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## LEADERSHIP AND ETHICAL DECISION-MAKING IN PUBLIC HEALTH CRISES: BALANCING PUBLIC SAFETY AND INDIVIDUAL RIGHTS



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### Abstract

Leadership teams are crucial during public health crises, as they are responsible for balancing public safety with individual rights. Effective decision making and ethical considerations are essential in addressing health emergencies and minimizing societal impacts. While various strategies exist in public health leadership, their wide variation often poses challenges in maintaining consistency in achieving both immediate and long-term goals. This study evaluates public health leadership during crises, focusing on administrative actions, ethical decision-making, and strategies to balance public welfare and individual liberty in health emergencies. A systematic review of articles published since 2010 in PubMed, Scopus, and Google Scholar was conducted per PRISMA guidelines. From 200 papers reviewed, 120 met inclusion criteria, with 13 highly relevant articles selected for qualitative analysis of leadership effectiveness and ethical frameworks. The results reveal that adaptive leadership promotes crisis response by facilitating effective communication, coordination, and timely decision making. Proactive risk assessment of key issues, instigating stakeholder communication and prioritizing resources are some of the key strategies identified. However, organizational hierarchies and dilemmas over ethical enforcement of related policies are main challenges. Crisis leadership requires evidence based ethical decision-making balancing public safety with individual rights. Improving crisis preparedness and resilience requires enhanced collaboration and adaptive leadership across sectors. Future research should also explore how certain leadership models affect crisis response outcomes.

**Keywords:** Adaptive strategies, Crisis management, Ethical decision making, Health emergencies, Individual rights, Policy response, Public health leadership, Public safety

## INTRODUCTION

Public health crises, such as epidemics, natural disasters, and other emergencies, pose significant challenges for public health officials, requiring strong leadership and ethical decision-making. These situations often raise acute ethical concerns, such as the balance between communal welfare and individual rights (1). Leadership in public health during emergencies extends beyond administrative direction—it demands proactive measures guided by vision, flexibility, and accountability (2). Ethical decision-making in such scenarios requires navigating competing priorities: protecting vulnerable populations, ensuring equitable access to healthcare, and respecting individual autonomy (3). Leaders must synthesize epidemiological data, public health priorities, and sociopolitical factors to maintain public trust and balance rights with public safety (4).

Past crises underscore that public health leaders play a dual role: managing the immediate threat while fostering trust and addressing ethical dilemmas. For example, during the COVID-19 pandemic, leaders who effectively communicated the rationale for mask mandates or vaccination campaigns often mitigated public resistance by fostering transparency and trust. This highlights the importance of ethical frameworks that guide leadership in making balanced decisions (5).

Ethical challenges in public health crises often center on interventions that limit personal freedoms, such as quarantines, mandatory vaccinations, or travel restrictions. While effective in controlling disease



spread, such measures can spark public concern over the infringement of rights. For instance, during COVID-19, opposition to vaccine mandates demonstrated the need for ethical clarity and effective communication to balance public welfare with personal autonomy (6). Ethical consistency is critical to guide decision-making in these high-stakes scenarios and prevent public backlash.

Leadership approaches during crises vary widely across regions and contexts due to political, cultural, and economic differences. Some leaders prioritize preventative measures and preemptive planning, while others emphasize reactive strategies and recovery. For instance, New Zealand's early, stringent lockdowns under Prime Minister Jacinda Ardern were praised for preventing widespread COVID-19 transmission, while countries with delayed responses faced more significant challenges. Such examples illustrate the importance of proactive risk assessment and clear communication in managing public health crises (7).

Although literature on public health leadership is expanding, many studies focus narrowly on crisis response tactics or ethical frameworks, leaving gaps in understanding how these elements integrate in real-world scenarios (8). This systematic review seeks to address this gap by synthesizing evidence on leadership strategies and ethical considerations during public health crises (9).

The current study examines public health leadership performance in managing crises, with a focus on ethical decision-making and balancing public welfare with individual rights (10). By analyzing recent literature, this research identifies effective leadership strategies that navigate ethical challenges and offer insights for handling health emergencies (11).

## METHODOLOGY

This study carries out a systematic review to investigate the role of leadership and ethical decision making in public health crisis, with respect to public safety and individual rights. To ensure a thorough analysis, we conducted a structured search of relevant literature published between 2010 and 2024 in three major academic databases: PubMed, Scopus, and Google Scholar. These databases were chosen because of their extensive coverage of health sciences, public health and interdisciplinary research that included high quality sources on public health leadership, ethical decision making and the policy response in health emergencies. We adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria to ensure transparency and rigor in our review procedure. This method allowed us to systematically discover, screen, and choose studies that fit our requirements. An initial search yielded roughly 200 papers, which were then vetted using defined inclusion and exclusion criteria. Studies were considered if they addressed one or more of the following topics: cognitive public health leadership responses to crisis settings, ethical frameworks for guidance during health emergencies, or policy responses to health crises, particularly those affecting public safety or individual rights. Only peer-reviewed articles, written in English, were considered. Studies were rejected if they were not relevant to leadership, ethics, or policy as shown in Fig. 1.

It was a two staged selection process. We first reviewed abstracts and titles to exclude studies which did not meet the scope of the study, leaving 120 papers which met the initial threshold. Second, all 120 were fully text assessed for relevance to achieving the study's objectives yielding a final sample of 13 high relevance articles. Specifically, the articles selected here touched on leadership effectiveness, ethical considerations and crisis response frameworks. The 13 selected studies were then analyzed qualitatively identifying key themes such as adaptive leadership strategies, proactive risk assessment, stakeholder communication, and ethical dilemmas regarding trade-offs between public safety and individual rights. A qualitative approach was taken to examine in detail leadership strategies and ethical frameworks to explore both effective practices and present challenges (Table I).

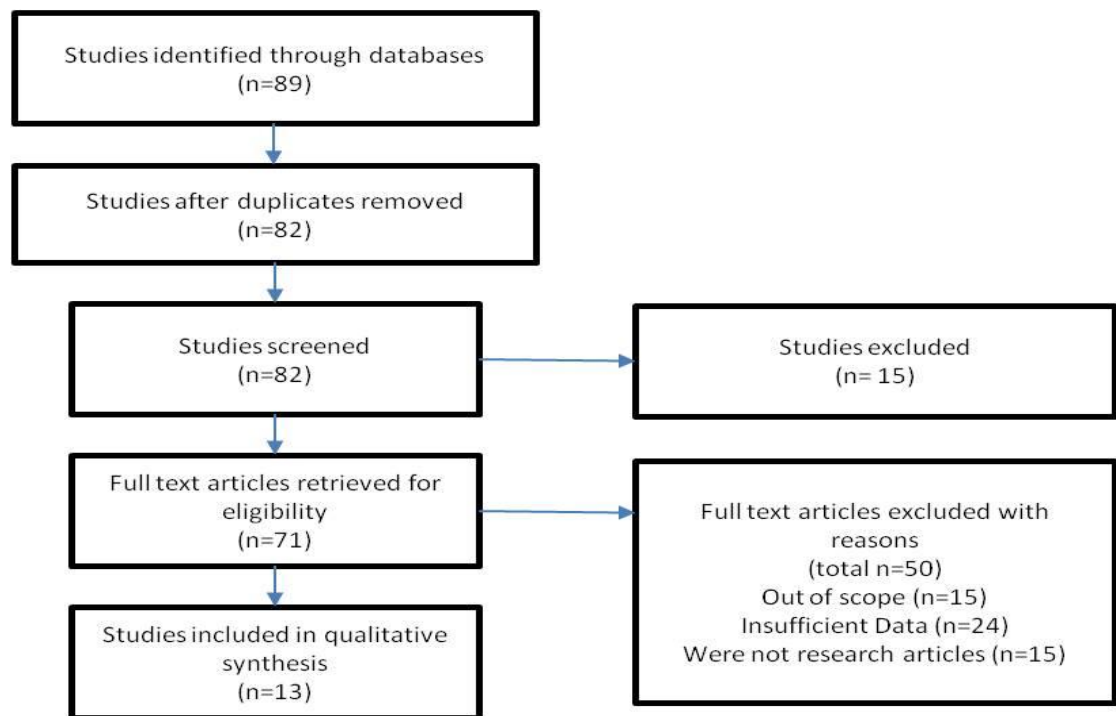


Fig. 1. PRISMA model illustrating selection of studies

Table I. Systematic review of leadership approaches in crisis management: contexts, key findings and limitations

Author, year, country (References)	Objective (Methods)	Key findings	Leadership strategies	Ethical considerations	Limitations
Salami A,2021, Nigeria (12)	To analyze the role of communication in crisis response (Case study analysis of pandemic response) To evaluate stakeholder collaboration in health crises	Effective communication reduces public panic	Proactive information dissemination	Balancing transparency with public safety	Limited to single case study
T. Fernando, 2021,Srilanka (13)	(Qualitative interviews with health officials) Assess ethical dilemmas in enforcing public health mandates (Systematic review of crisis management cases)	Collaboration improved resource sharing	Multi-agency coordination	Ethical distribution of resources	Small sample size
James G. Hodge, 2020, United States (14)	To identify risk assessment's role in crisis preparedness (Survey of public health leaders)	Ethical dilemmas arise in restrictive policies	Inclusive decision-making	Balancing public rights vs. safety	Generalized findings
Ward PR, 2020, Australia (15)	Examine hierarchical barriers to crisis response	Early risk assessment improves outcomes	Proactive risk identification	Weighing risks to vulnerable populations	Self-reported data
Jankelová N, 2021, Slovakia (16)	Assess resource prioritization in	Hierarchical barriers delay response	Decentralized decision-making	Ethical leadership in diverse teams	Possible response bias
Zink EK, 2021, United States		Resource allocation	Prioritizing critical	Fair allocation of resources	Case-specific

(17)	crises (Case study on limited resource allocation)	affects crisis response	resources		
Jens K. Roehrich, 2023, UK (18)	Explore adaptive leadership in unpredictable crises (Comparative analysis of two crisis responses)	Adaptability improves resilience	Flexible strategy adjustments	Transparency in adaptive decisions	Limited data scope
De Figueiredo A, 2022, Canada (19)	To assess the impact of policy enforcement on public compliance (Surveys of public compliance rates)	Strong policies increase compliance but may reduce trust	Balancing policy stringency	Ethical implications of strict mandates	Limited geographical scope
Estella A, 2020, Spain (20)	Examine ethical decision-making frameworks in health crises (Systematic review of ethical frameworks)	Ethical frameworks guide consistent actions	Integrative ethical decision models	Consideration of individual freedoms	Limited application contexts
Kachalia A, 2020, United States (21)	Evaluate leadership in resource-limited crises (Mixed-method analysis of crisis interventions)	Effective leadership promotes efficient use of limited resources	Resource prioritization	Fairness and justice in resource allocation	Lack of longitudinal data
Fadlallah R, 2024, Eastern Mediterranean region (22)	Identify challenges in inter-sectoral collaboration (Case study analysis of cross-sector partnerships)	Collaboration enhances crisis management	Multi-sector collaboration	Ethical sharing of resources	Limited to specific sectors
Hanfling D, 2020, United States (23)	Assess long-term impacts of leadership decisions on crisis outcomes (Retrospective cohort analysis)	Long-term planning enhances resilience	Strategic crisis planning	Accountability for public impact	Retrospective nature limits conclusions
Silvia Camporesi, 2021, UK (24)	Investigate the role of ethics in policy creation during crises (Content analysis of policy documents)	Ethical guidelines support consistent policy	Ethics-driven policy design	Balancing public and individual needs	Limited document diversity

The Table I findings highlighted the complex roles that leadership techniques and ethical issues play in managing public health emergencies. The studies, which span a variety of settings and approaches, emphasize crucial tactics used by successful public health leaders, including risk assessment, adaptive decision-making, proactive communication, and stakeholder collaboration. These tactics enable leaders to



respond to emergencies while retaining public trust and prudent resource management effectively. However, ethical quandaries arise, particularly when individual liberties are weighed against public safety. For example, imposing restrictive policies can assist limit health threats, but if they are regarded to violate personal rights, they may elicit public opposition or diminish trust.

## RESULTS AND ANALYSIS

This section summarizes the data from the selected research, as shown in Table 1, to assess the importance of leadership and ethical decision-making in addressing public health crises. Each of the articles analyzed presents different leadership tactics, ethical issues and practical dilemmas in the context of crisis management. These studies provide important insights of proactive communication, stakeholder collaboration, ethical frameworks, adaptive leadership, and resource prioritization, breaking down the complexity of straddling the public safety and individual rights.

### PROACTIVE COMMUNICATION

Effective communication, highlighted in many studies, is a key component to reducing public panic, and increasing trust. To take some examples, a researcher discovered that proactive communication strategies may reduce the introduction of misinformation, which in turn leads to a more informed choice by the public and enhancing compliance with mandatory health rules (12). Transparent communication about risks, policies taken, and their rationale helps diffuse public fears related to the restrictions that are imposed during a crisis. It does, however, point out that balancing transparency and public safety is a problem, in particular where concerned information is involved. Leaders are expected to be open without undermining the integrity of the response strategy and feed unnecessary fear.

### STAKEHOLDER COLLABORATION

Many studies found that stakeholder collaboration was a key component, and that better partnerships among different sectors and agencies can result in more efficient distribution of resources and crisis management. For instance, studies using qualitative interviews with health authorities suggests that multi-agency coordination facilitated resource distribution, enabling critical supplies to reach its area of greatest need more directly (13). There were evident ethical concerns around a fair allocation of resources as leaders had to make difficult decisions requiring the allocation of scarce resources to different populations' prioritization needs. Although the above benefits are touted, small sample size, and limited geographical focus, were noted limitations, prompting the need for wider research to validate these findings in varied contexts.

### ETHICAL DECISION-MAKING IN POLICY ENFORCEMENT

Significant emphasis is placed in the studies reviewed on the ethical dilemma of tension between public safety and individual freedoms. While the policies of mandatory quarantines, travel restrictions, and vaccination requirements are necessary for disease control; frequently violate these personal liberties (14). Therefore, this generally creates public resistance, as during the COVID pandemic where leaders came under a significant fire of criticism for taking so strict measures such as lock downs. One study discovered that strict enforcement of health mandates improved compliance rates, but could potentially undercut public trust by appearing excessive or unjust. Consequently, leaders are enjoined to adopt inclusive decision making processes that factor in the public feelings and ethical implications of its policies. The reviewed studies bring out the fact that whatever be the rights, public health must be protected at all costs. That is where ethical frameworks come into play; they help guide leaders on what to do in any situation leading to a fair, consistent decision (24). However, the generalization of some findings suggests a need to broaden research work to adapt ethical models to the respective cultural context and situational crisis of each one.

### ADAPTIVE LEADERSHIP

Adaptive leadership is central in effective crisis management especially in unpredictable surroundings that change fast. According to the studies, flexibility in leadership, defined as flexible plan



revisions and openness to stakeholder feedback, allows leaders to respond more effectively to emergent issues. Results of comparative analyses of crisis responses reveal that leaders who show adaptability facilitate greater resilience in their organizations and communities, thereby increasing their ability to withstand protracted crises (18). Furthermore, adaptive decision making is credible because it is transparent: since it demonstrates to the public that leaders are attentive to changing facts and willing to change policies as needed.

To date, however, there are only limited available empirical data in some studies, which impacts a broad application of adaptive strategies and suggests the need for additional empirical research on the long-term effects of adaptive leadership in different crisis settings (23). For example, adaptive leadership needs clear communication channels and a strong support network because decisions are likely to be rushed in that they cannot go through extensive hierarchical delay.

## RESOURCE ALLOCATION AND PRIORITIZATION

Efficient resource distribution is a critical component of effective crisis response, particularly when coping with limited supplies and high demand. Leaders face an ethical dilemma in resource scarce situations; i.e., which populations or areas should be accorded priority. In the case study of resource allocation in Table 1, it is found that the success of crisis interventions depends on the available critical resources, for instance medical supplies, and personnel (17). But it's an ethically questionable way to make policy decisions, since some communities or people may feel disenfranchised by these judgments.

The reviewed studies make it clear that allocating resources should take into account both current needs and future consequences, and make sure that decisions are as equitable as possible. In addition, leaders are urged to apply an evidence-based approach to resource prioritization by using data to identify the most vulnerable populations and based on that, organize resources (21). However, case specific findings in the studies indicate that principles of resource allocation in crises are not clear and need further research on standardized ethical guidelines for resource distribution.

## HIERARCHICAL BARRIERS TO CRISIS RESPONSE

Organizational hierarchies are often found to be potential barriers to fast crisis response, especially for those organizations in which decision-making processes are centralized and flexible. Response times may be delayed by hierarchical barriers as decisions must often pass through several levels of authority to be carried out (16). But another study suggests decentralized decision making could help prevent these delays by allowing local leaders to respond more quickly to emerging threats. For decisions that are aligned with broad public health objectives, ethical leadership across these diverse teams is needed as leaders need to empower, but also hold accountable.

Possible response bias in some studies reveals a problem in determining the entire influence of hierarchical systems on crisis response. Lastly, additional research is recommended into how decentralization can improve flexibility without diminishing coordination, especially for multi agency responses to large scale health crises.

## FUTURE RESEARCH NEEDS AND LONG-TERM IMPLICATIONS

Results from this review highlight the critical need for long term planning for crisis management. Retrospective cohort analyses of studies suggest that the implementation of strategic crisis planning and foresight can increase the public health resilience of communities and increase their preparedness for future crises. A future of effective long term planning goes beyond merely subduing health threats rapidly but also creating ethical accountability systems to appraise the society consequences of leadership choice (23). With this approach leaders don't lose accountability for their actions even after the crisis was over and therefore fostering transparency and trust in the community.

Review of existing literature shows that a great amount of progress has been made in determining what works in terms of leadership strategy but more work needs done on marrying ethical and practical frameworks. Crisis responses are most of what gets studied, often with the long term repercussions of

leadership choices neglected. There is future research for models incorporating both ethical and operational dimensions and these, if developed, will provide public health leaders a comprehensive toolkit for navigating crises.

## DISCUSSION

The systematic review highlighted the role of ethical decision-making, adaptive leadership, stakeholder engagement, and resource prioritization in effectively addressing public health crises. Balancing public welfare with individual rights remains a significant challenge during crises, especially for public health leadership (25). The results suggest that effective public health leadership is rooted in transparent communication with stakeholders. Clear, proactive communication strategies are essential for mitigating public anxiety, countering misinformation, and encouraging health mandates (26). Transparency helps reduce panic and build trust when timely, accurate information is provided. Leaders who clearly communicated the rationale behind tough policy decisions, such as during pandemics, improved public understanding, despite resistance. However, ethical dilemmas arise when the fine line between honesty and its potential negative impact on public behavior must be navigated (27). Over-communicating can cause panic, while insufficient communication erodes trust. The findings emphasize the need for ethically grounded, controlled communication strategies that respect the public's right to information while safeguarding crisis response integrity.

Another key strategy is collaboration between diverse stakeholders, especially between public and private sectors, which enhances resource allocation and logistical efficiency during crises (28). The reviewed studies suggest that partnerships not only optimize resource distribution but also promote shared responsibility, strengthening crisis response infrastructure. Ethical concerns arise when leaders must decide how to allocate limited resources, often leading to inequitable choices (29). The need for transparent, criterion-based resource allocation policies that balance short-term needs with long-term community impact is evident. Adaptive leadership is critical in responding to rapidly changing crisis scenarios. Leaders who are flexible and able to adjust strategies to fit evolving environments are more effective (30). Adaptive management is particularly useful during public health crises, where new threats and fluctuating resource availability demand ongoing adaptation. Leaders who adjust policies based on new information maintain higher public confidence and cooperation. However, this flexibility must be balanced with consistency to avoid confusion or perceptions of indecision. Dogmatic adherence to initial policies can hinder the response to emerging challenges (31). Thus, adaptive leadership requires a robust ethical framework that integrates both immediate crisis needs and long-term socio-economic effects.

A recurring ethical challenge in crisis management is the tension between enforcing public safety and respecting individual rights. Policies such as mandated vaccinations, movement restrictions, and quarantines are crucial for controlling disease spread but raise concerns about personal liberty, particularly in democracies (32). The review suggests that leaders who use ethical decision-making frameworks are better positioned to balance these concerns, crafting policies that respect individual freedoms. Involving public opinion in decision-making can also reduce resistance to policies perceived as restrictive (33). Ethical challenges also arise in the prioritization and allocation of resources. For example, prioritizing medical supplies for frontline workers and high-risk populations can marginalize other groups, leading to perceptions of inequity (34). Ethical resource allocation should aim for fairness, with clear communication to build public support. Leaders must consider both the immediate and long-term equity implications of their decisions.

Studies show that hierarchical barriers within organizations can slow crisis response. Centralized decision-making structures may delay policy implementation, while decentralized leadership can promote quicker responses by granting more autonomy to local decision-makers (35). However, ethical concerns arise about ensuring local decisions align with national public health objectives. Ethical leadership ensures coherence in crisis response by balancing formal authority structures with the need for local responsibility.

The review also underscores the importance of long-term planning and resilience building. Studies suggest that systems prepared for future crises benefit from strategic, long-term leadership planning (36). Ethical accountability structures, which evaluate the impact of decisions post-crisis, help improve preparedness and promote a culture of responsibility and transparency. However, securing long-term investment in planning can be challenging due to competing short-term demands (37).

The reviewed studies advocate for a comprehensive ethical framework for leadership in public health crises. While individual studies address specific aspects of crisis management (e.g., communication, stakeholder engagement, resource allocation), there is a lack of integration across these areas in existing models (38). This review contributes by emphasizing that ethical principles and operational considerations must be addressed concurrently by public health leaders (39). The limitations of these studies, including small sample sizes and context-specific findings, highlight the need for broader research. Most research focuses on immediate crisis responses, but little is known about how leadership decisions affect long-term public health resilience (40). A coherent, evidence-based framework that integrates ethical and operational issues is crucial, improving leaders' ability to make well-informed, balanced decisions. Maintaining a balance between individual rights and public good remains a key challenge, requiring leaders who are both flexible and ethically anchored. As public health crises grow in complexity, developing a coherent, evidence-based leadership framework will help future leaders make ethically sound decisions, enhancing public trust and system preparedness for future emergencies. This review lays the groundwork for such a framework, ultimately improving public health systems' resilience in future crises.

Future research should then build an integrated evidence based framework of public health leadership, which includes the ethical and operational facets of crisis management. Filling in some gaps of understanding in the long-run effects of leadership decisions on public health resilience is another aspect of this framework. Further, how cultural contexts beyond business shapes ethical decision making in public health crises needs further study, as does the relationship between public opinion and transparency and the outcomes of crisis management. Further research into the efficacy of decentralized decision making and the ethical issues of resource allocation in various crisis contexts may help to produce fairer ad responses to future emergencies. Long term planning and building resilience to future public health crises should also be explored further to increase preparedness for future public health crises.

## CONCLUSION

Finally, from this systematic review, we conclude with the critical elements of public health leadership in crisis from the perspective of its balance between protecting public welfare and respecting on individuals' rights. Public health leadership models should operationalize adaptive leadership frameworks with practical training modules, establish protocols for proactive communication during emergencies, and create standardized guidelines for ethical decision-making and resource allocation. Strengthening cross-sector collaborations and embedding stakeholder engagement into planning and response phases are essential actionable steps. Tension between public safety mandates and individual freedoms is continually part of the predicament leaders live with in terms of ethical considerations. In addition to effectively handling crises, leaders must cultivate public trust, which is necessary for compliance and societal resilience. Future leadership initiatives must prioritize the development of evidence-based toolkits, integrating moral decision-making frameworks and adaptable policies tailored to specific crisis scenarios. Additionally, investing in continuous education for leaders and fostering interagency collaborations will ensure readiness for complex emergencies. The results implied that the public health responses can be standardized toward the ethical guidelines and stabilize the resilience to long term, diminishing the discrepancy among different regions or crisis. Future studies should investigate how moral and flexible leadership styles affect crisis outcomes over time in order to fill up these gaps. Given that public health emergencies continue to present complex challenges to manage, future crises can be navigated only with leadership frameworks based on evidence that place high value on ethical decision making and collaborative work across sectors.

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