

Fear over Facts: The Political and Social Consequences of Health Misinformation

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Abstract. This article examines the definition, typologies, and propagation mechanisms of health misinformation and analyzes its consequences for political stability and social cohesion. Drawing on scholarly literature, the study applies Deborah Stone's Causal Story Framework as an analytical lens to explain how health misinformation is strategically framed to mobilize public opinion and shape policy outcomes. The study is guided by five research questions addressing the definition and propagation of health misinformation, the mechanics of the Causal Story Framework, and the political, social, and remedial consequences of politicized misinformation. The review indicates that health misinformation spreads through algorithmic amplification, trusted social networks, and deliberate fabrication by motivated actors, and that its persistence rests on simplicity, emotional appeal, and confirmation bias. Applying the Causal Story Framework shows that misinformation gains political traction through intentional causal narratives that assign blame to public health institutions and political elites, a pattern evident in COVID-19 vaccine conspiracy narratives. Politically, this dynamic contributes to policy gridlock, weakened international cooperation, and the rise of populist narratives that challenge scientific expertise. Socially, it is associated with public health crises stemming from reduced vaccination uptake, stigmatization and hate crimes directed at minority groups, and the fragmentation of a shared epistemic commons necessary for democratic deliberation. The findings indicate that health misinformation functions as a socio-political phenomenon rather than a purely informational or medical problem, one that erodes institutional trust and deepens polarization. Based on this synthesis, the study proposes a three-part response centered on countering motivated causal narratives, building public resilience through digital and media literacy, and strengthening institutional guardianship through transparent algorithms, consistent regulation, and proactive risk communication. These three strategies, countering causal narratives, building literacy-based resilience, and strengthening institutional guardianship, together form the study's central practical contribution. These findings suggest that restoring the primacy of facts over fear requires coordinated action across communication, education, and governance.

Keywords: Causal Story Framework; Health Misinformation; Political Polarization; Public Policy; Public Trust

Introduction

Contemporary societies are shaped by the unprecedented speed and reach with which information travels across digital platforms. This connectivity has expanded access to public health knowledge, yet it has simultaneously created conditions favorable to the spread of health misinformation, defined as health-related claims that are false, inaccurate, or misleading relative to the best available evidence at the time they are made (Chou et al., 2020; Vraga & Bode, 2020). During major health crises such as the COVID-19 pandemic, the resulting overabundance of both accurate and inaccurate information, an infodemic, has been described as damaging in its own right, independent of the biological threat that accompanies it (World Health Organization, 2020). When public fear begins to outweigh public facts, the consequences extend well beyond individual health decisions and permeate political institutions and social relationships.

The scale of this problem is illustrated by the misinformation that circulated around COVID-19 vaccines, including unfounded claims that vaccines contained microchips for government surveillance or altered human DNA (Islam et al., 2021; Stefkovics et al., 2024). Claims of this kind contributed to vaccine hesitancy even in populations with high vaccine access, prolonging the pandemic and, according to several

assessments, contributing to preventable deaths (Chen et al., 2022; Oyeyemi et al., 2023). Cases such as this indicate that health misinformation is not a harmless alternative viewpoint; it produces tangible and often severe consequences. It undermines scientific authority and constructs a parallel epistemic reality in which contrary evidence is dismissed regardless of its quality. In numerous countries, health misinformation has also become a political instrument, deployed to erode confidence in governing institutions and to deepen social divisions (Magnus, 2022).

Existing legal and regulatory frameworks have generally struggled to match the pace at which online falsehoods evolve, producing a governance gap between the speed of misinformation and the speed of institutional response (Marecos et al., 2023). In the absence of coherent counter-misinformation strategies, public health responses are weakened and social trust erodes further, creating conditions in which future crises may be met with even greater resistance and division.

Although a substantial body of research has examined the spread and correction of health misinformation from a communication or public health standpoint (Chou et al., 2020; Lewandowsky et al., 2012; Nan et al., 2023), comparatively less attention has been paid to the political mechanisms through which misinformation is transformed into policy-relevant narratives. Deborah Stone's (1989) Causal Story Framework, developed within policy studies to explain how problems are politically constructed through narratives of blame and responsibility, offers an underused lens for this purpose. Applying this framework to health misinformation allows its political dimension, and not only its epidemiological spread, to be systematically analyzed.

This article addresses this gap by pursuing three objectives. First, it synthesizes the secondary literature on the definition, typologies, and propagation mechanisms of health misinformation. Second, it applies the Causal Story Framework to explain how health misinformation is strategically framed to mobilize public opinion and shape policy agendas. Third, it examines the political and social consequences that follow from this politicization and proposes guidelines for building societal resilience. In doing so, the study contributes a more integrated understanding of health misinformation as a socio-political, rather than purely informational, challenge.

These objectives are developed into five specific research questions: what health misinformation is and how it spreads, how the Causal Story Framework explains its politicization, and what political, social, and remedial consequences follow. The study's scope is correspondingly narrow: it draws on secondary, English-language, peer-reviewed literature concentrated on the COVID-19 pandemic period, and its conclusions are offered as applicable primarily to that literature rather than to health misinformation in all linguistic, cultural, or historical contexts.

Research Questions

Guided by the study's three objectives, this research addresses five interrelated questions that examine health misinformation not only as a problem of inaccurate or misleading information but also as a phenomenon that can acquire political and social significance. The questions move from identifying how health misinformation is conceptualized and transmitted, to examining how it becomes politically meaningful, assessing its consequences, and identifying possible responses discussed in the existing literature.

1. How do definitions, typologies, and propagation mechanisms of health misinformation appear in the secondary scholarly literature?
2. How does Stone's (1989) Causal Story Framework explain the process by which health misinformation is transformed into a politically consequential narrative?
3. What political consequences are associated with the politicization of health misinformation in the reviewed literature?
4. What social consequences are associated with the politicization of health misinformation in the reviewed literature?
5. What strategies does the reviewed literature suggest for countering the political and social consequences of health misinformation?

Scope and Delimitation of the Study

This study is a qualitative, literature-based synthesis and does not involve the collection of primary data. Its scope is limited to secondary sources, including peer-reviewed journal articles and reports from recognized institutions such as the World Health Organization, that address health-related misinformation specifically rather than misinformation in general. Sources unrelated to the health domain, such as literature focused primarily on election misinformation or climate misinformation, were consulted only insofar as they informed general typologies or propagation mechanisms applicable to health contexts, and were not treated as a primary body of evidence. The literature reviewed is concentrated in the period following the emergence of COVID-19, from 2020 to 2025, supplemented by foundational theoretical works that precede the pandemic,

most notably Stone's (1989) original formulation of the Causal Story Framework and Lewandowsky et al.'s (2012) work on the correction of misinformation. This concentration reflects the volume of scholarship the pandemic generated rather than a claim that health misinformation is a new phenomenon, and readers should be cautious about extending pandemic-era findings without qualification to other health crises. The study is further delimited to English-language sources, which means that scholarship published in other languages, including research specific to non-English-speaking regions, is not directly represented and may limit the generalizability of the findings to those contexts. These boundaries mean that the findings reported here are drawn primarily from, and are most directly applicable to, English-language, Western, pandemic-era contexts; extending them to non-English-language literatures, non-Western political systems, or health crises with a different social and media environment than COVID-19 should be done cautiously and is treated in this study as a direction for future research rather than an established conclusion. Because the study applies Stone's (1989) Causal Story Framework as its primary analytical lens, it emphasizes the political construction of health misinformation through blame and causality rather than alternative theoretical approaches, such as purely cognitive or epidemiological models of belief formation. This choice sharpens the study's focus on the political and social consequences of misinformation but is not intended to suggest that the Causal Story Framework offers a complete account of why individuals believe false health claims. Finally, as a narrative rather than a systematic review, this study does not report a fixed count of screened or included sources and does not follow a formal protocol such as PRISMA; its purpose is conceptual synthesis and theoretical application rather than an exhaustive census of the available literature.

Literature Review

Defining Health Misinformation

Scholars generally define health misinformation as health-related claims that are false, inaccurate, or misleading according to the best available evidence from relevant experts at the time a claim is made (Chou et al., 2020; Vraga & Bode, 2020). This definition situates misinformation on a spectrum related to, but distinct from, disinformation, which involves the deliberate creation of false content intended to mislead (Vraga & Bode, 2020). The distinction matters analytically because it separates questions of intent from questions of accuracy, allowing researchers to study the diffusion of falsehoods regardless of whether their originators intended harm. The digital ecosystem, and social media algorithms in particular, has been identified as a central vector for the dissemination of health misinformation. Because these algorithms are optimized to maximize engagement rather than accuracy, they tend to reward content that is emotionally charged or controversial, characteristics that misinformation frequently exhibits (Shin & Shin, 2026; Tomassi et al., 2024).

Typologies of Health Misinformation

The literature identifies several recurring typologies of health misinformation. A first category consists of false claims about disease transmission and prevention, which distort understanding of how illness spreads and how it can be avoided (MacDonald & the SAGE Working Group on Vaccine Hesitancy, 2015; Nan et al., 2023). A second category involves the promotion of ineffective or dangerous treatments, ranging from unproven remedies to therapies that are actively harmful to patients (MacFarlane et al., 2020; Mian & Khan, 2020; Silva, 2024). A third category comprises conspiracy theories concerning the origin of diseases and the motives attributed to public health authorities, a category that has proven particularly resistant to correction (Hartman et al., 2021; Hong et al., 2021; Ma & Lu, 2024). Building on cognitive and social psychology, Lewandowsky et al. (2012) explain why misinformation of this kind is difficult to correct once it circulates. Three characteristics make misinformation cognitively sticky: its relative simplicity compared with complex scientific explanations, its emotional appeal to primal fears such as loss of freedom or exposure to toxins, and its capacity to reinforce confirmation bias by aligning with pre-existing beliefs and identities. These characteristics help explain why factual corrections alone are often insufficient to change belief, a point that becomes central to the discussion that follows.

Propagation Mechanisms

Beyond typology, the literature identifies at least three mechanisms through which health misinformation propagates. Algorithmic amplification occurs because platforms' engagement-driven business models inadvertently privilege controversial and emotionally charged content over factual corrections, granting misinformation a disproportionate reach (Shin & Shin, 2026; Tomassi et al., 2024). Exploitation of trust networks occurs when misinformation circulates through closed, high-trust channels such as family group chats or community pages, where it acquires credibility through interpersonal rather than institutional

trust (Dong et al., 2025). This mechanism is consistent with survey evidence that perceptions of substantial misinformation on social media are associated with lower trust in the formal health care system, suggesting that informal channels can come to substitute for institutional ones as a source of perceived credibility (Stimpson et al., 2025). Strategic fabrication by motivated actors occurs when individuals or groups, driven by political ideology or financial incentive, such as the sale of unproven cures, deliberately manufacture and seed false narratives into public discourse (Leonard & Philippe, 2021).

Theoretical Foundation: The Causal Story Framework

While the communication and public health literatures explain how misinformation spreads and why it persists cognitively, they offer a comparatively limited account of how misinformation becomes politically consequential. Stone's (1989) Causal Story Framework addresses this gap. Stone argues that policy problems are not self-evident but are constructed through political persuasion, and that a central instrument of this persuasion is the causal story, a narrative that assigns blame, responsibility, and causality for a given problem. Stone (1989) distinguishes between causal stories that portray a problem as an accidental, unforeseeable outcome and causal stories that portray it as the result of a conscious, malicious plan. Actors who successfully attach an intentional causal story to a problem can mobilize public outrage and policy attention more effectively than actors relying on accidental framings, because intentional stories identify a villain and imply a remedy, namely the removal or punishment of that villain. The typologies and propagation mechanisms of health misinformation are the raw material on which the Causal Story Framework operates. A typology alone, such as a false claim about disease origin, does not determine its political consequence; the framework specifies that consequence depends on whether the claim is cast as an accident of nature or as the deliberate act of an identifiable villain, and on how effectively that framing is amplified through propagation mechanisms such as algorithmic amplification or trust-network transmission. Reading the definitional and propagation literature through Stone's (1989) framework therefore does more than catalogue what health misinformation looks like; it explains why some typologies, particularly origin-related conspiracy theories, become disproportionately consequential once they are propagated as intentional causal stories, as when COVID-19 vaccine development, an accelerated but rigorously tested scientific achievement, was recast in public discourse as a deliberate plot to track or control populations.

Methodology

Research Design

This study employs a qualitative, descriptive-analytical design based on a narrative review of secondary literature. Rather than collecting primary data, the study synthesizes peer-reviewed scholarship, institutional reports, and policy-relevant publications on health misinformation, using Stone's (1989) Causal Story Framework as an interpretive lens through which the reviewed literature is organized and analyzed. This design is appropriate for a topic that spans multiple disciplines, including public health, communication studies, and political science, because it allows findings from otherwise disconnected literatures to be integrated around a single theoretical framework.

Sampling Design

This study employed purposive, criterion-based sampling rather than probability sampling, since the goal was to assemble a conceptually representative body of literature rather than a statistically representative one. Purposive sampling is appropriate for a narrative, theory-driven review because it allows sources to be selected deliberately for their relevance to the research questions rather than through a random selection process that would not distinguish thematically central sources from tangential ones. The sampling frame consisted of peer-reviewed journal articles and institutional reports indexed in major scholarly databases, supplemented by publications from recognized public health bodies such as the World Health Organization. From this frame, sources were included if they met three criteria: they addressed health-related misinformation specifically, rather than misinformation or disinformation in general; they were published in English; and they contributed substantively to at least one of the study's three analytical areas, namely the definition and typology of health misinformation, its propagation mechanisms, or its political and social consequences. Sources were excluded if they addressed misinformation in domains unrelated to health, such as election or climate misinformation, unless their theoretical content, such as a typology or propagation mechanism, was directly transferable to the health context. Within this frame, two categories of sources were sampled differently. Foundational theoretical works, including Stone's (1989) original formulation of the Causal Story Framework and Lewandowsky et al.'s (2012) account of misinformation correction, were included regardless of publication date because of their continued conceptual centrality to the field, consistent with a theoretical sampling logic. Empirical and applied studies were sampled with a preference for recency,

concentrating on work published between 2020 and 2025 to capture the substantial body of research generated by the COVID-19 pandemic, while still including earlier empirical work where it addressed a typology or mechanism not otherwise covered by more recent sources. Sampling continued iteratively, with reference lists of already-identified sources checked for additional relevant works, until subsequent searches and citation checks ceased to surface sources that added a new typology, mechanism, or consequence not already represented in the sample.

Research Locale

As a literature-based study, the research locale is defined by the scope of the literature reviewed rather than by a physical setting. The reviewed literature centers on health misinformation as it emerged during and after the COVID-19 pandemic, from 2020 to 2025, supplemented by foundational theoretical works that predate the pandemic, including Stone's (1989) original formulation of the Causal Story Framework and Lewandowsky et al.'s (2012) work on the correction of misinformation.

Research Participants

Because this study relies exclusively on secondary literature, it does not involve human participants. The unit of analysis is instead the individual scholarly article, institutional report, or policy document. Sources were selected on the basis of thematic relevance to the definition of health misinformation, its typologies and propagation mechanisms, its political framing, and its political or social consequences, with an emphasis on peer-reviewed journal articles published in indexed international outlets.

Research Instrument

Rather than a survey or interview protocol, this study uses a thematic coding framework derived from the Causal Story Framework as its analytical instrument. Sources were coded according to whether the health misinformation they described was framed predominantly through accidental or intentional causal stories, and according to the type of consequence discussed, political or social. This coding framework was informed by, and cross-checked against, the typologies of misinformation identified in the communication literature (Chou et al., 2020; Lewandowsky et al., 2012), providing a form of conceptual triangulation across the public health, communication, and political science literatures consulted.

Data Gathering Procedure

Literature was identified through targeted searches using terms including health misinformation, infodemic, vaccine hesitancy, causal story framework, political polarization, and public trust, applied to indexed scholarly sources. Sources were prioritized for inclusion if they were peer-reviewed, addressed health-related misinformation specifically rather than misinformation in general, and were published in English. Once identified, sources were read, coded thematically using the causal-story coding framework, and organized into typological and consequence-based categories. Because this study did not involve the collection of data from human participants, it did not require institutional ethical review; all information used is drawn from previously published, publicly available scholarship, and no issues of confidentiality, anonymity, or informed consent arise from its use. To support replication, the search strategy is specified in full. Literature was identified through targeted searches of Scopus, Web of Science, PubMed, and Google Scholar, the databases most commonly indexing peer-reviewed work in public health, communication studies, and political science. Search terms were combined using Boolean operators around three clusters: a misinformation cluster ("health misinformation," "infodemic," "health disinformation"), a consequence cluster ("vaccine hesitancy," "political polarization," "public trust," "populism"), and a theoretical cluster ("causal story framework," "Deborah Stone," "policy narrative"), with clusters paired using AND (for example, "health misinformation" AND "political polarization"). Reference lists of retrieved sources were then hand-searched for additional works, a snowball step that continued until three consecutive searches failed to surface a source contributing a typology, propagation mechanism, or consequence not already represented in the sample; this repetition, rather than a fixed numeric target, was the criterion used to judge that the sample had reached thematic saturation for the purposes of a narrative synthesis. In place of a formal numeric quality-appraisal instrument such as those used in systematic reviews, three quality criteria were applied when deciding whether to retain a source: publication in a peer-reviewed journal or by a recognized public health institution, a stated methodology (for empirical studies) or an explicit theoretical argument (for conceptual works), and direct relevance to at least one of the study's three analytical areas. This study does not report a numeric flow of records identified, screened, and included at each stage, since no fixed target sample size was set in advance and sources continued to be added iteratively until the saturation criterion was met; this is a limitation inherent to narrative reviews, which trade the numeric replicability of a systematic review for greater interpretive depth.

Results and Discussions

Research Question 1: How do definitions, typologies, and propagation mechanisms of health misinformation appear in the secondary scholarly literature?

Table 1. Typologies, Propagation Mechanisms, and Consequences of Health Misinformation

Typology	Example Propagation Mechanism	Predominant Causal Framing	Associated Consequence
False claims about disease transmission and prevention	Exploitation of trust networks	Mixed (accidental and intentional)	Public health crises; reduced compliance
Promotion of ineffective or dangerous treatments	Strategic fabrication by motivated actors	Predominantly accidental, occasionally intentional (profit motive)	Increased morbidity and mortality
Conspiracy theories about disease origin and authority motives	Algorithmic amplification	Predominantly intentional	Political polarization; weakened international cooperation; stigmatization

The secondary literature converges on a definition of health misinformation as health-related claims that are false, inaccurate, or misleading relative to the best available evidence at the time they are made, a definition that separates questions of accuracy from questions of intent (Chou et al., 2020; Vraga & Bode, 2020). Within this definition, three recurring typologies emerge: false claims about disease transmission and prevention, the promotion of ineffective or dangerous treatments, and conspiracy theories concerning disease origin and the motives of public health authorities. Table 1 maps each typology to its associated propagation mechanism, predominant causal framing, and consequence, synthesizing the pattern that runs through the literature reviewed for this study.

Viewed through the Causal Story Framework, the typologies and propagation mechanisms of health misinformation are not merely descriptive categories; they are the raw material from which political actors construct causal stories. Table 1 summarizes how the typologies of misinformation identified in the literature tend to align with particular causal framings and particular political or social consequences.

Table 1 illustrates a broader pattern in the reviewed literature. Claims about disease origin, such as conspiracy theories, are disproportionately associated with intentional causal stories and with severe political consequences, including diplomatic strain and populist mobilization, whereas claims about prevention and treatment tend to generate consequences concentrated at the individual and public health level. Interpreted through the Causal Story Framework, this pattern is not incidental: origin claims lend themselves more readily to an identifiable villain, government, industry, or a foreign actor, than prevention or treatment claims do, which helps explain why they are disproportionately cast as intentional stories. Prevention and treatment claims can also acquire political salience once adopted as markers of group identity, a dynamic in which health behaviors such as vaccination or mask-wearing become signals of political identity rather than purely medical choices.

On propagation specifically, the literature identifies three distinct mechanisms rather than a single pathway. Algorithmic amplification occurs because engagement-driven platform design privileges emotionally charged and controversial content over factual corrections (Shin & Shin, 2026; Tomassi et al., 2024). Trust-network transmission occurs when misinformation circulates through closed, high-trust channels such as family or community groups, acquiring credibility through interpersonal rather than institutional trust; this is consistent with survey evidence linking perceived misinformation exposure to lower trust in the formal health care system (Stimpson et al., 2025). Strategic fabrication occurs when individuals or groups, motivated by political ideology or financial gain, deliberately manufacture false narratives and seed them into public discourse (Leonard & Philippe, 2021). Building on cognitive psychology, Lewandowsky et al. (2012) further explain why misinformation resists correction once these mechanisms put it into circulation, pointing to its relative simplicity, its emotional resonance, and its tendency to reinforce beliefs the audience already holds. These three mechanisms suggest that no single point of intervention, whether platform design, community education, or fact-checking, is sufficient on its own, a

conclusion that favors combining platform-level, community-level, and institutional interventions over relying on any single countermeasure such as fact-checking alone.

Research Question 2: How does Stone's (1989) Causal Story Framework explain the process by which health misinformation is transformed into a politically consequential narrative?

Stone's (1989) Causal Story Framework holds that policy problems are not self-evident but are constructed through political persuasion, and that a central instrument of this persuasion is the causal story, a narrative that assigns blame, responsibility, and causality. Stone distinguishes between causal stories that portray a problem as an accidental, unforeseeable outcome and causal stories that portray it as the result of a conscious, malicious plan, with intentional stories mobilizing outrage more effectively because they identify a villain and imply a remedy. The clearest illustration of this mechanism in the reviewed literature is the misinformation that surrounded COVID-19 vaccines. Rather than the scientifically accurate account of vaccine development as an accelerated but rigorously tested achievement, misinformation campaigns recast it as an intentional causal story, framing it as a deliberate plot orchestrated by elites to track or control populations (Douglas & Sutton, 2023; Islam et al., 2021). This reframing succeeded, according to the literature, because it offered a simple, villain-centered explanation for a situation that was otherwise complex, uncertain, and frightening, characteristics that align closely with the stickiness criteria identified by Lewandowsky et al. (2012).

Once an intentional causal story becomes attached to a public health institution, the consequences for institutional trust follow directly. When malicious intent is attributed to bodies such as the Centers for Disease Control and Prevention or the World Health Organization, public confidence in those institutions erodes, and individuals who accept the causal story become more likely to resist recommended public health measures such as masking and contact tracing (Ball & Maxmen, 2020). A randomized controlled trial similarly found that exposure to recent online misinformation directly reduced people's stated intent to accept a COVID-19 vaccine, relative to exposure to factual information (Loomba et al., 2021). This produces a self-reinforcing cycle in which erosion of trust reduces compliance with public health measures, and reduced compliance provides further material, in the form of poor outcomes or continued crisis, that can be folded into subsequent causal stories.

Causal stories also fuel political polarization to the extent that health behaviors are transformed into markers of political identity. A content analysis of U.S. news coverage during the early months of the pandemic found that COVID-19 reporting was highly politicized and polarized, with politicians featured more prominently than scientists, a pattern the authors suggest contributed to polarized public attitudes toward the pandemic (Hart et al., 2020). Applying the Causal Story Framework, this suggests that a causal story such as government overreach is more readily adopted and amplified by audiences whose political worldview it confirms, deepening divisions between political factions and reducing the likelihood of bipartisan consensus on public health measures. In this sense, the Causal Story Framework helps explain not only why misinformation spreads, but why particular pieces of misinformation attach so firmly to specific political identities. This mechanism of political attachment is one that cognitive accounts of memory and belief persistence do not, on their own, explain.

Research Question 3: What political consequences are associated with the politicization of health misinformation in the reviewed literature?

The politicization of health misinformation generates several distinguishable political consequences. First, misinformation contributes to policy gridlock and inefficacy. Interviews with county public health officials in Milwaukee, Wisconsin found that the combination of misinformation and political polarization around COVID-19 created major challenges for making and promoting safety recommendations, forcing officials to divert time and effort from public health work toward navigating political backlash (Bates et al., 2023). This is consistent with Marecos et al.'s (2023) broader assessment that unresolved health misinformation is an urgent threat that hinders the success of public health policy and is likely to contribute to avoidable deaths, though translating accurate evidence into timely policy action is complicated by legitimate concerns about protecting freedom of expression. Considered alongside the Problem 2 findings, this suggests that policy gridlock is not simply the result of officials lacking accurate information, but of officials facing a political cost, generated by the causal story itself, for acting on that information.

Second, health misinformation-fueled populism weakens international cooperation more broadly. Pevehouse (2020) argues that populist sentiment, whether originating from publics or from leaders, poses a barrier to the traditional mechanisms of international cooperation, since populist actors are especially

resistant to cues from foreign authorities and multilateral institutions. Extending this argument to global health governance, Wilson et al. (2020) contend that rising populism poses a structural threat to compliance with the International Health Regulations (2005), the framework underpinning global pandemic surveillance and response, as populist governments become less willing to accept obligations originating from international institutions such as the World Health Organization.

Third, health misinformation contributes to the elevation of populist narratives. Misinformation frequently frames public health experts and institutions as part of a corrupt establishment, a framing that aligns closely with the villain-centered, intentional causal story used to explain COVID-19 vaccine development and that populist political movements can readily incorporate into broader anti-establishment platforms (Magnus, 2022). Because these movements position themselves as opposing entrenched elites, the adoption of health misinformation extends beyond individual belief and becomes embedded in electoral and party politics, further complicating governance responses (Kohler & Koinig, 2022).

Research Question 4: What social consequences are associated with the politicization of health misinformation in the reviewed literature?

Alongside these political effects, the literature identifies three principal categories of social consequence. The most direct is a deterioration in public health outcomes. Reduced vaccination uptake, reliance on unproven or dangerous treatments, and reluctance to adopt preventive measures collectively increase morbidity and mortality and place additional strain on healthcare systems (Kohler & Koinig, 2022; Magnus, 2022).

A second consequence is social stigmatization and, in some cases, violence. During the COVID-19 pandemic, individuals of Asian descent were falsely blamed for the origin of the virus, a causal story that contributed to a documented rise in hate crimes and broader social discrimination (Hahm et al., 2021; Lantz & Wenger, 2022; Xu et al., 2021). This pattern illustrates how an intentional causal story assigning blame to an identifiable group can translate directly into interpersonal and community-level harm, extending the consequences of misinformation well beyond public health policy. This pattern also confirms empirically that a causal story's political potency depends on a villain being identifiable and blameable, whether that villain is an institution or, more troublingly, an entire community.

A third, more diffuse consequence is the fragmentation of what can be described as the epistemic commons, the shared factual foundation on which democratic deliberation depends. When a society can no longer agree on basic empirical facts, competing groups instead occupy parallel information universes, each internally coherent but incompatible with the other, making constructive public discourse increasingly difficult to sustain (Pira, 2023). This fragmentation may be the most consequential long-term effect identified in the literature, because it undermines not only responses to the immediate crisis at hand but also the informational conditions required for future collective decision-making.

The findings for Problems 3 and 4 indicate that the political and social consequences of health misinformation are not separate phenomena but are mutually reinforcing. Political polarization increases the plausibility and reaches of causal stories, and the social harms that result, from stigmatization to public health crises, provide material for further politicization, sustaining a feedback loop of distrust and division.

Research Question 5: What strategies does the reviewed literature suggest for countering the political and social consequences of health misinformation?

The reviewed literature converges on three broad categories of response. The first targets the causal narrative directly: correction efforts are more effective when they address the continued influence of misinformation on belief and offer a competing explanation, rather than relying on factual correction alone, since correction that does not displace the underlying narrative tends to leave some residual influence on judgment (Lewandowsky et al., 2012). Complementary reporting on the COVID-19 infodemic similarly points to the value of proactive, trusted communication in blunting the appeal of conspiracy narratives before they take hold (Ball & Maxmen, 2020).

The second targets public susceptibility through digital and media literacy, equipping audiences with the skills needed to identify misinformation, understand algorithmic bias, and locate authoritative sources; this is presented in the literature as a durable, long-term complement to reactive correction (Nan et al., 2023). The third targets institutions and platforms, and here the literature identifies a genuine tension rather than a settled solution: measures that regulate deliberate disinformation must be balanced against the protection of freedom of expression, a balance that Marecos et al. (2023) treat as a matter of ongoing calibration rather than a fixed policy answer. At the international level, Wilson et al. (2020) argue that sustaining cooperation on frameworks such as the International Health Regulations requires addressing the

populist resistance to multilateral institutions that health misinformation helps to generate, while the World Health Organization (2020) emphasizes proactive risk communication, delivered consistently before a crisis rather than only during one, as a means of maintaining public trust.

Limitations of the Analysis

Several limitations qualify these findings. First, as a narrative rather than a systematic review, this analysis does not report a fixed count of sources screened and included at each stage, and a different researcher applying the same search terms and inclusion criteria could reasonably arrive at a somewhat different, though thematically overlapping, sample; this trade-off is inherent to purposive sampling and is accepted here in exchange for the interpretive depth a theory-driven synthesis allows. Second, the reviewed literature is concentrated on the COVID-19 pandemic in English-language, Western media and policy environments, so the causal-story mechanism described here has not been demonstrated to operate identically in other health crises, other languages, or political systems with different media structures; this is a boundary on generalizability rather than a flaw in the mechanism itself. Third, this study applies the Causal Story Framework as its primary interpretive lens, which means findings are organized around blame and causality; a study using a different framework, for instance one centered on cognitive bias or network science, could reasonably foreground different aspects of the same underlying literature. Finally, because this is a synthesis of secondary sources rather than original empirical research, claims about the relative strength of different mechanisms, such as algorithmic amplification versus trust-network transmission, reflect the emphases of the studies reviewed rather than an independent test of which mechanism is empirically dominant.

Ethical Considerations

This study did not involve the collection of data from human participants. No surveys, interviews, or experimental procedures were conducted, and no personal, identifiable, or health-related information belonging to any individual was accessed or processed. The study relies exclusively on previously published, publicly available scholarly literature and institutional reports. Accordingly, the study does not ordinarily require institutional ethics review or approval under procedures applicable to research involving human participants. Issues of informed consent, confidentiality, and anonymity therefore do not arise from the conduct of the study. All sources were used for scholarly purposes and appropriately acknowledged through citation and referencing.

Conclusion

This study indicates that health misinformation is not merely a public health issue but a critical socio-political challenge that exploits digital vulnerabilities and deep-seated human biases. Applying the Causal Story Framework clarifies why misinformation is politically potent: it provides simple, intentional narratives that assign blame and resonate with identity-driven politics. The consequences documented across the reviewed literature, including eroded institutional trust, political polarization, weakened international cooperation, and preventable illness and death, point toward the need for a coordinated response rather than piecemeal correction of individual false claims. These findings position health misinformation as a governance problem as much as an informational one. Because political and social consequences reinforce one another, forming a feedback loop of distrust and division, effective responses cannot treat communication, education, and regulation as separate tracks; they must be pursued together and sustained over time, well past the acute phase of any single health crisis. The principal contribution of this study is theoretical and integrative rather than empirical: it connects a policy-studies framework, Stone's (1989) Causal Story Framework, that has rarely been applied to health misinformation specifically, with a dispersed communication, public health, and political science literature that has not previously been organized around the mechanism of blame attribution. In doing so, it reframes health misinformation as a problem of political narrative construction rather than solely a problem of factual accuracy or platform design, a reframing that implies corrective interventions must contest the villain narrative itself, rather than simply repeating accurate facts, if they are to durably change belief and behavior. Future research building on this synthesis could test the causal-story mechanism empirically, for instance through experimental designs that vary whether a health claim is framed as accidental or intentional and measure the resulting effect on political trust and polarization, and could extend the analysis to health crises and political systems beyond the English-language, Western, pandemic-era literature on which this review is based.

Recommendations

Based on this synthesis, three mutually reinforcing strategies are proposed to address key nodes of the misinformation ecosystem: countering motivated causal narratives, building public resilience through digital

and media literacy, and strengthening institutional guardianship. Public communication should move beyond simply stating facts by actively deconstructing the false causal stories that make misinformation persuasive; because such stories often assign blame and provide a simple villain, factual correction alone may be insufficient, whereas effective counter-communication can acknowledge the underlying fears exploited by the narrative, such as concerns about loss of autonomy or deception by authorities, while redirecting these concerns toward accurate information (Ball & Maxmen, 2020). Pre-emptive approaches such as prebunking can further address anticipated concerns before false narratives become embedded in broader belief systems (Lewandowsky et al., 2012). In practice, this may involve short-form video explainers distributed through the same social media platforms where misinformation circulates, directly identifying emerging narratives, explaining their appeal, and presenting accurate alternatives, as well as training designated public health spokespeople to address the underlying questions exploited by misinformation, such as why a vaccine was developed rapidly, rather than simply repeating isolated safety claims. Such counter-narratives may be more credible when communicated by trusted community and religious leaders, local clinicians, pharmacists, youth leaders, and peer networks, particularly in contexts where official institutions are portrayed as untrustworthy or responsible for the problem. Building public resilience also requires sustained investment in digital and media literacy beginning at an early age, with education extending beyond generic critical-thinking skills to include recognition of emotional and identity-based appeals, understanding of engagement-driven algorithmic amplification, identification of algorithmic bias, and evaluation of claims encountered through trusted interpersonal networks (Nan et al., 2023; Dong et al., 2025; Stimpson et al., 2025). At scale, this could include integrating mandatory health-misinformation modules into secondary-school health or civics curricula, using periodically updated examples of currently circulating misinformation, while public libraries and primary care clinics could provide recurring workshops for adults on evaluating health claims shared through messaging applications. Because misinformation frequently spreads through family and community networks, literacy interventions could also empower trusted community health workers and other locally embedded actors to model verification practices during routine interactions. Strengthening institutional guardianship likewise requires closer cooperation between government health agencies and technology platforms through greater algorithmic transparency, consistent human-rights-based legal frameworks, and proactive risk communication. Platforms could regularly publish data on the reach, amplification, and removal of flagged health misinformation by topic, enabling researchers and regulators to assess patterns of engagement-driven visibility rather than relying solely on general assurances. Legal responses to deliberate disinformation could focus narrowly on coordinated and inauthentic distribution campaigns, which may be more distinguishable from protected individual expression, while continuing to balance public protection with legitimate freedom of speech (Marecos et al., 2023). Government health agencies could establish standing rapid-response units to monitor emerging causal narratives and issue transparent public responses within one to two days of gaining traction, thereby building and maintaining a reservoir of public trust before crises intensify (World Health Organization, 2020). Given that health misinformation crosses national boundaries and can interact with domestic political dynamics, stronger international coordination through frameworks such as the International Health Regulations may also be necessary (Wilson et al., 2020). Future research should empirically test the relationships proposed in this article, including comparative investigations of how causal framing and misinformation responses vary across political systems, cultural contexts, and media environments. Collectively, these strategies provide complementary points of intervention across narrative correction, public literacy, and institutional accountability, while continued empirical research can determine which approaches are most effective under different social and communication conditions.

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