

## THE ROLE OF TRADITIONAL MEDIA IN PREVENTING MISINFORMATION ABOUT COVID-19: A LITERATURE REVIEW

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### ABSTRACT

*Traditional media are increasingly marginalized by 'the new media' or 'social media', which are declared as advanced media. Behind this progress, many studies state that online media causes a lot of misinformation in the community. During the COVID-19 pandemic, people continue to look for sources of information from trusted media, between both media to be used as a reliable reference. This article's objective is to promote public understanding of the COVID-19 pandemic by describing how traditional media played a crucial role in disseminating accurate information and combating rapidly spreading misinformation. The study was a literature study using PRISMA guidelines. Relevant articles included in the analysis were obtained from several scientific databases such as PubMed, SAGE, Science Direct, and PLOS One (published between 2020 and 2021), by using the relevant keywords "traditional media", "misinformation", "COVID-19", then determined by criteria feasibility: (1) scientific journals, (2) research objectives, (3) open access, and (4) research results that are clear and in accordance with research objectives. We come to the conclusion that the majority of the public are understanding of and have a high level of trust in traditional media as a source of credible information during the COVID-19 pandemic and as a guide for preventing the spread of misinformation.*

**Keywords:** *traditional media, misinformation, COVID-19*

### ABSTRAK

Media tradisional (*traditional media*) semakin terpinggirkan oleh media baru atau sosial media yang dikategorikan sebagai media yang maju. Dibelakang kemajuannya banyak penelitian yang menyatakan media *online* banyak memberikan informasi yang salah pada masyarakat. Selama masa pandemi COVID-19 masyarakat terus mencari sumber informasi terpercaya dari dua media tersebut untuk digunakan sebagai pedoman mencegah penularan virus COVID-19. Penulisan artikel ini bertujuan untuk memperkuat pemahaman masyarakat dengan menggambarkan peran dari media tradisional dalam memberikan informasi yang akurat terpercaya dalam mencegah misinformasi yang beredar pesat selama pandemi COVID-19. Penelitian ini merupakan studi literatur dengan menggunakan pedoman PRISMA. Artikel diperoleh dari beberapa database ilmiah, seperti PubMed, SAGE, *Science Direct*, dan PLOS One (diterbitkan antara 2020 dan 2021), dengan menggunakan kata kunci yang relevan "*traditional media*", "*misinformation*", "COVID-19", kemudian ditentukan oleh kriteria kelayakan: (1) jurnal ilmiah, (2) tujuan penelitian, (3) *open access*, dan (4) hasil penelitian yang jelas dan sesuai dengan tujuan penelitian. Kami menyimpulkan bahwa sebagian besar masyarakat telah paham dan menaruh kepercayaan tinggi terhadap peran media tradisional sebagai media yang sangat membantu dalam memberikan informasi terpercaya dan akurat selama pandemi COVID-19 serta ikut berperan dalam mencegah misinformasi yang sangat cepat beredar.

**Kata Kunci:** media tradisional, misinformasi, COVID-19

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## **Introduction**

One strategy for health promotion that aims to inform the public about risky behaviors is the media's function. Millions of individuals are susceptible to the impact of the media. Since it acts as a communication bridge between the government, medical institutions, and the public, the media is crucial to how the public reacts to the COVID-19 pandemic. The corona virus is easy to infect humans with and travels readily to practically all parts of the world, which is a factor in the rapid and widespread transmission of COVID-19. The media's function is to serve as a conduit for factual information, scientific data, political decisions, and public responses.<sup>1</sup>

The existence of traditional media such as print media (books, pamphlets, rubik's cubes, posters), electronic media (television, radio, films, video films, cassettes, CDs, and VCDs), as well as online media (the internet, websites), blogs, and social media, also known as new media, is progressively suppressed.<sup>2</sup> This is due to the ways that information is found, disseminated, consumed, cheaper, and more easily accessible via internet media as opposed to traditional media.<sup>3</sup>

However, the current ease of information access is not counterbalanced by the improvement of scientific sources or professional judgments. As a result, false information, hoaxes, or fake news are frequently transmitted through the information that is communicated. This false information has the potential to cause a brand-new COVID-19 outbreak, sometimes known as an "infodemic".<sup>4</sup> Social media platforms spread false information about a COVID-19 pandemic than traditional media does.<sup>5-9</sup> Traditional media, on the other hand, have more specific knowledge and unique obligations associated to confirming the dissemination of various types of information.<sup>10</sup>

However, as disinformation spreads, established media outlets like newspapers and television shows play a crucial role in providing news coverage throughout the COVID-19 pandemic. As a result of a strategy of uncertainty over news coverage and an effort to minimize transmission, this endeavor became challenging. However, in reality, individuals have relied on false information and fake news that circulated, such as conspiracy theories and conventional treatments that are resistant to COVID-19. Considering that numerous elements, including politics and power, have an impact on this news concerning COVID-19.<sup>5,10</sup>

This must be done in order for us to filter the information acquired before acting or sharing it with the public. Presenting scientific evidence is undoubtedly one of the correct actions. Although the government has made steps to combat the transmission of false information by performing outreach, directly clarifying to the community about the information gathered, and disseminating reliable websites that can, in fact, be a reference for the public to find out the newest information about the progress of the COVID-19 epidemic. The goal of this review was to answer the question

of how traditional media contributes to the dissemination of reliable information about the COVID-19 pandemic.

## Method

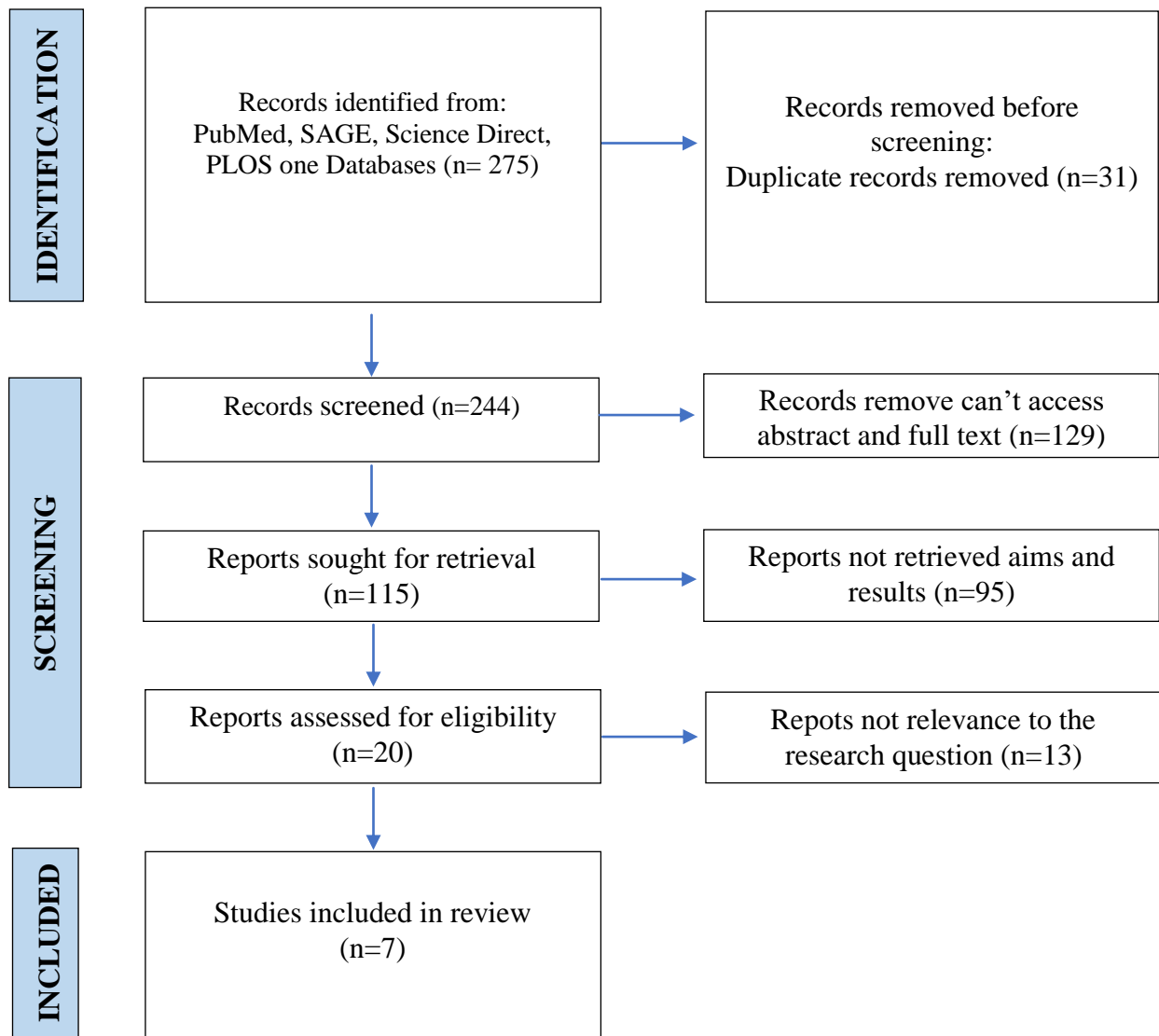
This study was a literature review by using Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) guidelines as the instrument used in this paper's article search, and a flowchart created in accordance with the PRISMA 2020 checklist guideline. Through the PRISMA method, data search uses a flowchart based on a checklist consisting of identifying articles through a database, screening articles by title and abstract, assessing full text for eligibility, and analyzing articles that have qualified inclusion criteria.

The search for articles and information was conducted in-depth using electronic databases from different websites as data sources, such as PubMed, SAGE, Science Direct, and PLOS One. The inclusion criteria of documents that are considered appropriate to conduct this systematic review are articles from original research (not systematic review) in full text without the requirement for additional payments (open access full text), published in the period 2020-2021. 275 articles were discovered through the search. Scientific journals, open access, clear and in line with research objectives, and eligible studies all met these criteria. The exclusion criteria are studies that do not address role and function of traditional media in preventing misinformation about COVID-19 is not included in the analysis.

During the document search process, the keywords "traditional media", "misinformation", and "COVID-19" were typed into a search engine to uncover studies about the role of traditional media in preventing misinformation. Duplicate articles were eliminated from the data selection and extraction process, and then potential articles will be checked for sources using titles and abstracts. Following that, the complete texts of the pertinent articles were read and evaluated in light of the inclusion and exclusion criteria.

**Table 1. Inclusion and Exclusion Criteria**

Inclusion Criteria	Exclusion Criteria
Full text of published journal articles Publication date 2020–2021 English language Studies from any geographical location Related with the role and function of traditional media in preventing misinformation about COVID-19	Non-peer reviewed literature Conference proceedings



**Figure 1. Flowchart of Study Selection According to PRISMA Guidelines**

## Results

Based on the literature search process using the PRISMA method, 275 publications documents were found published in 2020-2021. The initial search rejected 31 owing to duplication, and 129 due to inaccessibility of the abstract and full text. The remaining 20 research were reviewed after 95 publications were removed because their goals and outcomes did not coincide. In addition, after a comprehensive text examination, 13 articles were removed. Finally, seven studies satisfied the requirements for inclusion in this review.

**Table 2. Characteristics of Studies**

No.	Articles	Study Objectives	Study Results
1	Ng, BP, Park C. <i>The Role of Media Sources for COVID-19 Information on Engaging in Recommended Preventive Behaviors Among Medicare Beneficiaries Aged ≥ 65 Years.</i> 2022. <sup>11</sup>	Information on the COVID-19 is disseminated to the public through a variety of media outlets and communication channels. The ability to effectively communicate information on life-saving actions to this demographic depends on being able to identify the main sources of COVID-19 information among older persons.	All 3 of the advised preventive activities were used by 89.8% of research participants. About 59.3% of beneficiaries claimed that they relied on traditional news sources the most for COVID-19 information, followed by health care professionals, government officials, other websites/the internet, friends/family, and social media. Beneficiaries were more likely to practice preventative behaviors when they relied on government officials' comments or advice for information about COVID-19 as opposed to traditional news sources.
2	De Angelis, A., et.al., <i>Beliefs in Conspiracy Theories and Misinformation About COVID-19: Comparative Perspectives on the Role of Anxiety, Depression and Exposure to and Trust in Information Sources.</i> 2021. <sup>12</sup>	This study examines how exposure to and confidence in information sources, as well as anxiety and depression, are related to conspiracy and false information beliefs in eight nations/regions (Belgium, Canada, England, Philippines, Hong Kong, New Zealand, United States, and Switzerland) during the COVID-19 pandemic.	Television, radio, and newspaper exposure is related with reduced conspiracy and misinformation beliefs, but exposure to politicians, digital media, and personal relationships is associated with higher conspiracy and misinformation beliefs. Only a reduction in conspiracy ideas is linked to exposure to health specialists. Conspiracy and false information theories are also linked to higher levels of depressive symptoms.
3	Mach, K.J., et.al., <i>News Media Coverage of COVID-19 Public Health and Policy Information.</i> 2021. <sup>13</sup>	This study evaluates print and online media coverage of the coronavirus illness COVID-19 over the period from March 2020, when the global pandemic was announced, through August 2020 in three nations: Canada (with the lowest per-capita case and death rates during the study time-frame), the United Kingdom (with a noticeable early increase), and the United States (with persistently high rates).	Information on COVID-19, which covers the political landscape of three countries, is of a moderately high scientific level and without sensationalism (Canada, UK, and USA). Low-quality scientific coverage of pandemic-related news, danger of neglecting to warn of public health hazards, false information, or potential errors in policy that will have an impact on the disease's public health.

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4	Lee T.Y., et.al., <i>The Outbreak of Coronavirus Disease In China: Risk Perceptions, Knowledge, and Information Sources Among Prenatal and Postnatal Women</i> . 2021. <sup>14</sup>	This study looked at prenatal and postnatal Chinese women during the early stages of the COVID-19 epidemic to see how they perceived risk, how much they knew about it, and where they got their information.	The participants showed a sufficient level of COVID-19 knowledge. They relied heavily on doctors, nurses/midwives, and television as their main sources of knowledge regarding COVID-19 and gave each of these groups a high level of credibility.
5	Piltch-Loeb, Rachel., et.al., <i>Examining the Effect of Information Channel on COVID-19 Vaccine Acceptance</i> . 2021. <sup>15</sup>	This study aimed to assess how different media channels were used to disseminate information about the COVID-19 vaccine and explore the connection between the information channel and vaccine adoption.	This study indicated that traditional media, particularly national TV, national newspapers, and local newspapers, enhanced the likelihood that people would accept vaccinations.
6	Wang, Xiao., <i>The Motivations and Uses of Mainstream and Social Media During The COVID-19 Pandemic in China: A Structural Equation Modeling Approach</i> . 2021. <sup>16</sup>	The study aims to better serve the public during a public health emergency by gaining an understanding of the people's motives for using both traditional media and alternative media (such as social media).	Participants were more likely to use mainstream media than alternative media for the purposes of information seeking and surveillance.
7	Choudrie, Jyoti., et.al. <i>Machine Learning Techniques and Older Adults Processing of Online Information and Misinformation: A COVID-19 Study</i> . 2021. <sup>17</sup>	This study examined and comprehend how ML approaches (Study 1) and people, in particular older persons (Study 2), digest the online infodemic addressing COVID-19 prevention and cure.	It was discovered that they were more disposed to believe conventional media than new media. They frequently were perplexed regarding the validity of online information about COVID-19 prevention and treatment. Overall, the paper makes new ground by emphasizing how people absorb information differently from how computers work. It provides novel insights on the interactions between older adults, a vulnerable demographic group, and internet information and false information during a pandemic.

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## Discussion

COVID-19 is still spreading over the world as of right now, interrupting people's lives with lockdown procedures, various health issues, and misinformation about how to keep safe and how to recognize symptoms that spreads throughout all media in any form. The dissemination of false information has been made easier by social media.<sup>5-9</sup> This will deteriorate a person's mental health as well as their intents and conduct when taking precautions during a pandemic.<sup>18,19</sup>

Misinformation will cause someone to lose faith in scientific evidence and it may be used as a political tool and a means of purposefully spreading disinformation to undermine public confidence in the government.<sup>4</sup> The WHO terms this widespread false information a "*infodemics*" such as misinformation, disinformation and hearsay that complicates the identification process of reliable sources.<sup>10,20</sup> Social media is the key platform for the spread of false information about health during a public health emergency, such as this pandemic.<sup>7,17,21,22</sup>

On the other hand, the traditional media's function during the COVID-19 pandemic has been quite beneficial in disseminating accurate information. In one study, participants had higher levels of confidence in traditional media, whereas health professionals, radio stations, newspapers, and television stations had lower levels of belief in the notion of corruption and misinformation.<sup>12</sup> Compared to modern media, traditional media is much better, more helpful, and more reliable. Because Traditional media tends to enjoy very high levels of public confidence when it comes to delivering the most up-to-date and reliable information throughout the COVID-19 pandemic. As a result of this freedom to publish, social media is unable to weed out incorrect information,<sup>23</sup> which is frequently used as a marketing tactic to drive traffic to websites. This further establishes the fact that new media, or namely social media, has no control over whether information provided is accurate or false.<sup>16,24</sup>

The three primary sources of information concerning COVID-19 in China, namely information from doctors, nurses/midwives, and television, were recognized and held in high regard by women in pre and post-natal situations during the first phase of the COVID-19 pandemic.<sup>14</sup> Whether or not there is a pandemic, the medical profession is highly respected and esteemed worldwide.<sup>25</sup> This study is similar to research on older persons who chose traditional media as a source of information regarding prevention and treatment during the COVID-19 pandemic. According to them, people are frequently perplexed by the reliability of internet content on social media related to COVID-19 prevention and treatment.<sup>11,17</sup>

The sources of information based on traditional media, including National TV, National, and local newspapers, present more possibilities about someone who will undergo the vaccine.<sup>21</sup> Considering that traditional media sources are trustworthy and of high caliber. On the other hand, traditional media also plays another crucial role, as a vital avenue for promotion program of vaccinations that the government has announced.<sup>15,26</sup> News coverage of pandemics is of low

scientific quality, runs the risk of failing to warn about hazards to public health, spreading false information, or even neglecting to implement policies that may worsen the disease's effects on the public's health. These findings help to explain the negative effects of disinformation.<sup>11,27</sup> After all, improper attitudes and behaviors will result from improper knowledge.<sup>13,28</sup>

*Infodemics* are just as dangerous as pandemics. The abundance of conflicting news, false information, and manipulated data on social media must be recognized as a threat to global public health by international organizations, governments, and medical experts. It is difficult to control emerging infectious diseases, as evidenced by the present COVID-19 outbreak. While spreading accurate, evidence-based information quickly and widely among the general population is ideal for combating an *infodemic*, haste is the enemy of rigorous science. Media may play a significant role in fostering healthy habits, boosting exposure to accurate information, raising social consciousness, and enhancing psychological well-being through its many forms and venues.

The benefits of social media for generating and creating educational content have been abused, resulting in a lot of false information on health. This causes people to question the accuracy of the health information spreading on social media. Because of this, the majority of people verify any facts they are unsure of. This level of awareness is essential in the context of health since it may be extremely dangerous for someone to be given inaccurate information and misleading advice that could harm their health and the environment.<sup>29</sup> Likewise, we urge everyone to abide by the recommendations of medical professionals regarding COVID-19 health protocols and to follow any laws and regulations that may be in effect during the COVID-19 pandemic. Governments should create and oversee public health policies that address how media portals spread information during pandemics. Responding to the *infodemic* is an innovative strategy to encouraging more effective health communication practices to mitigate the effects of the present misinformation outbreak and any additional outbreaks that may occur in the future.

The only peer-reviewed articles in English were included in our investigation, and some articles published in French, Chinese, and other languages may not have been included. These are just a few of the limitations of our study. The utilization of numerous databases, which produced seven pertinent publications to be examined in this review, and the reasonably stringent inclusion and exclusion criteria are the strengths of our work. Our study was performed to demonstrate that, despite being dominated by social media, traditional media can still play a significant role in reducing COVID-19 disinformation. Traditional media are still in demand since it is expected how they can educate the public about COVID-19 and promote health. In order for traditional media to have a favorable effect on COVID-19-related health promotion practices and public health in general.



## Conclusion

Based on the findings of the aforementioned literature review, it can be said that traditional media, such as television and radio, as well as direct information from health professionals like doctors, nurses, and midwives, is highly beneficial in giving accurate information during the COVID-19 pandemic. Although governments in many nations have carried out various health promotions connected to attempts to avoid the infection of COVID-19, researchers feel the need to make this scientific endeavor as a step to fight the spread of the “infodemic” in various mass media so that it does not spread further in order to suppress the spread of misinformation and can be used as a reference for the public in accessing the most recent accurate information regarding the COVID-19 pandemic.

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## Conflict of Interest

The authors declare that they have no conflict of interest.

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