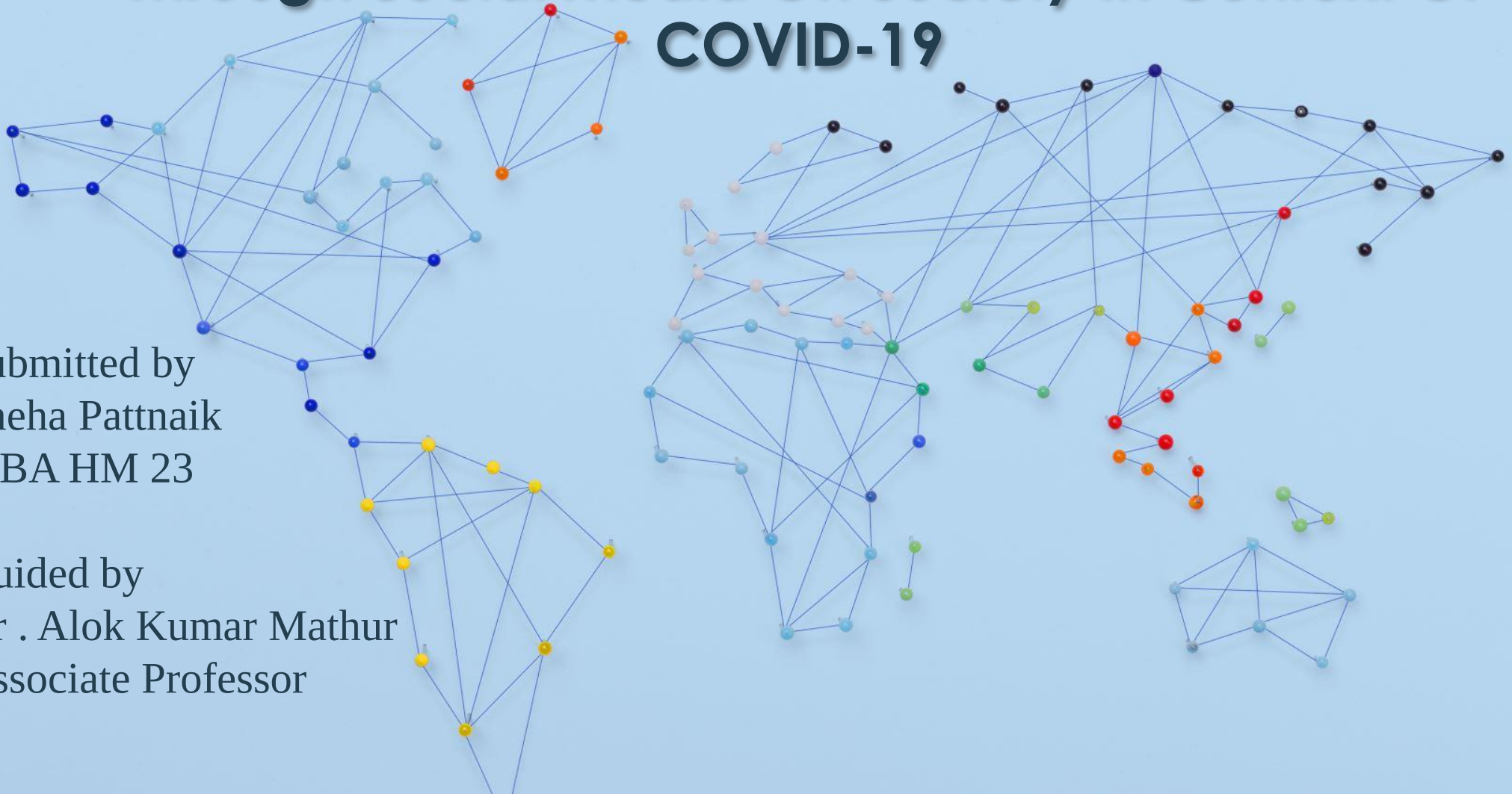


# **A Study On Assessment Of Role Of Digital Information Through Social Media On Society In Context Of COVID-19**

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# Introduction

- In the digital era, the internet is a great source of health information which has the ability to influence its users. More than a decade ago, social media and network services emerged to enable the emergence of real-time and dynamic communications between patients and healthcare workers which is considered to be a vital public health development. Though, the information discovered on internet often lacks scientific precision, as anybody may upload content. This factor is a great concern to government and users.
- The beginning of 2020 marked the emergence of the outbreak of COVID-19 that turned into an international pandemic. As a result, social media is both an indispensable source of vital information and a fertile ground for dangerous rumours all over the world. Inaccurate information is also common in other recent large-scale outbreaks. World Health Organization has stated that critical measures be required to be taken to address coronavirus infodemic.

**Title:**

A study on assessment of role of digital information through social media on society in context of COVID-19

**Research Objective**

To study the role of digital information through social media on society in context of COVID-19 outbreak.

**► SPECIFIC OBJECTIVE**

- 1. To assess the knowledge level of the participants regarding source of information on COVID-19.
- 2. To assess the source of information mostly preferred for COVID-19
- 3. To assess the acceptability of the source of information (social media) among the study population
- 4. To assess the reliability of source of information (social media) among study population
- 5. To assess the social media platforms involved in digital Information
- 6. To assess the behaviour of the study population towards digital misinformation



## LITERATURE REVIEW

### ► INFORMATION AND SOCIAL MEDIA

Social media can basically empower a community from structural, psychological, and resource empowerment process and help achieve group participation, shared identification, and collective control in the community (Carmen Mei Ling Leong, Peter Ractham, Shan L. Pan and Laddawan Kaewkitipong, 2015). In today's scenario, social media should be responsibly utilized to disseminate constant, consistent, and reliable information to bring about clarity and awareness eliminating confusion and panic. As a best and fastest way to share news, social media takes Covid-19 news from individual states, nation, and parts of the world to everyone who can gain access to it.

### ► MISINFORMATION AND SOCIAL MEDIA

A study on the effects of fake news on consumer trust in social media marketing was carried out by Tomi Pesonen (2018). The main purpose of his study was to find out, how fake news has an effect on the consumer trust in social media marketing. The procedure that the researcher used to arrive at the conclusion was quantitative methodology. The results proved that there has been seen a moderate rise in consumer distrust in social media marketing platforms compared to other places. Users feel that companies like Facebook should take certain responsibility and work with those sites that are responsible for the spread and in fighting fake news.



## METHODOLOGY

- **Study design** – Cross-sectional study
- **Sampling technique** – Non-probability sampling (Snowball technique)
- **Method of data collection** – Primary data was collected in the form of questionnaire during the outbreak of COVID-19 for assessing the knowledge level of study participants on COVID-19 and source of information preferred by them, assessing the acceptability and reliability of the source of information, assessing the type of social media platform spreading most of the information as well as misinformation, assessing the role of the social media in spreading misinformation in the society and the behaviour of the study participants towards the spread of misinformation through social media platforms.



## FINDINGS

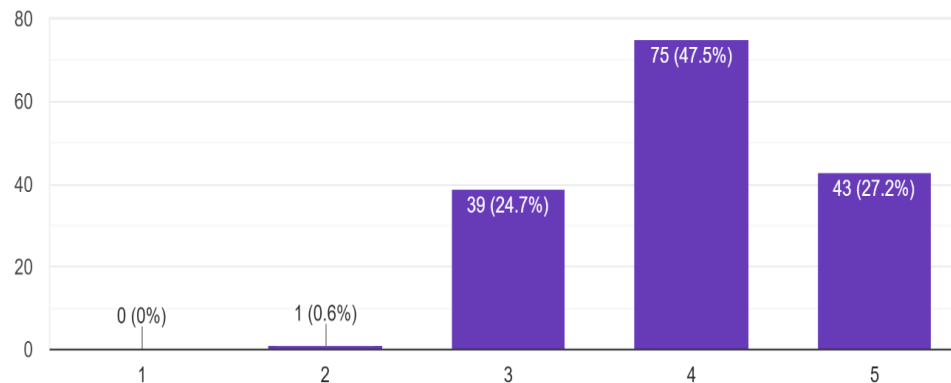
### Demographics Details

- The Mean age of the respondents of the study is 28.6
- Gender of the respondents participated in the study were 51.9 % male and 48.1% female.
- 48.1 % of the respondents of the study are employed 32% comprises the students 10.8 % are not working whereas 5.7 % are businessman
- Only 12% of the respondents are medical doctor and 1.9% are nurse, 1.3% pharmacists whereas 31.6% are somehow related to medical profession and rest of the population that comprises 53.2% are not medical professional.
- 53.4% of the respondent's household income is more than 50000 per month and 23% has household income between 30000-50000 per month whereas 20.3% has 10000-30000 per month and only 3.4% has less than 10000 per month as household income.
- 90.5% of the respondents lives in urban areas whereas only 9.5% respondents live in rural areas.
- 53.8% of the respondents lives in their own house whereas 37.3% in rented houses and 3.8 % lives in PG 1.9% in Hostels and 3.2% any other
- 70% lives with family, 19% with colleagues and friends and 10.8% alone

# Assessment of knowledge level of the respondents on COVID-19

11. How would you rate your knowledge level on COVID-19 or Novel corona virus outbreak and related information? (1- very poor, 2- poor, 3- Average, 4- Good, 5- very good)

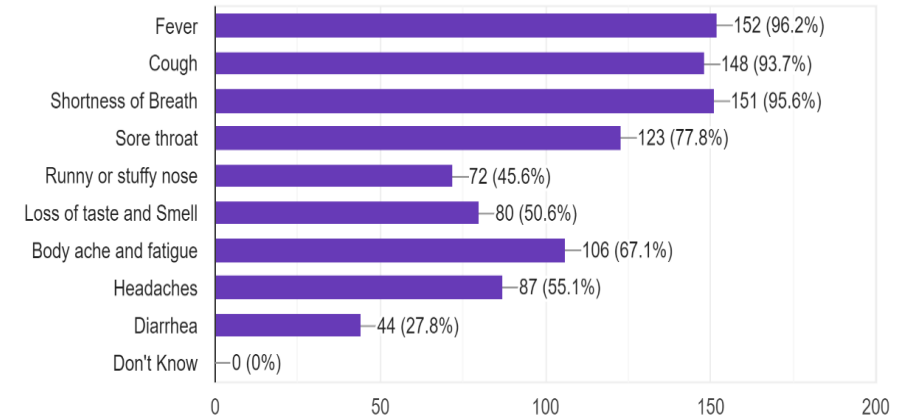
158 responses



27.2% respondents rate themselves very good at knowledge level on COVID-19 and related information 47.5% rated themselves good whereas 24.7% rated average and 0.6% as poor.

12. Which of the following can be symptoms of the novel corona virus or COVID-19?  
(You can choose more than one option)

158 responses

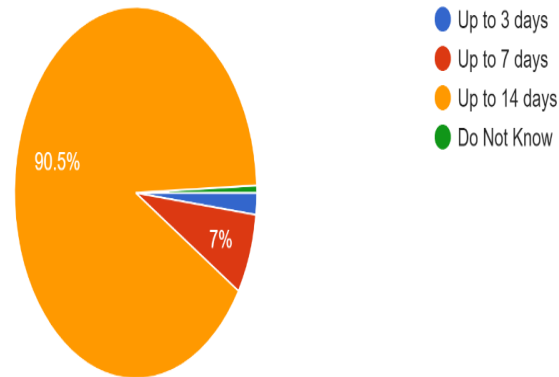


67-96% of the respondents were aware of the most common symptoms of COVID-19 whereas 44-77.8% were aware of the less common symptoms of COVID-19.

# Assessment of knowledge level of the respondents on COVID-19

13. What is the maximum incubation period (i.e., the time from viral infection to developing symptoms of illness) of the novel corona virus?

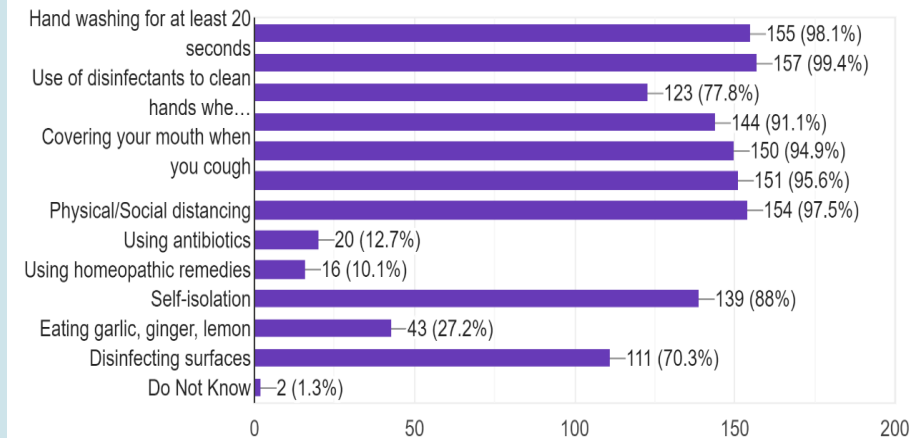
158 responses



90.5% of the respondents were aware of the maximum incubation period of the novel corona virus infection.

14. Which of the following are effective measures to prevent the spread and infection of the novel corona virus? ( You can choose more than one option)

158 responses

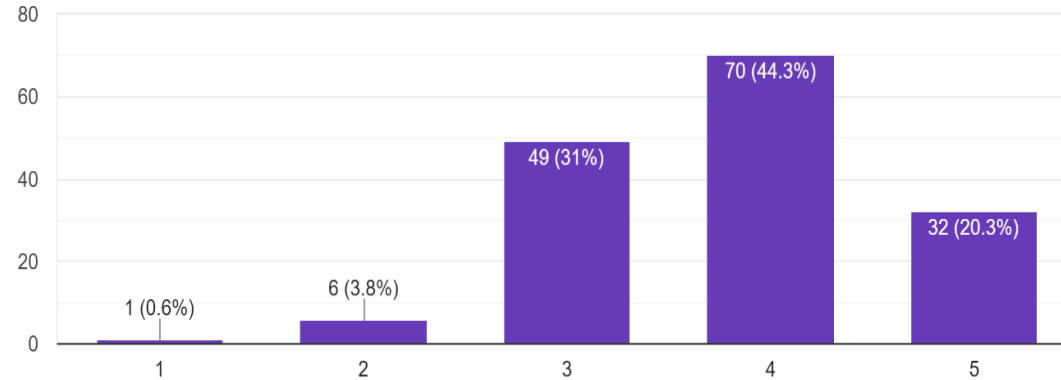


10-27% of the respondents had misconception regarding the preventive measures of novel corona virus infection and 1.3% were not aware of the preventive measures. Whereas 70-90% of the respondents were aware of the preventive measures.

## Assessment of Source of Information of the respondents

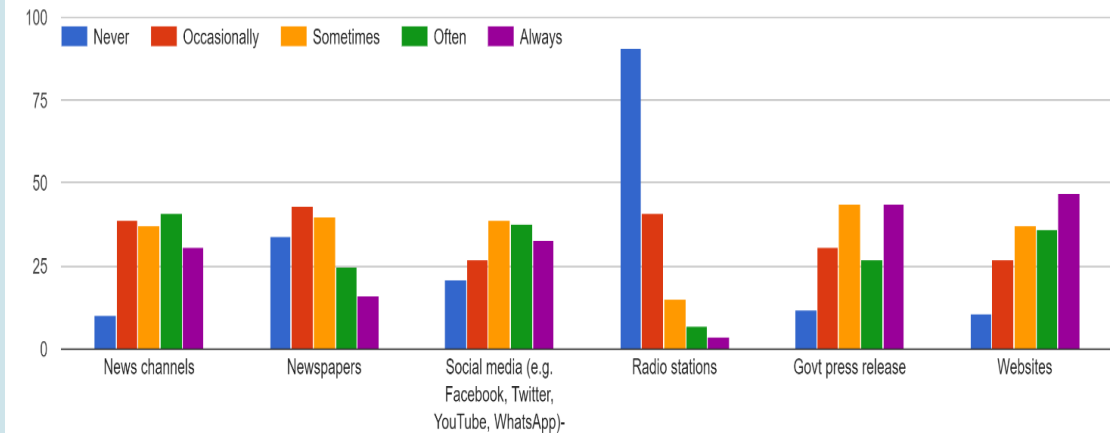
15. How often do you look for information on novel corona virus?  
(1.Never/ 2.Occasionally/3.Sometimes/4.often/5.Always)

158 responses



32-44.3% of the respondents often or always look for information whereas 3.8 – 31% look for information occasionally or sometimes and 0.6% never look for any information

16. How often do you use the following source of information to stay informed about the novel corona virus?( example. social media - Whats App, Facebook, Twitter, YouTube, etc) (slide side ...er / Occasionally/ Sometimes / Often / Always)



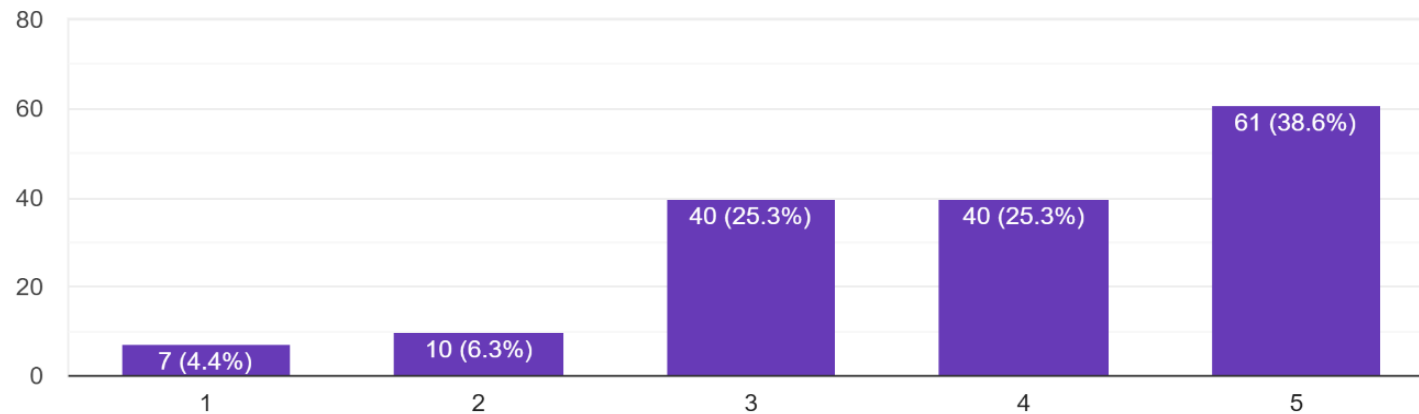
Most preferred source of information is website (23.2-29.7%), Govt press release (17-27.8%), social media (20.8-24%) & News channels (19.6-25.9%)

Least preferred source of information is Radio (2.5-4.4%) & Newspapers (10-15.8%)

## Assessment of Acceptability of Source of Information (social media)

17. Do you agree social media (Whats App, Facebook,etc) plays an important role in circulating vital information on novel corona virus? (1- Strongly dis... Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree)

158 responses

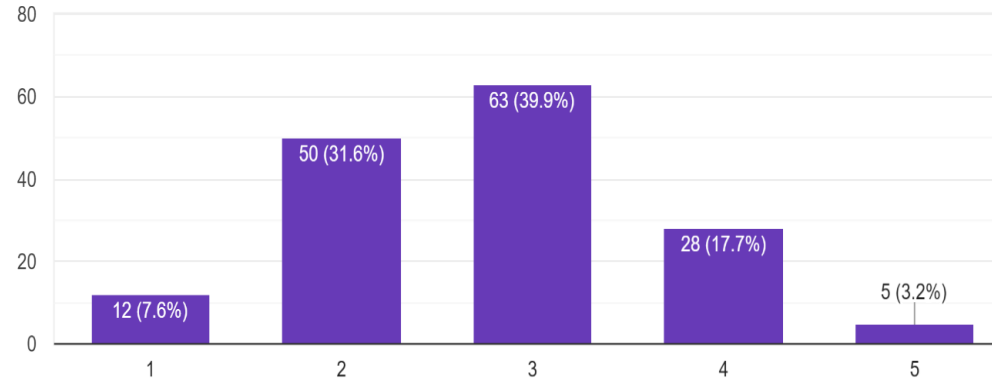


38.6% strongly agree and 25.3% agree that social media plays a important role in circulating vital information on novel corona virus whereas 4.4-6.3% of the respondents disagree

## Assessment of Reliability of Source of Information (social media)

18. How reliable according to you is social media in terms of authenticity of information on novel corona virus?

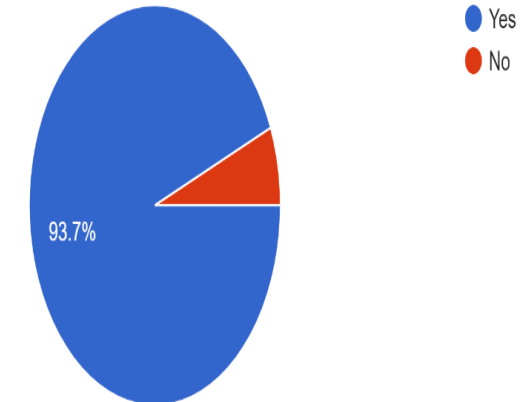
158 responses



3.2% thinks social media is completely reliable  
17.7% consider social media as reliable and 39.9% holds a neutral opinion whereas 7.6 – 31.6% consider social media as non-reliable in terms of authenticity of information

19. Have you ever come across any misinformation or rumors on social media?

158 responses

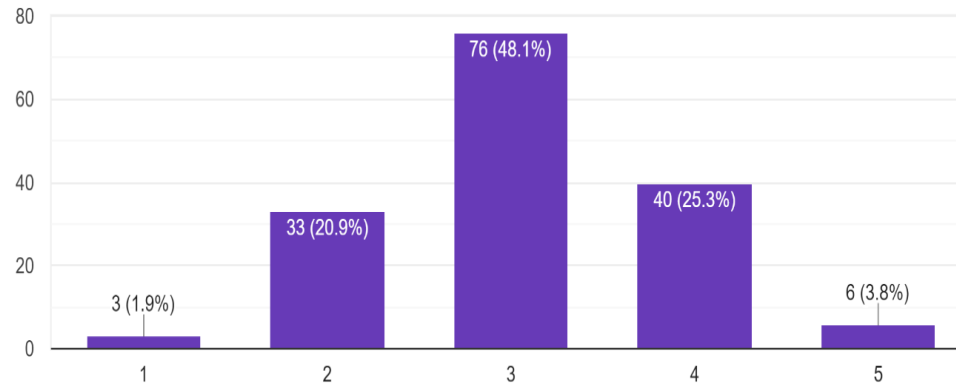


93.7% of the respondents have come across misinformation or rumours on social media

# Assessment of Role of Social Media in Digital Information

20. How often do you get rumors or misinformation on novel corona virus or related on social media? (1.Never/2.occasionally/3.Sometimes/4.Often/5.Always)

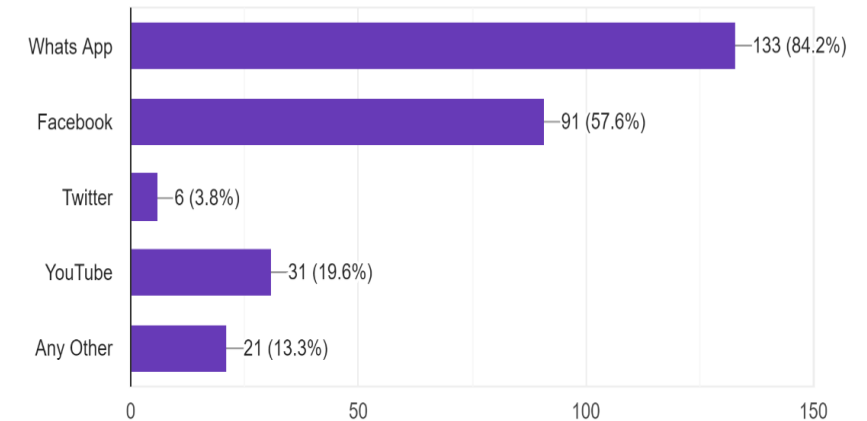
158 responses



3.8-25.3% of the respondents always or often get misinformation on novel corona virus or related on social media, 48.1% sometimes get misinformation on novel corona virus on social media whereas 1.9-20.9% of the respondents occasionally or never got misinformation on novel corona virus or related on social media

21. From which social media platform do you get most of the rumors on novel corona virus or related?

158 responses

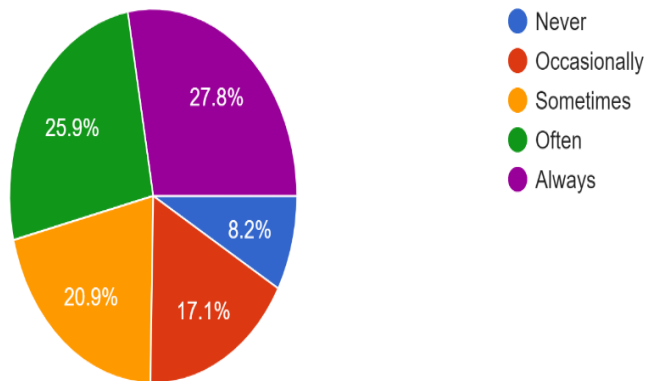


84.2% of the respondents get most of the inaccurate information or rumours through WhatsApp, 57.6% of the respondents get most of the misinformation from Facebook whereas 19.6 & 3.8 % get most the misinformation from YouTube & Twitter.

# Assessment Of Behaviour towards Misinformation on Social Media

22. How often do you check for the authenticity or reliable source of the information on novel corona virus received/circulated on social media platforms?

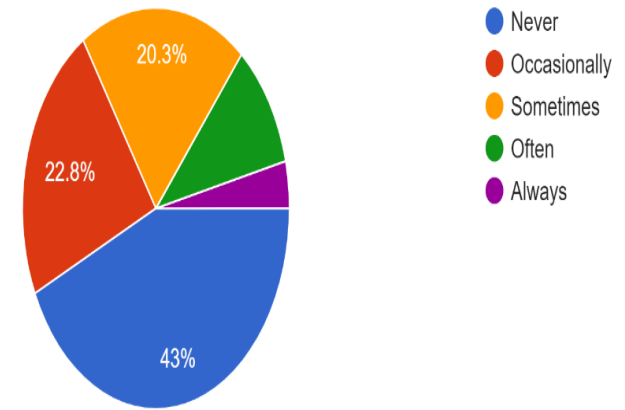
158 responses



27.8- 25.9% of the respondents always or often check for the authenticity of the information on novel corona virus received or circulated on social media platforms. 20.9% of the respondents check for the authenticity of the information on novel corona virus received or circulated on the social platforms whereas 8.2-17.1% of the respondents never or occasionally checks for the authenticity of the information on novel corona virus on social media.

23. How often do you report a misinformation or rumor on social media?

158 responses



43% of the respondents Never report a misinformation or rumour on social media whereas 22.8% of the respondents occasionally report and 20.3% report sometimes a misinformation on social media. 3.8- 10.1% of the respondents often or always report a misinformation on social media.



## DISCUSSIONS

- **Knowledge level of the study population regarding the information on COVID-19 outbreak**
  - According to study findings most of the respondents have above average knowledge level regarding the symptoms, measures, and incubation period of novel corona virus.
  - Another study “Corona virus (COVID-19) awareness assessment – A survey study amongst Indian population” revealed that a significant percentage of individuals learned about the pandemic through social media and news and were aware of the mode of spread of the virus and also initiatives to be taken to prevent it from spreading. But significant percentage of people were also not fully aware regarding the age groups this virus will be affecting.
- **Assessment of the source of information**
  - The study shows that the most preferred source of information is Digital News 30% and Social media 24% whereas least preferred source is Traditional News with 16% whereas In contrast to the study another “study among Bangaloreans: Propagation of Fake News in Social Media” states that 44% of the people still believe in traditional news like paper and magazine, 32% in digital sources, 22% on social media and 02% through others.



## DISCUSSIONS

### ➤ **Assessing the acceptability and reliability of social media for novel corona virus misinformation**

- According to this study 38.6% strongly agree and 25.3% agree that social media plays a important role in circulating vital information on novel corona virus. 17.7% of the respondents consider social media as reliable and 39.9% holds a neutral opinion whereas 7.6 – 31.6% consider social media as non-reliable in terms of authenticity of information. Whereas A descriptive study “( A study on validity and reliability in assessment of vulnerability of social networks)” was conducted with the intention of measuring the vulnerability of information on social media states that “Nowadays the importance of social networks is undeniable, and they will continue to be valid in an intermediate future.”

### ➤ **Assessment of the source of information**

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## DISCUSSIONS

### ► Role of social media in circulating digital information

- This study shows 93.7% of the respondents have come across misinformation or rumours on social media. Most of the misinformation is circulated through WhatsApp (84%) and Facebook (58%). Another “study among Bangaloreans: Propagation of Fake News in Social Media” shows similar findings that 93% of the study population have come across misinformation on social media and most of the misinformation is circulated through WhatsApp (95%) and Facebook (76%). In a 2016 Pew Research Centre study which sampled over 1,000 individuals, 71 percent of respondents said they often or sometimes have come across fake news. The researchers stated that when misinformation campaigns challenge access to reliable information, citizens are left to make "uninformed choices".

### ► Assessing the Behaviour of the individuals towards digital misinformation circulation

- According to the study 63% of the respondents always check for the authenticity of information on social media 21% sometimes check for authenticity and only 8% never checks for the authenticity of information on social media and 57% of the respondents report misinformation on social media whereas 43% still don't report misinformation on social media. Another “study among Bangaloreans: Propagation of Fake News in Social Media” shows similar findings 65% of the respondents always check for the authenticity of the information on social media 26% sometimes check for authenticity and only 9% never checks for the authenticity of information on social media. 53% of the respondents report misinformation on social media whereas 47% don't report misinformation on social media.



## SUGGESTIONS

### **1. To enhance knowledge level of the people**

- Based on the findings of the study even though the knowledge of the population is above average it is essential to create awareness and update people to enhance their knowledge and understanding about the current situation of pandemic.

### **2. To Promote different sources of information among people**

- promoting different sources of information by disseminating reliable information through authorized public health organization will ensure acceptability among people. Ease of accessibility to different sources of information will further increase the usage of the sources of information among the people.

### **3. To ensure acceptability among the people**

- A communications strategy with toolkits would require to be established immediately as a contribution to the instant needs for a public health response and vital foundation for improving frameworks for response in the aspect of future global outbreaks. This is especially significant for countries that are lacking well developed media listening techniques or are in need of more efficient yet “controlled transparency” regarding the epidemic, and for populations that are more vulnerable during the outbreak due to lack of information. The impact of organising a toolkit would improve efforts to empower the public and enable them to develop more informed consumers.

## SUGGESTIONS

### **4. To ensure level of trust and reliability**

- it is essential to ensure the trust of the people on social media by encouraging the use of the websites of official public health organizations when seeking for information on COVID-19 preventive measures on the internet. In this way, users will be able to gain high-quality information more often, and such websites may improve their accessibility and positioning.

### **5. To control the spread of misinformation on social media**

- As the study shows 93.7% of the respondents have come across misinformation or rumours on social media. A digital toolkit could be installed to shape future tools for rapid deployment and engagement where multilingual and socio-cultural responses are desired. WHO has created a WHO myth busters webpage to address and correct misinformation about the COVID-19 outbreak. The mass panic can only be fought with information. Besides developing partnerships with misinformation watchdogs, Facebook has introduced initiative in ranking and controlling user news feeds using sophisticated algorithms. WhatsApp has introduced 'forwarding limits' to restrict dissemination and propagation of misinformation to public. YouTube has also published strict guidelines on sensitive COVID-19 related content. The platform is not only promoting progress of content related to positive social practices such as #stayhome and #cookwithme, but they are also handling and managing hoax, medical misinformation, and tricks such as toilet licking, coughing, and sneezing on bystanders.

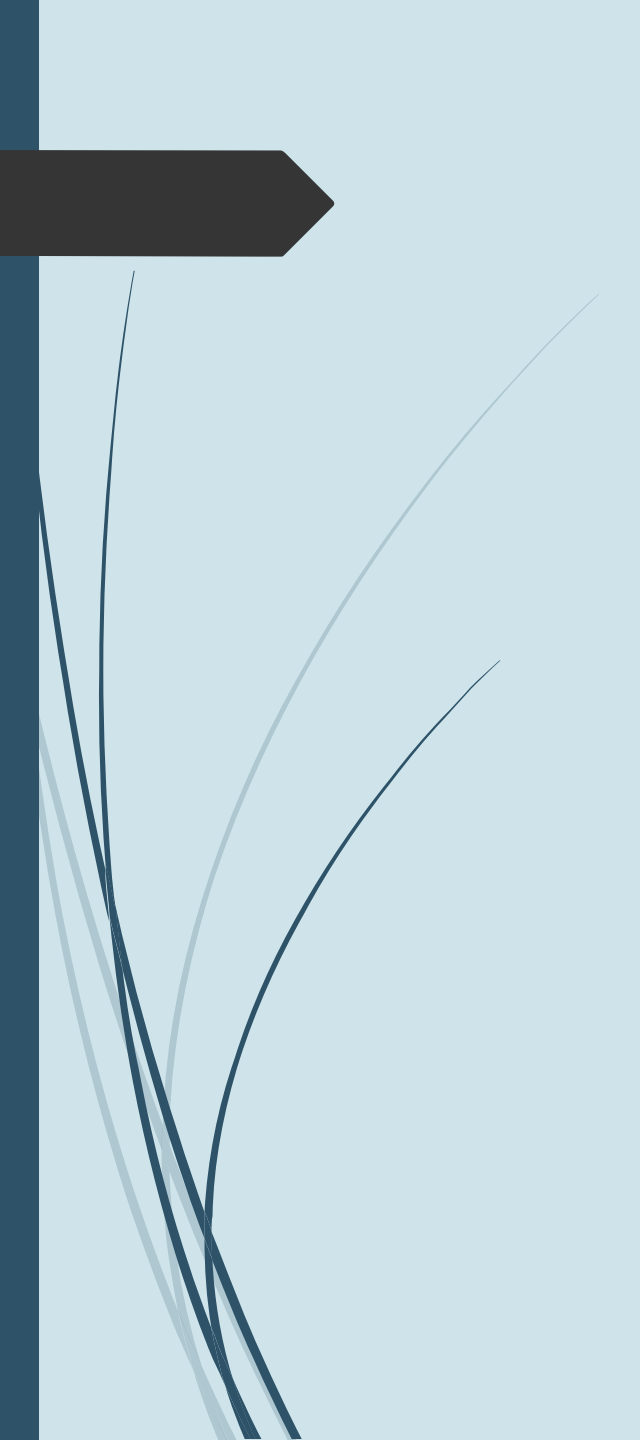
### **6. To change the behaviour of the individuals towards initiatives to be taken to control spread of misinformation**

- Creating awareness among the population regarding the initiatives to be taken to check the authenticity of the source of information as well as to report any misinformation received or circulated on any social media platforms. Through behaviour change of the population misinformation can be traced and reported leading to the curb the digital misinformation.



## CONCLUSION

This study analyses the implications of social media information as well as misinformation for global health risk communication. We describe information and misinformation, define the pathways through which it can adversely affect responses to risk communication efforts, highlight vulnerabilities in prevailing interventions and present an agenda for further research to understand and address this problem.



**THANK YOU**