journalism and media

MDPI

*Review*

# The Role of Media in Shaping Pandemic Response and Public Behavior: A Perspective from the Post-Pandemic Era

**Nik Norma Nik Hasan * and Jinglun Zhang**

School of Communication, Universiti Sains Malaysia, George 11800, Pulau Pinang, Malaysia; sharonzhang@student.usm.my
* Correspondence: niknorma@usm.my

**Abstract**

In human history, outbreaks of infectious diseases have had a profound impact on society, and the global spread of COVID-19 has posed unprecedented challenges to public health and social governance. In a mediatized society, the development of modern media technology has transformed the way information is disseminated, and the media are not only carriers of information but also deeply involved in social construction and system formation. Synthesizing conceptual and empirical literature on mediatization, pandemic communication, and public health governance, this review finds that viral transmission and information diffusion are intertwined, with the media and opinion leaders playing a key intermediary role in information dissemination. Mediatization operates at both the micro and macro levels, shaping the framing of pandemic prevention and control. Mediatized governance helps pandemic policies reach the public quickly and accurately and enables timely feedback, further shaping public opinion. Media practices have changed the modes of production and dissemination of health knowledge, bringing new challenges and opportunities, while the growing reliance on digital platforms has also introduced new risks such as data leakage. This review enriches the conceptual literature on information–disease co-transmission and outbreak prevention and control, and informs future pandemic prevention, control, and control practice.

**Keywords:** mediatization; media; COVID-19; pandemic prevention

## 1. Introduction

Throughout human history, pandemics caused by viruses have severely harmed societies. Their prevention and control have profoundly impacted economic, political and cultural processes, significantly influencing humanity's survival and future development (Briceño-León et al., 2019). The coronavirus pandemic (COVID-19) was first identified in December in Wuhan, China, and quickly spread across continents, creating an urgent public health crisis (Zu et al., 2020). However, potential uncertainty in pandemic prevention and control caused by continuously mutating pathogens, changing social structures, and increasing interpersonal interactions poses challenges for governmental health authorities and the public (Houser, 2023; Leach et al., 2022). Since the 20th century, the rapid development of modern media technology has had an enormous impact on human production and life. Today, the Internet, mobile Internet, and social media have not only vastly enhanced society's information dissemination capabilities, but also facilitated more expressions of opinion and social networks, constructing a new mediated society (Moores, 2022). Rather than viewing media as mere information dissemination tools, we must acutely recognize the

Check for updates

Academic Editor: María Luisa Humanes

Received: 30 June 2026
Revised: 17 September 2026
Accepted: 18 September 2026
Published: 12 October 2026

**Copyright:** © 2026 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license.

era of a mediated society's impact on health issues, especially the information pandemic's impact on COVID-19 prevention and control (Cinelli et al., 2020).

The prevalence of social media and internet platforms as generators of non-linear information flows is increasing. Numerous researchers have posited that social media networks, which currently hold a prominent position within the network model, have eroded the foundational faith in scientific competence, political institutions, and traditional news media inherent to the institutional model (Dahlgren, 2018). Social media have progressively brought their own logic into areas previously defined by the logic of the mass media, and the dissemination of scientific information can take on unexpected dimensions (van Dijck & Alinejad, 2020). In summary, while pandemic prevention and control policies and health messages reach the public quickly through the media, the knowledge constructed by the media regarding pandemic prevention and health does not always result in increased health awareness or positive behavioral changes in society.

Previous studies on COVID-19 prevention and control have focused on the medical field (Maglietta et al., 2022; Zheng et al., 2022). Most existing discussions on mediatization have focused on politics, religion, emotions, everyday life, sports, family, culture, migration, diplomacy, and children (Brommesson & Ekengren, 2017; Döveling et al., 2018; Frandsen, 2019; Krzyżanowski et al., 2018; Lövheim & Hjarvard, 2019; Michelsen & Krogh, 2017; Paus-Hasebrink et al., 2019; Sandén & Turunen, 2020; Scheu & Olesk, 2018; Xie, 2022). Research on mediatization during COVID-19 remains limited, and even where it exists, it tends to isolate single dimensions of the phenomenon—for example, opinion-leader dynamics on social media, or government risk communication within a single country—without connecting how virus–information co-transmission, mediatized governance, and the post-pandemic reorganization of health-knowledge production relate to one another. This fragmentation leaves an integrative account of mediatization's role in pandemic prevention and control largely absent from the literature, even as the post-pandemic period raises longer-term questions about institutional trust, misinformation management, and digital health governance that this earlier, more fragmented work does not directly address. Therefore, this paper brings these three strands of literature together: it provides a brief overview of previous studies on mediatization and health communication, analyzes the role of mass media and mediatized governance in pandemic prevention and control, and contributes an integrative conceptual account that connects them, informing future pandemic prevention, control, and health communication practice in the post-pandemic era.

For this review, mediatization is understood as the historical process by which the media have become increasingly interwoven with, and influential over, other social institutions and everyday practices, such that political, cultural, and health-related activities are increasingly conducted through, and shaped by the logic of, the media (Hepp et al., 2015; Hepp, 2019). Applied to pandemic prevention and control, mediatization refers to the ways in which media technologies and practices actively co-construct—rather than merely transmit—information about COVID-19, public health policy, and health knowledge, thereby shaping viral transmission dynamics, governance processes, and the public's health-related beliefs and behaviors. Building on this understanding, the review is guided by three questions: (1) How does mediatized information dissemination interact with the biological transmission of COVID-19? (2) How does mediatization operate within, and reshape, pandemic prevention and control at the micro and macro levels? (3) How have media practices during and after the pandemic reconfigured the production and circulation of health knowledge? Consistent with this focus, our treatment of public behavior throughout the review is conceptual and interpretive—synthesizing how mediatized information environments are theorized and reported to shape behavioral responses—rather than an

independent empirical analysis of behavioral outcomes; we return to this scope condition in the Discussion.

## 2. Methodology

The literature search was executed on 1 December 2024, utilizing comprehensive exploration across three electronic databases: SAGE Journals Online, Scopus, and Web of Science. The inclusion criteria stipulated that materials must be written in English and have a publication date falling between 1 January 2020 and 1 December 2024, thereby delimiting the temporal scope of the review. The search terms employed encompassed, though were not confined to, key terms such as 'COVID-19', 'Mediatization', 'Media', and 'Pandemic'. This initial search returned approximately 86 records from SAGE Journals Online, 122 from Scopus, and 67 from Web of Science.

To enhance the search scope, the snowballing method was applied, using recent articles to identify related works cited within them. Given the non-standardized keywords in research articles, potentially relevant literature may have been inadvertently omitted; because the search was restricted to article abstracts, studies whose abstracts did not contain the search terms—even where the full text was relevant—may also have been missed, which we treat as a limitation of the search strategy (see Section 4). Titles and abstracts were then screened for relevance, redundancy, and conformity to the inclusion criteria described above. This process identified a core set of anchor studies—spanning epidemiological models of information–disease co-transmission, mediatized-governance case studies, and health-knowledge production research—that structure the argument developed in Section 3. Because this review integrates and interprets a broader theoretical, contextual, and illustrative literature around these anchor studies, rather than exhaustively screening and reporting on a single fixed corpus in the manner of a systematic review, we present it as a conceptually structured literature review. The additional sources cited throughout Section 3 are theoretical, contextual, or case-illustrative material selected to support this synthesis, not a second, unreported set of 'included studies.' As the study involves no collection of primary data from human participants, no ethical approval was required. In total, the anchor studies and broader contextual and theoretical literature incorporated to build the review's argument comprise 119 cited sources.

## 3. Findings

### *3.1. Pandemic Transmission and Information Dissemination*

#### 3.1.1. Interaction of Viruses, Information, and Social Behavior

By combining epidemiological transmission and information diffusion, scholars have realized the intricate synergistic evolution and interaction between biological viral transmission and social information transmission (Bedson et al., 2021). Five potential modes of transmission, including airborne, droplet, contact with contaminated surfaces, oral, and fecal secretion, contribute to the significant infections of COVID-19 in the virus transmission network (Mehraeen et al., 2021). However, the spread of misinformation and disinformation in society is exacerbated by the online communication activities of countless individuals. Combined with the "Networks of coupled social and biological contagion structure" proposed by Bauch and Galvani (2013) (Figure 1) and the "dynamic interaction model of awareness and disease" proposed by Funk and Jansen (2013) (Figure 2), the structure of the epidemiological transmission network during COVID-19 is not only manifested in the fact that the pathogen leads to direct interpersonal transmission, but also triggers indirect information diffusion. These two transmission behaviors will not be confined to a single, static, and fragmented network structure but present a dynamic cross-coupling and synergistic evolutionary process (X. Zhang et al., 2021). In this complex

network structure, the infection rate, information entropy, and cognitive and behavioral changes affect the network transmission pattern worldwide, which brings many challenges to health prevention and control work and governmental decision-making (Nie et al., 2021). Therefore, pandemic prevention and control are a challenge to public health and wellness and a significant test of social governance in the digital age.

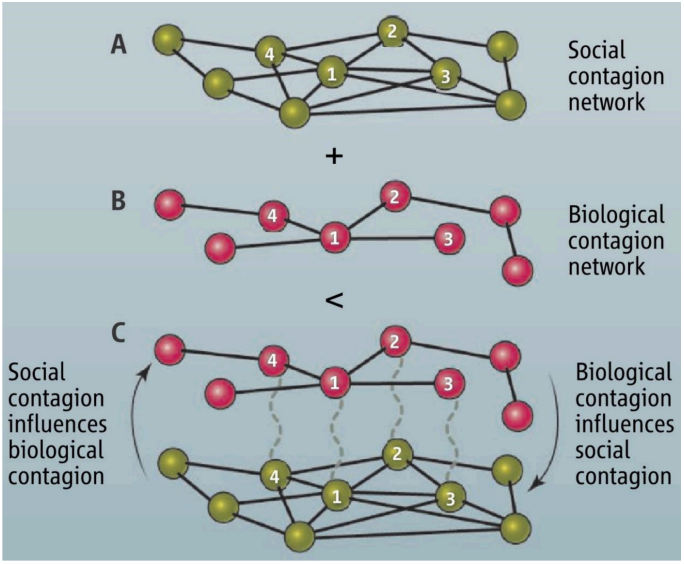



**Figure 1.** Schematic illustration of the multilayer network architecture linking a social (information) network layer and a biological (disease-transmission) network layer, adapted from the coupled social–biological contagion framework of Bauch and Galvani (2013). (**A**) The social contagion network layer, in which nodes represent individuals connected through social or informational ties; (**B**) The biological contagion network layer, in which the same individuals are connected through disease-transmission pathways; (**C**) The two layers coupled into a multilayer network, where dashed lines link each individual's node across the two layers, illustrating how social contagion influences biological contagion and, conversely, how biological contagion influences social contagion.

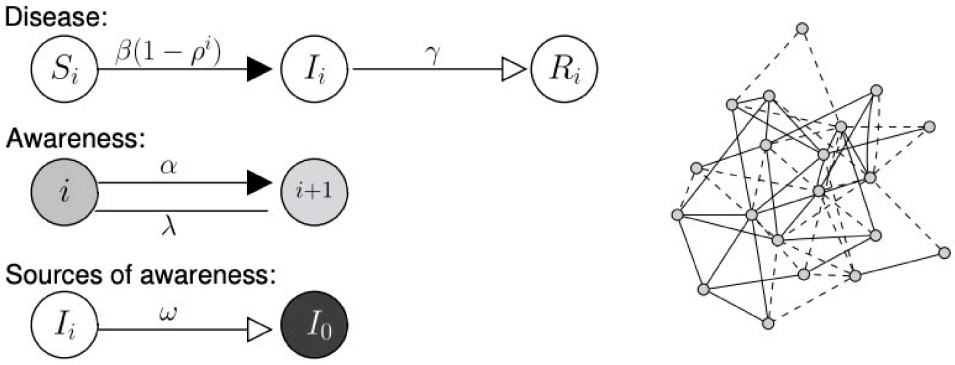



**Figure 2.** (**Left**): A network with two types of edges (disease, awareness). Disease states (white circles) follow a standard SIR structure, with transmission rate $\beta(1-\rho\hat{}i)$ decreasing as awareness level i increases; awareness states (shaded circles) increase via social contact at rate $\alpha$ and decay at rate $\lambda$; infected individuals become a recognizable source of awareness (filled circle, I_0) at rate $\omega$, triggering awareness in their contacts. (**Right**): Schematic diagram of the model. Transitions are marked to occur within nodes (empty caps), or across the disease (solid) or awareness (dashed) network (solid caps).

The pandemic and its awareness asymmetrically affect each other; rapid dissemination of information does not necessarily help control and prevent further spread of disease (W. Wang et al., 2019). The simultaneous spread of an infectious agent and information about

its presence and interactions in transmission changes human behavior, further influencing viral spread thresholds and individual/collective health behaviors, especially when rumors flood networks that people rely on for health information seeking. The structure of social networks plays an essential role in how awareness of infectious disease spreads, potentially altering the transmission curve of pandemics (Funk et al., 2009; Wątroba & Bródka, 2023). Widely spread misinformation and disinformation negatively affect individuals' physical and/or mental well-being, contribute to social group marginalization, and result in a lack of adherence to recommended public health measures, jeopardizing governmental efforts to combat persistent pandemics (Naeem & Bhatti, 2020; WHO et al., 2020). There is a positive correlation between information pace and disease spread based on the landscape of coevolution spreading dynamics (Figure 3). In other words, an effective, rapid distribution can successfully limit pandemic transmission (W. Wang et al., 2019). However, most research has investigated this correlation using mathematical modeling or computer simulations without empirical validation using real-world epidemiological data (Bedson et al., 2021), making it challenging to derive practical advice from theoretical frameworks. Accordingly, throughout this review we treat such mathematical and computational models as theoretical illustrations of possible information–disease co-transmission dynamics, and we restrict claims about actual public behavior to findings supported by empirical studies, such as surveys or digital-trace analyses, cited separately.

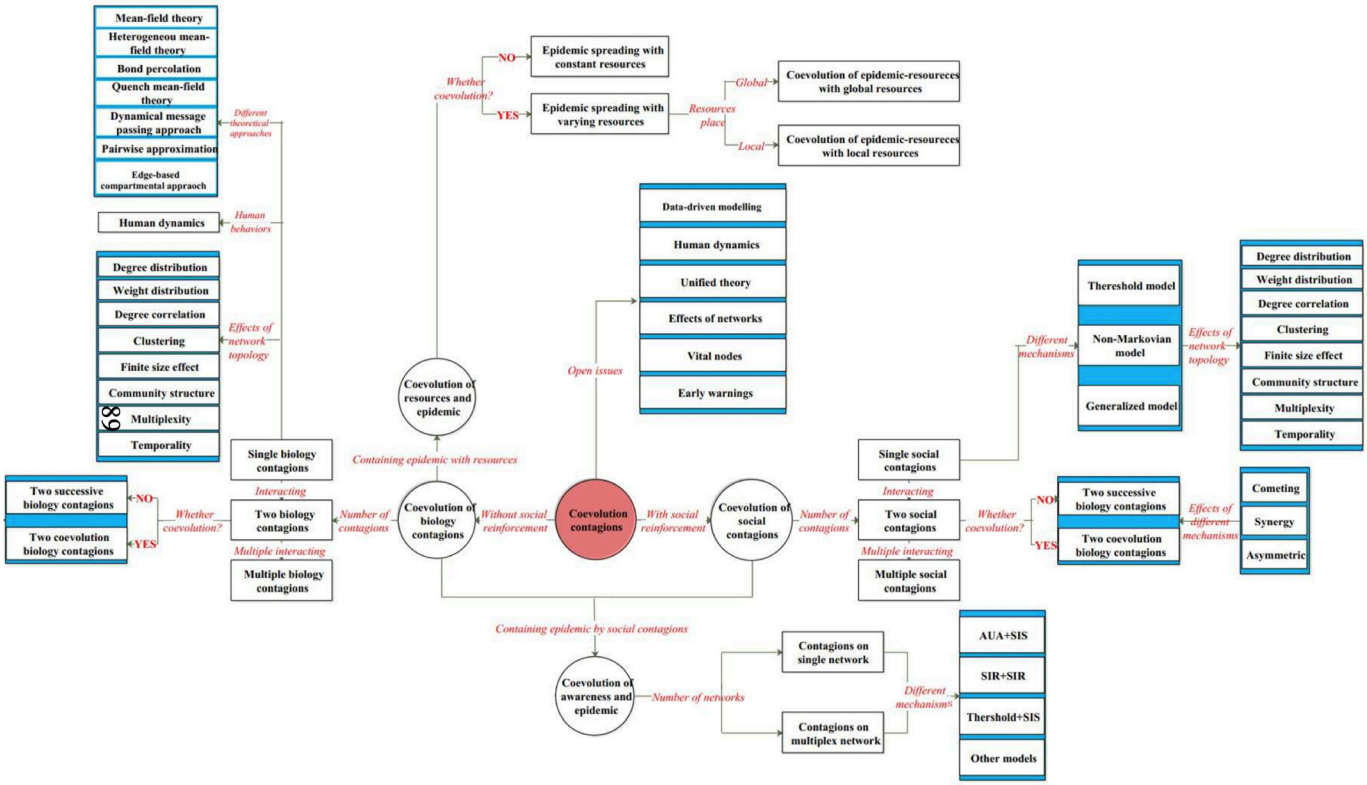



**Figure 3.** Landscape of coevolution spreading dynamics, showing how the relative rates of information diffusion and disease transmission jointly determine whether information spread accelerates or decelerates pandemic spread, adapted from W. Wang et al. (2019). White boxes/circles denote conceptual categories within the coevolution-contagion taxonomy; blue-bordered boxes list specific theoretical approaches, models, or network-topology properties associated with each category; red italicized text labels the criterion along which each branch is classified.

The study (X. Zhang et al., 2021) demonstrated that information dissemination significantly affects pandemic spread, with both positive acceleration and negative deceleration

observed. These effects vary by spatial distribution and media platform. The study also confirmed a notable positive correlation between the local economic development level and the positive feedback effect of information on pandemics. New media and big-city information quality directly relate to the infection number. Consequently, uncertainty is high in the "dynamic interaction model of awareness and disease," and social governance challenges in information pandemics are significant.

#### 3.1.2. Communication Pathways and Public Perceptions

During pandemics, accurate and timely health information is critical to preventing and controlling pandemics in the face of public communication challenges, such as difficulties in conveying scientific information, conflicting political differences over public health interests, and misinformation on social media (Adi & Stoeckle, 2021). Health policy, pandemic prevention and control, and health information are usually communicated to the public through the media from official sectors such as governments and health agencies. Examples include policies, guidance, and outbreak data released by government departments and health organizations (such as the World Health Organization and the Centers for Disease Control and Prevention), as well as research findings, outbreak analyses, and scientific advice released by research institutes, universities, and hospitals. These sources of information are highly authoritative and scientific and form the basis of pandemic information dissemination. Traditional media re-emerged as authoritative sources of information in some countries (e.g., Morocco, France), and public television during the pandemic restored audience trust through multilingual distribution and innovative content formats (e.g., online course transmissions) (Adi & Stoeckle, 2021). At the same time, with the development of a mediatized society, new media and social media (Twitter, Facebook, WeChat) have gradually replaced traditional media as a key link in the diffusion of information, health promotion and influencing public health behavior (Choi & Noh, 2023; Peng et al., 2024; Z. Wang, 2023), in which social media super-communicators (opinion leaders) play an important role in disseminating information to the public in the community. In social networks, with the participation of different opinion leaders at different times, the information dissemination environment will constantly change, thus changing the state of the dynamic system (Iranzo-Cabrera & López-García, 2021; Oko-Epelle et al., 2022).

The two-step flow theory proposed by Paul Lazarsfeld, Bernard Berelson, and Hazel Gaudet (Lazarsfeld et al., 1948) and the diffusion of innovations theory first proposed by Everett Rogers (1963) have demonstrated, with the arguments of many scholars, the enormous personal influence of opinion leaders; between the direct message of the media and the final reaction of the audience to that message, opinion leaders can influence people's attitudes and behavior. Opinion leaders often influence attitudes and behavior as experts in a particular field, even more than the official media (Oko-Epelle et al., 2022).

During the COVID-19 pandemic, the power-law distribution of different network nodes suggests that mass media and opinion leaders play crucial roles. When the network connects to numerous "hub nodes", their information quality and transmission rate directly impact pandemic spread (Funk & Jansen, 2013; Slimovich, 2021). For example (Figure 4), at the beginning of the COVID-19 outbreak in Wuhan, China, an ordinary user's post asking for help with treatment was rapidly increased in exposure by many opinion leaders on Weibo before it was finally taken seriously by the health authorities. The scale of communication from ordinary users with limited exposure can be gradually increased by the involvement of opinion leaders, whose time of entry into the court of public opinion controls the lifeline of retweets, and the earlier the opinion leaders are involved, the greater their influence (Yin et al., 2020). Effective social media use and following opinion leaders can enable individual active health information seeking and sound health decisions (X. Zhang et al., 2021).

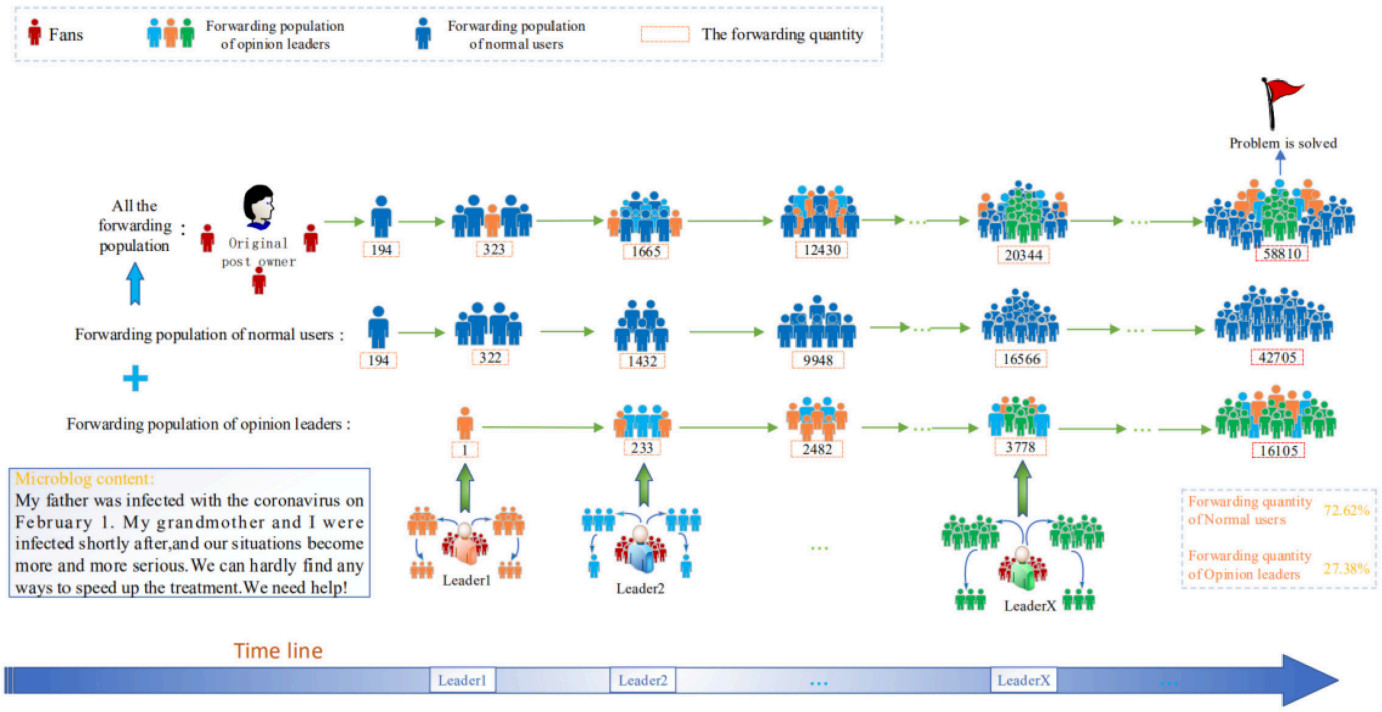



**Figure 4.** Illustration of how an ordinary user's message gains public attention as successive opinion leaders amplify it, using the Wuhan Weibo treatment-request example described in the text; each additional opinion leader further increases the message's exposure and eventual reach to health authorities. Blue icons indicate normal-user forwarders; orange/green icons indicate opinion leaders (Leader1, Leader2, . . ., LeaderX) and their respective downstream followers. Green arrows show the chronological progression of forwarding growth. The "+" denotes that the total forwarding population (top row) equals the sum of normal-user (middle row) and opinion-leader (bottom row) populations. Adapted from Yin et al. (2020).

Since there are always numerous opinion leaders with a large fan base in the real world, including influential journalists, well-known experts, etc., it is essential to study the dissemination mechanism of opinion leaders' influence. A study proposed a dynamic model of Opinion Leader Susceptibility to Spin-Forward Immunity (OL-SFI) that provides a good explanation (Yin et al., 2020). Figure 5 shows a schematic diagram to illustrate information spreading in the population with four independent states: the susceptible state (S), the forwarding state influenced by opinion leaders (FL), the forwarding state influenced by normal users (FN) and the immune state (I). '[L]' represents an opinion leader, as a superspreader, who has the ability to influence a susceptible user's state after contact; '[FL + FN]' represents a normal user influenced by an opinion leader or a normal user who has the ability to influence a susceptible user's state after contact.

Although it is difficult to determine and unify the public's personality and interests, choosing the best time to intervene and the appropriate number of opinion leaders to speak at different stages is conducive to guiding public opinion in a good direction, avoiding the exacerbation of conflicts between various groups, greatly increasing the efficiency of the dissemination of health information and health policies, and reducing the spread of viruses and rumors.

In this context, the media itself and the opinion leaders active therein function as a joint mediator facilitating pandemic information dissemination and serving as an intermediary in social communication. It is intricately interwoven with viral transmission and social communication processes, forming an organic structure of interconnected networks. However, in the "post-truth" era, where the public is more inclined to follow information that is

in line with their emotions and personal values rather than information that is perceived as factual or objective, the media and opinion leaders sometimes fail to play an active role in the information pandemic (Naeem & Bhatti, 2020). Consequently, it impacts pandemic transmission curves and societal behavioral adjustments, influencing pandemic prevention and control. Thus, pandemic transmission itself is mediatized, with media serving as a pandemic information dissemination channel and communication intermediary deeply embedded in virus transmission, spread, and social communication/interaction processes.

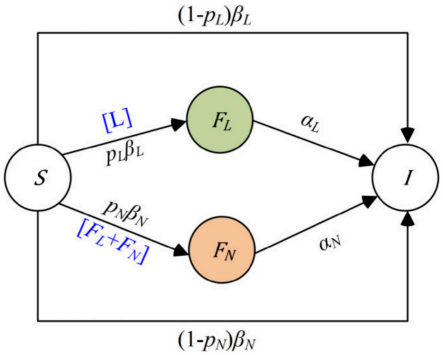



**Figure 5.** Schematic diagram of the Opinion Leader Susceptibility to Spin-Forward Immunity (OL-SFI) information-spreading model, showing the four population states—susceptible (S), forwarding influenced by an opinion leader (FL), forwarding influenced by a normal user (FN), and immune (I)—and the transitions between them, adapted from (Yin et al., 2020).

### *3.2. Mediatization of Pandemic Prevention and Control*

In May 2023, WHO (World Health Organization) Director-General Tedros Adhanom Ghebreyesus declared that COVID-19 was no longer a public health emergency of international concern (PHEIC). The three-year pandemic had profound, traumatic impacts globally, posing immense challenges to governmental health and epidemiological entities and the public (World Health Organization, 2023). Sudden public emergencies require governments to make timely decisions to protect lives, public health, and societal stability. Accurately understanding the virus heightens decision urgency. Thus, identifying disease risks and implementing risk mitigation strategies in a timely manner assume pivotal roles in public health across nations (Assefa et al., 2022; Dodds et al., 2020; Mukherjee et al., 2023). And viral transmission is complexly intertwined with social behavioral networks in the information society (Ali, 2022; Limaye et al., 2020). This manifests varying velocities and developmental states contingent on disparate countries, communities, and healthcare infrastructural levels (Kong et al., 2021). Notably, propelled by information technology, society, politics, and culture underwent profound mediatization; the media emerged as tools for intra-social interaction, transforming and reconstructing emergent social norms and interpersonal relationships (Hepp, 2019). Media occupy systemic social statuses, especially when the COVID-19 outbreak threatened lives and health globally, playing unprecedented roles in disseminating factual information, promoting public health initiatives/strategies, and influencing public opinion and behavior (Deuze, 2020). Mediatization has become an important theoretical framework for understanding the impact of media on society, politics and culture (Govindaraju & Muniandy, 2023).

#### 3.2.1. Multi-Level Pandemic Prevention and Control System

Mediatization operates concurrently at micro and macro levels, intricately shaping a sophisticated multilayered pandemic prevention and control framework (Hepp et al., 2015), propelling comprehensive enhancements across information dissemination, health systems, policy structures, resource safeguarding, and health knowledge domains. At the micro

level, media platforms, especially social media and portals, have evolved into pivotal conduits for pandemic-related information dissemination (Abd-Alrazaq et al., 2020; Mheidly & Fares, 2020). This transformation redefines interpersonal communication, profoundly influencing individual identity formation, event comprehension, and emotional responses (Latikka et al., 2022; Yue et al., 2022), accelerating virus transmission and information diffusion (Gisondi et al., 2022) while modulating public social behavior adaptively (Yu et al., 2022). Additionally, digital media facilitates online medical consultations and pharmaceutical transactions (Budd et al., 2020), with telemedicine extending personalized healthcare services around-the-clock and across larger physical territories, enhancing patient health literacy and convenience (Jnr, 2020), thereby reshaping their healthcare consumption patterns (Aldridge et al., 2021). Lastly, health and epidemiological agencies leverage digitized epidemiological information for pandemic surveillance and risk alerting, enabling more effective prevention and control strategy formulation (Budd et al., 2020). Concurrently, media employ visualization techniques like charts and maps to present pandemic data, providing real-time updates on pandemic dynamics and psychological support to the public (Bowe et al., 2020; Y. Zhang et al., 2021).

At the macro level, the deployment of digital technology in resource allocation has engendered heightened efficiency in health resource distribution, ensuring timely distribution of medical equipment, pharmaceuticals, human resources, and other essentials. This fosters integration and sharing of health resources, bolstering overall efficacy of pandemic prevention and control, instigating a transformation in the institutional mechanisms governing public health (Jnr, 2020; Budd et al., 2020). Concurrently, media and digital technologies shape societal ideologies through policy advocacy, explanation, and addressing public concerns. This influences public opinion and helps policymakers in flexibly adjusting pandemic prevention and control policies (L. Liu et al., 2022; Ma et al., 2023), thereby catalyzing innovation and refinement within the public health decision-making framework (Subbian et al., 2021; L. Zhang et al., 2020). Furthermore, the media dispels rumors and counters misinformation during pandemics, averting social panic caused by malevolent disease-related information dissemination. Health organizations utilize media platforms to disseminate health knowledge, augmenting public outbreak awareness and fostering health education and preventive consciousness. Mediatization has induced restructuring of the health knowledge production framework and reconfiguration of the network of health institutions, medical experts, the public, and media organizations. This heightens society's collective capacity and effectiveness in responding to pandemic threats. The effects of mediatization are interrelated and interactive. Individually, they impact lifestyles and thinking. Socially, they shape social structures, cultural landscapes and political and economic patterns. As technology evolves, so will these effects, presenting new challenges and opportunities.

Mediatization has profoundly reshaped the way information is disseminated and social interaction takes place in the digital age. While digital tools have alleviated social isolation to a certain extent and enhanced information exchange and interaction among community members, the high degree of dependency brought about by mediatization has gradually marginalized face-to-face communication, and the prolonged use of digital platforms may exacerbate digital fatigue and emotional detachment. In addition, global mediatization has exacerbated imbalances in the international discourse of different countries, limiting the influence of directly communicated content and making it more challenging and resistant in the areas of political advocacy and health communication. This trend suggests that mediatization not only expands channels of communication, but also deepens inequalities in the control of information and the distribution of power (Madrid-Morales, 2021; Schallhorn et al., 2022).

3.2.2. Synergies Between Government and Media in Policy Implementation

Mediatized governance emphasizes the importance of governmental interaction and synergy between the government and the media in public governance, especially in crisis events, where the media is an important channel for information dissemination as well as a key link in policy implementation and public mobilization. During the COVID-19 pandemic, governments released information on pandemic prevention, clarified rumors, and guided public behavior through both social media and traditional media, demonstrating the key role of mediatized governance in crisis response. In global public health crises, the synergy between governments and the media becomes an important guarantee for the effective implementation of pandemic policies (Dai et al., 2025; LaPoe et al., 2022; Sendra et al., 2024; Slimovich, 2021).

Mediatization, however, is not a uniform process: it is refracted through each country's political system, the ownership structure and independence of its media, and its level of economic development, so that mediatized governance takes substantially different forms across contexts. The national examples discussed below—Taiwan and Italy's cooperative public–private information partnerships, China's centralized state-media alignment, Russia's more restrictive state-dominated model, and African media's reliance on international news agencies—are therefore presented as illustrative case vignettes situated within this comparative framework, rather than as interchangeable instances of a single universal mechanism.

Firstly, social media is playing an increasingly important role in policy dissemination and health education. Governments' real-time communication through social media has effectively enhanced the transparency of policy implementation and public trust (Chen et al., 2020). The unidirectional mode of information dissemination, which relies only on press conferences and announcements to convey pandemic prevention policies and information to the public, gradually exposes the problems of lagging information, single content and poor interactivity in the face of the complexity of pandemics and the diversification of the public's information needs. In the face of the diversification of information needs, governments have quickly adjusted their communication strategies and realized multi-directional interactive communication with the help of social media platforms (Pomeranz & Schwid, 2021). For example, the Taiwanese government interacts with the public through social media and has established the 'Taiwan Fact Checking Centre', which has effectively dealt with false information and public anxiety; the Italian Ministry of Health has cooperated with Facebook to guide users to obtain authoritative information, which has effectively curbed the spread of false information. However, governments also intervene in media operations through censorship and information blocking. This suggests that the relationship between governments and the media needs to shift from one of control and obedience to one of cooperation and interaction to ensure effective policy implementation (Chen et al., 2020).

Secondly, political discourse in the contemporary highly mediated environment is increasingly influenced by the logic of the media. This is not only in terms of the media's screening and framing of issues, but also in terms of how political leaders and governments adapt their messaging approach to social media hotspots and the trend towards fragmentation of public attention, and how they use the media to shape political discourse that is understood and accepted by the public. Social media amplify or weaken political messages through editing, reframing, and reposting specific narrative frames that are more in line with the discursive style of the mass media. In addition, the intervention of disinformation has further disrupted the public opinion space, with social media algorithms fueling the rapid proliferation of emotive, high-conflict content and even dominating the direction of public opinion. Under these circumstances, the government has taken the initiative to set issues and control the flow of information, mainly through official media, social media

platforms and digital regulatory means, in an attempt to maintain discourse power in a fragmented public opinion environment. At the same time, the collaboration between the government and the mainstream media has become increasingly close, embedding political messages in the logic of the mainstream media through news releases, propaganda orientations and the setting of discourse frameworks, so that policy dissemination is more in line with the laws of media operation in order to increase public acceptance. As a result, the production and dissemination of political discourse is no longer a one-way output of the government, but a complex ecosystem full of interactions, conflicts and manipulations, in which governmental communication is closely intertwined with the media discourse and public reactions, shaping the contemporary political landscape (Slimovich, 2021). Mediatized governance has become a key governance tool for governments in the information society, not only affecting the dissemination and implementation of policies, but also determining the mode of interaction between the government, the media and the public, and shaping the new pattern of contemporary political governance.

In addition, mediatized governance is not only about government control and guidance of information flows, but also about how governments and the media work together to shape international and public opinion and influence policy implementation and public acceptance. Two-way interaction between the government and the media is detected in policy implementation, rather than one-way control from the authority. For example, the Chinese government reinforced the official narrative during the COVID-19 pandemic through state-owned media (e.g., Xinhua News Agency, CGTN) to emphasize the government's efforts and achievements in responding to the pandemic. At the same time, the deep binding between the government and state-owned media ensured that China's official messages were widely disseminated while reducing unfavorable coverage of the government. In the face of African media's greater tendency to rely on information provided by Western news organizations (e.g., Reuters, AFP) when reporting on the pandemic, Chinese state-owned media have attempted to shape the coverage of the pandemic in their favor in the Western media-dominated African news and opinion arena, so as to make the dissemination of the Chinese government's capabilities and pandemic policies more persuasive, which has also enhanced the prestige of international public opinion and preserved its international status (Madrid-Morales, 2021).

Finally, Asmolov's study shows that by regulating internet platforms, in the implementation of pandemic policy, the government not only controls the crisis narrative, but also influences the public's acceptance and implementation of pandemic policies (Asmolov, 2022). In the Russian case, the government used digital regulation, censorship and state-dominated media discourse to shape the image of official pandemic management, while undermining the mobilization capacity of independent media and social self-organization. This approach suggests that the synergy between government and media in pandemic management is not limited to information dissemination but also involves the structural construction of crisis management and social mobilization. However, the study points out that excessive media regulation can inhibit a society's ability to innovate on its own and limit decentered civic engagement, thereby reducing the overall society's resilience to crisis response. Therefore, the effectiveness of mediatized governance depends on a balanced relationship between the government and the media, which ensures authoritative information about the pandemic while preserving society's autonomous adaptive and coping capacity, in order to enhance the flexibility and sustainability of society governance.

In conclusion, during the COVID-19 pandemic, the synergistic cooperation between the government and the media in the areas of information dissemination, public opinion guidance, disinformation management, and policy implementation effectively promoted the implementation of the pandemic policy and the enhancement of public trust.

### *3.3. Media Practices and Pandemic Prevention and Control*

With technological advancements, the media has evolved into more than just a tool for information dissemination and knowledge sharing; it has become a powerful means of participating in societal creation and system construction (Hepp, 2019). During the pandemic, individuals and communities enriched media practice research by using media not only to obtain outbreak information, disseminate health knowledge, and engage in discussions but also to actively engage in self-protection and curbing the virus spread (Du et al., 2021; Hong et al., 2022). Interpersonal interactions and larger social forces during the pandemic have led to changes in social structure and order, providing new insights for media practice research (Boin et al., 2021; Giritli Nygren & Olofsson, 2020; Stawicki et al., 2020). Modern communication technologies provide a solid foundation for mediatization in pandemic prevention and control, transforming the pragmatic dimension of health knowledge production and circulation.

#### 3.3.1. Changes in Health Knowledge Production and Circulation System

Media impact both the nation at large and individual families, blurring boundaries between private and public, and transforming the concept of self, privacy, family, and knowledge production. The media's role in emancipatory restructuring and reconfiguring social relations has become more prominent in the network age (B. Li & Guan, 2012). While traditional health knowledge production relied mainly on professional bodies, medical institutions, and government releases, the rapid spread of modern communication technologies has led to profound changes in how health knowledge is produced and dramatically enhanced the ability of individuals and communities to produce and disseminate health knowledge through social media, blogs, and online health platforms (Bertolazzi et al., 2023; Tan & Goonawardene, 2017).

The media became a fundamental driving force in the construction of society through its total penetration of everyday life. Social restrictions and geographic closure policies were implemented in many countries at the height of the pandemic, limiting direct experience and first-hand information (Saud et al., 2020; Sun, 2020; Tsao et al., 2021). Negative emotions, such as fear and helplessness, influence preventive behavior, and people turn to social media for information and experiences that can benefit their survival and protect their health, which are not limited by time and space (Feng & Tong, 2022). Thus, social media became one of the main channels for the public to access health information during the pandemic (pp. 83–84), covering almost all aspects of an average person's existence. The public shared their personal experiences and self-protection measures through social media, transforming knowledge and information on different health topics into fruitful online discussions and dialogues daily (Al-Dmour et al., 2020), leading to more diversified dissemination of health knowledge (Saud et al., 2020). This bottom-up approach to knowledge production not only improves the efficiency of public access to health information but also contributes to the updating and enrichment of knowledge in the health field.

The active audience relies on the knowledge and information provided by the media to satisfy their health needs and achieve their health maintenance goals. However, people also cannot avoid the impact of the increase in information flow brought about by the proliferation of various media (Lupton & Lewis, 2021). Information overload and confusion affect people's mental health and health information-seeking behavior (Huang et al., 2023; T. H. Zhang et al., 2022). On social media platforms, information is disseminated fast. However, the authenticity of information is difficult to validate, which may lead to increased public uncertainty about the outbreak situation, and the dissemination of misinformation by many low-awareness members of the public, reducing credibility in public health authorities and increasing resistance to the cohesion of the public health

system and the implementation of epidemiological prevention and control policies (Ahmed & Rasul, 2022; P. Li et al., 2022). Social media amplifies the dissemination of controversial information, making it easier for the public to access unsubstantiated information; media travel faster than scientific research progresses, leading to a disconnect between information dissemination and scientific evidence (Sendra et al., 2024).

Moreover, individuals' participation in health knowledge production via platforms like social media has dramatically increased knowledge diversity and subjectivity. However, in autonomous information production, the public's information's truthfulness, scientific accuracy, and authority have been challenged (Bertolazzi et al., 2023). Additionally, although social media provide a platform for public opinion and experience, health knowledge dissemination has shifted from a top-down, one-way flow to horizontal information exchange. The status and role of experts and professional healthcare organizations have changed (van Dijck & Alinejad, 2020). The media, especially social media and online health platforms, is increasingly important to society's social fabric as people's information needs expand. However, traditional professional organizations are irreplaceable for providing verified, authoritative health information (Neely et al., 2021). Coordinating knowledge production between individuals and professional bodies to ensure accurate and scientific health information requires thoughtful consideration.

Lastly, the media significantly impacts the construction and reconstruction of the information environment (Hepp, 2019). Although the media has greatly expanded the scope of communication during public crises, both in terms of private peer-to-peer information flows and participation in the production of public health information and expression of public opinion (van Dijck & Alinejad, 2020), the controlling policies of the political power system, commercial interests of media organizations, and limitations of individual perspectives or capacities create a gap between the information environment and the natural environment, which is often ignored by the audience. Consequently, the information environment constructed by the mass media does not necessarily help the audience cope with the crisis in the natural environment (Grossman, 2022; Pansanella et al., 2023). Establishing a more effective mechanism to monitor and validate health information on social media and guiding the public to handle information on social media more rationally to ensure quality, credible wellness information in the era of social media are topics requiring future exploration.

#### 3.3.2. Data Traces and Information Resources in Media Practices

During the pandemic, media practices generated massive traces of data in the digital space, including individuals' browsing, sharing, commenting and other behaviors on social media, which became important cues for researchers and government agencies to understand the public's behaviors and social responses (Karafillakis et al., 2021; Whitelaw et al., 2020; Zang et al., 2023). Studying public attention to and application of health information, socio-emotional dispositions and information consumption pathways can shed light on the public's information access behaviors, social network structure and information dissemination pathways during a pandemic (Al-Dmour et al., 2020).

However, digital spaces are not a safe place, and the widespread use of data tracking by researchers and governments to analyze public behavior and sentiment during pandemics is highly likely to raise public concerns about privacy and data security (Golinelli et al., 2020; The Lancet, 2020). Large-scale data collection and analysis by governments during pandemics often involves sensitive information and personal privacy, such as individuals' health status and movement trajectories, which, to some extent, greatly exacerbates the risk of privacy breaches. It is therefore crucial for governments to balance the use of personal data with privacy protection and open and transparent communication (Bardus et al., 2022; Lin et al., 2021; F. Liu et al., 2023; Zenone et al., 2022). Deep mediatization has made the

pandemic crises inseparable from digital platforms, and while states have strengthened their control over digital platforms in crises through internet regulation, such regulation may limit the generative power of innovation and the resilience of society (Asmolov, 2022).

Moreover, although data tracking analysis provides a wealth of information about public behavior during pandemics, individuals' behavior and emotions are not stable and unchanging, but are influenced by a variety of factors, including social status, literacy level, psychological state, age, etc.; individual differences can exert a significant impact on research findings (Davies et al., 2021). Therefore, the broad applicability of conclusions drawn from data traces needs to be validated across different social contexts and groups to fully understand potential limitations and biases.

In modern society, open sharing of information resources has become an essential trend in media practice (Gardner et al., 2021). Medical research (Lau et al., 2023; Marra et al., 2022; Park & Yoon, 2023), pandemic prevention information (Kluge et al., 2020; Rubin, 2022; Zheng et al., 2022), pandemic data (Flor et al., 2022; Kandel et al., 2020), and other information resources are widely and openly shared online, providing the public with more timely information. On social media, individual behaviors and attitudes can be analyzed and mined through data to form information dissemination pathways, leading to a better understanding of the public's concerns and their need for health information (Abd-Alrazaq et al., 2020; Dai et al., 2023; Jordan et al., 2019; Shah et al., 2019; Sinnenberg et al., 2017). Mediated existence is becoming a fundamental aspect of human beings' overall way of being and daily life (Sun, 2020). By studying these information resources, scholars have gained a deeper understanding of the public's needs for different information types and assessed the information resources' credibility and validity (Rotulo et al., 2023). By using these information resources, the public can better understand a pandemic situation and take more targeted preventive and control measures.

While open sharing of information resources has enabled broader dissemination of health knowledge, new issues have emerged in information use. Especially during pandemics, uneven information access and sharing across communities necessitate attention. Some may have easier access and share pandemic information, while others may have limited access to information (Woolley et al., 2023). Research on social differences in information access would promote a more universally equitable distribution of resources, enabling fuller societal participation in pandemic prevention and control (Davies et al., 2021; Wei et al., 2023).

## 4. Discussion

Bringing the findings of Sections 3.1–3.3 together, this review shows that mediatization operates as a connective thread across three levels of pandemic response: it shapes the co-evolution of viral and information transmission (Section 3.1), structures the governance relationship between states and media in crisis response (Section 3.2), and reorganizes how health knowledge is produced, circulated, and contested among professional institutions, media organizations, and the public (Section 3.3). None of these levels is fully separable from the others: information dissemination pathways condition which governance strategies are viable, and mediatized governance choices in turn shape what health knowledge circulates and how it is received.

The contribution of this review is accordingly integrative rather than empirical: to our knowledge, it is the first to connect epidemiological information–disease co-transmission models, comparative analysis of mediatized pandemic governance, and research on post-pandemic health-knowledge production within a single conceptual account, addressing the research questions set out in Section 1.

This review has several limitations. First, as a conceptually structured literature review rather than a systematic review, it draws on a broader and more heterogeneous set of sources than a formally screened corpus, and its selection of anchor studies and supporting literature, while explained in Section 2, necessarily reflects the authors' interpretive judgment rather than an exhaustive, independently reproducible search. Second, the search was limited to English-language sources across three databases and restricted to abstracts, which may have excluded relevant work published in other languages or whose abstracts did not surface the search terms. Third, several of the epidemiological findings discussed in Section 3.1 rest on mathematical or computational models that, by their own authors' admission, lack empirical validation against real-world epidemiological data; we have treated these as theoretical illustrations rather than as validated descriptions of public behavior, but this also means the review's account of public behavior is more conceptual than empirically demonstrated, and dedicated empirical synthesis of behavioral outcomes remains an important direction for future work. Finally, the national governance examples discussed in Section 3.2.2 are illustrative rather than a systematic comparative analysis, and future research applying a structured comparative framework across a larger set of countries would strengthen this line of inquiry.

## 5. Conclusions

In conclusion, the uncertainty of pandemic prevention and control is intricately related to the complexity of human social behavior. The spread of pandemics triggers social crises and potential risks, and the monitoring, prevention and control of these crises and risks by the public health security system have become an important issue in the post-pandemic era. Among the many factors affecting the uncertainty of pandemic prevention and control, the deepening trend of social, political, and cultural mediatization plays a key role. The media and information are embedded in the process of viral transmission and spread as well as the adjustment of social behaviors, building a more complex transmission network and influencing the scope and speed of viral transmission and human health. Furthermore, lots of individuals obtain and share information about pandemics through the media, providing an opportunity to monitor and control pandemics. This activity objectively provides real data for epidemiological surveillance, prevention, and control. Moreover, the media, as an institutional factor involved in the production and construction of health knowledge, has provided an online space for the construction and dissemination of the discourse on pandemic prevention and control by different social actors, further contributing to the adjustment of the power structure.

**Author Contributions:** Conceptualization, N.N.N.H. and J.Z.; methodology, J.Z.; writing—original draft preparation, J.Z.; writing—review and editing, J.Z.; visualization, J.Z.; supervision, N.N.N.H.; All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. The authors have no financial or non-financial interests that are directly or indirectly related to the work submitted for publication.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** The authors confirm that all data generated or analyzed during this study are included in this published article. Furthermore, primary and secondary sources and data supporting the findings of this study were all publicly available at the time of submission.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## References


Abd-Alrazaq, A., Alhuwail, D., Househ, M., Hai, M., & Shah, Z. (2020). Top concerns of tweeters during the COVID-19 pandemic: A surveillance study. *Journal of Medical Internet Research*, *22*(4), e19016. [CrossRef] [PubMed]

Adi, A., & Stoeckle, T. (2021). Public relations and communications during the COVID-19 pandemic. *ESSACHESS—Journal for Communication Studies*, *14*(2), 7–13.

Ahmed, S., & Rasul, M. E. (2022). Social media news use and COVID-19 misinformation engagement: Survey study. *Journal of Medical Internet Research*, *24*(9), e38944. [CrossRef] [PubMed]

Al-Dmour, H., Masa'deh, R., Salman, A., Abuhashesh, M., & Al-Dmour, R. (2020). Influence of social media platforms on public health protection against the COVID-19 pandemic via the mediating effects of public health awareness and behavioral changes: Integrated model. *Journal of Medical Internet Research*, *22*(8), e19996. [CrossRef] [PubMed]

Aldridge, J., Garius, L., Spicer, J., Harris, M., Moore, K., & Eastwood, N. (2021). Drugs in the time of COVID: The UK drug market response to lockdown restrictions. *CrimRxiv*. Available online: https://www.crimrxiv.com/pub/86qkjvyn (accessed on 15 April 2023).

Ali, S. (2022). Combatting against COVID-19 & misinformation: A systematic review. *Human Arenas*, *5*(2), 337–352. [CrossRef]

Asmolov, G. (2022). Internet regulation and crisis-related resilience: From COVID-19 to existential risks. *The Communication Review*, *25*(3–4), 235–257. [CrossRef]

Assefa, Y., Woldeyohannes, S., Cullerton, K., Gilks, C. F., Reid, S., & Van Damme, W. (2022). Attributes of national governance for an effective response to public health emergencies: Lessons from the response to the COVID-19 pandemic. *Journal of Global Health*, *12*, 05021. [CrossRef] [PubMed]

Bardus, M., Daccache, M. A., Maalouf, N., Sarih, R. A., & Elhajj, I. H. (2022). Data management and privacy policy of COVID-19 contact-tracing apps: Systematic review and content analysis. *JMIR mHealth and uHealth*, *10*(7), e35195. [CrossRef] [PubMed]

Bauch, C. T., & Galvani, A. P. (2013). Social factors in epidemiology. *Science*, *342*(6154), 47–49. [CrossRef] [PubMed]

Bedson, J., Skrip, L. A., Pedi, D., Abramowitz, S., Carter, S., Jalloh, M. F., Funk, S., Gobat, N., Giles-Vernick, T., Chowell, G., de Almeida, J. R., Elessawi, R., Scarpino, S. V., Hammond, R. A., Briand, S., Epstein, J. M., Hébert-Dufresne, L., & Althouse, B. M. (2021). A review and agenda for integrated disease models including social and behavioural factors. *Nature Human Behaviour*, *5*(7), 834–846. [CrossRef] [PubMed]

Bertolazzi, A., Lombi, L., Lovari, A., Ducci, G., & D'Ambrosi, L. (2023). I know that I know: Online health information seeking, self-care and the overconfidence effect. *Sociological Forum*, *38*(3), 793–812. [CrossRef]

Boin, A., McConnell, A., & Hart, P. (2021). *Governing the pandemic: The politics of navigating a mega-crisis*. Springer Nature.

Bowe, E., Simmons, E., & Mattern, S. (2020). Learning from lines: Critical COVID data visualizations and the quarantine quotidian. *Big Data & Society*, *7*(2), 2053951720939236. [CrossRef] [PubMed]

Briceño-León, R., Guevara, M., & Terán, I. (2019). Politics as disease in Venezuela: Vector control before and after the Bolivarian revolution. In K. Bardosh (Ed.), *Locating Zika: Social change and governance in an age of mosquito pandemics*. Routledge. [CrossRef]

Brommesson, D., & Ekengren, A. M. (2017). *The mediatization of foreign policy, political decision-making, and humanitarian intervention*. Palgrave Macmillan US.

Budd, J., Miller, B. S., Manning, E. M., Lampos, V., Zhuang, M., Edelstein, M., Rees, G., Emery, V. C., Stevens, M. M., Keegan, N., Short, M. J., Pillay, D., Manley, E., Cox, I. J., Heymann, D., Johnson, A. M., & McKendry, R. A. (2020). Digital technologies in the public-health response to COVID-19. *Nature Medicine*, *26*(8), 1183–1192. [CrossRef] [PubMed]

Chen, Q., Min, C., Zhang, W., Wang, G., Ma, X., & Evans, R. (2020). Unpacking the black box: How to promote citizen engagement through government social media during the COVID-19 crisis. *Computers in Human Behavior*, *110*, 106380. [CrossRef] [PubMed]

Choi, D. H., & Noh, G. Y. (2023). The impact of social media on preventive behavior during the COVID-19 outbreak in south Korea: The roles of social norms and self-efficacy. *Sage Open*, *13*(3), 21582440231184969. [CrossRef] [PubMed]

Cinelli, M., Quattrociocchi, W., Galeazzi, A., Valensise, C. M., Brugnoli, E., Schmidt, A. L., Zola, P., Zollo, F., & Scala, A. (2020). The COVID-19 social media infodemic. *Scientific Reports*, *10*(1), 16598. [CrossRef] [PubMed]

Dahlgren, P. (2018). Media, knowledge and trust: The deepening epistemic crisis of democracy. *Javnost—The Public*, *25*(1–2), 20–27. [CrossRef]

Dai, J., Ji, C., & Chen, B. (2025). Mediatized governance in environmental disasters: Self-organizing community rescue through collaborative online documents. *Chinese Journal of Communication*, *18*(1), 1–20. [CrossRef]

Dai, J., Lyu, F., Yu, L., & He, Y. (2023). Temporal and emotional variations in people's perceptions of mass epidemic infectious disease after the COVID-19 pandemic using Influenza A as an example: Topic modeling and sentiment analysis based on Weibo data. *Journal of Medical Internet Research*, *25*(1), e49300. [CrossRef] [PubMed]

Davies, A. R., Honeyman, M., & Gann, B. (2021). Addressing the digital inverse care law in the time of COVID-19: Potential for digital technology to exacerbate or mitigate health inequalities. *Journal of Medical Internet Research*, *23*(4), e21726. [CrossRef] [PubMed]

Deuze, M. (2020). The role of media and mass communication theory in the global pandemic. *Communication Today*, *11*(2), 4–16.

Dodds, K., Broto, V., Detterbeck, K., Jones, M., Mamadouh, V., Ramutsindela, M., Varsanyi, M., Wachsmuth, D., & Woon, C. Y. (2020). The COVID-19 pandemic: Territorial, political and governance dimensions of the crisis. *Territory, Politics, Governance*, *8*, 289–298. [CrossRef]

Döveling, K., Harju, A. A., & Sommer, D. (2018). From mediatized emotion to digital affect cultures: New technologies and global flows of emotion. *Social Media + Society*, *4*(1), 2056305117743141. [CrossRef]

Du, E., Chen, E., Liu, J., & Zheng, C. (2021). How do social media and individual behaviors affect epidemic transmission and control? *Science of The Total Environment*, *761*, 144114. [CrossRef] [PubMed]

Feng, Y., & Tong, Q. (2022). Exploring the mediating role of situation awareness and crisis emotions between social media use and COVID-19 protective behaviors: Cross-sectional study. *Frontiers in Public Health*, *10*, 793033. [CrossRef] [PubMed]

Flor, L. S., Friedman, J., Spencer, C. N., Cagney, J., Arrieta, A., Herbert, M. E., Stein, C., Mullany, E. C., Hon, J., Patwardhan, V., Barber, R. M., Collins, J. K., I Hay, S., Lim, S. S., Lozano, R., Mokdad, A. H., Murray, C. J. L., Reiner, R. C., Sorensen, R. J. D., ... , Gakidou, E. (2022). Quantifying the effects of the COVID-19 pandemic on gender equality on health, social, and economic indicators: A comprehensive review of data from march, 2020, to September, 2021. *The Lancet*, *399*(10344), 2381–2397. [CrossRef] [PubMed]

Frandsen, K. (2019). *Sport and mediatization*. Routledge.

Funk, S., Gilad, E., Watkins, C., & Jansen, V. A. A. (2009). The spread of awareness and its impact on epidemic outbreaks. *Proceedings of the National Academy of Sciences of the United States of America*, *106*(16), 6872–6877. [CrossRef] [PubMed]

Funk, S., & Jansen, V. A. A. (2013). The talk of the town: Modelling the spread of information and changes in behaviour. In P. Manfredi, & A. D'Onofrio (Eds.), *Modeling the interplay between human behavior and the spread of infectious diseases* (pp. 93–102). Springer. [CrossRef]

Gardner, L., Ratcliff, J., Dong, E., & Katz, A. (2021). A need for open public data standards and sharing in light of COVID-19. *The Lancet Infectious Diseases*, *21*(4), e80. [CrossRef] [PubMed]

Giritli Nygren, K., & Olofsson, A. (2020). Managing the COVID-19 pandemic through individual responsibility: The consequences of a world risk society and enhanced ethopolitics. *Journal of Risk Research*, *23*(7–8), 1031–1035. [CrossRef]

Gisondi, M. A., Barber, R., Faust, J. S., Raja, A., Strehlow, M. C., Westafer, L. M., & Gottlieb, M. (2022). A deadly infodemic: Social media and the power of COVID-19 misinformation. *Journal of Medical Internet Research*, *24*(2), e35552. [CrossRef] [PubMed]

Golinelli, D., Boetto, E., Carullo, G., Nuzzolese, A. G., Landini, M. P., & Fantini, M. P. (2020). Adoption of digital technologies in health care during the COVID-19 pandemic: Systematic review of early scientific literature. *Journal of Medical Internet Research*, *22*(11), e22280. [CrossRef] [PubMed]

Govindaraju, G. M., & Muniandy, R. (2023). Mediatisation: Mapping the conceptual terrain. *Search*, *15*(2), 121–131.

Grossman, E. (2022). Media and policy making in the digital age. *Annual Review of Political Science*, *25*(1), 443–461. [CrossRef]

Hepp, A. (2019). *Deep mediatization*. Routledge.

Hepp, A., Hjarvard, S., & Lundby, K. (2015). Mediatization: Theorizing the interplay between media, culture and society. *Media, Culture & Society*, *37*(2), 314–324. [CrossRef]

Hong, X., Han, Y., Tanaka, G., & Wang, B. (2022). Co-evolution dynamics of epidemic and information under dynamical multi-source information and behavioral responses. *Knowledge-Based Systems*, *252*, 109413. [CrossRef]

Houser, R. S. (2023). The role of public health emergency management in biodefense: A COVID-19 case study. *Disaster Medicine and Public Health Preparedness*, *17*, e185. [CrossRef] [PubMed]

Huang, Q., Mao, B., Jia, X., & Peng, W. (2023). COVID-19 information overload mediated the effects of cross-channel information differences on health information elaboration. *Journal of Health Communication*, *28*(7), 401–411. [CrossRef] [PubMed]

Iranzo-Cabrera, M., & López-García, G. (2021). Scientific power in the Spanish press during the pandemic: A portrait of new leaders while explaining its risk. *Communication & Society*, *34*, 263–280. [CrossRef]

Jnr, B. A. (2020). Use of telemedicine and virtual care for remote treatment in response to COVID-19 pandemic. *Journal of Medical Systems*, *44*(7), 132. [CrossRef] [PubMed]

Jordan, S. E., Hovet, S. E., Fung, I. C. H., Liang, H., Fu, K. W., & Tse, Z. T. H. (2019). Using Twitter for public health surveillance from monitoring and prediction to public response. *Data*, *4*(1), 6. [CrossRef]

Kandel, N., Chungong, S., Omaar, A., & Xing, J. (2020). Health security capacities in the context of COVID-19 outbreak: An analysis of international health regulations annual report data from 182 countries. *The Lancet*, *395*(10229), 1047–1053. [CrossRef] [PubMed]

Karafillakis, E., Martin, S., Simas, C., Olsson, K., Takacs, J., Dada, S., & Larson, H. J. (2021). Methods for social media monitoring related to vaccination: Systematic scoping review. *JMIR Public Health and Surveillance*, *7*(2), e17149. [CrossRef] [PubMed]

Kluge, H. H. P., Wickramasinghe, K., Rippin, H. L., Mendes, R., Peters, D. H., Kontsevaya, A., & Breda, J. (2020). Prevention and control of non-communicable diseases in the COVID-19 response. *The Lancet*, *395*(10238), 1678–1680. [CrossRef] [PubMed]

Kong, J. D., Tekwa, E. W., & Gignoux-Wolfsohn, S. A. (2021). Social, economic, and environmental factors influencing the basic reproduction number of COVID-19 across countries. *PLoS ONE*, *16*(6), e0252373. [CrossRef] [PubMed]

Krzyżanowski, M., Triandafyllidou, A., & Wodak, R. (2018). The mediatization and the politicization of the "refugee crisis" in Europe. *Journal of Immigrant & Refugee Studies*, *16*(1–2), 1–14. [CrossRef]

LaPoe, B. R., Carter Olson, C. S., LaPoe, V. L., Jain, P., Woellert, A., & Long, A. (2022). Politics, power and a pandemic: Searching for information and accountability during a Twitter infodemic. *Electronic News*, *16*(1), 30–53. [CrossRef]

Latikka, R., Koivula, A., Oksa, R., Savela, N., & Oksanen, A. (2022). Loneliness and psychological distress before and during the COVID-19 pandemic: Relationships with social media identity bubbles. *Social Science & Medicine*, *293*, 114674. [CrossRef] [PubMed]

Lau, J., Koh, W. L., Ng, J. S., Khoo, A. M. G., & Tan, K. K. (2023). Understanding the mental health impact of COVID-19 in the elderly general population: A scoping review of global literature from the first year of the pandemic. *Psychiatry Research*, *329*, 115516. [CrossRef] [PubMed]

Lazarsfeld, P. F., Berelson, B., & Gaudet, H. (1948). *The people's choice: How the voter makes up his mind in a presidential campaign* (2nd ed.). Columbia University Press.

Leach, M., MacGregor, H., Ripoll, S., Scoones, I., & Wilkinson, A. (2022). Rethinking disease preparedness: Incertitude and the politics of knowledge. *Critical Public Health*, *32*(1), 82–96. [CrossRef] [PubMed]

Li, B., & Guan, Z. (2012). Medialization of space and spatialization of media—On media evolution and space shift. *Chinese Journal of Journalism Communication*, *34*(5), 38–42.

Li, P., Chen, B., Deveaux, G., Luo, Y., Tao, W., Li, W., Wen, J., & Zheng, Y. (2022). Cross-verification of COVID-19 information obtained from unofficial social media accounts and associated changes in health behaviors: Web-based questionnaire study among Chinese netizens. *JMIR Public Health and Surveillance*, *8*(5), e33577. [CrossRef] [PubMed]

Limaye, R. J., Sauer, M., Ali, J., Bernstein, J., Wahl, B., Barnhill, A., & Labrique, A. (2020). Building trust while influencing online COVID-19 content in the social media world. *The Lancet Digital Health*, *2*(6), e277–e278. [CrossRef] [PubMed]

Lin, H., Garg, S., Hu, J., Wang, X., Piran, M. J., & Hossain, M. S. (2021). Privacy-enhanced data fusion for COVID-19 applications in intelligent internet of medical things. *IEEE Internet of Things Journal*, *8*(21), 15683–15693. [CrossRef] [PubMed]

Liu, F., Wang, D., & Yan, T. (2023). Some examples of privacy-preserving sharing of COVID-19 pandemic data with statistical utility evaluation. *BMC Medical Research Methodology*, *23*(1), 120. [CrossRef] [PubMed]

Liu, L., Tu, Y., & Zhou, X. (2022). How local outbreak of COVID-19 affect the risk of internet public opinion: A Chinese social media case study. *Technology in Society*, *71*, 102113. [CrossRef] [PubMed]

Lövheim, M., & Hjarvard, S. (2019). The mediatized conditions of contemporary religion: Critical status and future directions. *Journal of Religion, Media and Digital Culture*, *8*(2), 206–225. [CrossRef]

Lupton, D., & Lewis, S. (2021). Learning about COVID-19: A qualitative interview study of Australians' use of information sources. *BMC Public Health*, *21*(1), 662. [CrossRef] [PubMed]

Ma, N., Yu, G., Jin, X., & Zhu, X. (2023). Quantified multidimensional public sentiment characteristics on social media for public opinion management: Evidence from the COVID-19 pandemic. *Frontiers in Public Health*, *11*, 1097796. [CrossRef] [PubMed]

Madrid-Morales, D. (2021). Who set the narrative? Assessing the influence of Chinese global media on news coverage of COVID-19 in 30 African countries. *Global Media and China*, *6*(2), 129–151. [CrossRef]

Maglietta, G., Diodati, F., Puntoni, M., Lazzarelli, S., Marcomini, B., Patrizi, L., & Caminiti, C. (2022). Prognostic factors for post-COVID-19 syndrome: A systematic review and meta-analysis. *Journal of Clinical Medicine*, *11*(6), 1541. [CrossRef] [PubMed]

Marra, A. R., Kobayashi, T., Suzuki, H., Alsuhaibani, M., Tofaneto, B. M., Bariani, L. M., Auler, M. d. A., Salinas, J. L., Edmond, M. B., Doll, M., Kutner, J. M., Pinho, J. R. R., Rizzo, L. V., Miraglia, J. L., & Schweizer, M. L. (2022). Short-term effectiveness of COVID-19 vaccines in immunocompromised patients: A systematic literature review and meta-analysis. *Journal of Infection*, *84*(3), 297–310. [CrossRef] [PubMed]

Mehraeen, E., Salehi, M. A., Behnezhad, F., Moghaddam, H. R., & SeyedAlinaghi, S. (2021). Transmission modes of COVID-19: A systematic review. *Infectious Disorders—Drug Targets*, *21*(6), 27–34. [CrossRef]

Mheidly, N., & Fares, J. (2020). Leveraging media and health communication strategies to overcome the COVID-19 infodemic. *Journal of Public Health Policy*, *41*(4), 410–420. [CrossRef] [PubMed]

Michelsen, M., & Krogh, M. (2017). Music, radio and mediatization. *Media, Culture & Society*, *39*(4), 520–535. [CrossRef]

Moores, S. (2022). *Media and everyday life in modern society*. Edinburgh University Press.

Mukherjee, S., Asthana, S., Ukponu, W., Ihueze, A. C., Gobir, I. B., Phelan, A. L., & Standley, C. J. (2023). National and subnational governance and decision-making processes during the COVID-19 pandemic in Nigeria: An empirical analysis. *BMJ Global Health*, *8*(9), e012965. [CrossRef] [PubMed]

Naeem, S. B., & Bhatti, R. (2020). The COVID-19 'infodemic': A new front for information professionals. *Health Information & Libraries Journal*, *37*(3), 233–239. [CrossRef] [PubMed]

Neely, S., Eldredge, C., & Sanders, R. (2021). Health information seeking behaviors on social media during the COVID-19 pandemic among American social networking site users: Survey study. *Journal of Medical Internet Research*, *23*(6), e29802. [CrossRef] [PubMed]

Nie, Q., Liu, Y., Zhang, D., & Jiang, H. (2021). Dynamical SEIR model with information entropy using COVID-19 as a case study. *IEEE Transactions on Computational Social Systems*, *8*(4), 946–954. [CrossRef] [PubMed]

Oko-Epelle, L., Sanusi, B., Olayinka, A. P., Oyedeji-Kazeem, A., & Adeagbo, S. A. (2022). A social network analysis: Evaluating roles of opinion leaders in shaping public opinion on COVID-19 news. *Sapientia Global Journal of Arts, Humanities and Developent Studies*, *5*(2), 385–398.

Pansanella, V., Sîrbu, A., Kertesz, J., & Rossetti, G. (2023). Mass media impact on opinion evolution in biased digital environments: A bounded confidence model. *Scientific Reports*, *13*(1), 14600. [CrossRef] [PubMed]

Park, H. W., & Yoon, H. Y. (2023). Global COVID-19 policy engagement with scientific research information: Altmetric data study. *Journal of Medical Internet Research*, *25*(1), e46328. [CrossRef] [PubMed]

Paus-Hasebrink, I., Kulterer, J., & Sinner, P. (2019). *Social inequality, childhood and the media: A longitudinal study of the mediatization of socialisation*. Springer Nature. Available online: https://library.oapen.org/handle/20.500.12657/23023 (accessed on 6 May 2023).

Peng, L., Wang, J., Zheng, N., & Guo, X. (2024). Traversing emotional spaces: Social media affordances and emotion regulation in times of physical isolation. *Social Media + Society*, *10*(1), 20563051241237273. [CrossRef]

Pomeranz, J. L., & Schwid, A. R. (2021). Governmental actions to address COVID-19 misinformation. *Journal of Public Health Policy*, *42*(2), 201–210. [CrossRef] [PubMed]

Rotulo, A., Kondilis, E., Thwe, T., Gautam, S., Torcu, Ö., Vera-Montoya, M., Marjan, S., Gazi, I., Putri, A. S., Hasan, R. B., Mone, F. H., Rodríguez-Castillo, K., Tabassum, A., Parcharidi, Z., Sharma, B., Islam, F., Amoo, B., Lemke, L., & Gallo, V. (2023). Mind the gap: Data availability, accessibility, transparency, and credibility during the COVID-19 pandemic, an international comparative appraisal. *PLoS Global Public Health*, *3*(4), e0001148. [CrossRef] [PubMed]

Rubin, R. (2022). Challenges of deciding whether and how to update COVID-19 vaccines to protect against variants. *JAMA*, *327*(23), 2273–2275. [CrossRef] [PubMed]

Sandén, J., & Turunen, J. (2020). Public servants' values and mental mediatization—An empirical study of Swedish local government. *Scandinavian Journal of Public Administration*, *24*(3), 3–28. [CrossRef]

Saud, M., Mashud, M., & Ida, R. (2020). Usage of social media during the pandemic: Seeking support and awareness about COVID-19 through social media platforms. *Journal of Public Affairs*, *20*(4), e2417. [CrossRef]

Schallhorn, C., Nölleke, D., Sinner, P., Seeger, C., Nieland, J. U., Horky, T., & Mehler, K. (2022). Mediatization in times of pandemic: How German grassroots sports clubs employed digital media to overcome communication challenges during COVID-19. *Communication & Sport*, *10*(5), 891–912. [CrossRef] [PubMed]

Scheu, A. M., & Olesk, A. (2018). National contextual influences on mediatization: The comparison of science decision makers in Estonia and Germany. *Science Communication*, *40*(3), 366–392. [CrossRef]

Sendra, A., Torkkola, S., & Parviainen, J. (2024). AstraZeneca vaccine controversies in the media: Theorizing about the mediatization of ignorance in the context of the COVID-19 vaccination campaign. *Health Communication*, *39*(3), 541–551. [CrossRef] [PubMed]

Shah, Z., Surian, D., Dyda, A., Coiera, E., Mandl, K. D., & Dunn, A. G. (2019). Automatically appraising the credibility of vaccine-related web pages shared on social media: A Twitter surveillance study. *Journal of Medical Internet Research*, *21*(11), e14007. [CrossRef] [PubMed]

Sinnenberg, L., Buttenheim, A. M., Padrez, K., Mancheno, C., Ungar, L., & Merchant, R. M. (2017). Twitter as a tool for health research: A systematic review. *American Journal of Public Health*, *107*(1), e1–e8. [CrossRef] [PubMed]

Slimovich, A. (2021). Global pandemic and mediatized politics: Argentina's presidential communication and its impact on Twitter in the first half of 2020. *Comunicación y Hombre*, *17*, 85–102.

Stawicki, S. P., Firstenberg, M. S., & Papadimos, T. J. (2020). The growing role of social media in international health security: The good, the bad, and the ugly. In A. J. Masys, R. Izurieta, & M. Reina Ortiz (Eds.), *Global health security: Recognizing vulnerabilities, creating opportunities* (pp. 341–357). Springer International Publishing. [CrossRef]

Subbian, V., Solomonides, A., Clarkson, M., Rahimzadeh, V. N., Petersen, C., Schreiber, R., DeMuro, P. R., Dua, P., Goodman, K. W., Kaplan, B., Koppel, R., Lehmann, C. U., Pan, E., & Senathirajah, Y. (2021). Ethics and informatics in the age of COVID-19: Challenges and recommendations for public health organization and public policy. *Journal of the American Medical Informatics Association*, *28*(1), 184–189. [CrossRef] [PubMed]

Sun, W. (2020). Mediated survival: Civilisational transformation and the birth of a new kind of humanity. *Exploration and Free Views*, *(6)*, 15–17+157.

Tan, S. S. L., & Goonawardene, N. (2017). Internet health information seeking and the patient-physician relationship: A systematic review. *Journal of Medical Internet Research*, *19*(1), e5729. [CrossRef] [PubMed]

The Lancet. (2020). COVID-19: Fighting panic with information. *The Lancet*, *395*(10224), 537. [CrossRef] [PubMed]

Tsao, S. F., Chen, H., Tisseverasinghe, T., Yang, Y., Li, L., & Butt, Z. A. (2021). What social media told us in the time of COVID-19: A scoping review. *The Lancet Digital Health*, *3*(3), e175–e194. [CrossRef] [PubMed]

van Dijck, J., & Alinejad, D. (2020). Social media and trust in scientific expertise: Debating the COVID-19 pandemic in the Netherlands. *Social Media + Society*, *6*(4), 2056305120981057. [CrossRef]

Wang, W., Liu, Q. H., Liang, J., Hu, Y., & Zhou, T. (2019). Coevolution spreading in complex networks. *Physics Reports*, *820*, 1–51. [CrossRef] [PubMed]

Wang, Z. (2023). Analysis of the dissemination of health information in the context of mass communication. *Journal of Education, Humanities and Social Sciences*, *13*, 212–218. [CrossRef]

Wątroba, P., & Bródka, P. (2023). Influence of information blocking on the spread of virus in multilayer networks. *Entropy*, *25*(2), 231. [CrossRef] [PubMed]

Wei, R., Zhang, Y., Gao, S., Brown, B. J., Hu, S., & Link, B. G. (2023). Health disparity in the spread of COVID-19: Evidence from social distancing, risk of interactions, and access to testing. *Health & Place*, *82*, 103031. [CrossRef] [PubMed]

Whitelaw, S., Mamas, M. A., Topol, E., & Van Spall, H. G. C. (2020). Applications of digital technology in COVID-19 pandemic planning and response. *The Lancet Digital Health*, *2*(8), e435–e440. [CrossRef] [PubMed]

WHO, UN, UNICEF, UNDP, UNESCO, UNAIDS, ITU, UN Global Pulse & IFRC. (2020). *Managing the COVID-19 infodemic: Promoting healthy behaviours and mitigating the harm from misinformation and disinformation*. World Health Organization. Available online: https://www.who.int/news/item/23-09-2020-managing-the-covid-19-infodemic-promoting-healthy-behaviours-and-mitigating-the-harm-from-misinformation-and-disinformation (accessed on 5 April 2023).

Woolley, K. E., Bright, D., Ayres, T., Morgan, F., Little, K., & Davies, A. R. (2023). Mapping inequities in digital health technology within the World Health Organization's European region using PROGRESS PLUS: Scoping review. *Journal of Medical Internet Research*, *25*(1), e44181. [CrossRef] [PubMed]

World Health Organization. (2023, May 5). *WHO Director-General's opening remarks at the media briefing—5 May 2023*. Available online: https://www.who.int/news-room/speeches/item/who-director-general-s-opening-remarks-at-the-media-briefing---5-may-2023 (accessed on 16 June 2023).

Xie, Z. (2022). The invention of Chinese "media tradition": Mediatization of festival tradition and family cultural reproduction in contemporary China. *Global Media and China*, *7*(2), 183–201. [CrossRef]

Yin, F., Xia, X., Song, N., Zhu, L., & Wu, J. (2020). Quantify the role of superspreaders -opinion leaders- on COVID-19 information propagation in the Chinese sina-microblog. *PLoS ONE*, *15*(6), e0234023. [CrossRef] [PubMed]

Yu, S., Abbas, J., Draghici, A., Negulescu, O. H., & Ain, N. U. (2022). Social media application as a new paradigm for business communication: The role of COVID-19 knowledge, social distancing, and preventive attitudes. *Frontiers in Psychology*, *13*, 903082. [CrossRef] [PubMed]

Yue, Z., Zhang, R., & Xiao, J. (2022). Passive social media use and psychological well-being during the COVID-19 pandemic: The role of social comparison and emotion regulation. *Computers in Human Behavior*, *127*, 107050. [CrossRef] [PubMed]

Zang, S., Zhang, X., Xing, Y., Chen, J., Lin, L., & Hou, Z. (2023). Applications of social media and digital technologies in COVID-19 vaccination: Scoping review. *Journal of Medical Internet Research*, *25*(1), e40057. [CrossRef] [PubMed]

Zenone, M., Kenworthy, N., & Maani, N. (2022). The social media industry as a commercial determinant of health. *International Journal of Health Policy and Management*, *12*, 6840. [CrossRef] [PubMed]

Zhang, L., Li, H., & Chen, K. (2020). Effective risk communication for public health emergency: Reflection on the COVID-19 (2019-nCoV) outbreak in Wuhan, China. *Healthcare*, *8*(1), 64. [CrossRef] [PubMed]

Zhang, T. H., Tham, J. S., Waheed, M., Kim, J. N., Jeong, J. S., Chang, P. K., & Ahmad, A. M. (2022). Pathway linking health information behaviors to mental health condition during the COVID-19 infodemic: A moderated mediation analysis. *Frontiers in Public Health*, *10*, 924331. [CrossRef] [PubMed]

Zhang, X., Zhang, Z. K., Wang, W., Hou, D., Xu, J., Ye, X., & Li, S. (2021). Multiplex network reconstruction for the coupled spatial diffusion of infodemic and pandemic of COVID-19. *International Journal of Digital Earth*, *14*(4), 401–423. [CrossRef]

Zhang, Y., Sun, Y., Padilla, L., Barua, S., Bertini, E., & Parker, A. (2021, May 8–13). *Mapping the landscape of COVID-19 crisis visualizations*. 2021 CHI Conference on Human Factors in Computing Systems, Yokohama, Japan. [CrossRef]

Zheng, C., Shao, W., Chen, X., Zhang, B., Wang, G., & Zhang, W. (2022). Real-world effectiveness of COVID-19 vaccines: A literature review and meta-analysis. *International Journal of Infectious Diseases*, *114*, 252–260. [CrossRef] [PubMed]

Zu, Z. Y., Jiang, M. D., Xu, P. P., Chen, W., Ni, Q. Q., Lu, G. M., & Zhang, L. J. (2020). Coronavirus disease 2019 (COVID-19): A perspective from China. *Radiology*, *296*(2), 245–467. [CrossRef] [PubMed]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.