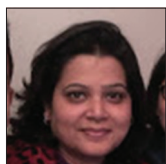


Original Article

Role of mass media and its impact on general public during coronavirus disease 2019 pandemic in North India: An online assessment

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ABSTRACT

Objectives: Based on the global experience, India has the possibility to be highly affected by coronavirus disease 2019 (COVID-19) pandemic. To contain the spread of the infection, a complete lockdown was enforced from March 25 to May 31, 2020 in India. During the unlock phase from June 1, 2020, only limited mobility was allowed. At present, in the pandemic, mass media is playing a very important role in sharing information and connecting people. The objective of this study is to understand the role and impact of mass media in the general public during COVID-19 pandemic.

Material and Methods: This study has been conducted on the above 10-year aged population by the online survey through Google spreadsheets. The semi-structured questionnaire was circulated to the known contacts in north Indian states for responses. The data collection started on June 23 and was closed on July 3, 2020.

Results: This study shows that the use of internet/social media was the highest, followed by TV news before and during lockdown. The use of the internet and TV news increased during the lockdown and the use of newspapers, radio, and magazine declined significantly. The anxiety due to COVID-related news through mass media was reported highest (27.3 %) in the 40–49 years age group and lowest (14.49%) in the 20–29 age group. About 43.18% of people of 30–39 years of age group developed fear, and 28% of 50–59 age groups felt panic due to COVID-related news in media. It has been found that the use of social media is highest in the 20–29 age group followed by 10–19 years age group

Conclusion: Mass media is playing a very important role in the dissemination of the COVID-related information to the general public in north India. However, the misleading or wrong information shall be checked in the large public interest.

Keywords: Coronavirus disease 2019, Pandemic, Mass media, Lock down

INTRODUCTION

After the year 1918, the world is again facing the worst pandemic named coronavirus disease 2019 (COVID-19), caused by coronavirus. On December 31, 2019, China informed the World Health Organization about the cluster of pneumonia cases in Wuhan city, which subsequently spread to other countries.^[1] Initially, the virus was named as a severe acute respiratory syndrome – coronavirus-2, some media reports also called it the Wuhan virus, and now, the disease is named COVID-19.^[2] Due to non-availability of any vaccine and treatment for COVID, the

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Government of India enforced the lockdown from March 25, to May 31, 2020 to contain the spread of COVID-19. The unlock process started from June 1, 2020 onward in a phased manner.^[3] During the lockdown period, the central and state governments got adequate time to strengthen the institutional capacity to handle COVID cases both in terms of infrastructure development and capacity building. Mass media played a very important role in creating awareness among the general public and in the dissemination of the Government orders/guidelines to the health workers, sanitation workers, including the police at grassroots levels.^[4] Mass media includes TV news, internet/social media (Facebook, WhatsApp, Instagram, Twitter, YouTube, etc.), radio, and newspapers. Media also promoted handwashing, personal hygiene, social distancing norms, and reporting the COVID cases around the world. The purpose of this study is to understand the type of existing media, its role, and impact on the general public and to understand public perception about the trustworthiness of mass media during the COVID crisis in North India.

Mass media highlights during COVID-19

We followed the mass media trends from January to June 2020 for this study [Figure 1] in a chronological order. The World Health Organization (WHO), on January 30, 2020, declared the novel coronavirus a public health emergency of international concern.^[1] During the 1st week of February, mass media focused on China's tally and screening at airports. In India, the first COVID case was reported in Kerala on January

30, 2020.^[5] Meanwhile, mass media started promoting hand hygiene and other preventive measures. The WHO declared COVID-19 a global pandemic on March 11, 2020. From this day, media started constant reporting on COVID which created anxiety among the public, leading to impulsive buying of hand sanitizers, face masks, and daily need products. Simultaneously, media started covering the shortage of personal protective equipments (PPE) for health care workers. This coverage helped in putting masks and sanitizers under the essential commodities act.^[6] On March 22, #jantacurfew, India observed Janta (People) curfew the whole day and beat thali (plate) at 5'o clock in support of a call from the Prime Minister of India.^[7] This was to boost the morale of many health workers, but also negative words spread that we do not need clapping but masks and PPE kits #INDIAFIGHTSCORONA. These reports helped the government in decision making for manufacturing PPE kits. On March 25, India entered into 21-day lockdown period, and most popular trend on Twitter was #coronaviruslockdown or #stayhomeindia. During the starting period, everyone was motivated to try different things at home, and even media reported about social distancing practices followed by the public; however, the motivation was down by the time as some misinformation was floated like Indians are more immune to the virus; few people were following sadhus who were promoting drinking cow urine.^[8] This news was further suppressed as Indian singer Kanika Kapoor was the highlight for spreading the disease by attending a party and meeting many celebrities at luck now on March 15. On April 5, media became a part of the festivity by switching off residential lights for 9 min and light a candle

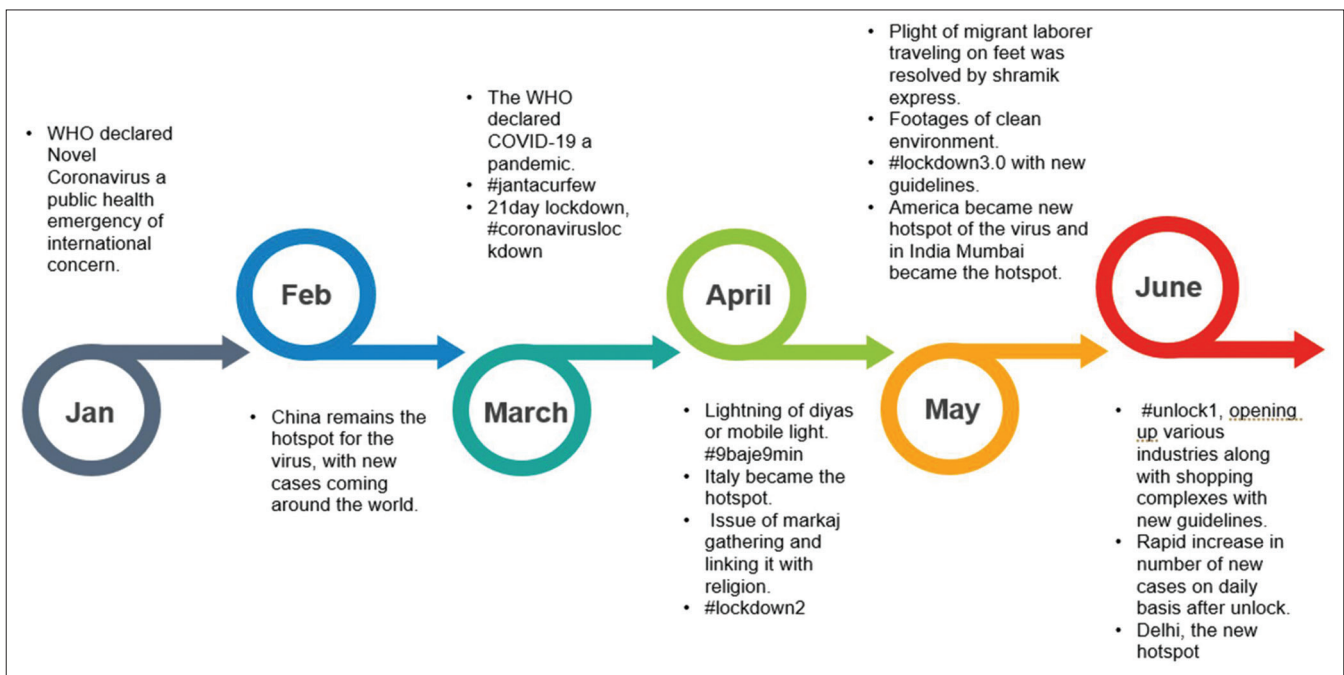


Figure 1: Mass media highlights during covid19 from January to June 2020, in India.

or Diya on their balconies. #9baje9min. Along with all these, some media platforms showed the hotspots and the COVID condition of Italy. Footages of people falling on the streets, overburdened hospitals, and dead bodies in the churches showed that the problem may worsen in future if the adequate preventive measure is not taken. In April, a gathering in Delhi's Nizamuddin Markaz (center) in India reported a number of its members to test positive for COVID.^[9] At the end of the first lockdown on April 14, 2020, the #lockdown two started. Social media was flooded with trolls about the new task. Soon, it shifted to migrant workers traveling hundreds of miles to reach their homes amid lockdown. The media coverage helped the laborers for starting special trains called "Shramik express." After being in lockdown for over a month, media showed photos and footages of a clean environment and clean air. The low movement of automobiles and closed factories improved the environment by 60–65%.^[10] In May, America became the new hotspot of the virus after Italy. Media showed the protests of Americans against the extended lockdown. Along with this, all internet platforms start showing India's status of coronavirus in the small box on almost every website. There were miscommunication and misunderstanding about the guidelines and relaxations during different phases of lockdown like night curfew timings and which institution/industry will remain open during the lockdown. Here, media played an important role in asking questions to the public officials for more clarity on various platforms. Over time, corona took a side seat on media, and the lead was taken by the India China border conflict at Galwan valley, showing satellite images of the army position over there. #GALWAN.^[11]

MATERIAL AND METHODS

To assess the role and impact of mass media on the general public, a semi-structured questionnaire having 18 questions was developed for the online survey with the help of public health experts titled "COVID19 and impact of mass media." The questionnaire was circulated through Google spreadsheets to the known contacts for response and further dissemination, especially in the state of Punjab, Haryana, Himachal Pradesh, and Union Territory Chandigarh in North India. The questionnaire was divided into six sections: Preference of platform of mass media before and during lockdown, impact of mass media, and dissemination of information, time spending on mass media before and during lockdown, and preference of platform on social media. We used the self-selection survey method of non-probability to recruit participants through WhatsApp and Instagram. The population above 10 years of age has been involved in the survey. The sample population data includes sociodemographic details, including area, age, gender, and educational background. The data collection was stopped

after getting the desired number of 384 responses, out of which 65% was urban, and 35% was rural population. The analysis of the data has been done by multiple responses cross tabulation method.

RESULTS

On analysis of the data, it has been found that the use of internet/social media was highest during and before lockdown, followed by TV news. The use of TV and internet/social media increased during the lockdown while the use of newspapers, radio, and magazines declined significantly [Figure 2]. To see the impact of media on the general public, the options, including fear, panic, stress, anxiety, and none, were included in the questionnaire. The data show that most of the population felt stress after hearing about COVID-19 [Table 1] through mass media. The anxiety was felt highest (27.3%) in 40–49 age group and lowest (14.19%) in 20–29 age group. The stress was highest (27.3%) in the 40–49 age group and lowest (15.9%) in 30–39 age groups. The fear was highest (43.18%) in 30–39 age group and lowest (7.69%) in the +60 age group. The panic was highest (30.76%) in +60 age group and no stress was reported in 40–49 age group.

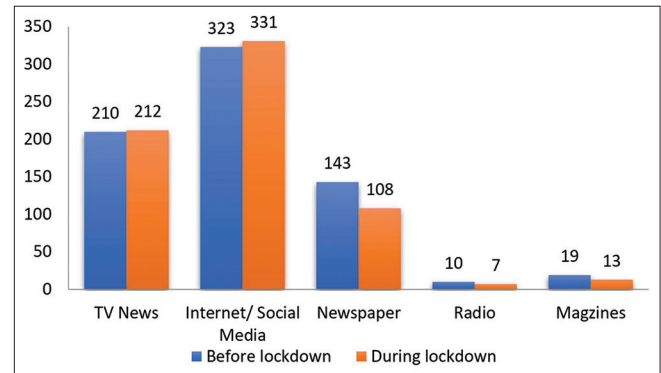


Figure 2: The preference of the use of mass media by the public before and during lockdown (imposed to contain coronavirus disease 2019 pandemic) in North India.

Table 1: The impact of mass media on the public during lockdown imposed to contain the spread of COVID-19 on various age groups in North India.

Impact (%)	Age group (years)					
	10–19	20–29	30–39	40–49	50–59	60 and above
Anxiety	14.45	14.19	18.18	27.3	22.2	15.38
Stress	16.86	20.32	15.9	27.3	16.67	15.38
Fear	24.09	25.16	43.18	27.3	33.33	7.69
Panic	19.27	18.38	18.18	0	27.78	30.76
None	25.30	21.93	4.5	18.18	0	0

It has also been found that 20–29 age group is the biggest user of social media followed by 10–19 year age group and +60 age group is the lowest user of social media. The data shows that people of 10–19 and 20–29 age groups mostly use YouTube, WhatsApp, and Instagram. The people above the age of 30 mostly prefer Facebook and WhatsApp [Table 2].

DISCUSSION

Mass media has played a very important role in the dissemination of the COVID-related information to the general public and to follow safe practices.^[4] Individuals who rarely read, watch, or listen to the news regularly before COVID-19 are now using it in routine. The frontline workers are working diligently, as well as the government agencies are more active due to the information and directions being circulated through mass media. Without prevailing mass media, people have limited access to objective sources of information. During the earlier H1N1 influenza pandemic, it has been seen that more news reports resulted in fewer hospital visits and vice versa. The mass media is a powerful tool to halt the spread of disease during pandemic, and it has a great impact on people's behavior.^[12]

During COVID-19 pandemic, newspaper supply has declined due to the doubts about COVID that it can be transmitted through the newspaper also. A survey conducted through telephonic interview determined the lockdown impact on newspaper reading pattern and time spent by the public. It found that readers who spent over an hour reading before lockdown declined by 22 % after lockdown due to the doubt of the spread of infection through newspapers, and many people shifted from print media to digital media.^[13]

Misinformation and fear have been widely associated with mass media during the COVID-19 pandemic. The relation between various sources of media and impact on public has been evaluated in a study published in the Electronic Journal of General Medicine. The researchers used a scale to measure the impact of media which concludes that mainly three factors (exaggeration of the media, generated fear, and information received from health personnel, family, and friends) has influence on people.^[14]

Table 2: The preference of platform of social media used by different age groups during COVID-19 pandemic in North India.

Preferences of type of media (%)	Age group (years)					
	10–19	20–29	30–39	40–49	50–59	60 and above
Facebook	5	68	22	5	6	4
WhatsApp	35	162	25	6	12	4
Instagram	37	173	6	0	1	1
Twitter	2	21	0	0	0	0
YouTube	33	143	8	2	4	2

Social media has a great impact on human behavior, and it has transformed the way of communication in modern days. The outburst of COVID-19 has also been outpaced by the misinformation related to the pandemic spread among millions of people. It has been seen that false information can result in adverse impact through social media platforms because it can spread fast and easily.^[15]

A study conducted in Iraq on the potential impact of social media on human behavior shows that social media has a significantly negative effect on mental health and psychological well-being. During the lockdown, people are using social media platforms to gain information about COVID-19. However, the impact of social media on human behavior depends on individual's gender, age, and education.^[16]

Misinformation may continue to influence beliefs and attitudes even after being debunked if it is not replaced by an alternate causal explanation.^[17] Although some content could be actual and useful, they may be overpowered by false information. Exaggeration of news related to COVID was done by TV news or social media which created a sense of panic among the public at large. The WHO director also suggested not to watch or read COVID news for more than half an hour a day instead indulge in some physical activity or any hobby.^[18]

Despite this, the time spending on mass media increased during lockdown significantly. Social media and phonic conversation became the main source of communication during the lockdown. However, after the unlock media also deviated from the corona story to other incidents, including geopolitical conflicts between India and China. This study highlights the need for persistent reporting about COVID-19 to create a sense of understanding of what could happen if we do not follow the universal precautions. However, this study provides an in-depth view of the uses of media and its impact on the general public, but due to the small sample size, the cause and effect relationship cannot be established.

CONCLUSION

Media is a powerful tool to provide information to the general public and to promote positive environment during COVID pandemic, but it may also spread misleading information. Media of New Zealand did great work by helping government to combat the spread of COVID by highlighting every aspect to encourage public participation. India, with a huge population of about 1.3 billion, is having a high use of social media platforms. At present, it is the most powerful media in India. Taking it as an advantage public can be motivated through social media to follow safe practices to contain the spread. It becomes the joint responsibility of the media and the individuals not to forward any misleading information

without verifying the facts and the source of information. There is an urgent need to develop the means of verification of any COVID-related information to avoid confusions. Although it is difficult to show COVID-related reports on 24 × 7 h basis by any media, analysis of the COVID-related key information shall be done at least once a day on preferred media channels. The mass media shall be promoted, but the misleading and wrong information shall be verified/checked before dissemination in the large public interest.

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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