

**CRISIS COMMUNICATION FAILURES IN PUBLIC
ADMINISTRATION: LESSONS FROM PANDEMIC
GOVERNANCE**

Noah Conte

Entrepreneur

M.P.A. (Master of Public Administration) Student, *London School of Economics
and Political Science*

ABSTRACT

During the rapid spread of COVID-19, the existence of communication failure in public administration was examined by the study. To handle crises situation effectively, public health authorities need to focus on using advanced updated strategies to share the information instead of using traditional method of communication. The major challenges faced during the spread of communication on the occurrence of pandemic across the world are political interference, poor digital communication and lack of efficient governance system. By using PRISMA framework, systematic literature review was conducted to evaluate the communication failure in public administration. Total of 567 studies was considered for initial search using various databases such as Web of Science, Springer Link, IEEE Xplore, PubMed and Scopus. The studies published within the period of 2020 to 2025 was considered for analysis of systematic review. To strengthen the comprehensiveness of the review 51 additional studies were identified by using Research Gate and Google Scholar. After screening and eligibility checks total of 19 studies was finalized. The comparative insights were incorporated in the study to reflect the diverse governance context in the study. The poor coordination of framework, reactive communication and inconsistent data was considered as major reason impacting the confidence of public during the spread of COVID-19. Moreover, study predicated uncertainty among public during COVID-19 was caused due to political interference, delayed updates and mismatched information. The anticipatory communication frameworks integrated with transparency need to be adopted by public administrator helps to prevent the spread of misinformation among public.

Keywords: *Public Administration, Public Trust, Misinformation, Crisis Communication, COVID-19, Digital Communication, Pandemic Governance, Leadership and Crisis Models.*

1. INTRODUCTION

During the occurrence of national emergencies, government agencies and public authorities need to focus on communicating accurate information with public. The government need to focus on assuring reliable and effective communication transferred to the public during the occurrence of pandemic. The public was able to understand the risk associated with the COVID-19 pandemic based on the government providing clear and consistent messages help to develop trust on government actions. **Hyland-Wood *et al.* (2021)** explored that during the fast spread of COVID-19, government faces several challenges in establishing proper communication with public. The level of public trust, political influence and quality of information shared are the major factors helps to shape the communication of the government during the occurrence of pandemic. To assure effective governance during emergencies, more focus needs to given on improving communication framework helps to enhance public trust. The assurance of clear and accurate information shared to public in a timely manner helps to address the challenges caused during the spread of COVID-19. The serious weakness was caused to government due to spreading of misinformation during pandemic in official communication system reduced the trust of the public government actions.

Christensen and Lagreid (2020) highlighted the importance of spreading smoother and cooperative communication during the spread of COVID-19 by the government helps to gain the trust of the public in Norway. Moreover, government used common theme known as “working together” and worked with experts to give clear and consistent messages to public during pandemic. **Lucini (2025)** stated that the existence of communication between government and public during the spread of COVID-19 was poorly coordinated and confusing in Lombardy, Italy. The conflicting and different type of messages was spread by regional and national authorities. The risk of fragmented communication in the Italian government reduces public trust and confidence of the public. The spread of virus increases then expected due to miscommunication problem in Italy. The trust of public in Italy was lost due to fragmented and unclear mode of spread of communication by the government.

The Norway government was able to gain the trust of the public during the spread of pandemic with the spreading of theme ‘Working together’ helps to gain the trust of the public. The communication strategies adopted by Italy uses clear and consistence guidance.

The Norway government managed the crisis communication in an effective way by using well organized communication strategies helps to strengthen the trust of the public. **Moon (2020)** evidenced that flexible and transparent measures adopted by South Korea during the spread of pandemic helps to gain the trust of the public. The lessons learned due to spread of Middle East Respiratory Syndrome (MERS) helps to provide guideline in managing the occurrence of COVID-19. The spread of MERS in South Korea was controlled without adopting lock down by encouraging people to cooperate voluntarily by explaining the risk of MERS. **Biancovilli et al. (2021)** demonstrated that the spread of false information in Brazil during the occurrence of COVID-19 pandemic created a strong negative effect among the people around the country leads to major cause of “infodemic” across worldwide. The political divisions were able to become stronger due to spreading of misinformation more quickly decreased the trust of the public (**Hong & Roy, 2023**). The transparent and consistent way of communication with the public helps to address the challenges caused by spread of misinformation. The spreading of misinformation was handled effectively by assuring the accuracy of the message and trust in messenger. **Zhai et al. (2022)** highlighted in China the spread of virus was made understood by the people helps to reduce the panic with the people enhances the trust of the public. **Rasmussen et al. (2024)** stated that the spreading of misinformation in Denmark was handled by focusing on clear, consistent and targeted information in social media by the government helps to prevent the spread of false information. The confidence of the people in Denmark was enhanced by using of well-planned communication strategies. The inconsistent messages by the government make public to respond poorly to the pandemic. The fast and accurate information sharing during pandemic was assured by the adoption of Crisis and Emergency Risk Communication (CERC) framework (**Sauer et al. 2021**). The quality of political leadership and government administrative strength was influenced by the policies shared with the public. The political environment exist in the country and governance system helps to predicate the effectiveness of crisis communication (**Caldarelli et al. 2021; Janousek & Noh, 2024**).

The government was able to track the real time events of the country during the spread of COVID-19 by using governance technology tools. During the occurrence of pandemic various type of tools such as automated reporting tools, real time dashboard and apps help government in tracking of infection accurately (**Zhang et al. 2023**). The trust of the public

with government was enhanced during the occurrence of COVID-19 by the integration of strong government information system with social media (**Zhai *et al.* 2022**). The major challenges caused to the government during pandemic was the spread of misinformation rapidly than government official updates (**Caldarelli *et al.* 2021**). **Hyland-Wood *et al.* (2021)** explored the importance of implementing two-way communication during COVID-19 helps government to collect the feedback from the government in turn helps to correct the error quickly by the government.

During the spread of COVID-19, the existence of communication failure by the government was examined by the study help in strengthening the emergency response capacity, preparedness and capacity of public administration. The following was the list of objectives used in the study

- ❖ To examine coordination and integration challenges in crisis communication across different levels of government during COVID-19.
- ❖ To analyse the role of data inconsistencies and information gaps in shaping public perception, trust, and decision-making during the pandemic.
- ❖ To evaluate proactive versus reactive communication approaches and the effectiveness of strategies.

MA *et al.* (2021) demonstrated that the existence of weakness in global communication strategies decreased the compliance and trust of the public with health measures. The millions of lives around the world were saved during the occurrence of COVID-19 by the implementation of effective and strong communication. **Khan and Moazzam (2022)** stated that the strategies of improving the communication system need to focus on examining the reason for communication failure in different countries helps to manage the occurrence of crises in future effectively. The good cooperation and coordinated strategies with different agencies help to deliver consistent and accurate messages to the public. The addressing of inconsistency and data gap was achieved by delivering timely and reliable information to the public during pandemic.

Wang et al. (2021) states that the occurrence of miscommunication during the pandemic was caused by fast spread of false information, growing trust and confusion. The spread of information in twitter on globally before the spike in infections in china causes public health risk more serious. **Hatcher (2020)** explored that in United States public compliance with safety measures was reduced by state level and political conflict differences. The overwhelming amount of spreading unrelated information about pandemic in Itlay weakened the understanding of the public. The implementation of high reliability organizational principles in the communication helps to reduce the spread of misinformation risk during pandemic (**Sanders, 2020**). **Kamin and Perger (2021)** explored that reactive approaches adopted by the government in managing the pandemic communication help to reduce the trust of the public with government. The paying of attention to feedback by the public by the officals of the government helps to enhance the credibility of the government. The communication becomes more efficient by the public sharing common understanding of messages discussed with officals of the government (**Mai et al. 2023**). **Hyland-Wood et al. (2021)** states that adoption of proactive evidences-based strategies during pandemic helps to manage the pandemic communication in an effective way. The sincerity and accuracy of government messages transmitted to the public helps to earn the trust of the citizens (**Savoia et al. 2023**).

2. METHODOLOGY

The examination of crisis communication failure during the spread of COVID-19 was considered as major goal of the study. The PRISMA method of systematic review was used by the study for analysis. The identification, screening, data coding and thematic analysis are the major key processes used in the analysis of the study (**Page et al. 2021**).

2.1 Article Identification

By using keyword related to crisis communication structured search was carried out in the study. The specific query was used for the collection of studies related to analysis. The well-designed search terms integrated with Boolean operators helps to assure the relevance and accuracy of the results.

("coronavirus" OR "public administration" OR "crisis communication" OR "government communication") AND ("pandemic" OR "COVID19" OR "pandemic governance").

The studies related to immediate post pandemic phases was included in the analysis. By using five major databases such as PubMed, Scopus, Springer Link, IEEE Xplore and Web of science total of 567 studies was considered for the study. By using Research gate and Google scholar additional 51 studies were identified for analysis. The studies written only in English are considered for the review. The relevant studies for the review were identified by using systematic search strategy.

2.2 Article Screening and Inclusion

The collected abstracts and titles are reviewed by the researcher to identify relevant empirical studies, theoretical analysis and case studies on communication failure in public administration during the spread of COVID-19. Total of 165 studies was removed due to not focusing on government communication, used weak methods and did not have enough data needed for analysis. 19 studies were finally included in the review. Based on the consideration of relevance, providing useful information and reliability 19 studies was selected for final analysis. The challenges caused in the screening process of the studies was prevented through careful discussion. To choose the study for analysis, research used well organized and strict method. The analysis of crisis communication failures in public administration was made easy with the adoption of structured approach during the occurrence of COVID-19. The review was assured to produce careful and trustworthy process thereby assuring study comprehensiveness and relevance. The government actively responded to COVID-19 during the period of 2019 to 2025 were considered for the collection of studies to assure the relevance. The loss of public trust due to political or mixed messages, slow sharing of information and the use of unclear or disconnected communication channels are the major problem considered in the selection of final set of studies.

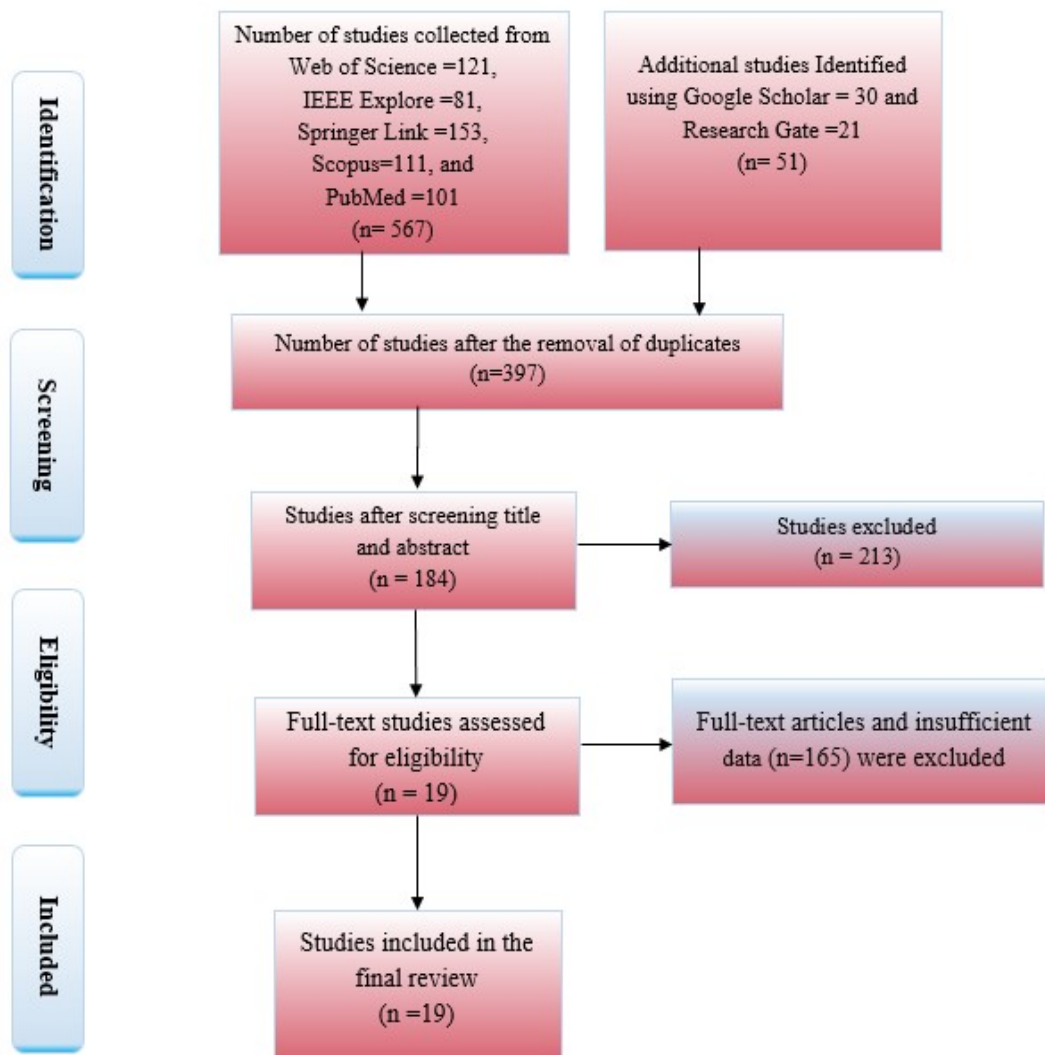


Figure 1: PRISMA flow diagram of the systematic review

(Source: The Author)

Moreover, the selected study highlights weak communication strategies, spread of misinformation and reduced public cooperation with health rules makes harder for governments to manage the crisis effectively. The trustworthiness of the study was increased by systematic and transparent process used in the selection of studies for analysis. The crisis communication strengthening future health emergencies was highlighted using PRISMA guided process helps to validate the credibility of the methodology.

2.3 Data Coding and Thematic Analysis

The overall governance issues, public reactions during the occurrence of COVID-19 pandemic, misinformation and failure of communication are the major factors considered in the selection of studies. The analysis of studies was proceeded with open coding method. The repeating ideas and patterns were identified by the researcher by carefully analysing each study. The sharing of information, engagement of public and establishment of public trust are the major pattern identified by the analysis of finalized studies. Based on the identification of codes, each code related to crisis communication failure in public administration was classified into four major themes such as coordination and integration challenges across government levels, data inconsistencies and information gap, proactive and reactive communication approaches with enhancing transparency and public engagement. The existence of communication between national, regional and local authorities during crisis causes inconsistencies result in spreading of mixed messages, reduced public and regional was briefly explored by using first theme of the study Coordination and Integration Challenges across Government Levels. The impact of delayed decision making by the public due to transmission of inaccurate and delayed information from government highlighted by using second theme of the study data inconsistency and information gap. The proactive strategies used by the government and reactive strategies used to responded emerging issues during pandemic was illustrated by the third theme of the study proactive and reactive communication approaches. The consideration of decision making by public during the occurrence of COVID-19 helps to strengthen the spread of information by the government was highlighted by fourth theme of the study such as enhancing engagement and public engagement explores various type of strategies including real time feedback system and mechanism designed to increase openness and credibility. The ability of the government to share accurately and timely health information during the occurrence of COVID-19 pandemic was explored by the theme digital communication tools and data-driven technologies helps to enhance the trust of the public by the government during crisis. As government was more relied on online platform to share timely updates the implementation of digital communication tools becomes essential during COVID-19 pandemic. The fifth theme of the study focuses more on digital communications tools used during pandemic. The large number of populations was reached quickly and consistently by mobile applications, social media

network, official government websites and mobile applications. The real time information related to vaccine procedure and case numbers was accurately predicated with the help of digital tools helps to avoid uncertainty and confusion among public.

2.4 Ethical Considerations

Lowe *et al.* (2022) explore that lack of honesty and transparency in the transmission of the messages during rapid spread of COVID-19 creates confusion and reduced trust of the public made it harder for the public to adopt health guidelines effectively. To protect the public, government need to assure and had an ethical duty to share timely, clear and accurate information during crisis. To understand the risk of pandemic, people depend on the truthful updates from the government to follow safety measures. On the other hand, the authority's irresponsibility caused to hid important information or delayed sharing of information weakened the trust of the public. Instead of considering safety of the public as first priority, sometime the transmission of health messages was influenced by political interest. The confusion among the people during crisis was created due to lack of transparency and honesty. **Guttman and Lev (2021)** states that each and every individual staying in the country either earning low income, living in rural area or speaking different language needs to receive the information shared by the public. The information shared by the government need to be clear, simple and accessible to everyone helps to assure ethnicity. The public was able to stay informed during the crisis by accurate and timely information shared by the government at right time. During pandemic, most of the people was impacted and did not have equal access to digital services considered as major reason for the existence of social inequalities. Moreover, the important messages shared by the government was not properly be translated to different language groups. Additionally, government need to assure the personal information of the public needs to be kept confidential and need not to be shared in mobile tracking system, government dashboard and surveillance tools used. The misuse of information was prevented by focusing on data ethics and privacy helps to build trust with the public during health emergencies (**Gasser *et al.* 2020**).

3. RESULTS

The systematic review of studies on crisis communication failures in public administration during the COVID-19 pandemic presented its findings briefly in this section.

3.1 Coordination and Integration Challenges across Government Levels

Doueh and Gartz (2022) explored the existence of poor integration and weak coordination between regional, national and local levels of government causes a major communication during the spread of COVID-19 pandemic. **Christensen and Lægreid (2020)** illustrated that common problem in pandemic was majorly caused due to lack of coordination in communication exists across various level of government. The integration of local and national authorities was considered as mandatory during pandemic helps to strengthen the trust of the public by maintaining consistent messages. In the early stages of pandemic, the country of Italy makes people confused by the spread of inconsistent and unclear messages (**Lucini, 2025**). The communication problem in South Korea during pandemic was handled flexible and quickly by the government. The early challenges faced by South Korea during the occurrence of MERS helps to manage the occurrence of COVID-19 efficiently (**Moon, 2020**).

The inconsistent messages spreaded by federal and state government during pandemic in United States decreases the trust of the public by the government (**Sauer et al. 2021**). **Hatcher (2020)** stated that confidence among public was reduced by political disagreement exist in the country causing people to lose the trust in the government. The existence of differences in political system and administration impacts the vaccination campaign in different states during COVID-19. Due to poor coordination in countries like Slovenia and Switzerland led to delayed public messages decreases the trust in government communication (**Janousek & Noh, 2024**) To ensure clear and unified communication with the public, studies considered good cooperation between agencies a mandatory prerequisite (**Kamin & Perger, 2021**).

3.2 Data Inconsistencies and Information Gaps

During the COVID-19 pandemic, the problem of the spread of incomplete, inconsistent, or conflicting data was considered. To provide reliable information to the public, the government faces several challenges due to unclear reporting and fragmented datasets. Public

decision-making was impeded by inconsistent information from the government. In official communications, the public became confused due to the government's unreliable information on differences in case counts and vaccination statistics (**Zhang *et al.* 2023**). The presence of data inconsistencies and information gaps poses major challenges for crisis communication during the COVID-19 pandemic. During a crisis, people rely on government institutions for reliable, timely information. The lack of trust and fertile ground for misinformation to spread were exacerbated by inconsistent and delayed government messages. Most of the public agencies and the government lacked standardised data reporting across different government levels and agencies. The misinformation related to death toll, infection rate, and hospitalization during the COVID-19 pandemic in the United States caused discrepancies between the Centers for Disease Control and Prevention (CDC) and individual state health departments. Divergent political and administrative structures undermined the credibility of vaccination campaigns, hindering data collection and dissemination. Moreover, the delay in sharing accurate information about the pandemic creates a critical gap in public administration's crisis communication. In the early stages of the pandemic, most countries struggled to provide real-time updates on case numbers and COVID-19 transmission dynamics. The actual severity of the crisis was not clearly predicted by the public due to delayed reporting by both the national and regional governments. Lower compliance with mask-wearing and social distancing was due to the government's lower COVID-19 case predictions. Moreover, social and political influences are considered a major cause of the spread of the consequences of data inconsistency. The delay in accurate information from the government contributes to the spread of harmful health advice on social media and community platforms (**Biancovilli *et al.* 2021**). Trust in government and health authorities decreased due to the abundance of inaccurate or misleading information spread during the pandemic (**Hong & Roy, 2023**). The public panic during the COVID-19 pandemic was not reduced by communication integration, as strong local government credibility helped enhance citizens' trust and confidence in official communication.

The clear and consistent guidance provided by government authorities helps public to adopt the health advice confidentiality during COVID-19 pandemic (**Rasmussen *et al.* 2024**). The trust of the public was enhanced by preventing the spread of false information in online (**Wang *et al.* 2021**). The major challenges during pandemic were caused due to spreading of

false information more quickly than official updates from reliable sources. Due to spreading of false information in social media, people are less likely to adopt health guidelines and confused in following the rules (Caldarelli *et al.* 2021). Zhai *et al.* (2022) explored that trust of the citizen during pandemic was increased by strong credibility of the local government in transferring high quality of information from national authorities. Many of the countries during pandemic faces challenges due to transfer of delayed updated information, inconsistent data and important data missing during sharing of information to the public. The public decision-making during crisis was impacted by conflicting and incomplete messages reduced the trust of the public during crisis.

The differences in the number of COVID-19 cases and vaccination records was created due to lack of coordination at local, national and regional levels. The predicating of accurate picture of situation was prevented by existence of inconsistency in the transmission of data from various level. The existence of inconsistency on the records created confusion with policy makers because the data received does not match with the information that was officially reported. The confidence of the people with government announcement during COVID-19 was reduced by the identification of gap between public reports and collected data. The cooperation of the public during crisis and efficient decision making of the public was impacted by inconsistent information reduces the trust on official updates by the government. The confusion of the public was raised due to many governments lack in providing standardized epidemiological data accurately and timely manner. The crisis communication during pandemic was majorly impacted by information gap and data inconsistency. The policy decisions relied on real time data was impacted resulting in conflicting figures of testing rates, hospital capacities exist in regional reporting system. The major gap in the crisis communication was caused by release of outdated information by the government filled by non-credible news sources and misinformation circulating on social media.

3.3 Proactive versus Reactive Communication Approaches

Cain (2021) highlighted that proactive and reactive are the two main strategies used by the government in managing the crisis. The uncertainty caused to the public and spreading of false information during pandemic was reduced by the implementation of proactive

communication adopted by the government. The people were able to feel more confident and informed by early accurate and reliable updated information provided by the government. Many of the government prefer to use proactive approach considered as effective approach used during pandemic. The credibility and trust of the public was enhanced by the adoption of proactive approach. The confidence in official messages by the government was enhanced by accurate and timely delivery of information. On the other hand, the implementation of reactive communication focuses on responding rumours or misinformation already spreaded. **Agnello (2020)** highlighted that trust of the public was increased by proactive communication **Forman and Mossialos (2021)** stated that the ability to anticipate for future development, sufficient resources and careful planning are the major factor need to be considered for effective proactive communication. The clear and accurate messages was created by the government by collection of data and analysing the trends. The confusion among public was raised during the spread of pandemic by the adoption of reactive communication by the government. In managing crises communication effectively, the implementation of proactive approach was considered as best method helps public to make accurate decisions, reduced uncertainty and enhanced strength in government actions.

3.4 Enhancing Transparency and Public Engagement

Kumalasari et al. (2024) highlighted that transparency and public engagement are the two major factors need to be considered for the implementation of effective communication during COVID-19 pandemic. **Horgan et al. (2022)** stated the trust of the public was increased by government sharing accurate information on case numbers, testing capacity, changing policies and healthcare resources. **Burton et al. (2023)** insisted that public was willing to voluntarily follow the guidelines based on the clear information provided by the government for social distancing and lock down on the real situation. The spreading of rumour and unnecessary speculation was prevented by the adoption of transparent communication. The establishment of transparency and public engagement was further strengthened by supporting of two-way communication between communities and authorities. The occurrence of confusion among public was reduced by providing opportunities for the public to ask questions directly in interactive government websites and by using social media platform. The public was able to report problem and seek guidance by using digital channel during pandemic. The government responded immediately to public regarding spreading of

false information and misconceptions improved public understanding and reduced the spread of misinformation. The barrier caused in the implementation of government strategies was addressed with the help of public engagement. The public was able to follow and support health measures, based on considering public in discussions and their feedback was considered. The existence of gap between citizens and authorities was supported by feedback form, online consultation, community level digital communication and live sessions.

Benner *et al.* (2022) highlighted that the integrated working of healthcare professionals, leaders and civil society helps to enhance the credibility of crisis communication. Additionally public was able to easily trust the information coming from members of the community instead of distant government authorities. The confidence of the public was enhanced by the local involvement make the public health messages more efficient during the occurrence of pandemic. The information shared by the government need to assure consistent and accurate across all platform. The public's active involvement in adopting pandemic guidelines was driven by the government's transparency and public engagement during COVID-19. The higher public trust was achieved by government authorities combining accurate, timely information, which helped improve compliance with health measures.

The officials' honest and responsive nature helps enhance trust in government messages, as studies predict. The transparency and quick responses of the Swiss government help improve public trust and reliability during the COVID-19 pandemic (**Diviani *et al.* 2024**). The establishment of trust with local government in China helps to guide the public effectively with the integration of enhanced credibility (**Zhai *et al.* 2022**). The citizens of the country integrating with the government by providing feedback, sharing information openly, and providing opportunities for the public in making decisions helps to enhance the communication by the government to the public in an accurate way, helping to save the lives of many individuals from the rapid spread of COVID-19 (**Hyland-Wood *et al.* 2021**). Public trust and compliance in Italy were enhanced by government efforts (**Lucini, 2025**). The public panic during the pandemic was reduced by addressing false information and encouraging dialogue (**Hong & Roy, 2023**). Consistent messages from the government enhanced its credibility; these need to be integrated with transparency. The government faces challenges in managing crisis information due to a lack of focus on public feedback and a loss of legitimacy. The establishment of transparency and active public engagement play a

major role in effective and resilient crisis management during COVID-19 pandemic. To assure the public to follow the guidelines proposed by the government need to focus on ensuring active public engagement and transparency helps in maintain the public confidence. The trust of the public was enhanced by sharing of accurate information by the government and updating regularly in public helps to reduce uncertainty. The trust in official communication was assured by government need to focus on answering the questions from public and providing reliable guidance. Most of the public was following the instructions given by the government due to adoption of transparency. The government explaining the reasons behind the decisions makes public to feel more confident help to protect the communities. The confusion and resistance among public was reduced by explanation of government provided for the implementation of policy consistent and in clear manner. On the other hand, people believe social media rumours and unofficial websites of information due to lack of clear communication shared by the government. The delay in official updates make many of citizen to separate facts from false claims. The trust of authorities was weakened mainly due to lack of timely information make rumours to spread easily. The implementation of transparency was considered as major tool for addressing the challenges caused by the spread of false information during pandemic. The government was able to address misconceptions by offering regular updates, acknowledging challenges and openly discussing changing situations.

3.5 Digital Communication Tools Used During the COVID-19 Pandemic

The use of a digital platform enhanced the trust in an institution. According to **Zhai *et al.* (2022)**, individuals managed to trust and adhere to safety measures during the pandemic, as it was clear and of high quality, and the government disseminated the information on social media. Government authorities also responded to the questions of the population in a timely manner with different interactive features, including frequently asked questions, live videos, and comments, which contributed to decreasing the fear and confusion of the population during the pandemic (**Hong & Roy, 2023**). The government published information to the public via an excessively broad digital channel, comprising government web portals, Telegram, YouTube, Instagram, Twitter, and Facebook. Within seconds, millions of people were informed via the different digital platforms, such as a real-time dashboard and quick transmission of official health updates. The complicated data on epidemiology was converted

into user-friendly formats, such as short video explainers, social media posts, and infographics. Telegram and WhatsApp also facilitated community-level communication that allowed health agencies and governments to distribute accurate and verified information via the official channels and broadcast lists. Besides, live streams on Instagram, Facebook, and YouTube provided direct communication between the citizens and the authorities during the COVID-19 pandemic.

3.5.1. Governance Technologies and Data-Driven Decision Support

The adoption of governance technologies was viewed as obligatory to the organization of communication with the population regarding health communications, as the government resorted to digital infrastructure to make the message spread. Real-time monitoring tools, mobile applications, an automated reporting platform, and built-in dashboards supported quick decision-making during COVID-19. The lack of communication in the US was largely brought about by the variability in the use of the dashboard (**Sauer *et al.* 2021**). In China, the accuracy of messages was enhanced through the addition of real-time data from the social media platform of the government, contributing to the increase in confidence that people were given in the Wuhan lockdown (**Zhai *et al.* 2022**). The data-supported communication interventions used to analyse the information on social media included accuracy prompts (**Rasmussen *et al.* 2024**).

4. DISCUSSION

Findings of a systematic review were used to come up with several critical insights into the failure of crisis communication at the level of public administration during the COVID-19 pandemic. The multi-level governance system meant that the country experienced a problem of coordination and integration. Fragmented messages at the interventions of national, regional, and local authorities confused the population and decreased compliance with the interventions of the public health (**Christensen & Laegreid, 2020; Sauer *et al.* 2021; Lucini, 2025**). The results demonstrated the necessity of inter-agency cooperation and the relevance of consistent communication guidelines. South Korea obtained greater compliance among citizens, and trust served to coordinate the message at various levels of government as a result of the experience of the epidemics (**Moon, 2020**).

The presence of an information gap and inconsistency of data resulted in huge critical issues. Unfinished and slow governmental information contributed to the spread of misinformation and created doubts about its effects on the population, and undermined the trust of the individuals (Biancovilli *et al.* 2021; Zhai *et al.* 2022; Hong & Roy, 2023). Research increased the general understanding and digital literacy, and it was stressed that the impact could be reduced by the spread of verified and timely information (Wang *et al.* 2021; Rasmussen *et al.* 2024). Strategy is important in influencing the perception of the people based on the difference between a proactive and a reactive approach. The societal panic calmed down in the crisis period, and regular early communications by the government and assisted in regulating society (Sanders, 2020; Mai *et al.* 2023). Reactive strategies that were manifested in Slovenia and other instances complicated the confusion and mistrust that the people had (Kamin & Perger, 2021). Transparency and public participation have always enhanced trust and confidence among people. The expectations of the citizens were met by distributing information freely, a system to address real-time citizen feedback, and participatory communication (Hyland-Wood *et al.* 2021; Diviani *et al.* 2024; Lucini, 2025). Table 1 below summarizes the systematic review and includes different important aspects, including title, author, and content focus.

Table 1: Systematic Review of Crisis Communication Findings by Theme

Author(s) & Year	Title	Coordination & Integration Challenges	Data Inconsistenc ies & Information Gaps	Proactive vs. Reactive Communicati on	Transparen cy & Public Engagement
Christensen and Læg Reid (2020)	The coronavirus crisis communication,	The Norwegian government focuses on integrating departments that	The late delivery of information caused a major gap	The communication was structured so that even ordinary	The consistent messaging and engagement

	meaning-making, and reputation management	need to work together to deliver accurate messages to the public and to ensure trust and legitimacy in its governance.	with the public.	people could understand the crisis.	campaigns enhanced the trust of a large number of citizens.
Lucini (2025)	Crisis Communication and Governance : Lessons from COVID-19 in Italy	Confusion was caused due to misalignment between national and regional communications	During the early weeks of COVID-19, Lombardy region published inconsistent case and mortality rates	The coordination between the public improved over time	The clarification and press briefings help to enhance public engagement
Moon (2020)	Fighting COVID-19 with agility, transparency, and participation	Across agencies, agile adaptive strategies were applied by the South Korean government	The misinformation gaps were reduced with frequent updates	The voluntary compliance initiatives were enhanced with the help of a proactive approach	The citizen cooperation and voluntary adherence were enhanced with the help of transparent

					communicati on
Biancovilli <i>et al.</i> (2021)	Misinformation on social networks during COVID-19 in Brazil	The misinformation across agencies was caused due to poor coordination in countering	The significant data gap was created based on social media amplification of false claims	The social media correction based on reactive communication was insufficient	To engage citizens and to build trust, public awareness campaigns were recommended.
Hong and Roy (2023)	Communication in the Time of Uncertainty and Misinformation	Inconsistent coordination exists between health authorities and local government.	The confusion was exacerbated by contradictory messages from different agencies.	In adopting a reactive approach, a delay in communication was encountered.	The public's confidence increased with accurate, timely, and clear information from the government.
Zhai <i>et al.</i> (2022)	Impact of government social media information	The response of the public was influenced by coordinated messages across	The confusion and panic among the public were	The accurate data base on proactive dissemination	Local government's trust strengthened public

	quality on public panic	local, central, and social media channels	caused by to low quality of information	was critical	engagement and knowledge.
Janousek and Noh (2024)	State Contexts for a Public Health Emergency	The coordination gap was revealed by divergent policies across US states	The unified understanding hindered variability in vaccination	The vaccine uptake was influenced by reactive policy adjustment	The citizen relied on authoritative sources was enhanced by the engagement of the public
Wang <i>et al.</i> (2021)	Can predominant credible information suppress misinformation	A coordinated effort by trusted authorities enhanced the reliability of information.	The data uncertainty was caused by misinformation during the initial stages of the COVID-19 wave.	The proactive dissemination of credible information reduced the misinformation.	The citizens' reliance on authoritative sources was enhanced by public engagement.
Sauer <i>et al.</i> (2021)	A failure to communicate: Public messaging in the US	The coordination was hindered by mixed messages between federal and state	Conflicting and incomplete data made informed decisions	The credibility was reduced by predominantly reactive communication	The transparent update to citizens and unified messaging

		authorities	difficult		was highlighted
Caldarelli <i>et al.</i> (2021)	Flow of online misinformation during COVID-19 in Italy	In media monitoring, coordination was limited.	The knowledge gap was created by a high flow of information	Compared with the misinformation spread, Reactive corrections were slower	The transparency and engagement were prompted by evidence-based public communication
Savoia <i>et al.</i> (2023)	Learning from COVID-19: government leaders' perspectives	Leaders enhanced the emergency risk communication, emphasizing inter-agency coordination.	Disparate epidemic data increased the confusion among the public	The effectiveness was reduced by limited proactive messaging	The uncertainty of the public was reduced by the transparent reporting of epidemic data
Zhang <i>et al.</i> (2023)	Complexity of Government Response to COVID-19	The heterogeneity of government agencies complicated coordination	Disparate data on the epidemic drove the increased public	The effectiveness was reduced by limited proactive messaging	The uncertainty among the public was reduced by the transparent

		among them.	confusion.		reporting of epidemic data
Mai <i>et al.</i> (2023)	Common Ground in Crisis: Narrative Networks	The coordination challenges were highlighted by disjointed narratives between officials.	An information gap among citizens was created by mixed messaging	The understanding was facilitated by proactive narrative alignment	An engagement supported the consistent narrative communication
Sanders (2020)	British government communication during COVID-19	The UK adopted the integrated interagency communication	Monitoring inconsistencies reduced the information gap	The high-reliability practices were aligned with proactive, pre-planned communication	The trust and compliance were reinforced by using engagement strategies
Diviani <i>et al.</i> (2024)	Understanding public response in Switzerland	The federal and messaging gaps were bridged through coordination.	Transparent data reduced the misinformation and confusion	The responsiveness was improved by proactive assessment	To enhance trust and engagement, feedback from the citizens was integrated

Kamin and Perger (2021)	Failures in crisis communication in Slovenia	A lack of coordination caused the inconsistent messaging across agencies.	The existence of a gap in shared data confused the public	The undermined compliance was integrated with a predominantly reactive messaging service	The transparency and participation engagement were emphasized by using audience feedback
Hyland-Wood <i>et al.</i> (2021)	Toward effective government communication strategies	The unified messages assure coordination across ministries	The structured communication planning was addressed by using the information gap	The panic was reduced by the adoption of proactive communication	Engagement initiatives prompted citizen participation and transparency
Hatcher (2020)	A failure of political communication during COVID-19	The coordination of administrative messages was impacted by political misalignment	The widespread confusion was created by political misinformation	The trust of the public was undermined by reactive political messaging	The confidence of the citizen was reduced by transparency deficits and misinformation

(Source: The Author)

The systematic Table 1 provided above assists in showcasing different empirical results and predicting different aspects associated with crisis communication. Learning from past mistakes enhanced the administration of the public based on the analysis of the existing studies. A study was conducted to deal with future pandemics in the community administration. The government must aim to give precise and reliable communication to the citizens to safeguard their well-being.

The dynamism that is evident in the situations of COVID-19 made it apparent that database systems are playing a significant role in crisis communication, thus aiding in providing timely information to the general population. A significant issue in the US, according to the study by **Sauer *et al.* (2021)**, consisted of using other states with other data dashboards and reporting at various times, which largely led to communication issues. According to **Zhai *et al.* (2022)**, when the Wuhan lockdown was in effect, the incorporation of the government social media with real-time data allowed offering more accurate and timely information to the population. According to **Rasmussen *et al.* (2024)**, the accuracy-reliability communication tools could help people to be more careful with information judgment. As depicted by **Zhang *et al.* (2023)**, the government encountered other troubles when the information was not consistent with the messages it was communicating to the population during the COVID-19 pandemic. According to **Hong and Roy (2023)**, individuals get disoriented when governments cannot clarify data in simple terms, and rumours can be passed very fast.

4.1 Crisis Communication based on Public Management and Leadership

Public management was efficiently handled by focusing more on crisis management. Leaders' decisions, the organization's behaviour, and the effectiveness of leadership all play major roles in the implementation of crisis communication during COVID-19. The government's provision of updated information alone does not help the public address challenges. The government needs to ensure that the public adopts the rules it lays down, as this helps build public trust in the government. **Christensen and Lægheid (2020)** found that the establishment of strong coordination between local and national authorities enhanced the government's capacity in Norway during the COVID-19 pandemic.

On the other hand, public confusion in Italy was exacerbated by weak leadership and poor alignment across government levels, which were considered major causes of early communication problems (Lucini, 2025). Sauer *et al.* (2021) found that trust in and public compliance with the US government decreased due to the spread of mixed, politically influenced messages. According to Janousek and Noh (2024), fragmented leadership was one of the significant obstacles encountered in the course of vaccination efforts in states during the rapid COVID-19 spread at the time, which in turn affected the effectiveness of the implementation of government policies. According to Diviani *et al.* (2024), transparent messages are one of the communication instruments that can be used to create trust and credibility in communication in China and Switzerland. Zhai *et al.* (2022) emphasized that the self-confidence of people during lockdown was increased due to clear and data-supported communication. Hong and Roy (2023) discovered that people exposed to adverse stress and uncertainty during COVID-19 were attributed to poor communication, which led to keeping people less engaged and obedient. According to Rasmussen *et al.* (2024), the implementation of accuracy reminders, proactive communication, and real-time interaction with the population strengthened the process of decision-making during the pandemic, both in the government and among individuals. Crisis communication was the power tool of policy success, public behaviour, and government coordination based on analysis of the research.

4.2 Crisis Communication on Organizational Behaviour & Decision-Making

The decisions made by the government in the context of COVID-19 assist in assessing the level of trust in the government and the response of the population in the context of crisis communication. According to Christensen and Lagreid (2020), the dissemination of information was effective in informing the meaning behind the government policies and crisis management. The execution of the rules to the people had to be properly defined by the leaders to make people more accepting of the guidelines (Moon, 2020). The unclear, slow, and political forms of communication weakened the decision-making of the government during the COVID-19 pandemic, which was the result of multiple studies. According to Sauer *et al.* (2021), unclear national messaging delayed the responses of the government during the pandemic in the US since it influenced coordination between individuals and their government. Political contradictions in the country led to the reduction of trust in the public health service (Hatcher, 2020). According to Zhang *et al.* (2023), irregular updates and

inconsistent data were the reasons that led the government to make irrelevant decisions. Policies were accepted by the public as trust and open communication increased with the government (**Diviani *et al.* 2024**). The availability of trustworthy information makes the decisions of the government stable. Further, the misinformation dissemination by anonymous people should be responded to avoid it (**Wang *et al.* 2021**). Contrary to this, misinformation disseminates more quickly in Italy than the official government updates and the authorities react to it, instead of planning (**Caldarelli *et al.* 2021**).

4.3 Crisis Communication Models (CERC, SCCT, Governance Frameworks)

With effective models of crisis communication, the pre-planned directions of dealing with uncertainty, keeping institutional credibility amidst the emergency, and moulding the populace's behaviour were skilfully presented. Successful feedback between citizens and the government was controlled by the introduction of properly developed models of crisis communication, including the Situational Crisis Communication Theory (SCCT), larger governance models, and the Crisis and Emergency Risk Communication (CERC) model, which have been studied. The government hampered confusion was also minimized through the introduction of the CERC model that assists in ensuring timely, consistent and transparent messages are made. SCCT emphasized the significance of active exchange of information in the process of a crisis. In the initial phases of COVID-19 discovery, numerous governments experienced challenges and confusion, and they were resolved by introducing the CERC model based on the results of the study (**Christensen & Lagreid, 2020**). The masses started accusing the government and the country of giving contradictory messages by the state and the national governments. Moreover, there were irregular statements of political leaders in the country. It harmed the reputation of the government, given the misinformation that was spreading among people (**Sauer *et al.* 2021**).

4.4 Case Studies of Communication Failures during the COVID-19 Pandemic

During the COVID-19 pandemic, significant communication failures occurred in most countries. The ambiguous discrepancy, inaccurate information, political pressure and ineffective use of digital interaction antagonistically affected crisis governance, which was viewed through the lens of 9 studies. Fragile communication between leaders and uneven

federal instructions led to the overall communication crisis in the US (**Sauer *et al.* 2021**). The quick infection with misinformation in comparison with official information in Italy generated panic and ambiguous messages, which added uncertainty; it was answered through enhancing transparency in the public communication (**Caldarelli *et al.* 2021**).

According to **Lucini (2025)**, the uncertainty of the general population during the time of COVID-19 was enhanced by the fact that the government delivered its messages very slowly and ambiguously. As shown by **Biancovilli *et al.* (2021)**, social media was full of conspiracy theories and fake cures. According to **Hong and Roy (2023)**, the lack of trust in the government-authorized sources decreased since of the continuous dissemination of misinformation. According to **Zhai *et al.* (2022)**, incomplete and delayed early reporting is the highest challenge during the COVID-19 pandemic in China, which is the primary contributor to less trust, and the official information is usually good. There is also a significant problem with the inconsistency of the dissemination of data without governmental authorization, which is a significant problem with the Wuhan lockdown (**Zhang *et al.* 2023**). This lack of communication transparency continues to cause persistent problems in Switzerland, which causes the population to lose confidence in the government (**Diviani *et al.* 2024**). The readiness of people to obey the rules declined since of ambiguous governmental regulations in Slovenia (**Kamin & Perger, 2021**). The people of the UK were lost and bombarded with the changes that the government made every minute on the slogans and rules (**Sanders, 2020**). As analysed in 19 studies, weak use of technology, slower information, breakdown of misinformation, and political influence were found to be significant causes of communication breakdown in the course of COVID-19. There are severe issues in communication with the population during COVID-19. The absence of messages which addressed various audiences was a significant communication breakdown in the COVID-19 pandemic. Individuals living in rural regions, migrant labourers, and the elderly population have problems since of the general messages sent to everyone without taking into consideration the various needs of people, languages, and the availability of information.

4.5 Lessons Learned and Policy Implications

The speed of decision-making, transparency, and good coordination between the political, scientific, and public health institutions are key contributors to effective crisis communication

among countries, as the review of 19 studies suggests. Early, concise, culturally competent messaging minimized the panic in the population in the case of COVID-19, which left a vital lesson that allowed for enhancing compliance. Conversely, other reasons like sufficient digital literacy of the citizens, sound data protection policies, and fair access to the available technology are significant obstacles to the consumption of digital tools. To address future health emergencies, one should concentrate on the betterment of emergency preparedness, long-term trust in the population, and the availability of clear data exchange.

4.6 Future Research Directions

The multiple research directions of the future proposed in the systematic review of the crisis communication failures within the framework of the public administration during the COVID-19 pandemic assist to contribute to the practical and theoretical comprehension of governance in the context of the risks of the emergency in the field of health. The crisis communication needs to be studied in future by examining the political systems and various forms of governance. The broad comparative studies formed the basis of identifying the best practices. It is also necessary to research the trends in social media, the engagement of the audience with the messages of the government, and the possibilities to establish or reestablish confidence in the governmental institutions on the internet. The ethics governance theory building was developed based on the emphasis on the practical implementation of interdisciplinary frameworks that include public administration, communication science, behavioural science, and data ethics, which contribute to the enrichment of theory building in crisis governance.

5. CONCLUSION

Within the area of crisis communication, the COVID-19 crisis revealed the prevalence of weaknesses in the field of public administration. The analysis of 19 studies points deeper into the organization of the governments, the processes they took, and the strategies they chose. The studies were mapped systematically using the four major themes. The studies were used to determine the effectiveness of crisis communication in multi-dimensional settings. Misinformation was enhanced by the inconsistency of data and incomplete data, resulting in

confusion and panic among the population. The government was restricted in its powers by the reactive communication methods.

Conversely, the level of compliance with health practices and the reduction of misinformation dissemination were improved due to the implementation of proactive measures, as exhibited by the research study. Transparency and involvement of the people boosted the legitimacy. To overcome the crisis and keep the citizens' trustful, the government must work on creating clear, consistent, and inclusive communication.

REFERENCES

- Agnello, M. C. (2020). Communication Risk: Preventive Measures and Proactive Value-Based Health-Oriented Tools. *J Med Res Surg*, 1(2), 1-2. <https://www.respubjournals.com/medical-research-surgery/pdf/v1i3/Communication-Risk-Preventive-Measures-and-Proactive-Value-Based-Health-Oriented-Tools.pdf>
- Benner, M., Grant, J., & O'Kane, M. (2022). The lived experience of university leaders during the COVID pandemic. In *Crisis Response in Higher Education: How the Pandemic Challenged University Operations and Organisation* (pp. 135-157). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-97837-2_8
- Biancovilli, P., Makszin, L., & Jurberg, C. (2021). Misinformation on social networks during the novel coronavirus pandemic: a quali-quantitative case study of Brazil. *BMC Public Health*, 21(1), 1200. <https://doi.org/10.1186/s12889-021-11165-1>
- Burton, A., McKinlay, A., Dawes, J., Roberts, A., Fynn, W., May, T., & Fancourt, D. (2023). Understanding barriers and facilitators to compliance with UK social distancing guidelines during the COVID-19 pandemic: A qualitative interview study. *Behaviour Change*, 40(1), 30-50. <https://doi.org/10.1017/bec.2021.27>
- Cain, L. (2021). Modernising the Government Communication Service. *The Institute for Government* UK, 5-6. <https://www.instituteforgovernment.org.uk/sites/default/files/publications/modernising-government-communications-service.pdf>
- Caldarelli, G., De Nicola, R., Petrocchi, M., Pratelli, M., & Saracco, F. (2021). Flow of online misinformation during the peak of the COVID-19 pandemic in Italy. *EPJ data science*, 10(1), 34. <https://doi.org/10.1140/epjds/s13688-021-00289-4>
- Christensen, T., & Lagreid, P. (2020). The coronavirus crisis—crisis communication, meaning-making, and reputation management. *International public management journal*, 23(5), 713-729. <https://doi.org/10.1080/10967494.2020.1812455>

- Diviani, N., Fiordelli, M., & Rubinelli, S. (2024). Understanding public response: Government communication during the COVID-19 crisis through the eyes of the Swiss public. *PEC innovation*, 5, 100349. <https://doi.org/10.1016/j.pecinn.2024.100349>
- Doueh, H., & Gartz, R. (2022). The Internal Crisis of a Corporation. Effects on coordination, cooperation, integration and communication by the Covid-19 Pandemic. <http://hdl.handle.net/2077/70668>
- Forman, R., & Mossialos, E. (2021). The EU response to COVID-19: from reactive policies to strategic decision-making. *Journal of Common Market Studies*, 59(Suppl 1), 56. <https://doi.org/10.1111/jcms.13259>
- Gasser, U., Ienca, M., Scheibner, J., Sleight, J., & Vayena, E. (2020). Digital tools against COVID-19: taxonomy, ethical challenges, and navigation aid. *The lancet digital health*, 2(8), e425-e434. [https://doi.org/10.1016/S2589-7500\(20\)30137-0](https://doi.org/10.1016/S2589-7500(20)30137-0)
- Guttman, N., & Lev, E. (2021). Ethical issues in COVID-19 communication to mitigate the pandemic: dilemmas and practical implications. *Health Communication*, 36(1), 116-123. <https://doi.org/10.1080/10410236.2020.1847439>
- Hatcher, W. (2020). A failure of political communication not a failure of bureaucracy: The danger of presidential misinformation during the COVID-19 pandemic. *The American Review of Public Administration*, 50(6-7), 614-620. <https://doi.org/10.1177/0275074020941734>
- Hong, Y., & Roy, R. (2023). Communication in the Time of Uncertainty and Misinformation. *Journal of Creative Communications*, 18(2), 131-132. <https://doi.org/10.1177/09732586231173129>
- Horgan, D., Borisch, B., Cattaneo, I., Caulfield, M., Chiti, A., Chomienne, C., ... & Von Meyenn, M. (2022). Factors affecting citizen trust and public engagement relating to the generation and use of real-world evidence in healthcare. *International Journal of*

Environmental Research and Public Health, 19(3), 1674.
<https://doi.org/10.3390/ijerph19031674>

Hyland-Wood, B., Gardner, J., Leask, J., & Ecker, U. K. (2021). Toward effective government communication strategies in the era of COVID-19. *Humanities and Social Sciences Communications*, 8(1). <https://doi.org/10.1057/s41599-020-00701-w>

Janousek, C. L., & Noh, S. (2024). State Contexts for a Public Health Emergency: The Divergence of Politics and Administration in COVID-19 Vaccination Rates. *COVID*, 4(8), 1324-1337. <https://doi.org/10.3390/covid4080094>

Kamin, T., & Perger, N. (2021). Failures in crisis communication during the COVID-19 pandemic in Slovenia: What can we learn from audience feedback?. *Teorija in Praksa*, 58, 517-689. <https://doi.org/10.51936/tip.58.specialissue.517-535>

Khan, H., & Moazzam, A. (2022). Interagency collaboration/coordination. *Public Sector Reforms in Pakistan: Hierarchies, Markets and Networks*, 153. https://doi.org/10.1007/978-3-030-96825-0_7

Kumalasari, A., Musa, H. G., Garad, A., Emovwodo, S. O., & Aditasari, K. (2024). How Digital Communication Transparency and Public Trust Shape Crisis Communication through Public Engagement. *Komunikator*, 16(2), 182-195. <https://doi.org/10.18196/jkm.24485>

Lowe, A. E., Voo, T. C., Lee, L. M., Gillespie, K. K. D., Feig, C., Ferdinand, A. O., ... & Wynia, M. K. (2022). Uncertainty, scarcity and transparency: Public health ethics and risk communication in a pandemic. *The Lancet Regional Health–Americas*, 16. <https://doi.org/10.1016/j.lana.2022.100374>

Lucini, B. (2025). Crisis Communication and Governance: Lessons Learned from Covid– 19 Pandemic in Italy. *Public Organization Review*, 1-16. <https://doi.org/10.1007/s11115-025-00817-0>

MA, S., Pande, N., & PK, S. K. (2021). Role of effective crisis communication by the government in managing the first wave Covid-19 pandemic–A study of Kerala

government's success. *Journal of public affairs*, 21(4), e2721.
<https://doi.org/10.1002/pa.2721>

Mai, S., Renshaw, S. L., Sutton, J., & Butts, C. T. (2023). Common Ground In Crisis: Causal Narrative Networks of Public Official Communications During the COVID-19 Pandemic. *arXiv preprint arXiv:2309.03528*.
<https://doi.org/10.48550/arXiv.2309.03528>

Moon, M. J. (2020). Fighting COVID-19 with agility, transparency, and participation: Wicked policy problems and new governance challenges. *Public administration review*, 80(4), 651-656. <https://doi.org/10.1111/puar.13214>

Page, M. J., Moher, D., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., & McKenzie, J. E. (2021). PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *bmj*, 372.
<https://doi.org/10.1136/bmj.n160>

Rasmussen, J., Lindekilde, L., & Petersen, M. B. (2024). Public health communication reduces COVID-19 misinformation sharing and boosts self-efficacy. *Journal of Experimental Political Science*, 11(3), 327-342. <https://doi.org/10.1017/XPS.2024.2>

Sanders, K. B. (2020). British government communication during the 2020 COVID-19 pandemic: learning from high reliability organizations. *Church, Communication and Culture*, 5(3), 356-377. <https://doi.org/10.1080/23753234.2020.1824582>

Sauer, M. A., Truelove, S., Gerste, A. K., & Limaye, R. J. (2021). A failure to communicate? How public messaging has strained the COVID-19 response in the United States. *Health security*, 19(1), 65-74. <https://doi.org/10.1089/hs.2020.0190>

Savoia, E., Piltch-Loeb, R., Stanton, E. H., & Koh, H. K. (2023). Learning from COVID-19: government leaders' perspectives to improve emergency risk communication. *Globalization and Health*, 19(1), 86.
<https://doi.org/10.1186/s12992-023-00993-y>

- Wang, Y., Gao, S., & Gao, W. (2021). Can predominant credible information suppress misinformation in crises? Empirical studies of tweets related to prevention measures during Covid-19. *arXiv preprint arXiv:2102.00976*.
<https://doi.org/10.48550/arXiv.2102.00976>
- Zhai, S., Li, Y. J., & Chi, M. (2022). The impact of government social media information quality on public panic during the infodemic. *Frontiers in Psychology, 13*, 908213.
<https://doi.org/10.3389/fpsyg.2022.908213>
- Zhang, X., Fu, J., Hua, S., Liang, H., & Zhang, Z. K. (2023). Complexity of Government response to COVID-19 pandemic: a perspective of coupled dynamics on information heterogeneity and epidemic outbreak. *Nonlinear Dynamics, 111*(23), 22055-22074.
<https://doi.org/10.1007/s11071-023-08427-5>