A Study to Understand the Effectiveness of Different Media Channels in Disseminating Information on the COVID-19 Vaccine

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Abstract

The paper seeks to ascertain the effectiveness of various media channels in disseminating information about COVID-19 vaccination and whether it had a role in influencing the consumers of media to take the vaccine. The researchers carried out an online survey of 119 people above the age of 18 years (currently eligible for COVID-19 vaccine) living in India. We concluded that newspaper is the first preferred media and considered the most authentic source of information. The respondent's decision to take the COVID-19 vaccine was influenced by their preferred media i.e. newspapers than news channels and social media. Respondents expressed more faith in newspapers and news channels, both English and Hindi, on the authenticity of information when compared to social media where a majority of respondents have preferred to remain neutral.

Keywords: Coronavirus; COVID-19 vaccine; Media; Newspapers; News channels.

Introduction

India rolled out the world's largest mass vaccination programme on January 16, 2021 to protect its people from Coronavirus infection (PIB, 2021). Vaccines have been the most effective tools of prevention against viral infection-related illnesses. However, since vaccination was not made mandatory in India, there were doubts and apprehensions in the minds of the people regarding the efficacy of the vaccines which were made in India. Historically also, vaccine hesitancy towards vaccinations has been a serious issue all over the world. The reasons for hesitancy have been religious beliefs to its linkage with adverse health hazards (Umakanthan, Srikanth, et al. 2021).

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The government adopted various methods to create awareness among the people regarding safety and efficacy of the vaccines. Media was one such tool used by the government to overcome vaccine hesitancy and motivate people to get vaccinated. Mid, mass and traditional media, in addition to social media platforms, were used by the government to disseminate authentic information on vaccine including its importance in preventing Coronavirus infection.

Indian media is one of the oldest globally, and is the biggest newspaper market in the world. Indian media is also regarded as the most dynamic and the fastest growing media industry in the world. India publishes more than 1,00,000 newspapers and magazines. More than 17,000 newspapers are published every day in different languages, and about 100 million copies are printed daily. About 400 channels broadcast news 24 hours a day in India, again the highest in the world. Similarly, there are 560 million social media users in the country making it the world's second-largest market, after China (Kandoth and Shekhar, 2021).

Hence, it was decided to ascertain—through this research-- the credibility of these media channels among the consumers as far as information on COVID-19 vaccination was concerned and the extent of influence these media channels had on people's decision to take the vaccine. Also, which media channels were considered more authentic and effective was also taken up.

Objectives

a)   To understand which media channel (print, electronic, or social) was influential in disseminating information on COVID-19 vaccine.

b)   To ascertain which of these media channels were most influential in motivating the masses to take the vaccine.

c)   To assess various media platforms to compare their effectiveness as the most authentic source that helped the audience to make up their mind to take the vaccine

d)   To find out whether there was any other source of information, other than the media, that influenced the respondents

Review of Literature

Mass vaccination appears to be the most effective strategy for dealing with the COVID-19 pandemic as there are no alternate treatments available to tackle the infection that hit the world late in 2019. Hence, the urgent need to understand what influences people's decisions on whether to take vaccination or not, and to plan or improve the public health messaging (Dhani, Singh et al., 2021).

Media also influences the public perceptions around the disease (Mutua and Oloo, 2020). Infodemic – defined by the World Health Organisation as abundance of information, some correct and some not – is an area of concern as information spreads very fast over social media and there is no mechanism to check its source and credibility. Infodemic can be only countered by disseminating evidence-based and authentic information among the public. Here, media, in its various forms, can play an important role in providing authentic information, and promoting health-seeking behavior. Mheidly and Fares, 2020 in a research paper have called upon the governments to formulate public health policies defining the role of media during pandemics. It has recommended the Infodemic Response Checklist as a tool for efficient health communication strategy to counter outbreak of misinformation.

Traditionally, public participation on vaccination has been high in India, but public communication and transparency is critical (Bagchi, 2021).

Public trust and transparency are the foundations of effective communication, (Hyland-Wood, Gardner, et al. 2021) say in their research, adding that effective communication during a public health crisis is not only about messaging but also an interaction of information and opinion among individuals, groups, and institutions.

A study on the coverage of COVID-19 by media suggests that the information provided by the media partially follows WHO guidelines and updates with the coverage of prevention activities (Gupta, Keshri, et al. 2021).

Recommending employing professionally trained health reporters, fact-checkers to debunk fake news, better communication between media and health experts to improve the quality of health reporting in India among others, a research paper (Sharma, Pathak, et al, 2020) says that media has the responsibility to inform and educate people because newspa-

pers, television channels and radio shape opinions of people and policy makers on key issues facing the society. This becomes more important at the present time when the world is faced with a pandemic of not only health but also overload of infodemic. Hence, it is critical that health news delivered by newspapers is authentic, accurate and free from vested interests making it important to take steps to improve the quantity and quality of health news in Indian media.

Realising the importance of media in disseminating information on health and its influence on people in taking decisions related to their health and health-seeking behaviour, the current research paper was designed to ascertain how different media channels guided the consumers of media in deciding whether or not to take the COVID-19 vaccine as well as which was the most preferred media in seeking information on the vaccine.

Methodology:

An online survey was carried out to collect data for this research, using a technique of Google questionnaire. Responses were gathered by convenient random sampling method from across the country. Respondents, as dependent variables, were above 18 years of age and eligible for COVID-19 vaccination.

The questionnaire was circulated approximately among 125 people living in India, and responses were received from 119 people. Of these, more than 94% were vaccinated.

Only English and Hindi media platforms were chosen for this research since Hindi covers almost the entire Northern India and English covers Southern and North Eastern regions of the country. The media channels included newspapers, news channels and social media platforms.

Likert scale was used in some questions to assess the opinion of respondents on the coverage of COVID-19 vaccination by newspapers, news channels and social media.

Results and Discussions:
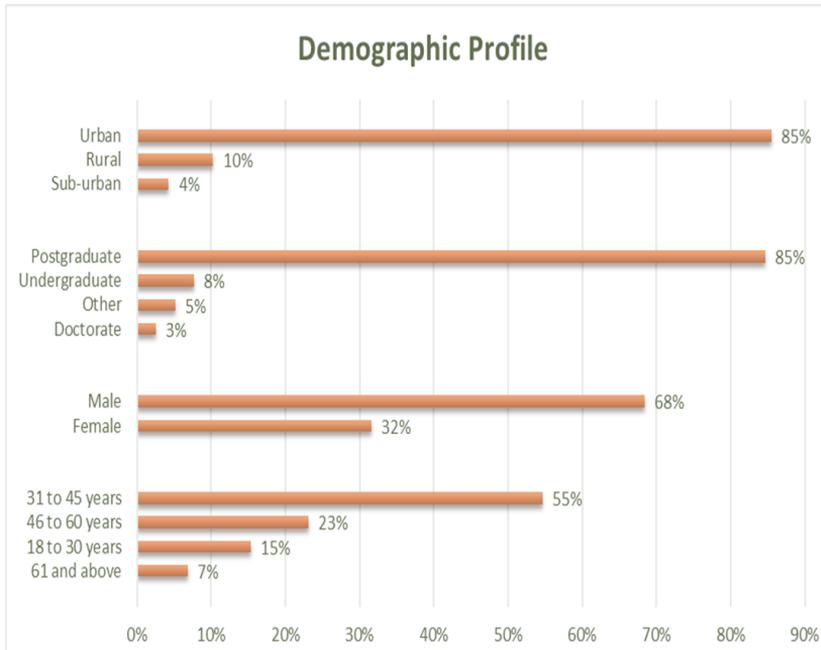
**Figure 1: Demographic profile of the respondents**

As many as 119 responses were received on the questionnaire. Figure 1 suggests more than half of the respondents (54.6%) were aged between 31-45 years, 23.5% were between 46 to 60 years, 15.1% were in the age group of 18 to 30 years and the remaining above 61 years. At 68.1%, men constituted a major chunk of the respondents and women were 31.9%.

Academically, 84% respondents hold Post Graduation degrees, 7.6% were Under Graduates, and the rest either holding a Doctorate degree or any other degrees. An overwhelmingly high percentage of respondents (85.6%) lived in urban areas, 11% resided in rural areas and the remaining in the sub-urban areas.
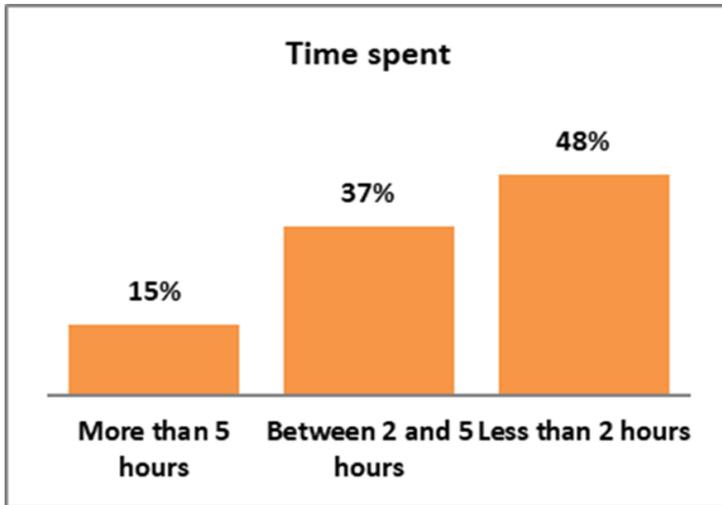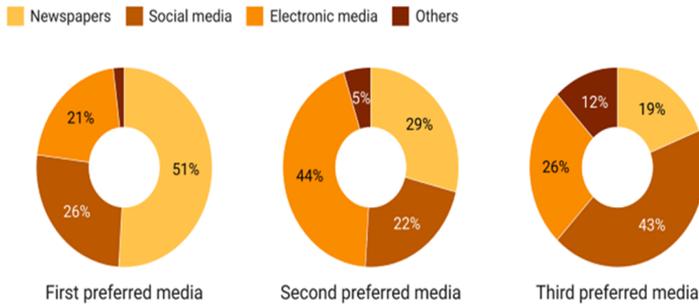
Figure 2: Time spent on media

The questionnaire sought to know from the respondents on the number of hours they spent (reading/watching) on their preferred media. According to Figure 2, more than 47% said less than 2 hours, 37.8% between 2 to 5 hours, and 15.1% for more than 5 hours.
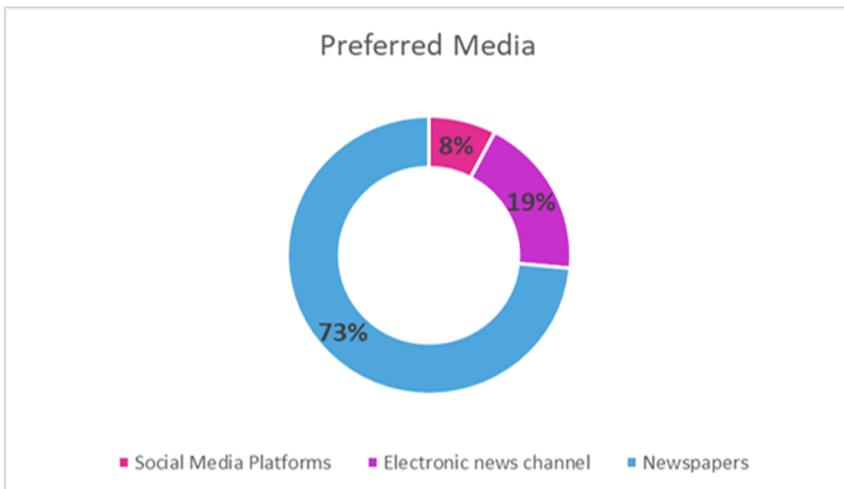
**Figure 3: Preferred media of the respondents**

Media Sources

Newspapers   Social media   Electronic media   Others

First preferred media: 51%, 21%, 26%, 29%

Second preferred media: 5%, 29%, 22%, 44%

Third preferred media: 12%, 19%, 43%, 26%

Figure 4: Medium preference of the respondents

Figure 3 indicates that among newspapers were the overwhelmingly pre-ferred by the people with 73% choosing this media followed by electronic news channels (19%) and then social media by a mere 8%. In Figure 4, we see among all media channels, newspapers were the first preferred media for 51.3% respondents, followed by social media for 26.9% and electronic media (news channels) for 20.2%. Electronic media (news channels) were the second preferred media for 43.7%, followed by newspapers for 29.4% and social media for 21.8%. Social media is the third preferred media for 43.2% respondents, followed by electronic media for 26.3% and 19.5% pre-ferred newspapers while 11% chose others as their third preferred media.

Covid and Media:

VACCINATION STATUS

Are you fully vaccinated   No   Yes
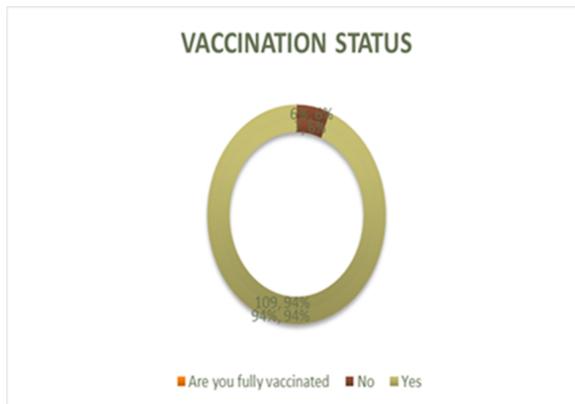
Figure 5: COVID-19 Vaccination Status

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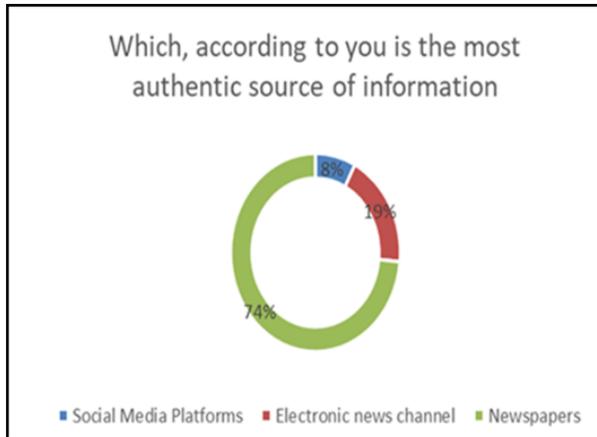
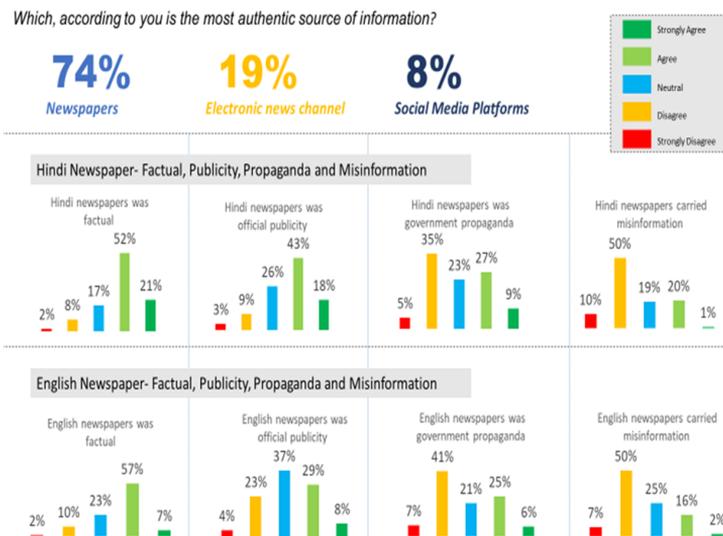**Figure 6: Authentic source of information on COVID-19 vaccine**

Respondents—94% of whom were vaccinated (Figure 5)--were asked which, according to them, was the most authentic source of information. As seen in figure 6, an overwhelmingly high 74.6% said newspapers, 17.8% said electronic news channels and for the remaining 7.6% it was the social media. Within social media, Whatsapp was considered as the authentic source of information by 41.6%, Facebook by 28.3%, twitter by 26.5%.
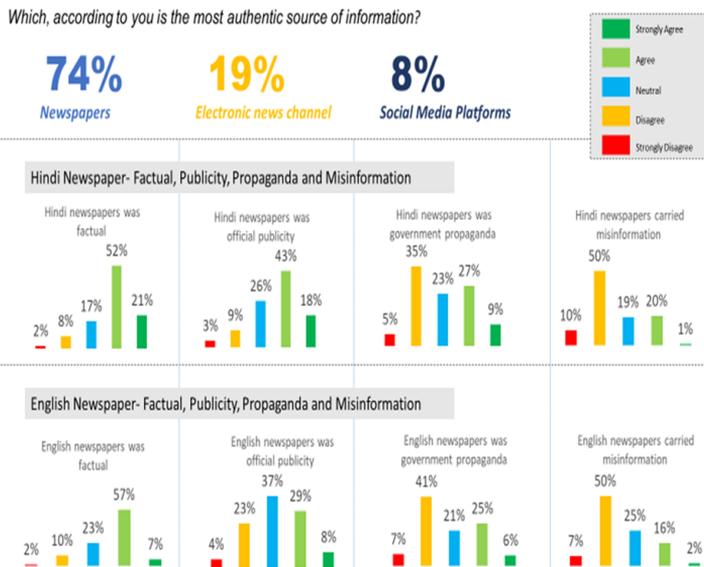
Figure 7: Most authentic source of information-1

The questionnaire also sought to assess the opinion of the respondents regarding the coverage of COVID-19 vaccination on different media platforms. Figure 7 shows that the respondents were asked whether the coverage was factual, official publicity, government propaganda or misinformation.

More than 72% respondents agreed that the coverage in Hindi newspapers was factual (52.1% agreeing and 20.5% agreeing strongly) while 17.9% remained neutral and the remaining disagreed. Over 61% felt the coverage of Hindi newspapers on Coronavirus vaccine was official publicity with 17.8% feeling this strongly feeling while 26.3% chose to remain neutral and the remaining disagreed with the statement. A lesser percentage of respondents (35.6%) agreed with the statement that Hindi media coverage of the issue was government propaganda, 24.6% remained neutral and 34.7% disagreed. Less than 20% respondents agreed with the statement that Hindi newspaper coverage was misinformation while more than 60% disagreed with it and 19.5% stayed neutral.

**Figure 8: Most authentic source of information-2**

Similar opinions were sought on the coverage of COVID-19 vaccine in English newspapers and more than 64% respondents agreed that the coverage was factual while 23% remained neutral and 11 disagreed with it. More than 36% opined that the coverage was official publicity but an

equal percentage preferred to remain neutral while 27% disagreed. On being asked whether the coverage of the issue was government propaganda, 49% either disagreed or strongly disagreed with it, 31% agreed or strongly agreed and more than 20% preferred to remain neutral. More than 57% disagreed with the statement that English newspaper carried misinformation on the issue, more than 25% remained neutral and 18% agreed or strongly agreed.

On respondent's opinion of Hindi news channels on COVID-19 vaccine coverage, more than 61% agreed or strongly agreed that the coverage was factual, 25% remained neutral and the rest disagreed or strongly disagreed. On whether the coverage of the issue was official publicity, more than 49% agreed, 32% remained neutral and the rest disagreed. When asked whether the coverage was government propaganda, the response was almost equal with 38% agreeing with the statement and 39% disagreeing and more than 22% remaining neutral. When asked if they thought the channels carried misinformation, more than 48% disagreed, 29% agreed and nearly 23% remained neutral.

Regarding the coverage of Coronavirus vaccination in English news channels, 54% said it was factual, 15% disagreed and 28.7% remained neutral. When asked if they thought it was official publicity, 40% agreed and 29% disagreed and more than 30% preferred to neutrality. On being asked whether the coverage was government propaganda, 30% agreed, 39% disagreed and more than 26% remained neutral. More than 50% of the respondents disagreed that the coverage in English news channels was misinformation while more than 20% agreed and more than 28% remained neutral.

When asked whether the information on COVID-19 vaccination available on social media platforms was factual, nearly 32% agreed but 36% were neutral and more than 32% disagreed. On whether the information available was official publicity, 34% agreed 25% disagreed and 41% remained neutral. The response on whether the information available on social media was government propaganda was almost same with more than 31% agreeing with the statement, more than 36% disagreeing with it and more than 32% remaining neutral. Close to 50% respondents agreed that the information the issue available on social media was misinformation, more than 22% disagreed with the statement and nearly 30% remained neutral.
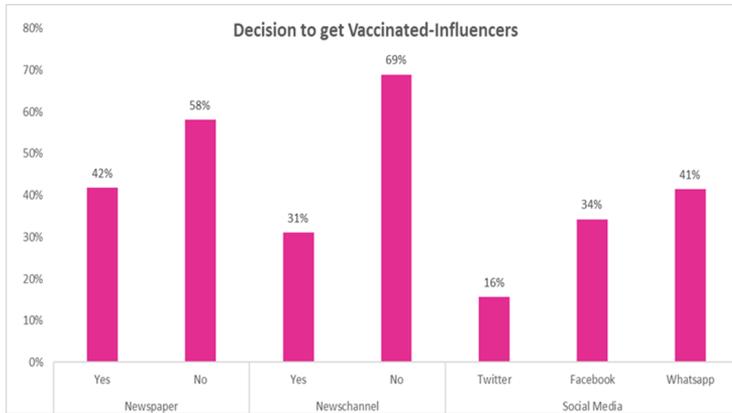
Figure 9: Media influence on decision to take the vaccine

Figure 9 shows that when the respondents were asked whether their decision to take the vaccine was influenced by their preferred newspaper, 42% said yes and 58% said no. They were also asked whether their decision to take the vaccine as influenced by their preferred news channel, 31.4% said yes and 68.6% said no. When the same question was asked about social media platforms, 40.8% said their decision was influenced by Whatsapp, 33.8% said Facebook, 16.9% said Twitter and 8.5% said Instagram.

The respondents were asked whether media was the only source of information about COVID-19 vaccination. More than 63% said yes while 26% said no and 10.5% remained neutral. The other sources of information on the issue were word of mouth, peer groups, doctors and healthcare workers, Corona warriors, Resident Welfare Associations, office meetings, webinars, institutional information (Ministry of Health and Family Welfare, WHO, UNICEF, local administration) Aarogya Setu and non-government organisations.

Conclusion:

This research has shown that media has substantial influence on people. In the case of of COVID-19 vaccine information   newspaper is the first preferred media and overwhelmingly considered the most authentic source of information on Coronavirus vaccination. The decision of the respondents to take the COVID-19 vaccine was also influenced by their preferred media--newspaper more than news channels and social media.

Respondents expressed more faith in newspapers and news channels, both English and Hindi, on the authenticity of information when compared to social media where a majority of respondents have preferred to remain neutral.

This is important because a percentage of the respondents were in the age group of 31-45 years of age and residing in urban areas. It is needless to say that they would be social media users.

The respondents clearly said that the authenticity of Hindi newspapers and news channels on the coverage of COVID-19 vaccination was more than that of English newspapers and news channels. This could also be because English newspapers and news channels have lesser readership/viewership as compared to Hindi newspapers and news channels.

However, respondent's belief in the authenticity of newspapers and news channels (both Hindi and English) was way ahead of the social media platforms. An equal percentage of respondents have agreed, disagreed and preferred to remain neutral on factual reporting on the issue and 50% have agreed that social media platforms carried misinformation.

Sixty percent of the respondents said they had alternate sources of information for information on COVID-19 vaccination. These included official sources such as official press releases, WHO, UNICEF and other websites, communications from the district administration, and Arogya Setu App to name a few. This was followed by word of mouth, peer groups and self-awareness including online classes and information from RWAs and work places.

The outcomes clearly indicate that consumers do take decisions based on the information gathered through various media platforms. Hence, it would be useful to ensure that media shares authentic and evidence-based information on health issues that would enable the people to take informed decisions about their health. To achieve this, educating media – journalists reporting on health—also need to be sensitized on public health issues so that their reporting is informative, educative and authentic.

It is pertinent to add here that many newspapers are now available digitally but in this research no distinction has been made between hard copy of the newspaper and digital versions.

Scope for further improvement: More questions on profession and eco-

nomic background could be added. State and district could have been added in the demographic profile. There could be more questions for unvaccinated respondents. We could have also included information on vaccination provided on telephones (recorded messages).

Works Cited:

Bagcchi, Sanjeet. "The world's largest COVID-19 vaccination campaign." *The Lancet infectious diseases* 21.3 (2021): 323.

Dani, Mihir Tusharbhai, Arjun Gurmeet Singh, and Pankaj Chaturvedi. "COVID-19 vaccine hesitancy in India." *Cancer Research, Statistics, and Treatment* 4.3 (2021): 437.

Gupta, M., Keshri, V.R., Konwar, P., Cox, K.L. and Jagnoor, J., 2021. "Media Coverage of COVID-19 Health Information in India: A Content Analysis." *Health Promotion International.*

Hyland-Wood, B., Gardner, J., Leask, J. and Ecker, U.K., 2021. Toward effective government communication strategies in the era of COVID-19. *Humanities and Social Sciences Communications,* 8(1), pp.1-11.

Kandoth, Sneha, and Suraj Kushe Shekhar. "Media and COVID-19 vaccine negligence in India." *Media Asia* 49.1 (2021): 58-61.

Lachyan, A., Kumar, V., Ingale, S., and Gade, K "Analyzing the impact of COVID-19 vaccine infodemic on social media: A study of human behaviour in state of Uttar Pradesh, India." *International Journal of Research and Analytical Reviews (IJRAR)* (2021).

Mheidly, N. and Fares, J. "Leveraging Media and Health Communication Strategies to Overcome the COVID-19 Infodemic". *J Public Health Pol* 41, 410–20 (2020).

Mutua, S.N. and Oloo Ong'ong'a, D., 2020. "Online News Media Framing of COVID-19 Pandemic: Probing the Initial Phases of the Disease Outbreak in International Media". *European Journal of Interactive Multimedia and Education*, 1(2).

Sharma, D.C., Pathak, A., Chaurasia, R.N., Joshi, D., Singh, R.K. and Mishra, V.N., 2020. "Fighting infodemic: Need for robust health journalism in India". *Diabetes & Metabolic Syndrome: Clinical Research & Reviews.*

Umakanthan, S., Patil, S., Subramaniam, N., and Sharma, R. "COVID-19 vaccine hesitancy and resistance in India explored through a population-based longitudinal survey." *Vaccines* 9.10 (2021): 1064.

www.pib.gov.in/PressReleasePage.aspx?PRID=1689018