing persistent practice of infodemic was found to be the ignorance of the people towards the fake news as 85 people out of 518 responses have said that they never try to inform people about a fake news that is being circulated. It was found that majority of the people have agreed to the thought that people would have been affected less during this pandemic if there was a check on infodemic.

With reference to the secondary sources, we collected information from WHO findings on fake news during Covid 19. The different news reports and articles published by various news organizations and TV channels on the internet were of equal importance.

Recommendations:

It is said that news outlets will be more reliable sources of news than bloggers and other citizen journalists. So it is imperative that whenever you read a news story, first thing to ask yourself is whether the outlet or the journalist is trusted and respected source. Next, there is a tool like All Sides which is helpful to consider the outlet's bias. If we consider the case of citizen journalists, then you'll ask yourself whether and how this person is qualified to speak on the topic. For

example, an M.D. is more likely to be qualified to speak about medical topics, but you'll also want to consider the particular M.D.'s biases, including their professional affiliations.

Many people on your social media feeds share news without having considered its validity; in fact, many share news without even having read it first. That means it's up to you to vet the information before you assume it's true (we've got more on that below) and certainly, before you share it.

Make sure the story, itself, matches the headline. If it doesn't, it's called "clickbait." Please don't take the "bait" by forwarding it around to your contacts.

Trustworthy journalists cite their source material. Primary sources (e.g., research reports, studies, first-hand quotes) are generally more reliable than secondary sources (i.e., news and commentary about research reports, studies, and quotes). Beware of vague references that you can't easily qualify or confirm.

If the information is legitimate, you should be able to read it on other legitimate websites. Library databases are a great resource for confirming the credibility of information. It's always a good idea to verify facts using trusted sources such as the CDC, WHO, your state Department of Public Health and of course, your own doctor.

If someone is making a health recommendation that doesn't sound quite right, then there's a good chance it isn't. If "news" sounds like opinion, it probably is. If news is conveyed using emotional words and/or an emotional tone, you should be suspicious.

COVID-19 information changes minute by minute. In order to have the most accurate data you should check to make sure the information you are reading has been updated recently.

Limitations:

No doubt the outbreak of the Novel Coronavirus Disease (COVID – 19), which has brought the entire world to a standstill, poses a severe threat to human life, however, an equally dangerous and worrisome issue is the spread of false information in such difficult times but people are not treating it as a threat to humankind. As a result, little research has been done on the infodemic

thing during the corona pandemic and thus we had to face difficulties while collecting data.

Another limitation was that we were not allowed to step outside because of the lockdown due to the pandemic situation which restrict our research to only online surveys. We were not able to conduct offline surveys.

Conclusion:

The Coronavirus disease (COVID-19) is the first pandemic in history in which technology and social media are being used on a massive scale to keep people safe, informed, productive and connected. At the same time, the technology we rely on to keep connected and informed is enabling and amplifying an infodemic that continues to undermine the global response and jeopardizes measures to control the pandemic.

An infodemic is an overabundance of information, both online and offline. It includes deliberate attempts to disseminate wrong information to undermine the public health response and advance alternative agendas of groups or individuals. Mis- and disinformation can be harmful to people's physical and mental health; increase stigmatization; threaten precious health gains; and lead to poor observance of public health measures, thus reducing their effectiveness and endangering countries' ability to stop the pandemic.

Misinformation costs lives. Without the appropriate trust and correct information, diagnostic tests go unused, immunization campaigns (or campaigns to promote effective vaccines) will not meet their targets, and the virus will continue to thrive.

According to the World Health Organisation, the Covid-19-related infodemic is just as dangerous as the virus itself. False preventive measures, such as traditional African treatments and fake remedies, like eating garlic, drinking warm water with lemon slices or adulterated alcohol, hinder the fight against the illness. Similarly, conspiracy theories accusing China of manufacturing the virus, blaming 5G cell towers for spreading the disease or falsely accusing business magnate Bill Gates of causing the epidemic to sell us a vaccine may have consequences that go beyond public health.

Such rumours, myths and exaggerated facts fuel new forms of xenophobia online and offline. Many people of Chinese or East Asian origin are being insulted, assaulted or denied services. Religious, minority and elite groups are being blamed online for its spread.

Internet users who share memes, videos or photos that make fun of the virus, even without any harmful intent, also risk spreading misinformation. There is a danger of fuelling panic and confusion in the population. People no longer know who to trust and become more vulnerable to manipulation and cybercrime.

Several measures have been put in place to curb the circulation of fake news. Google removes misleading information about Covid-19 from YouTube, Google Maps, its development platforms such as Play, and in advertisements. Twitter checks, among other things, accounts that are credible sources of information about Covid-19 and monitors conversations to ensure that the keywords searched for on the virus provide access to reliable information.

The World Health Organisation has also launched a health alert on WhatsApp and a chatbot on Facebook Messenger to provide accurate information about the virus. The United Nations is sparing no effort either in tackling misinformation and cyber-fraudsters who exploit the crisis. The United Nations Development Program supports the #CoronaVirusFacts Alliance, which brings together more than 100 fact-checkers from over 45 countries in the International Fact-Checking Network.

References:

- www.who.int/covid-19/information
- www.exelatech.com
- www.nature.com
- <https://www.un.org/en/un-coronavirus-communications-team/un-tackling-%E2%80%98infodemic%E2%80%99-misinformation-and-cybercrime-covid-19>
- <https://www.thehindu.com/topic/coronavirus/>
- <https://www.thehindu.com/sci-tech/health/infodemic-management-a-serious-challenge-during-covid-19-soumya-swaminathan/article32911994.ece>
- <https://www.drishtiias.com/daily-updates/daily-news-editorials/pandemic-and-infodemic>
- <https://www.orfonline.org/expert-speak/how-fake-news-complicating-india-war-against-covid19-66052/>