Int J Equity Health

https://doi.org/10.1186/s12939-026-02819-w

Article in Press

Why do people trust (or mistrust) health organizations? A systematic review

Received: 18 November 2025

Accepted: 15 March 2026

Published online: 20 March 2026

Cite this article as: Pelizzari N., Visconti M. & Gelatti U. Why do people trust (or mistrust) health organizations? A systematic review. *Int J Equity Health* (2026). https://doi.org/10.1186/s12939-026-02819-w

Nicola Pelizzari, Maria Visconti & Umberto Gelatti

We are providing an unedited version of this manuscript to give early access to its findings. Before final publication, the manuscript will undergo further editing. Please note there may be errors present which affect the content, and all legal disclaimers apply.

If this paper is publishing under a Transparent Peer Review model then Peer Review reports will publish with the final article.

ARTICLE IN PRESS

© The Author(s) 2026. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc-nd/4.0/.

ARTICLE IN PRESS

Why do people trust (or mistrust) health organizations? A systematic review

Pelizzari, N.[1], Visconti, M.[1], Gelatti, U.[1]

[1] Section of Public Health & Human Sciences, Department of Medical and Surgical Specialties, Radiological Sciences, and Public Health, Università degli Studi di Brescia, Viale Europa, 11 25123 - Brescia, Italy

Nicola Pelizzari (Corresponding author)
Section of Public Health & Human Sciences,
Department of Medical and Surgical Specialties, Radiological Sciences, and Public Health,
Università degli Studi di Brescia,
Viale Europa 11, 25123 Brescia, Italy
Email: nicola.pelizzari@unibs.it

Maria Visconti
Section of Public Health & Human Sciences,
Department of Medical and Surgical Specialties, Radiological Sciences, and Public Health,
Università degli Studi di Brescia,
Viale Europa 11, 25123 Brescia, Italy
Email: m.visconti006@unibs.it

Umberto Gelatti
Section of Public Health & Human Sciences,
Department of Medical and Surgical Specialties, Radiological Sciences, and Public Health,
Università degli Studi di Brescia,
Viale Europa 11, 25123 Brescia, Italy
Email: umberto.gelatti@unibs.it

All authors reviewed the content for accuracy and take full responsibility for the final manuscript.

ARTICLE IN PRESS

ARTICLE IN PRESS

Abstract

Background

Trust and mistrust shape how people engage with health organizations, influencing cooperation, compliance, and institutional legitimacy. While trust supports collective action, mistrust can reflect rational responses to inequity or institutional failure. Yet evidence on how these constructs are defined, measured, and addressed remains fragmented. This review synthesizes two decades of research to clarify definitions, determinants, measurement tools, and interventions related to trust and mistrust in health organizations.

Methods

PRISMA guidelines were followed and the protocol was registered at PROSPERO registry for systematic reviews. We searched PubMed, Scopus, Web of Science and PsycINFO from inception to October 2025 for studies on trust or mistrust directed at health organizations. Eligible studies examined conceptualisations, determinants, instruments, and interventions. Two reviewers independently screened, extracted data, and appraised study quality (KMET, JBI).

Results

We included 149 studies from 52 countries (2003–2025); 71.8% came from high-income settings, and 92.6% were empirical, predominantly cross-sectional (55.7%). Trust was defined in 91.3% of studies; mistrust was conceptualized as a distinct construct shaped by structural, historical, and social inequities, rather than simply the absence of trust. Determinants clustered at individual, organizational, and systemic levels. Across quantitative studies, organizational characteristics constituted approximately two-thirds of all statistically tested

ARTICLE IN PRESS

predictors of trust, particularly transparent communication (42.3%), competence and service quality (38.3%), and perceived fairness (18.1%). Individual factors were key drivers of mistrust, while systemic factors were shaped by governance quality, corruption, and broader issues of equity. Only 29.5% of studies used validated instruments (14 distinct scales), mostly developed and applied in U.S. settings, with limited cross-cultural validation. Thirty-seven intervention studies (24.8%) evaluated strategies across five domains; community engagement and governance reforms showed the most consistent improvements in trust-related indicators, but evidence was largely short-term and rarely linked to behavioural or system-level outcomes.

Conclusions

Trust functions as both a determinant and an indicator of equitable health-system performance. Progress requires validated, culturally adaptable measures and interventions that address the structural and historical roots of mistrust, especially among marginalized groups. Sustained investment in transparent governance, participatory communication, fair service delivery, and responsible digital infrastructures is essential to building trusted and resilient health organizations.

ARTICLE IN PRESS

Registration: Prospero Protocol number CRD420251155996

Keywords: trust; mistrust; health organizations; health systems; medical mistrust; health equity

1. Introduction

Trust is widely regarded as a cornerstone of effective health care and public health systems, yet it remains a complex and multifaceted construct [1-2]. Within these contexts, trust functions as the social foundation that sustains cooperation among individuals, professionals, and institutions, shaping whether people accept medical advice, comply with public health measures, and engage

ARTICLE IN PRESS

with services designed to protect them [3]. In this review, we adopted the World Health Organization (WHO) definition of health organizations, understood as "*the people, institutions and resources, arranged together in accordance with established policies, to improve the health of the population they serve, while responding to people's legitimate expectations and protecting them against the cost of ill health through a variety of activities whose primary intent is to improve health*" [1]. More broadly, these organizations operate within health systems, defined by the World Health Organization as "*the ensemble of all organizations, people and actions whose primary intent is to promote, restore or maintain health*" [1]. Trust in such health organizations reflects an optimistic acceptance of vulnerability, grounded in the belief that they will act competently, fairly, and in the best interests of individuals and communities.

Conceptually, trust embodies expectations of competence, integrity, benevolence, and fairness, assumptions that institutions will perform their duties responsibly and ethically [2-3]. It operates at multiple levels: interpersonal trust, concerning relationships between patients and clinicians, and institutional or social trust, referring to confidence in health systems and organizations [4]. Empirical research consistently links higher trust in healthcare with improved adherence, satisfaction, and self-reported health outcomes [5,6]. Conversely, low trust or mistrust correlates with reduced service utilization, discontinuity of care, and poorer physical and mental health indicators across diverse populations [7–9]. Evidence from high- and low-income countries shows that confidence in public institutions strongly influences healthcare use, with low trust acting as a barrier to engagement with government systems [1]. At the organizational level, trust fosters professional collaboration, reinforces institutional legitimacy, and enhances overall system performance [3,4,11].

Public trust also underpins collective behaviours crucial to population health. Confidence that authorities act competently and fairly increases participation in vaccination, screening, and preventive programs [12,13]. When trust weakens, individuals are more likely to question scientific recommendations and resist institutional guidance, fueling vaccine hesitancy and noncompliance with public health measures [14,15]. Studies of vaccine confidence suggest that trust mediates the relationship between public health

ARTICLE IN PRESS

communication and behavioral uptake, while mistrust amplifies susceptibility to misinformation and conspiracy beliefs [15]. Thus, trust is not merely an ethical ideal but a structural determinant of population health, influencing both individual outcomes and collective preparedness for health emergencies [8,11].

The COVID-19 pandemic highlighted how crucial trust is for effective public health responses. Countries with higher trust in governments and health agencies saw greater compliance with preventive measures such as masking, distancing, and vaccination [16–19]. Confidence in authorities' competence, transparency, and integrity fostered cooperation, while mistrust fueled skepticism and resistance [18]. Trust also proved a key driver of vaccination: those who trusted health organizations were far more likely to be vaccinated, demonstrating that trust directly influences both attitudes and health outcomes [16–19].

At the same time, the pandemic revealed how quickly trust can erode amid uncertainty and polarization. Inconsistent communication, misinformation, and the politicization of science led to declining confidence in healthcare professionals and organizations across diverse populations [17,20]. Comparative studies also showed weakening trust in international health authorities, especially in regions hardest hit by repeated infection waves [20,21].

ARTICLE IN PRESS

This widespread erosion of trust has been interpreted as evidence of deeper institutional vulnerabilities: even technically competent performance may fail to sustain legitimacy in the absence of transparency, accountability, and responsiveness [20,22]. These dynamics underline that trust in health organizations is both essential and precarious. When present, it enhances the reach and effectiveness of health interventions; when absent, it compromises cooperation and endangers public welfare [22].

Despite its clear importance, trust in health organizations has received relatively limited systematic attention. Most empirical work has focused on patient–provider relationships, showing that greater trust in clinicians enhances adherence, satisfaction, and perceived care quality [23]. In contrast, research on organizational and system-level trust remains conceptually fragmented and geographically concentrated in high-income settings [24–26]. Studies of medical mistrust among racial and ethnic minorities further highlight

ARTICLE IN PRESS

that mistrust, rooted in structural and historical discrimination, reduces engagement in preventive care and satisfaction with health services [27]. Evidence from vaccine confidence and COVID-19 research likewise underscores that trust in governments, public health agencies, and pharmaceutical organizations strongly shapes compliance, vaccine uptake, and broader public health behaviors [28–30].

While these findings offer valuable insights, they remain scattered across diverse domains, ranging from measurement and equity-focused health research to crisis communication, highlighting the need for a unified, systematic synthesis of knowledge on trust and mistrust in health organizations.

This review addresses this gap by examining four interrelated aspects of the literature: (1) how trust and mistrust in health organizations are defined and conceptualized; (2) the individual, social, and institutional determinants that shape them; (3) the tools and methodologies used to measure trust and mistrust; and (4) the interventions empirically tested to build, maintain, or restore trust.

This review synthesizes evidence across these domains and seeks to inform future research and guide strategies for strengthening public confidence in health organizations. In an era of recurrent health crises, digital transformation, and growing demands for transparency and accountability, such evidence is essential to support equitable and trustworthy health governance.

ARTICLE IN PRESS

2. Materials and methods

This systematic review was conducted and reported in accordance with the preferred reporting items for systematic reviews and meta-analyses (PRISMA) statement [31] and followed a predefined protocol registered in the international prospective register of systematic reviews (PROSPERO; protocol number CRD420251155996).

2.1 Research questions and PICO framework

ARTICLE IN PRESS

The overarching aim of this review was to systematically synthesize evidence on how trust and mistrust in health organizations are conceptualized, what factors influence them, how they are measured, and which interventions have been implemented to build, maintain, or restore trust. To ensure methodological clarity, the research design was structured according to the PICO framework [32]. The population (P) included healthcare and public health organizations, such as hospitals, clinics, health systems, and international health institutions (e.g., the World Health Organization). The intervention (I) encompassed any initiative, strategy, or tool designed to evaluate, enhance, or restore trust in these organizations or mitigate mistrust. No specific comparison (C) group was defined, as the review sought to describe and integrate findings rather than compare interventions. The outcomes (O) included conceptual definitions, identified determinants, validated or applied trust measurement instruments, and documented intervention outcomes.

2.2 Information sources and search strategy

A comprehensive literature search was conducted across four major electronic databases: PubMed, Scopus, Web of Science, and PsycINFO, covering all publications from inception to 15th October 2025. These databases were selected to capture the multidisciplinary nature of trust, spanning health communication, psychology, and public health systems. The search strategy employed both Medical Subject Headings (MeSH) and free-text terms. The general search string applied across databases was:

(“medical mistrust” OR “trust” OR “mistrust” OR “distrust” OR “confidence”) AND (“health organization*” OR “healthcare institution*” OR “hospital*” OR “clinic*” OR “public health agenc*” OR “health system*”)

Search syntax was tailored to each database to optimize retrieval accuracy. The full search strategy for each database, together with the date of each search and the number of records identified per database, is provided in the appendix. Reference lists of included studies and relevant reviews were manually screened to identify additional eligible publications.

ARTICLE IN PRESS

2.3 Eligibility criteria, study selection, and data extraction

Eligible studies included empirical and non-empirical peer-reviewed research focusing on trust or mistrust in health organizations or health systems. Studies were included if they: (i) examined the conceptualization, determinants, measurement, or interventions related to trust or mistrust; (ii) addressed healthcare or public health organizations at the institutional or system level; and (iii) were published in English before 15 October 2025. Because trust in healthcare is shaped not only by provider organizations but also by the broader institutional environment that governs, regulates, and communicates health services, an expanded operational scope was applied. Studies examining trust or mistrust directed toward governmental health authorities, public-health agencies, pharmaceutical or regulatory bodies were included when these entities acted in ways that explicitly influenced public confidence in healthcare organizations or in the legitimacy of the health system. This approach reflects contemporary public-health and health-systems frameworks that view healthcare organizations as interdependent with the governance structures that shape their performance and credibility. Studies were excluded if they focused exclusively on interpersonal trust between patients and individual healthcare professionals, or on trust in information systems, social media, or digital health technologies without an explicit institutional focus. No restrictions were placed on geographical setting or study design. All retrieved records were imported into Zotero software, which was used as the reference management platform to support duplicate detection and to manage the screening process. Duplicate entries were identified using a two-step verification system combining automated detection within Zotero with manual screening [33]. Title, abstract, and full-text screening were conducted independently by two reviewers (NP and MV) within the Zotero environment, with disagreements resolved through discussion or, when necessary, adjudication by a third reviewer (UG). Data extraction followed a structured charting table developed *a priori* and pilot tested on a subset of twenty included studies to assess clarity, consistency, and completeness of extraction fields. Following pilot testing, data extraction was performed independently by two

ARTICLE IN PRESS

reviewers (NP and MV), working in parallel. Extracted variables included author(s), year, country, study design, organizational context, conceptual definitions of trust or mistrust, identified determinants, measurement instruments, intervention characteristics, and principal findings. To ensure analytic transparency, determinants were coded using a multilevel framework [3, 26, 179] and grouped into three domains: individual, organizational, and contextual/systemic. Interventions were classified according to the multidimensional framework of McKee et al. [2]. Extracted data were compared across reviewers, and discrepancies were resolved through discussion and consensus; no automated data-extraction tools were used, and study authors were not contacted for additional data. Owing to heterogeneity in study designs, contexts, and outcomes, meta-analysis was not feasible, and findings were synthesized narratively.

2.4 Quality assessment and data synthesis

ARTICLE IN PRESS

The methodological quality and credibility of each study were independently assessed by two reviewers (NP and MV) using distinct tools according to study type. Any discrepancies were resolved through structured discussion, and unresolved disagreements were adjudicated by a third investigator (UG) to reach consensus. For empirical studies, defined as studies based on the collection and analysis of primary data through observational, survey, or experimental designs, the KMET standard quality assessment criteria [34] were applied. The KMET tool comprises structured checklists for quantitative (14 items) and qualitative (10 items) studies, with each item scored as Yes (2 points), Partial (1 point), or No (0 points). Total scores were normalized to a continuous scale ranging from 0 to 1. Assessment items include clarity of research question, appropriateness of study design, description of participants, control of confounding variables, and suitability of statistical analyses. Quality thresholds were defined *a priori*, in line with established scoring conventions and prior applications of normalized KMET scores in evidence synthesis: studies scoring > 0.75 were classified as high quality, those scoring between 0.55 and 0.75 as moderate quality, and those scoring < 0.55 as low quality. For non-empirical studies, including narrative, opinion, or textual analyses, the JBI

ARTICLE IN PRESS

critical appraisal checklist [35] was used to evaluate methodological credibility and identify potential sources of bias in design, argumentation, and evidence use. Items include clarity of the source and its standing in the field, relevance to the population or issue discussed, coherence and transparency of reasoning, support from peers or the literature, and acknowledgement of inconsistencies. Based on the predefined checklist criteria, studies were categorized as high credibility (scores 6–5), moderate credibility (scores 4–2), or low credibility (scores 1–0). Across both empirical and non-empirical studies, quality and credibility assessments were conducted to characterise the strength of the evidence and to inform interpretive synthesis only. No study was excluded on the basis of methodological quality or risk of bias. Quality ratings were subsequently considered during narrative synthesis to contextualize findings and discussed in the limitations.

2.5 Ethical considerations

Because this study analysed data from previously published sources, no new data collection involving human participants was performed. Ethical approval was therefore not required. All review activities were conducted in accordance with the registered protocol adhering to principles of transparency, reproducibility, and research integrity.

ARTICLE IN PRESS

3. Results

The screening and study selection process is presented in Figure 1. In total, 149 studies fulfilled the eligibility criteria and were included in this review [36–185]. A full list of the selected study and their characteristics is available in the appendix. In accordance with PRISMA, the appendix also documents studies that appeared, on initial assessment, to meet the inclusion criteria but were subsequently excluded after full-text review, together with a detailed justification for their exclusion.

ARTICLE IN PRESS

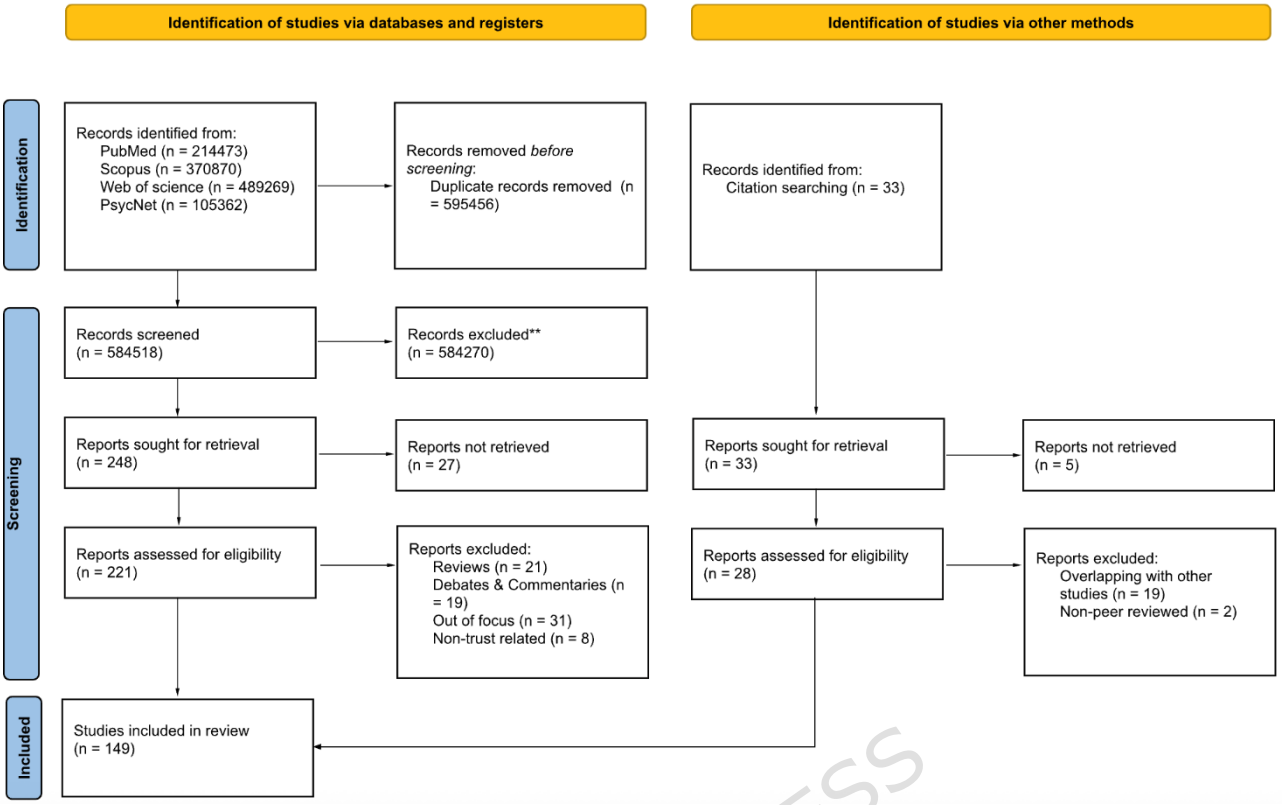
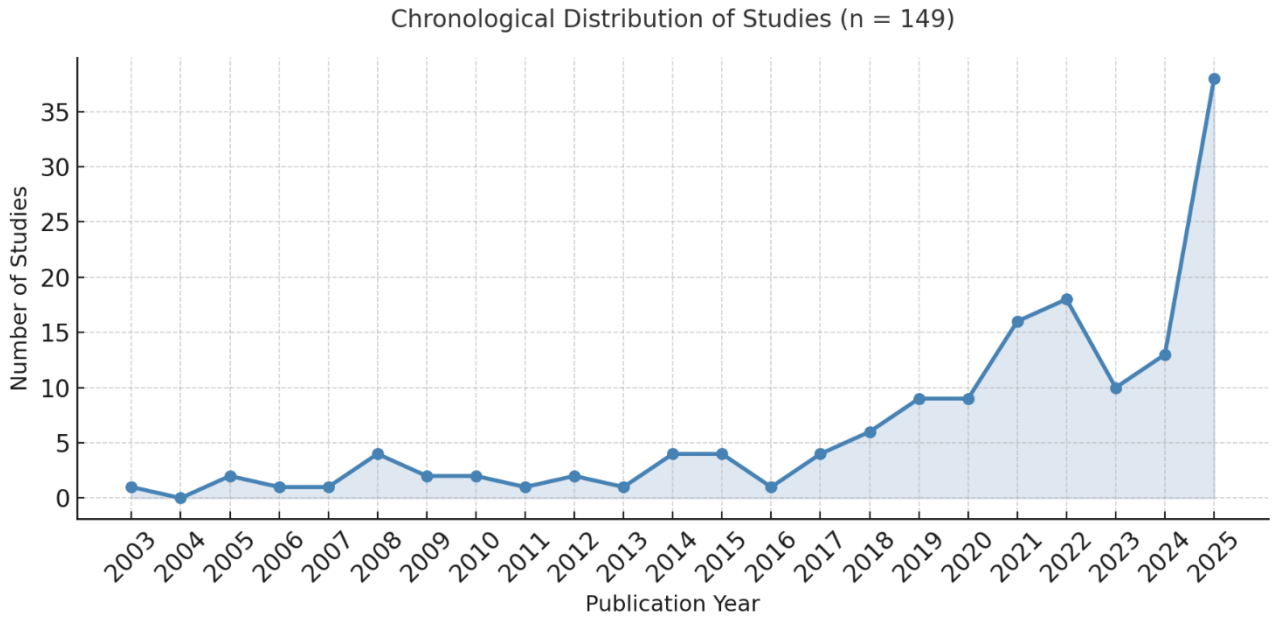


Figure 1. *PRISMA flowchart of the screening process*

Publications spanned the period 2003–2025 (Figure 2), showing a marked increase in output in recent years. The majority (n=104) were published from 2020 onward, with the highest annual frequency recorded in 2025 (n=38), followed by 2022 (n=18) and 2021 (n=16).

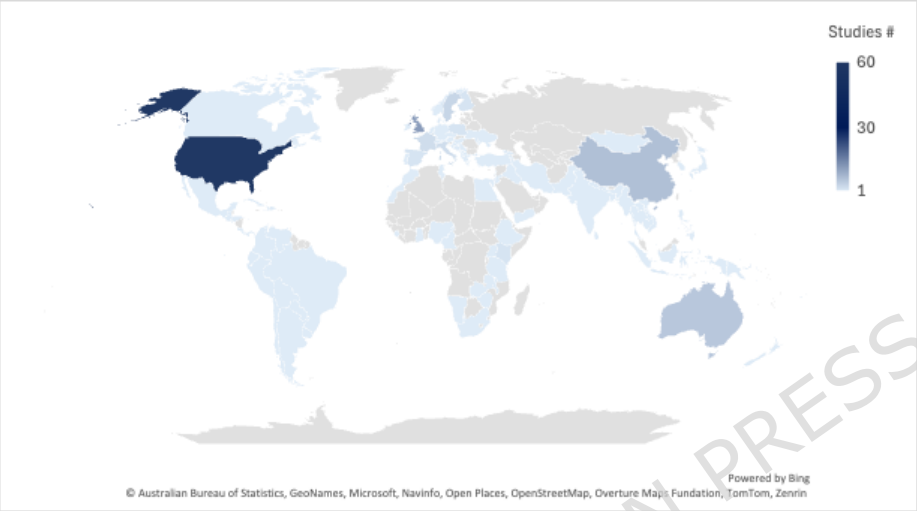
ARTICLE IN PRESS



ARTICLE IN PRESS

Figure 2. *Chronological distribution of selected studies*

As presented in Figure 3, studies were conducted across 52 countries, with the United States accounting for 40.3% of the sample, followed by the United Kingdom (8.1%) and China (4.7%). Ten studies (6.7%) represented international collaborations, frequently within WHO-affiliated or multilateral research frameworks. High-income settings represented 71.8% of the total.



ARTICLE IN PRESS

Figure 3. *Geographical distribution of selected studies*

Most studies were empirical (92.6%), while eleven (7.4%) were theoretical, conceptual, or policy analyses. Among empirical studies, the dominant design was cross-sectional quantitative (55.7%), followed by qualitative (18.1%), mixed-methods (14.1%), and experimental or interventional studies (6.1%). A further nine studies (6%) focused on instrument development or psychometric validation of trust or mistrust measures.

Studies addressed trust and mistrust across diverse health-system levels and organizational settings. The largest group examined national or regional health-system or institutional health contexts (40.9%), typically focusing on public trust in government-managed health systems, ministries of health, and service-governance structures. Hospitals and healthcare organizations (20.8%)

ARTICLE IN PRESS

represented the second most frequent setting, often analysing organizational relationships among staff, management, and patients. A further 23 studies (15.4%) addressed public-health authorities and pandemic-governance contexts, most conducted during or after the COVID-19 pandemic, while 19 studies (12.8%) investigated community or primary-care services, including those involving community health workers, clinics, and outreach programmes. Smaller subsets focused on research, data-governance, or biobanking settings (5.4%) and on digital, technology-assisted, or AI-enabled healthcare systems (4.7%), reflecting emerging interest in data protection, algorithmic transparency, and technology-mediated care. The study populations were equally diverse. Most investigations targeted patients and members of the general public (67.8%), followed by health professionals (14%), mixed stakeholder samples (10.1%), and policy or institutional representatives (8.1%). Sample sizes varied substantially, ranging from qualitative studies with 20–50 participants to national and multinational surveys exceeding 40,000 respondents. Trust was most often examined at the institutional level (41%), followed by relational or patient–provider trust (33%) and organizational or managerial trust (15%), whereas mistrust was predominantly studied at the institutional level (77%), reflecting its systemic orientation within contemporary research.

ARTICLE IN PRESS

3.1 Quality assessment

Overall, most studies demonstrated good methodological quality and credibility (Table 1). As shown below, 67.8% of all studies were rated as good quality, 30.2% as adequate quality, and only 0.7% as poor quality, indicating that low-quality evidence was exceptionally rare across the corpus.

	Score > 0.75 (Good quality)	**Between 0.55 and 0.75 (Adequate quality)**	**Score < 0.55 (Poor quality)**
Empirical studies (n = 138)	69.6%, (n=96)	29.7%, (n=41)	0.7%, (n=1)
	Score 6-5	**Score 4-2 Moderate credibility studies**	**Score 1-0**

ARTICLE IN PRESS

	High credibility studies		Low credibility studies
Non-empirical studies (n = 11)	63.6%, (n=7)	36.4%, (n=4)	0%, (n=0)

Table 1. Distribution of quality and credibility scores among studies (n=149)

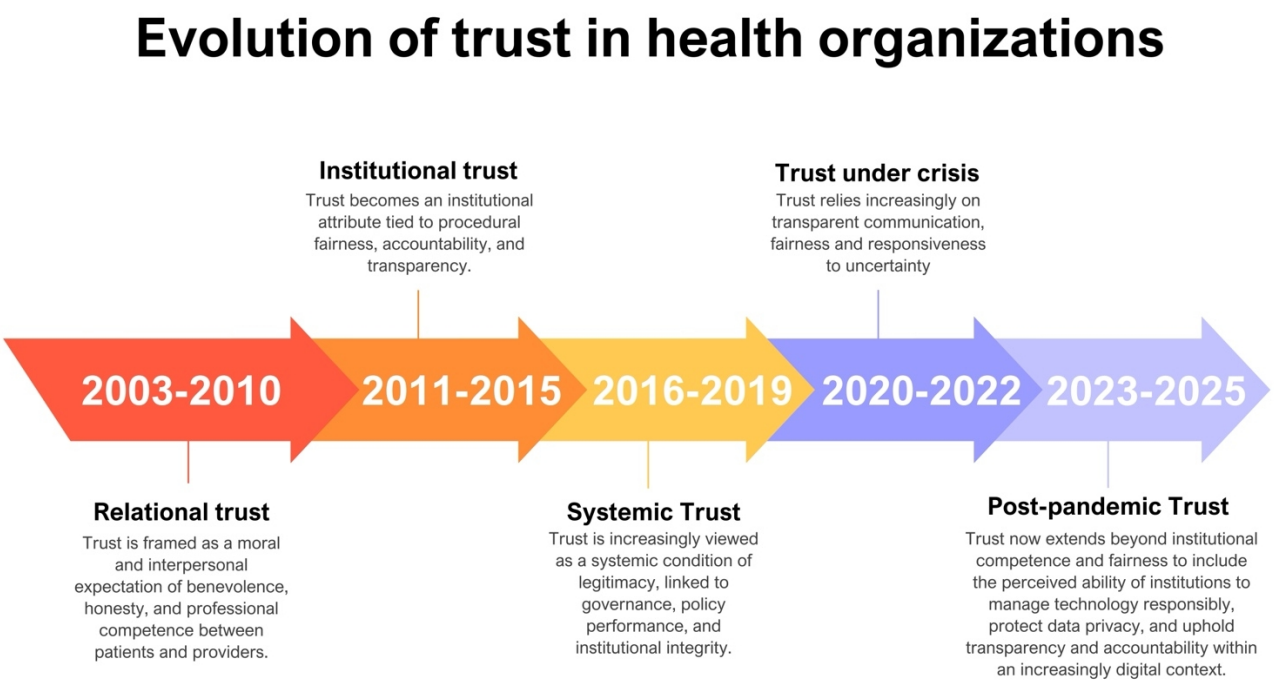
Good-quality studies were more likely to provide explicit and theoretically grounded definitions of trust and mistrust and to employ validated instruments or multilevel analytical frameworks. They consistently linked higher trust with favourable outcomes, including better treatment adherence, greater participation in preventive and screening programmes, and higher compliance with public-health measures. Adequate-quality studies generally examined narrower antecedents, such as transparency, fairness, or communication, but provided less methodological detail and rarely tested behavioural outcomes. Poor-quality studies were uncommon and mainly descriptive, often lacking validated measures or theoretical framing, and typically focused on isolated dimensions of trust without systematic analysis.

ARTICLE IN PRESS

3.2 Definitions and conceptual frameworks of trust and mistrust in health organizations

136 studies (91.3%) provided a conceptual or operational definition of trust or mistrust in health organizations. Among these, 79 (53.0%) defined trust only, 43 (28.9%) defined mistrust or distrust only, and 14 (9.4%) addressed both constructs as distinct yet interrelated. Thirteen studies (8.7%) used the terms empirically without explicit conceptual clarification. Trust was most frequently defined as a positive expectation under conditions of vulnerability that individuals, professionals, or institutions will act competently, fairly, and benevolently in the public interest. Over time, conceptualizations progressively expanded while retaining these core features (see figure 4).

ARTICLE IN PRESS



ARTICLE IN PRESS

Figure 4. *Evolution of trust*

Early studies (2003–2010) emphasized interpersonal and moral dimensions, framing trust as grounded in perceived benevolence and integrity [37,79,104]. Between 2011 and 2019, definitions built on this foundation, increasingly focusing on institutional accountability, transparency, and procedural justice, positioning trust as a feature of health systems rather than individuals [74,77,125]. From 2020 onward, definitions became multi-layered and system-embedded, further extending to domains of digital governance, AI reliability, and organizational transparency [94,116,159]. Across this evolution, trust was conceptualized as both a determinant and an indicator of institutional legitimacy, grounded in competence, fairness, and integrity.

Mistrust has evolved as an independent construct rather than merely representing the absence of trust. The most widely cited framework distinguishes between competence-based mistrust, which arises when institutions are perceived as ineffective or inconsistent, and values-based mistrust, which stems from perceived violations of fairness or moral integrity [54,163]. Unlike distrust, which typically denotes an explicit and situational

ARTICLE IN PRESS

withdrawal of confidence in response to identifiable institutional failures, mistrust represents a more enduring, experience-based stance of caution. It is shaped by broader historical, social, and structural contexts rather than by discrete events. From 2015 onward, especially in U.S. research, scholars have increasingly linked mistrust to structural inequities and histories of exclusion, particularly among racial and ethnic minority communities [47,66,86,166,181]. In this sense, mistrust reflects not simply disbelief in institutions, but a learned wariness rooted in lived and inherited experiences of marginalization. Rather than portraying mistrust as a personal unwillingness or inability to trust, studies conceptualised it as a response emerging from people's lived experiences of discrimination, limited transparency, and institutional failure. After 2020, mistrust expanded to encompass political and digital domains, including skepticism toward governments, pharmaceutical industries, and AI-driven health technologies [111,121,159].

3.3 Determinants of trust in health organizations

Across the 149 included studies, 144 (96.6%) identified at least one determinant of trust or mistrust in healthcare. A full report is included in the appendix. As described in the method section, determinants were clustered into three broad domains [3,26,179], namely individual, organizational, and contextual/systemic, which often interact across levels. Figure 5 reflects these patterns by synthesizing the most frequently identified determinants across levels.

ARTICLE IN PRESS

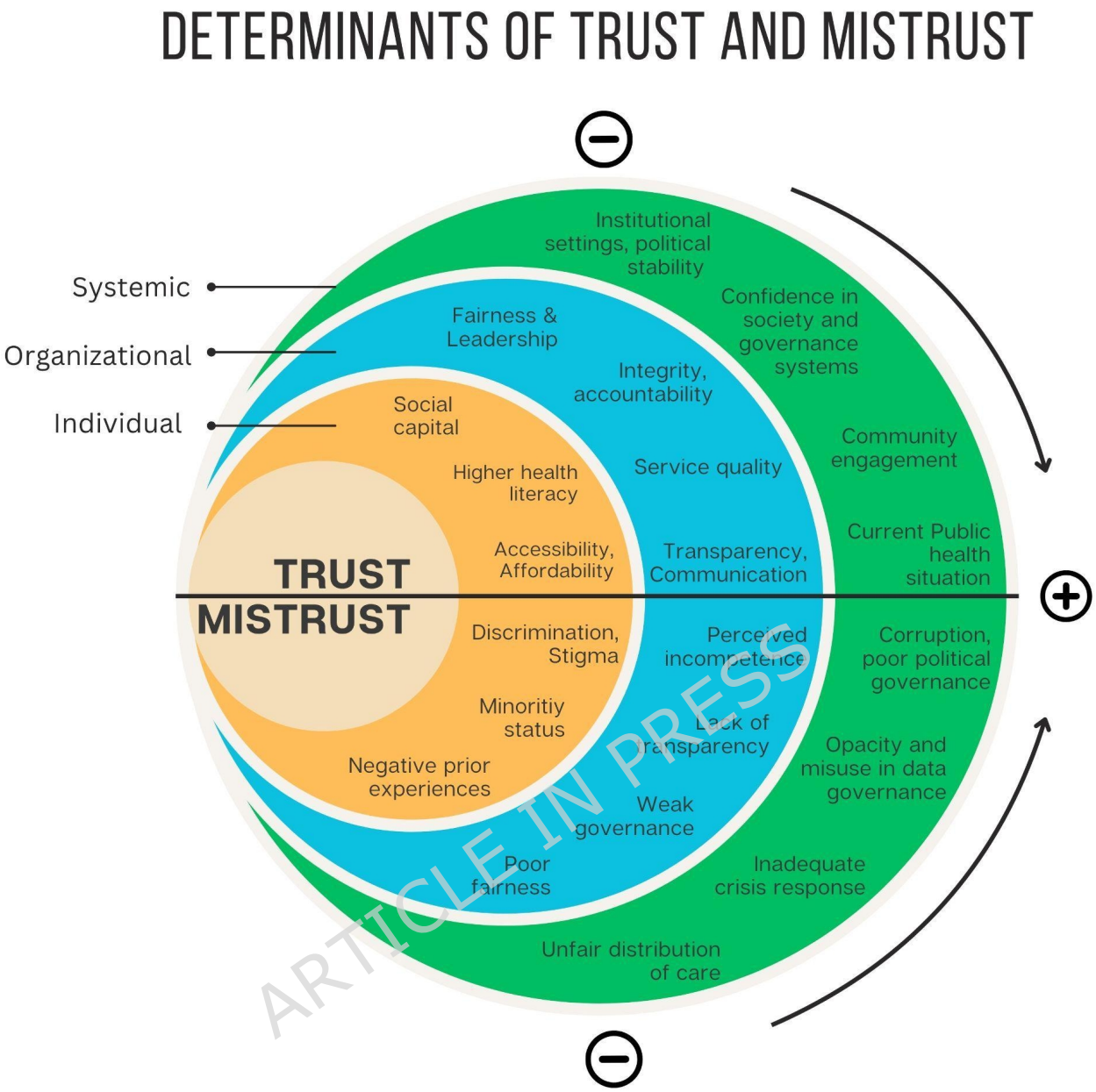


Figure 5. *This figure illustrates the most frequently identified determinants of trust and mistrust, categorized across three analytical levels: individual, organizational, and systemic. The determinants positioned closer to the middle line represent those most frequently supported by quantitative evidence. Positive determinants (upper half) promote trust, while negative determinants (lower half) contribute to mistrust.*

3.3.1 Individual-level determinants

ARTICLE IN PRESS

Individual sociodemographic characteristics were the most consistently examined factors. Age, gender, and education were significant correlates in 41 studies (27.5%), though directions varied by context. Higher educational attainment and older age were generally associated with greater trust (e.g., [52,59,100]), whereas younger age and lower socioeconomic status predicted lower trust or higher mistrust (e.g., [53,139]). Racial or ethnic identity emerged as a major determinant in 29 U.S.-based studies (19.5%), with medical mistrust markedly higher among African American, Latino, and Native American populations (e.g., [47,66,83,86]). These associations were frequently mediated by perceived discrimination, historical marginalization, and prior negative healthcare experiences. Psychological variables were also salient: perceived vulnerability, perceived risk, and high health literacy levels were positively associated with trust in 18 studies (12.1%) [36,37,45,50,52,56,67,82,87,92,94,107,129,134,139,161,175,176], while anxiety, stigma, and political cynicism were linked to mistrust [158,181].

Trust in science and general social trust correlated positively with trust in 17 studies (11.4%), suggesting that individuals who have confidence in science, government, or society at large are also more likely to trust health organizations
[36,53,75,100,104,111,113,123,124,137,143,154,157,158,162,165,179].

ARTICLE IN PRESS

3.3.2 Organizational determinants

At the institutional level, 109 studies (73.1%) highlighted characteristics of healthcare organizations as primary drivers of trust. Three main themes emerged: competence and quality of care (38.3%), referring to professional expertise, safety, and reliability of services; fairness and equity (18.1%), reflecting perceptions of impartial treatment and just distribution of care; and communication and transparency (42.3%), linked to openness in information sharing and institutional accountability. Perceived competence, operationalized through technical proficiency, diagnostic accuracy, and responsiveness, was consistently associated with higher trust across diverse contexts (e.g., [79,113,125]). Conversely, procedural inequities and resource constraints, particularly in low- and middle-income settings (e.g., [74,132]), were reported

ARTICLE IN PRESS

as structural sources of distrust. Transparency and effective communication, especially during public-health crises, were among the most cited predictors of trust (42.3%). Studies conducted during the COVID-19 pandemic (e.g., [52,75,116]) showed that timely, honest, and evidence-based communication by authorities increased public confidence, whereas inconsistent or politicized messaging amplified mistrust. Leadership integrity and organizational justice were identified as key internal determinants in 16 studies (10.7%), reflecting the role of transparent, ethical, and fair management practices in sustaining trust within organizations. These studies emphasized that consistent leadership behaviour, open communication, and equitable treatment of staff strengthen both employee trust and clinician–management relationships [40,51,89,96,98,99,106,116,118,125,126,143,144,147,148,151].

3.3.3 Contextual and systemic determinants

Broader socio-political and policy contexts influenced trust in 118 studies (79.2%). Trust tended to be higher in publicly financed systems perceived as equitable, accountable, and oriented toward the common good (e.g., [37,62,104]), where healthcare was understood as a public good and a shared social responsibility. Conversely, it declined in contexts marked by corruption, opaque decision-making, privatization, or political instability, which undermined perceptions of fairness and legitimacy (e.g., [122,148]). Several studies linked abrupt losses of trust to governance failures and health-related scandals, including vaccine controversies that questioned regulatory independence [172] and pandemic mismanagement that exposed political interference and inadequate crisis leadership [150,158]. Community engagement and participatory governance emerged as trust-enhancing mechanisms in 14 studies (9.4%) [38,44,46,74,85,128,133,137,149,160,167,168,174,177], particularly in African and South Asian contexts [46,85,167]. Conversely, digitalization and AI-based care introduced new forms of institutional vulnerability. Twenty-three studies (15.4%) identified issues related to the opacity of algorithmic decision-making and data protection [4,21,23,34,41,53,57,60,62,75,79,81,87,101,107,109,121,125,127,130,135,143

ARTICLE IN PRESS

,144]. Seven recent papers (4.7%) highlighted two interrelated concerns: the limited explainability of how AI systems generate clinical or public-health decisions and the safeguarding of personal health data [42,94,108,116,159,170,177]. Together, these studies indicate that technological trust, grounded in perceptions of algorithmic transparency, data security, and institutional oversight, is emerging as a distinct dimension of institutional confidence.

3.3.4 Quantitative patterns of determinants of trust and mistrust

When narrowing the analysis to quantitative evidence only (83 studies, 55.7%), a consistent pattern emerges across both trust and mistrust. As illustrated in figure 6, transparent communication, professional competence, and institutional integrity were the strongest quantitative predictors of trust, whereas figure 7 highlights corruption, discrimination, and social marginalization as the most frequent sources of mistrust. Across both polarities, organizational-level determinants predominated, representing roughly two-thirds (≈65%) of all quantitative evidence, while systemic influences accounted for about one-quarter (≈25%) and individual characteristics for less than 15%. Overall, the quantitative data indicate that determinants related to organizational performance and governance were examined most frequently, followed by contextual and individual factors with secondary or moderating roles.

ARTICLE IN PRESS

ARTICLE IN PRESS

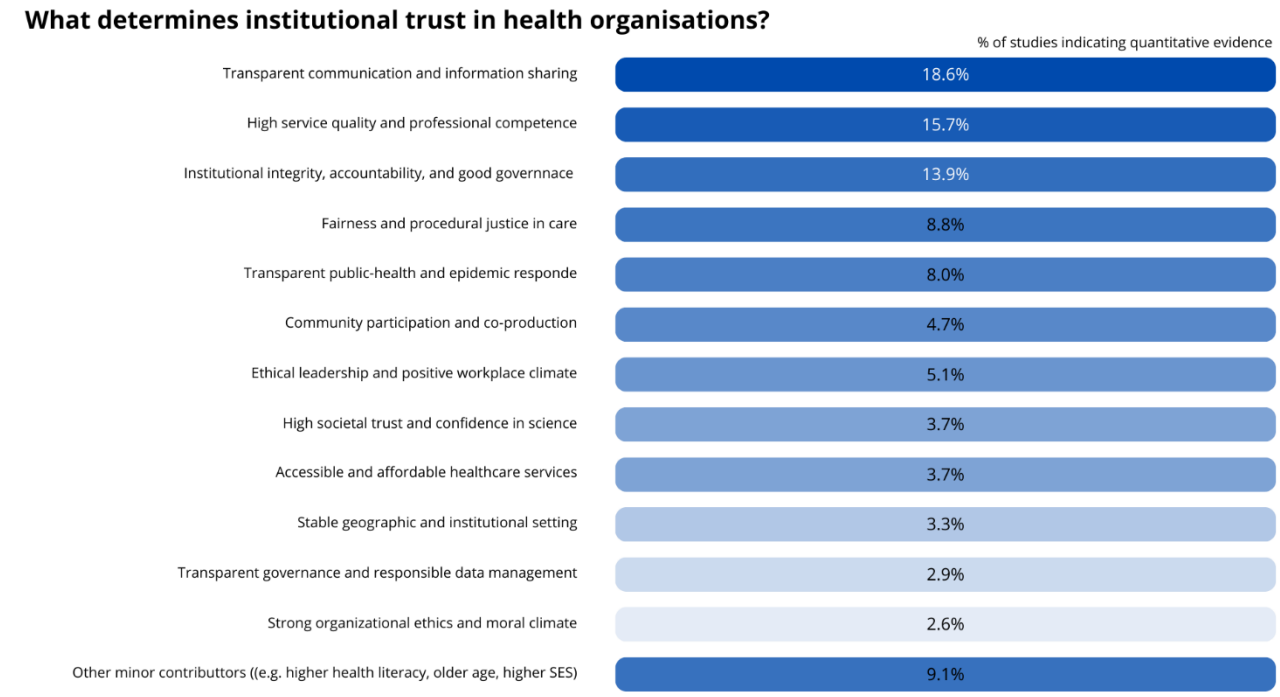


***Figure 6**. Quantitative evidence on trust determinants*

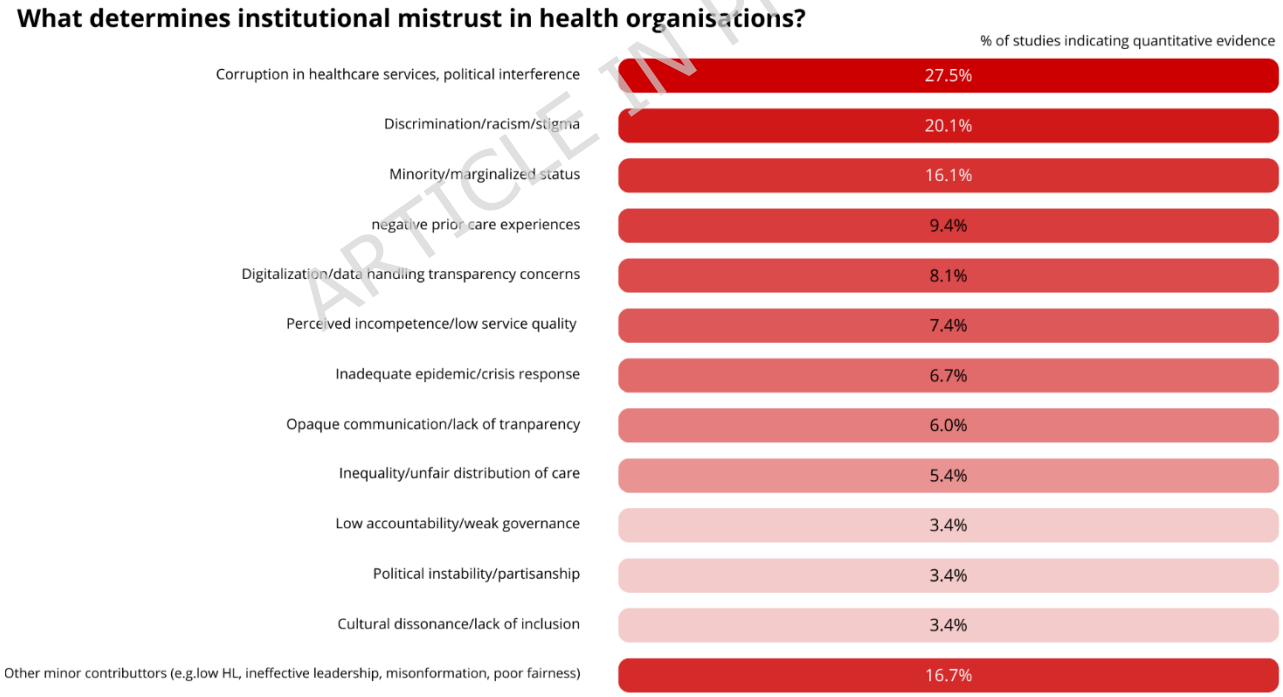


***Figure 7**. Quantitative evidence on mistrust determinants*

3.4 Measurement instruments and methodologies used to assess trust and mistrust

ARTICLE IN PRESS

Among the included studies, 44 (29.5%) employed a validated instrument specifically designed to measure trust or mistrust, corresponding to 45 total applications across 14 distinct scales (Table 2). An additional 64 studies (43.0%) assessed trust or mistrust using non-validated or adapted survey items, while 41 (27.5%) explored these constructs qualitatively through interviews, focus groups, ethnography, or document analysis. In qualitative and mixed-method designs, trust was typically conceptualized as a thematic or contextual construct rather than as a quantified outcome. The most frequently used validated instruments were the group-based medical mistrust scale (n=13), the medical mistrust index (n=8), and the health care system distrust scale (n=8), together accounting for nearly two-thirds of all validated applications. Less common but conceptually relevant tools included organizational and workforce trust inventories, multilevel system-trust scales, and context-specific measures of public-health, government, data-governance, and community trust. Validated instruments were used most frequently in U.S.-based studies (68%), whereas research conducted in Europe, Asia, and Africa more often relied on adapted or newly constructed items. Conceptually, validated scales converged on recurring domains, namely competence, integrity, fairness, benevolence, transparency, and accountability, capturing both institutional performance and ethical trustworthiness. Overall, quantitative approaches predominated across the dataset, though nearly one third of studies (n=46, 30.9%) used qualitative or mixed-methods designs that examined trust as a relational, process-oriented construct rather than a measurable attitude.

ARTICLE IN PRESS

Instrument	**Level of trust assessed** *	**Study ID (s)** **
Group-Based Medical Mistrust Scale (GBMMS)	Institutional	3, 11, 24, 28, 37, 41, 48, 58, 84, 97, 139, 148, 149
Medical Mistrust Index (MMI)	Institutional	10, 29, 49, 55, 61, 110, 118, 132
Health Care System Distrust Scale (HCSD)	Institutional	19, 30, 31, 56, 59, 68, 72, 104
Trust in Physician Scale (TiPS)	Institutional	29, 56, 59
Organizational Trust Inventory (OTI)	Organizational	2, 64, 82
Health Organization & System Trustworthiness Scale (HOST)	Organizational	5

ARTICLE IN PRESS

Trust in Health Care Settings Scale (THCSS)	Institutional	83
S-TIMHSS / TIMHSS (System Trust in Medical and Health Systems Scale)	Multilevel	87, 91
Citizen Trust in Government Organizations Scale (CTGO)	Institutional	127
Public Health Disaster Trust Scale	Institutional	79
CHW Trust Scale (Community Health Worker)	Institutional	133
Public Trust in Health Information Sharing Scale	Institutional	109
Primary Care Trust Scale	Institutional	81
Public Trust in Health Care Scale	Institutional	76

* **Level of trust assessed**

Institutional = trust or mistrust directed toward healthcare systems, ministries, or governance structures.

Organizational = trust within healthcare organizations (e.g., hospitals, management, workforce).

Multilevel = combined or cross-level constructs (institutional + organizational).

** Study IDs correspond to the numbering in Appendix Table A.

Table 2. *Validated instruments used to assess trust and mistrust in healthcare organizations*

ARTICLE IN PRESS

3.5 Interventions designed to enhance or restore trust, or to address mistrust, within healthcare organizations

A total of 37 studies (24.8% of the 149 included) described interventions or initiatives explicitly aimed at strengthening trust or mitigating mistrust within healthcare systems. Guided by the multidimensional framework of McKee et al. [2], these interventions were organized into five domains: community engagement and communication (45.9%), organizational culture and workforce development (13.5%), institutional governance and accountability (21.6%), digital and data trust (8.1%), and restorative trust initiatives (10.8%) (Table 3). Most interventions operated at the community–institutional interface, with fewer targeting internal organisational culture or the digital and data

ARTICLE IN PRESS

infrastructures underpinning care. Across domains, studies commonly reported improvements in trust-related perceptions, transparency, responsiveness, or user engagement, although a minority described only partial or short-lived effects when structural constraints persisted. Thirteen studies (35.1%) reported at least one statistically significant quantitative association ($p < .05$) between the intervention and a trust-related indicator such as institutional credibility, satisfaction, data-sharing willingness, or care-seeking behaviour. Intervention reports were largely concentrated in the post-2020 period and in North America, sub-Saharan Africa, and South-East Asia, reflecting heightened policy attention to rebuilding trust in the wake of the COVID-19 pandemic. However, only a small subset of studies explicitly linked changes in trust to objective performance metrics, limiting inferences about downstream effects on service utilisation or health outcomes.

Intervention domain	**Main features**	**Level targeted**	**Reported outcomes**	**Statistically significant findings**
Community engagement and communication	Outreach by community health workers, participatory co-design, and transparent dialogue-based campaigns.	Community / Institutional	Greater responsiveness, message credibility, and institutional legitimacy [6, 10, 15, 18, 36, 38, 44, 57, 79, 92, 95, 101, 125, 133, 134, 135, 140].	Improved care-seeking intentions (+9.3%, $p < .05$) [10]
				Higher regulatory trust in UK vs US ($p < .01$) [57]
				Lower trust predicted care avoidance ($p< .001$) [95].
Organizational culture and workforce development	Leadership and empathy training, cultural-competence and staff-development programmes.	Organizational / Individual	Enhanced teamwork, patient satisfaction, and perceived organizational reliability [2, 19, 45, 82, 120].	Discrimination increased mistrust ($p < .001$) [19]
				leadership alignment raised clinician trust ($p<.01$) [82]
				Service quality predicted trust ($p< .001$) [120]

ARTICLE IN PRESS

Institutional governance and accountability	Transparency reforms, participatory oversight, and integrity audits.	Institutional / Governance	Improved fairness, procedural justice, and institutional integrity [23, 32, 91, 114, 124, 126, 127, 136].	Corruption reduced trust ($p < .001$) [114];
				Transparency reforms increased trust ($p < .05$) [126];
				Trust reduced fatigue and improved adherence ($p < .001$) [127].
Digital and data trust	Ethical AI design, transparent consent, and data-governance safeguards.	Institutional / Digital	Increased data security and fairness; concerns over algorithmic opacity persisted [34, 87, 143].	Digital participation increased trust ($\beta = .27$, $p < .01$) [87];
				Privacy assurances improved trust ($p < .05$) [143].
Restorative trust initiatives	Public acknowledgment, apology, and inclusion of marginalized groups.	Institutional / Community	Partial restoration of trust and improved dialogue with affected populations [24, 58, 98, 145].	Poor infrastructure decreased trust ($p < .01$) [98];
				apology and inclusion efforts increased trust sentiment ($p<.05$) [145].

ARTICLE IN PRESS

* Study IDs correspond to the numbering assigned to included studies in Appendix.

Table 3. *Intervention domains, implementation levels, and trust-related outcomes*

4. Discussion

The body of evidence examined reveals an evolving, yet methodologically fragmented field concerned with how trust and mistrust in health organizations are conceptualized, measured, and addressed. Although their importance for system legitimacy, cooperation, and resilience is now widely recognized [1,3,11], conceptual and methodological inconsistencies persist. Trust is increasingly understood not only as a determinant of health-system performance but also as an indicator of institutional integrity. Yet its boundaries, drivers, and mechanisms of repair remain only partly understood.

ARTICLE IN PRESS

4.1 Conceptual evolution of trust and mistrust

This review shows a clear theoretical progression from individualistic to systemic understandings of trust. Earlier studies treated trust as a relational expectation of competence and benevolence, whereas more recent work interprets it as a structural feature of governance that sustains legitimacy through transparency, accountability, and procedural fairness [37, 78, 113, 124]. Such a shift mirrors broader public-health thinking, where trust is viewed as both an ethical value and a measurable determinant of institutional performance [184, 185].

The growing analytical distinction between trust and mistrust marks a second conceptual advance. Empirical evidence increasingly portrays mistrust not as a lack of confidence but as a lived, contextual reaction to inequity, exclusion, or perceived institutional failure [47, 54, 86, 166, 181].
Recognizing mistrust as contextually grounded rather than irrational clarifies why institutional legitimacy depends as much on communication and perceived fairness as on technical competence: people trust systems that demonstrate openness and respect, not only those that deliver effective outcomes [27, 186].

Finally, recent research extends these constructs to the digital sphere. Studies highlight that confidence in AI-enabled and data-driven health systems depends on algorithmic transparency, consent, and equitable governance [94, 116, 159]. Transparent and equitable governance of digital technologies is increasingly described as important for sustaining trust in modern health systems [184, 185].

4.2 Determinants across levels and contexts

Trust and mistrust in health organizations are not static attitudes, but relational processes shaped by interactions among individuals, organizations, and broader systems. At the individual level, demographic, psychosocial, and cognitive factors influence perceptions but remain intertwined with lived experience. The association between high health literacy and trust, observed across multiple studies [56, 67, 175, 176], supports earlier findings that health-literate individuals make more accurate judgments about competence and

ARTICLE IN PRESS

transparency [187, 188]. Conversely, the recurrent link between racial or ethnic identity and medical mistrust, primarily in U.S.-based studies, reflects enduring structural inequities and experiences of perceived discrimination [47, 66, 86, 166, 181]. At the organizational level, competence, procedural fairness, and transparency remain foundational dimensions of institutional trustworthiness. Technical proficiency alone is insufficient when decision-making lacks transparency or when leadership accountability is questioned [47, 74, 79, 113]. During the COVID-19 pandemic, several studies demonstrated that even evidence-based interventions lost public traction when communication was inconsistent or politicized [16, 52, 75, 116]. Transparent and participatory governance therefore appears to operate not only as an ethical norm but also as a structural mechanism for institutional legitimacy. At the systemic level, contextual factors such as governance, equity, and digitalization further shape institutional confidence. Trust tends to be higher in publicly financed, equitable systems that symbolize solidarity and accountability [37, 62, 104] and lower in contexts affected by corruption, privatization, or political instability [122, 148, 153]. Meanwhile, emerging digital infrastructures have introduced new vulnerabilities. Lack of transparency in AI decision-making (also known as the "*black box problem*"), data-privacy concerns, and lack of oversight in AI-enabled healthcare are increasingly recognized as sources of mistrust [94, 159, 177]. Recent studies highlight that sustaining confidence in digital health systems depends on dataset transparency, bias mitigation, and participatory governance [184, 185] - although these studies represent a relatively small proportion of the total evidence base.

Utilizing the World Bank's income classification, we analyzed the distribution of determinants across countries. Overall, 103 studies were conducted in high-income countries, 23 in upper-middle-income countries, 6 in lower-middle-income countries, and 3 in low-income countries. The classification was not applicable to 14 studies, either because they adopted a global scope or included heterogeneous groups of countries differing in income levels. In high-income countries, determinants of trust tended to appear more evenly distributed across individual, organizational, and systemic domains. Among these, transparency and effective communication were the most frequently reported factors fostering trust [e.g., 2, 33, 143]. Conversely,

ARTICLE IN PRESS

determinants of mistrust tended to cluster within the individual domain, though this pattern was largely driven by U.S.-based studies, particularly relating to experiences of discrimination, stigma, minority status, and prior negative encounters with healthcare providers [e.g., 6, 28, 118]. It is important to note, however, that nearly half of these studies (48; 46.6%) were conducted in the United States, which may limit the broader generalizability of these findings due to the country's distinctive socio-political context.

In upper-middle-income countries, trust was most frequently associated with organizational-level determinants, particularly service quality, community engagement, and transparency [e.g., 44, 81, 146]. In contrast, mistrust was primarily linked to institutional factors, including perceived corruption and discrimination [111, 114]. In lower-middle-income countries, community engagement emerged as the predominant driver of trust [39, 133], while perceived unfairness and misinformation were the most frequently cited determinants of mistrust [4, 98]. In low-income countries, social capital, transparent communication, and leadership were key enablers of trust [11, 15, 73], whereas politicization and resource constraints represented the main institutional sources of mistrust.

Across income levels, the relative salience of determinants appeared to shift from individual-level factors in high-income contexts toward organizational and institutional drivers in lower-income settings. Consistent with the quantitative synthesis presented, organizational performance and governance variables were the most frequently tested predictors of trust, whereas individual-level determinants, particularly discrimination, minority status, and prior negative experiences, were more prevalent in qualitative and mixed-methods studies. We also explored the distribution of determinants according to the primary health system financing source (public, private, or external). However, this analysis was considered redundant, as 85.8% of publicly financed systems were located in high-income countries, while no high-income countries were represented within the private or externally financed groups. Consequently, the observed patterns largely overlapped with those derived from the income-based classification.

ARTICLE IN PRESS

4.3 Methodological and intervention gaps

Although conceptual understanding of trust has advanced, methodological inconsistency continues to limit empirical synthesis and cross-cultural generalization. This review identified 14 validated instruments used to assess trust and mistrust, most developed and psychometrically validated in U.S. contexts. While some have been applied or translated in other regions, few underwent full cross-cultural validation or reliability testing. Evidence of conceptual equivalence therefore remains limited [189]. More recent analyses confirm that heterogeneous operationalizations of trust hinder cumulative knowledge building and obscure how contextual determinants such as governance, communication, and cultural norms shape institutional confidence [190,191]. Quantitative designs have been valuable for identifying attitudinal patterns but capture only static dimensions of trust. By contrast, qualitative and mixed-methods studies reveal its relational and temporal nature, illustrating how trust is negotiated, sustained, or lost [78, 125, 179]. Integrating these methodological traditions through hybrid frameworks (e.g. [192, 193] may enable a more comprehensive understanding of the mechanisms through which trust evolves and mistrust can be repaired.

Empirical evidence on interventions remains limited and uneven. Only 37 studies evaluated strategies to strengthen or restore trust, and just 13 (35.1%) reported statistically significant effects on trust-related indicators. Community-based initiatives, especially those involving participatory co-design or trusted health workers, were the most frequently evaluated and consistently improved perceived responsiveness, message credibility, and institutional legitimacy (e.g., [44, 133, 167]), with some demonstrating measurable behavioural effects such as increased care-seeking intentions [10]. Organisational culture and workforce interventions yielded positive impacts on teamwork, perceived reliability, and clinician–management trust [19, 82, 120], while governance and accountability reforms, including transparency audits, citizen oversight, and integrity mechanisms, were associated with improvements in fairness, procedural justice, and institutional integrity [114, 124, 126, 127, 136]. Digital-trust interventions showed promising but still emerging evidence: transparent consent processes and data-governance safeguards increased trust [87, 143],

ARTICLE IN PRESS

despite persistent concerns about algorithmic opacity [34]. However, most studies relied on cross-sectional or short-term outcomes, and few linked trust changes to objective performance indicators or long-term service-use patterns. Future implementation research should integrate validated trust metrics with measures of performance, equity, and behavioral outcomes, ensuring that trust is treated not only as a perception but as a measurable determinant of health-system functioning [190,193,194].

4.4 Impact on public health interventions

Trust underpins the legitimacy on which public health interventions depend to secure compliance and collective action [12,13]. When that legitimacy is weakened, interventions lose authority, credibility, and social acceptance [14,15]. Among the 37 intervention studies identified in this review, the majority reported qualitative improvements in transparency, engagement, or trust-related perceptions, while a smaller subset, most notably studies [114,136], demonstrated measurable increases in service utilisation and reductions in care delays following trust-building initiatives. Taken together, these findings indicate that higher trust facilitates public participation and the uptake of health services and programmes. Conversely, mistrust, particularly when rooted in structural inequities and historical exclusion, was associated with sustained resistance to institutional guidance and diminished responsiveness to health policies and outreach efforts, thereby constraining intervention reach and effectiveness. During public health crises such as the COVID-19 pandemic, several studies (e.g., [52,75,116]) showed that transparent and consistent communication from authorities enhanced public confidence, whereas inconsistent or politicised messaging amplified mistrust. This evidence directly links trust to adherence to preventive measures, risk-communication efficacy, and compliance with emergency directives. At the organisational level, leadership integrity, fairness, and mutual trust between staff and management were shown to strengthen internal cohesion and communication, conditions that support both the effective implementation and the sustainability of public health interventions [40, 51, 89, 96, 98, 99, 106, 116, 118, 125, 126, 143, 144, 147, 148, 151].

ARTICLE IN PRESS

ARTICLE IN PRESS

4.5 Strengths and limitations

This review offers a comprehensive synthesis of trust and mistrust in health organizations, integrating conceptual, empirical, and intervention-based evidence across 149 studies from 52 countries. Its main strength lies in the systematic mapping of definitions, determinants, measurement tools, and interventions over time, which provides a coherent overview of a previously fragmented field. By examining both trust and mistrust, it captures their asymmetric yet interrelated dynamics across individual, organizational, and systemic levels. The inclusion of heterogeneous study designs further enabled triangulation of patterns across contexts. Nonetheless, several limitations must be considered. Restricting the search to English-language publications resulted in a dataset dominated by high-income settings (71.8%), with a substantial concentration of U.S.-based studies (40.3%), which may limit global generalizability. Most included studies were cross-sectional and self-reported, with limited examination of institutional or policy-level variables and no consistent sub-analyses by health-system type, despite clear differences across national models. Evidence on interventions was methodologically limited, with few longitudinal or experimental evaluations. These constraints reflect not only the available evidence but also highlight the need for theory-informed, cross-culturally validated, and longitudinal research linking trust dynamics to health-system functioning and outcomes.

ARTICLE IN PRESS

5. Conclusions

Research on trust in health organizations has matured conceptually but remains methodologically fragmented. Three priorities emerge. First, clearer conceptual alignment is needed to distinguish trust from mistrust and to refine competence- and values-based frameworks for empirical testing. Second, the field requires validated, culturally adaptable instruments to support cross-national comparability in monitoring trust as a public-health indicator. Third, intervention research must move beyond descriptive or short-term outcomes toward rigorous evaluations capable of assessing whether trust-building

ARTICLE IN PRESS

strategies produce sustained behavioural and system-level effects. Strengthening trust demands coordinated, multilevel action targeting both organizational practices and broader governance processes. Transparent, evidence-based, and timely communication should remain a central policy priority: across the included studies, consistent messaging was among the strongest determinants of public confidence, while opacity or politicization contributed to mistrust, particularly during crises. Embedding fairness and equity into decision-making similarly enhances institutional legitimacy; systems perceived as just and accountable reported higher levels of trust, whereas inequities, corruption, or discriminatory experiences undermined confidence. Demonstrated competence, through quality, safety, responsiveness, and professional integrity, remains fundamental to public perceptions of institutional reliability. Community engagement and participatory governance further reinforce legitimacy by fostering shared accountability and strengthening relationships with underserved groups. Addressing historical and structural sources of mistrust is essential for reconnecting with marginalized communities whose experiences of discrimination were consistently linked to lower institutional trust across multiple contexts in this review. Digital transformation introduces new expectations for transparency and oversight. Evidence from recent studies highlights that data protection, algorithmic explainability, and ethical governance of AI-enabled systems are now integral to maintaining public confidence and preventing the emergence of technology-related mistrust. From a public-health perspective, trust operates as a measurable determinant of intervention reach and effectiveness. Higher trust was associated with improved uptake of services, adherence to public health guidance, and engagement with preventive programmes, whereas mistrust constrained policy effectiveness during emergencies and routine care.

Taken together, the evidence synthesized in this review indicates that investments in transparency, equity, and participatory communication are not ancillary to health system performance but constitute foundational strategies for trust-sensitive governance. For health system leaders, prioritising clear and accountable decision-making, fair and inclusive service delivery, and sustained engagement with communities, particularly those historically marginalised, represents a pragmatic pathway to strengthening institutional legitimacy,

ARTICLE IN PRESS

system resilience, and the reach and effectiveness of public-health interventions. Ultimately, trust is not secured through technical capacity alone, but through the continuous demonstration of competence, fairness, transparency, and respect that underpins resilient, inclusive, and credible health systems.

List of abbreviations

AI: Artificial Intelligence
HIC: High-Income Country
HL: Health Literacy
LMIC: Low- and Middle-Income Country
PICO: Population, Intervention, Comparison, Outcome
PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses
UHC: Universal Health Coverage
WHO: World Health Organization

ARTICLE IN PRESS

Declarations

Ethics approval and consent to participate

Not applicable. This study is a systematic review of published literature and does not involve human participants, human data, or human biological material.

Consent for publication

Not applicable. This manuscript does not include any individual person’s data.

Availability of data and materials

All data and materials are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

ARTICLE IN PRESS

Funding

This research received no external funding. No funding body had any role in the study design, data extraction, analysis, interpretation, writing, or decision to submit the manuscript.

Authors' contributions

NP conceived the review, developed the protocol, performed the database searches, conducted screening and quality appraisal, extracted and synthesised the data, and drafted the manuscript. MV contributed to screening, data extraction, quality appraisal, interpretation of findings, and drafting of the discussion. UG contributed to the conceptual framing, methodological oversight, and critical revision of the manuscript. All authors read and approved the final manuscript.

Acknowledgements

Not applicable.

References

1. World Health Organization. Everybody's business: strengthening health systems to improve health outcomes: WHO's framework for action. Geneva: World Health Organization; 2007. Available from: https://iris.who.int/handle/10665/43918. Accessed 2025 Oct 29.
2. McKee M, van Schalkwyk MCI, Greenley R, et al. *Trust: The foundation of health systems.* Copenhagen: European Observatory on Health Systems and Policies; 2025.
3. Gilson L. Trust and the development of health care as a social institution. *Soc Sci Med*. 2003;56(7):1453–1468. doi:10.1016/s0277-9536(02)00142-9
4. Calnan M, Rowe R, Gilson L. Trust in health care: theoretical perspectives and research needs. *J Health Organ Manag*. 2006;20(5):359–375. doi:10.1108/14777260610701768
5. Harris M, Rhodes T, Martin A. Taming systems to create enabling environments for HCV treatment: negotiating trust in the drug and alcohol setting. *Soc Sci Med*. 2013;83:19–26. doi:10.1016/j.socscimed.2013.01.031
6. Wu D, Lowry PB, Zhang D, Tao Y. Patient trust in physicians matters: understanding the role of a mobile patient education system and patient–physician communication in improving adherence. *J Med Internet Res*. 2022;24(12):e42941. doi:10.2196/42941
7. Shukla M, Schilt-Solberg M, Gibson-Scipio W. Medical mistrust: a concept analysis. *Nurs Rep*. 2025;15(3):103. doi:10.3390/nursrep15030103

ARTICLE IN PRESS

8. Souvatzi E, Katsikidou M, Arvaniti A, et al. Trust in healthcare, medical mistrust, and health outcomes in times of health crisis: a narrative review. *Societies*. 2024;14(12):269. doi:10.3390/soc14120269
9. Ellis K, Walters S, Friedman SR, et al. Breaching trust: a qualitative study of healthcare experiences of people who use drugs in a rural setting. *Front Sociol*. 2020;5:593925. doi:10.3389/fsoc.2020.593925
10. Brown CE, Jackson SY, Marshall AR, et al. Discriminatory healthcare experiences and medical mistrust in patients with serious illness. *J Pain Symptom Manage*. 2024;67(4):317–326.e3. doi:10.1016/j.jpainsymman.2024.01.010
11. Anderson A, Griffith DM. Measuring the trustworthiness of health care organizations and systems. *Milbank Q*. 2022;100(2):345–364. doi:10.1111/1468-0009.12564
12. Xie YJ, Liao X, Lin M, et al. Community engagement in vaccination promotion: systematic review and meta-analysis. *JMIR Public Health Surveill*. 2024;10:e49695. doi:10.2196/49695
13. Isasi F, Naylor MD, Skorton D, et al. Patients, families, and communities COVID-19 impact assessment: lessons learned and compelling needs. *NAM Perspect*. 2021 Nov 29;2021:10.31478/202111c. doi: 10.31478/202111c
14. Krastev S, Krajden O, Vang ZM, et al. Institutional trust is a distinct construct related to vaccine hesitancy and refusal. *BMC Public Health*. 2023;23:2481. doi:10.1186/s12889-023-17345-5
15. Simione L, Vagni M, Gnagnarella C, et al. Mistrust and beliefs in conspiracy theories mediate psychological effects on vaccine propensity. *Front Psychol*. 2021;12:683684. doi:10.3389/fpsyg.2021.683684
16. Schluter AP, Généreux M, Landaverde E, et al. In the COVID-19 pandemic, who did we trust? An eight-country cross-sectional study. *J Glob Health*. 2023;13:06036. doi:10.7189/jogh.13.06036
17. Perlis RH, Ognyanova K, Uslu A, et al. Trust in physicians and hospitals during the COVID-19 pandemic in a 50-state survey of US adults. *JAMA Netw Open*. 2024;7(7):e2424984. doi:10.1001/jamanetworkopen.2024.24984
18. Anakpo G, Mishi S. Hesitancy of COVID-19 vaccines: rapid systematic review of the measurement, predictors, and preventive strategies. *Hum Vaccin Immunother*. 2022;18(5):2074716. doi:10.1080/21645515.2022.2074716
19. Bollyky TJ, Angelino O, Wigley S, Dieleman JL. Trust made the difference for democracies in COVID-19. *Lancet*. 2022;400(10353):657. doi:10.1016/S0140-6736(22)01532-X
20. Guo C, Hu X, Yuan D, et al. The effect of COVID-19 on public confidence in the World Health Organization: a natural experiment among 40 countries. *Global Health*. 2022;18:77. doi:10.1186/s12992-022-00872-y
21. Sarker R, Roknuzzaman ASM, Hossain MJ, et al. The WHO declares COVID-19 is no longer a public health emergency: benefits, challenges, and necessary precautions. *Int J Surg*. 2023;109(9):2851–2852. doi:10.1097/JS9.0000000000000513
22. Correia T. Trust building in public health approaches: the importance of a “people-centered” concept in crisis response. *Risk Manag Healthc Policy*. 2024;17:1903–1908. doi:10.2147/RMHP.S471250
23. Taylor LA, Nong P, Platt J. Fifty years of trust research in health care: a synthetic review. *Milbank Q*. 2023;101:126–178. doi:10.1111/1468-0009.12598
24. Platt J, Taylor LA. Betraying, earning, or justifying trust in health organizations. *Hastings Cent Rep*. 2023;53(2):24–34. doi:10.1002/hast.1493

ARTICLE IN PRESS

ARTICLE IN PRESS

25. Lee JY. The effects of social media criticism against public health institutions on trust, emotions, and social media engagement. Proc Natl Acad Sci U S A. 2025;122(26):e2422890122. doi:10.1073/pnas.2422890122
26. Ozawa S, Sripad P. How do you measure trust in the health system? A systematic review of the literature. *Soc Sci Med*. 2013;91:10–14. doi:10.1016/j.socscimed.2013.05.005
27. Benkert R, Cuevas A, Thompson HS, Dove-Meadows E, Knuckles D. Ubiquitous yet unclear: A systematic review of medical mistrust. *Behav Med*. 2019;45(2):86–101. doi:10.1080/08964289.2019.1588220
28. Larson HJ, Clarke RM, Jarrett C, Eckersberger E, Levine Z, Schulz WS, Paterson P. Measuring trust in vaccination: A systematic review. *Hum Vaccin Immunother*. 2018;14(7):1599–1609. doi:10.1080/21645515.2018.1459252
29. Achdut N. Inequality in psychological distress among young adults: an integrative model of social and environmental determinants. *Am J Orthopsychiatry*. 2023;93(4):321–334. doi:10.1037/ort0000673
30. Farahani ZT, Tayer H, Rashleigh C, Dooley B. Data collection and outcome measurement in student counseling services in Irish higher education institutions. *Psychol Serv*. 2023;20(Suppl 2):136–149. doi:10.1037/ser0000759
31. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*. 2021;372:n71. doi:10.1136/bmj.n71
32. Eriksen MB, Frandsen TF. The impact of patient, intervention, comparison, outcome (PICO) as a search strategy tool on literature search quality: a systematic review. *J Med Libr Assoc*. 2018;106(4):420-431. doi:10.5195/jmla.2018.345
33. Vanhecke, Thomas E.. “Zotero.” Journal of the Medical Library Association : JMLA vol. 96,3 (2008): 275–276. doi:10.3163/1536-5050.96.3.022
34. Kmet LM, Lee RC, Cook LS. Standard Quality Assessment Criteria for Evaluating Primary Research Papers from a Variety of Fields. Edmonton, AB: Alberta Heritage Foundation for Medical Research; 2004.
35. McArthur A, Klugarova J, Yan H, Florescu S. Systematic reviews of text and opinion. In: Aromataris E, Munn Z, editors. JBI manual for evidence synthesis. Adelaide: JBI; 2020. p. 134–174.
36. Abdelzadeh A, Sedelius T. Fears, Pandemic, and the Shaping of Social Trust: A Three-Wave Panel Study in Sweden. *Scand Pol Stud.* 2025 May;48(2):e70007. doi:10.1111/1467-9477.70007
37. Abelson J, Miller FA, Giacomini M. What does it mean to trust a health system? *Health Policy.* 2009 Jun;91(1):63–70. doi10.1016/j.healthpol.2008.11.006
38. Adam MB, Minyenya-Njuguna J, Karuri Kamiru W, Mbugua S, Makobu NW, Donelson AJ. Implementation research and human-centred design: how theory driven human-centred design can sustain trust in complex health systems, support measurement and drive sustained community health volunteer engagement. *Health Policy and Planning.* 2020 Nov 1;35(Supplement_2):ii150–62. doi: 10.1093/heapol/czaa129
39. Ahmad SI, Aliyu H, Usman R, Abubakar A, Maijawa MA, Suleiman BA, et al. Factors influencing COVID-19 vaccine acceptability among household heads in northern Nigeria: a community-based cross-sectional study. *BMJ Open.* 2025 Jan;15(1):e083470. doi: 10.1136/bmjopen-2023-083470

ARTICLE IN PRESS

40. Akkaya B. Linking Organizational Commitment and Organizational Trust in Health Care Organizations. *Organizacija.* 2020 Dec 1;53(4):306–18. doi:10.2478/orga-2020-0020
41. Alang S, McAlpine DD, Hardeman R. Police Brutality and Mistrust in Medical Institutions. *J Racial and Ethnic Health Disparities*. 2020 Aug;7(4):760–8. doi:10.1007/s40615-020-00706-w
42. Alshare K, Moqbel M, Alam M, Hanna M. Health status: the pivot point in trusting smart health-care systems and providers for use. *ICS*. 2025 Jun 13;33(3):390–407. doi:10.1108/ICS-10-2023-0197
43. Anderson A, Cintron DW. Pilot evaluation of the Health Organization and System Trustworthiness scale: reliability and validity testing. *BMC Health Serv Res*. 2025 May 21;25(1):739. doi:10.1186/s12913-025-12724-7
44. Anstey Watkins J, Griffiths F, Goudge J. Community health workers' efforts to build health system trust in marginalised communities: a qualitative study from South Africa. *BMJ Open*. 2021 May;11(5):e044065. doi:10.1136/bmjopen-2020-044065
45. Antinyan A, Bassetti T, Corazzini L, Pavesi F. Trust in the Health System and COVID-19 Treatment. *Front Psychol*. 2021 Jul 9;12:643758. doi:10.3389/fpsyg.2021.643758
46. Arakelyan S, Jailobaeva K, Dakessian A, Diaconu K, Caperon L, Strang A, et al. The role of trust in health-seeking for non-communicable disease services in fragile contexts: A cross-country comparative study. *Social Science & Medicine*. 2021 Dec;291:114473. doi:10.1016/j.socscimed.2021.114473
47. Armstrong K, McMurphy S, Dean LT, Micco E, Putt M, Halbert CH, et al. Differences in the Patterns of Health Care System Distrust Between Blacks and Whites. *J GEN INTERN MED*. 2008 Jun;23(6):827–33. doi:10.1007/s11606-008-0561-9
48. Ash MJ, Berkley-Patton J, Christensen K, Haardörfer R, Livingston MD, Miller T, et al. Predictors of medical mistrust among urban youth of color during the COVID-19 pandemic. *Translational Behavioral Medicine*. 2021 Aug 13;11(8):1626–34. doi: 10.1093/tbm/ibab061
49. Aspiras O, Lucas T, Thompson HS, Manning MA. Medical mistrust, culturally targeted message framing, and colorectal cancer screening among African Americans. *J Behav Med*. 2023 Oct;46(5):871–81. doi:10.1007/s10865-023-00415-9
50. Baldé H, Geurts B, Fischer HT, Menelik-Obbarius S, Kaba I, Merhi V, et al. Responding to fluctuations in public and community trust and health seeking behaviour during the COVID-19 pandemic: a qualitative study of national decision-makers' perspectives in Guinea and Sierra Leone. *BMC Public Health*. 2024 Oct 4;24(1):2710. doi:10.1186/s12889-024-20181-w
51. Baron RJ, Simpson L. Understanding Clinician Trust in Health Care Organizations Should Be a Research Priority. *JAMA Health Forum*. 2023 May 26;4(5):e231015. doi:10.1001/jamahealthforum.2023.1015
52. Baroudi M, Goicolea I, Hurtig AK, San-Sebastian M. Social factors associated with trust in the health system in northern Sweden: a cross-sectional study. *BMC Public Health*. 2022 Dec;22(1):881. doi:10.1186/s12889-022-13332-4
53. Bayram AB, Shields T. Who Trusts the WHO? Heuristics and Americans' Trust in the World Health Organization During the COVID-19 Pandemic. *Social Science Quarterly*. 2021 Sep;102(5):2312–30. doi:10.1111/ssqu.12977

ARTICLE IN PRESS

54. Bazargan M, Cobb S, Assari S. Discrimination and Medical Mistrust in a Racially and Ethnically Diverse Sample of California Adults. *Ann Fam Med*. 2021 Jan;19(1):4–15. doi:10.1370/afm.2632
55. Berrich O, Lamari M, Lakhal F. Does healthcare access affect trust in institutions? Empirical evidence in Canada during the COVID-19 pandemic.*International journal of health care quality assurance*, 2025 Oct 23;38(4), 201–217. doi:10.1108/IJHCQA-08-2024-0080
56. Bertram M, Brandt US, Hansen RK, Svendsen GT. Does higher health literacy lead to higher trust in public hospitals? *Int J Equity Health*. 2021 Dec;20(1):209. doi:10.1186/s12939-021-01528-w
57. Blukacz A, Obach A, Vásquez P, Campaña C, Huerta C, Bernal Y, et al. Determinants of COVID-19 and non-COVID-19 vaccine confidence in low- and middle-income countries: A systematic review of qualitative evidence and thematic synthesis. *Vaccine.* 2025 Jan;44:126546. doi:10.1016/j.vaccine.2024.126546
58. Bouzarjomehri H, Maleki M, Masoudi Asl I, Ranjbar M. Unlocking transparency, building trust: a policy brief for a developing health system. *Health Scope. 2025*;14(2):e157071. doi:10.5812/healthscope-157071
59. Chen L, Cheng M. Exploring Chinese Elderly's Trust in the Healthcare System: Empirical Evidence from a Population-Based Survey in China. *IJERPH*. 2022 Dec 8;19(24):16461. doi:10.3390/ijerph192416461
60. Coleman C, Magee J, Shields W. Building trust for shared services: a model for collaboration between nonprofit reproductive health organizations. *Contraception.* 2012;85(4):335–7. doi:10.1016/j.contraception.2011.12.007
61. Colvin K, Potts W, Heinlein E, Himelhoch S. Prevalence and Predictors of Medical Mistrust Among African Americans with Serious Mental Illness Receiving Care in an Urban Setting. *Community Ment Health J*. 2024 Apr;60(3):438–41. doi:10.1007/s10597-023-01190-2
62. Costa-Font J, Vilaplana-Prieto C. Trusting the Health System and COVID 19 Restriction Compliance. *Economics & Human Biology.* 2023 Apr;49:101235. doi:10.1016/j.ehb.2023.101235
63. Cottler LB, Rosales LC, Seegulam VL, Bilello L, Striley CLW, Ravenswood A, et al. Characteristics of persons with varying vaccination personas: data from the CDC-funded PANDEMIC project. *Discov Public Health.* 2025 Jun 8;22(1):326. doi:10.1186/s12982-025-00703-6
64. Cox AB, Jaiswal J, LoSchiavo C, Witte T, Wind S, Griffin M, et al. Medical Mistrust Among a Racially and Ethnically Diverse Sample of Sexual Minority Men. *LGBT Health*. 2023 Sep 1;10(6):471–9. doi:10.1089/lgbt.2022.0252
65. Cueva KL, Marshall AR, Snyder CR, Young BA, Brown CE. Medical Mistrust Among Black Patients with Serious Illness: A Mixed Methods Study. *J GEN INTERN MED*. 2024 Nov;39(14):2747–54. doi:10.1007/s11606-024-08997-z
66. Cuevas AG, O'Brien K. Racial centrality may be linked to mistrust in healthcare institutions for African Americans. *J Health Psychol*. 2019 Dec;24(14):2022–30. doi:10.1177/1359105317715092
67. Dağ E, Demir Y, Kayar Z, Nal M. Relationship between digital health literacy, distrust in the health system and health anxiety in health sciences students. *BMC Med Educ*. 2025 Mar 9;25(1):354. doi:10.1186/s12909-025-06903-7
68. Dean LT, Greene N, Adams MA, Geffen SR, Malone J, Tredway K, et al. Beyond Black and White: race and sexual identity as contributors to healthcare

ARTICLE IN PRESS

system distrust after breast cancer screening among US women. *Psycho-Oncology.* 2021 Jul;30(7):1145–50. doi:10.1002/pon.5670
69. DeCamp M, Dukhanin V, Hebert LC, Himmelrich S, Feeser S, Berkowitz SA. Patients' Views About Patient Engagement and Representation in Healthcare Governance. *Journal of Healthcare Management*. 2019 Sep;64(5):332–46. doi:10.1097/JHM-D-18-00152
70. Denniss E, Lindberg R. Social media and the spread of misinformation: infectious and a threat to public health. *Health Promotion International.* 2025 Mar 5;40(2):daaf023. doi:10.1093/heapro/daaf023
71. Dotter C, Haug S, Schnell R, Raptis G, Weber K. Sharing health data for research purposes: results of a population survey in Germany. *BMC Health Serv Res*. 2025 May 14;25(1):699. doi:10.1186/s12913-025-12706-9
72. Doty AMB, Powell RE, Carr BG, Nelson DB, Rising KL. Identification of Approaches to Improve Patient Trust in Health Systems: A Group Concept Mapping Study. *Journal of Healthcare Management.* 2018 Sep;63(5):e116–29. doi:10.1097/JHM-D-17-00037
73. El Sharif N, Ahmead M, Imam A. COVID-19 infection prevention and control procedures and institutional trust: Perceptions of Palestinian healthcare workers. *Front Public Health.* 2022 Aug 19;10:947593. doi:10.3389/fpubh.2022.947593
74. Ezumah N, Manzano A, Ezenwaka U, Obi U, Ensor T, Etiaba E, et al. Role of trust in sustaining provision and uptake of maternal and child healthcare: Evidence from a national programme in Nigeria. *Social Science & Medicine*. 2022 Jan;293:114644. doi:10.1016/j.socscimed.2021.114644
75. Geisterfer-Black M, Niemi T, Neier L, Rodwin VG. Trust in the U.S. Government and Its Health Agencies in the Time of COVID-19. *Epidemiologia.* 2022 Mar 22;3(2):148–60. doi:10.3390/epidemiologia3020012
76. Ghoshal A, O'Carroll RE, Ferguson E, Shepherd L, Doherty S, Mathew M, et al. Assessing medical mistrust in organ donation across countries using item response theory. *J Health Psychol.* 2022 Oct;27(12):2806–19. doi:10.1177/13591053211064985
77. Gille F, Smith S, Mays N. Towards a broader conceptualisation of 'public trust' in the health care system. *Soc Theory Health*. 2017 Feb;15(1):25–43. doi:10.1057/s41285-016-0017-y
78. Gille F, Smith S, Mays N. What is public trust in the healthcare system? A new conceptual framework developed from qualitative data in England. *Soc Theory Health.* 2021 Mar;19(1):1–20. doi:10.3929/ethz-b-000395771
79. Gilson L. Trust and the development of health care as a social institution. *Social Science & Medicine.* 2003 Apr;56(7):1453–68. doi:10.1016/s0277-9536(02)00142-9
80. Grant SJ, Mills JA, Telfair J, Erisnor G, Wildes TM, Bates-Fraser LC, et al. " They don't care to study it ": Trust, race, and health care experiences among patient-caregiver dyads with multiple myeloma. *Cancer Medicine.* 2024 May;13(10):e7297. doi:10.1002/cam4.7297
81. Greene J. Patients' Perspectives on Trust and Trustworthiness of Health Care Organizations. *Milbank Quarterly*. 2022 Jun;100(2):365–9. doi:10.1111/1468-0009.12556
82. Grygarová D, Kožený J, Tišanská L, Havlík M, Horáček J. Trust in official information as a key predictor of COVID-19 vaccine acceptance: evidence from a Czech longitudinal survey study. *BMC Public Health*. 2025 Feb 25;25(1):770. doi:10.1186/s12889-025-21988-x

ARTICLE IN PRESS

83. Guadagnolo BA, Cina K, Helbig P, Molloy K, Reiner M, Cook EF, et al. Medical Mistrust and Less Satisfaction With Health Care Among Native Americans Presenting for Cancer Treatment. *J Health Care Poor Underserved*. 2009 Feb;20(1):210–26. doi:10.1353/hpu.0.0108
84. Gupta C, Bell SP, Schildcrout JS, Fletcher S, Goggins KM, Kripalani S, et al. Predictors of Health Care System and Physician Distrust in Hospitalized Cardiac Patients. *Journal of Health Communication*. 2014 Oct 14;19(sup2):44–60. doi:10.1080/10810730.2014.934936
85. Haenssgen MJ, Elliott EM, Phommachanh S, Souksavanh O, Okabayashi H, Kubota S. Community engagement for stakeholder and community trust in healthcare: Short-term evaluation findings from a nationwide initiative in Lao PDR. *Social Science & Medicine*. 2024 Aug;354:117079. doi:10.1016/j.socscimed.2024.117079
86. Hall OT, Jordan A, Teater J, Dixon-Shambley K, McKiever ME, Baek M, et al. Experiences of racial discrimination in the medical setting and associations with medical mistrust and expectations of care among black patients seeking addiction treatment. *Journal of Substance Abuse Treatment.* 2022 Feb;133:108551. doi:10.1016/j.jsat.2021.108551
87. Hammond WP. Psychosocial Correlates of Medical Mistrust Among African American Men. American *J of Comm Psychol.* 2010 Mar;45(1–2):87–106. doi:10.1007/s10464-009-9280-6
88. Hardie EA, Critchley CR. Public perceptions of Australia's doctors, hospitals and health care systems. *Medical Journal of Australia*. 2008 Aug;189(4):210–4. doi:10.5694/j.1326-5377.2008.tb01985.x
89. Håvold JI, Håvold OK. Power, trust and motivation in hospitals. *LHS*. 2019 May 7;32(2):195–211. doi:10.1108/LHS-03-2018-0023
90. Hawthorne A, Bobek A, Sandström L. Inequality, Trust and Fear: Migrant Healthcare During the COVID-19 Pandemic and Beyond. *Sociology Health & Illness.* 2025 Sep;47(7):e70077. doi:10.1111/1467-9566.70077
91. He W, Tuersun Y, Yang T, Wan Y, Yong M, Huang Z, et al. Mapping the interactions of critical factors in China's first-contact healthcare systems using causal loop diagrams. B*MC Public Health.* 2025 Aug 21;25(1):2874. doi:10.1186/s12889-025-23884-w
92. Himmelstein M, Miron-Shatz T, Hanoch Y, Gummerum M. Over-the-counter cough and cold medicines for children: A comparison of UK and US parents' parental usage, perception and trust in governmental health organisation. *Health, Risk & Society*. 2011 Aug;13(5):451–68. doi:10.1080/13698575.2011.596189
93. Hong HC, Lee H, Collins EG, Park C, Quinn L, Ferrans CE. Factors affecting trust in healthcare among middle-aged to older Korean American women. *BMC Women's Health*. 2018 Dec;18(1):109. doi:10.1186/s12905-018-0609-x
94. Hu X, Gu Y, Lee HW, Chen X, Li Y, Li X, et al. A national survey on the integration of traditional Chinese medicine and artificial intelligence: attitudes and perceptions from the individuals with health needs. *Integrative Medicine Research*. 2025 Dec;14(4):101219. doi:10.1016/j.imr.2025.101219
95. Idan E, Xing A, Ivory J, Alsan M. Sociodemographic Correlates of Medical Mistrust among African American Men Living in the East Bay. *Journal of Health Care for the Poor and Underserved*. 2020;31(1):115–27. doi:10.1353/hpu.2020.0012

ARTICLE IN PRESS

96. Islam A, Li W, Johnson K, Lauchande P. How far has the integrated care come? Applying an asymmetric lens to inter-organisation trust amongst health and social care organisations. *Int Entrep Manag J*. 2020 Jun;16(2):529–54. doi:10.1007/s11365-019-00583-8
97. Jacobs J, Walsh JL, Valencia J, DiFranceisco W, Hirschtick JL, Hunt BR, et al. Associations Between Religiosity and Medical Mistrust: An Age-Stratified Analysis of Survey Data from Black Adults in Chicago. *J Racial and Ethnic Health Disparities*. 2025 Jun;12(3):1473–81. doi:10.1007/s40615-024-01979-1
98. Jain AK, Sinha AK. General Health in Organizations: Relative Relevance of Emotional Intelligence, Trust, and Organizational Support. *International Journal of Stress Management*. 2005 Aug;12(3):257–73. doi:10.1037/1072-5245.12.3.257
99. Jain SH, Lucey C, Crosson FJ. The Enduring Importance of Trust in the Leadership of Health Care Organizations. JAMA. 2020 Dec 15;324(23):2363. doi:10.1001/jama.2020.18555
100. Jallinoja PT, Vento EV, Väliverronen ET. Trust in scientific institutions and experts during the first 2 years of the COVID-19 pandemic in Finland. *Scand J Public Health*. 2025 Jul;53(5):490–7. doi:10.1177/14034948241289633
101. Jin XL, Yin M, Zhou Z, Yu X. The differential effects of trusting beliefs on social media users'willingness to adopt and share health knowledge. *Information Processing & Management*. 2021 Jan;58(1):102413. doi:10.1016/j.ipm.2020.102413
102. Johnson LM, Green HD, Koch B, Harding R, Stockman JK, Wagner KD. Correlates of Medical Mistrust Among Minority Women at Risk for HIV and Their Networks. H*ealth Educ Behav.* 2021 Dec;48(6):860–72. doi:10.1177/1090198120986783
103. Jones AL, Fine MJ, Taber PA, Hausmann LRM, Burkitt KH, Stone RA, et al. National Media Coverage of the Veterans Affairs Waitlist Scandal: Effects on Veterans' Distrust of the VA Health Care System. *Medical Care*. 2021 Jun;59(Suppl 3):S322–6. doi:10.1097/MLR.0000000000001551
104. Jovell A, Blendon RJ, Navarro MD, Fleischfresser C, Benson JM, DesRoches CM, et al. Public trust in the Spanish health-care system. *Health Expectations*. 2007 Dec;10(4):350–7. doi:10.1111/j.1369-7625.2007.00466.x
105. Kaczynski MA, Benitez G, Shehadeh F, Mylonakis E, Fiala MA. Perceived Discrimination in the Healthcare Setting and Medical Mistrust: Findings from the Health Information National Trends Survey, 2022. *J GEN INTERN MED*. 2025 Aug;40(11):2491–8. doi:10.1007/s11606-025-09369-x
106. Kane S, Calnan M, Radkar A. Trust and trust relations from the providers' perspective: the case of the healthcare system in India. *Indian J Med Ethics*. 2015;12(3):157–68. doi:10.20529/IJME.2015.045
107. Katapodi MC, Pierce PF, Facione NC. Distrust, predisposition to use health services and breast cancer screening: Results from a multicultural community-based survey. *International Journal of Nursing Studies.* 2010 Aug;47(8):975–83. doi:10.1016/j.ijnurstu.2009.12.014
108. Kayondo BN, Kyobe M. Influence of trust on hospital staff compliance with the data protection act, moderated by noncompliance costs – a Ugandan case study. *Information & Computer Security.* 2025 Oct 21;33(4):649–69. doi:10.1108/ICS-08-2024-0210
109. Kiernan M, Oppezzo MA, Resnicow K, Alexander GL. Effects of a methodological infographic on research participants' knowledge, transparency, and trust. *Health Psychology*. 2018 Aug;37(8):782–6. doi:10.1037/hea0000631

ARTICLE IN PRESS

110. Kolar SK, Wheldon C, Hernandez ND, Young L, Romero-Daza N, Daley EM. Human Papillomavirus Vaccine Knowledge and Attitudes, Preventative Health Behaviors, and Medical Mistrust Among a Racially and Ethnically Diverse Sample of College Women. *J Racial and Ethnic Health Disparities.* 2015 Mar;2(1):77–85. doi:10.1007/s40615-014-0050-2
111. Koren O, Weidmann NB. Infectious disease outbreaks drive political mistrust. *Proc Natl Acad Sci USA*. 2025 Jul 22;122(29):e2506093122. doi:10.1073/pnas.2506093122
112. Krot K, Rudawska I. How Public Trust in Health Care Can Shape Patient Overconsumption in Health Systems? The Missing Links. *IJERPH*. 2021 Apr 7;18(8):3860. doi:10.3390/ijerph18083860
113. Kruk ME, Kapoor NR, Lewis TP, Arsenault C, Boutsikari EC, Breda J, et al. Population confidence in the health system in 15 countries: results from the first round of the People's Voice Survey. *The Lancet Global Health*. 2024 Jan;12(1):e100–11. doi:10.1016/S2214-109X(23)00499-0
114. Kumar A, Palle E, Kodali PB, Thankappan KR. What influences the people's trust on public healthcare system in Bihar, India? A mixed methods study. *BMC Health Serv Res*. 2025 Feb 25;25(1):309. doi:10.1186/s12913-025-12395-4
115. Lachlan KA, Spence PR, Edwards A, Reno KM, Edwards C. If you are quick enough, I will think about it: Information speed and trust in public health organizations. *Computers in Human Behavior.* 2014 Apr;33:377–80. doi:10.1016/j.chb.2013.08.014
116. Lee JY. The effects of social media criticism against public health institutions on trust, emotions, and social media engagement. *Proc Natl Acad Sci USA.* 2025 Jul;122(26):e2422890122. doi:10.1073/pnas.2422890122
117. Li L, Zhang Q, Zhu L, Zeng G, Huang H, Chen Z, et al. Patients' loyalty to primary care institutions and associated factors in China: a cross-sectional study. *BMC Health Serv Res.* 2025 Jan 28;25(1):162. doi:10.1186/s12913-025-12244-4
118. Linzer M, Poplau S, Prasad K, Khullar D, Brown R, Varkey A, et al. Characteristics of Health Care Organizations Associated With Clinician Trust: Results From the Healthy Work Place Study. *JAMA Netw Open*. 2019 Jun 21;2(6):e196201. doi:10.1001/jamanetworkopen.2019.6201
119. LoCurto J, Berg GM. Trust in healthcare settings: Scale development, methods, and preliminary determinants. *SAGE Open Medicine*. 2016 Jan 1;4:2050312116664224. doi:10.1177/2050312116664224
120. López-Cevallos DF, Flórez KR, Derose KP. Examining the association between religiosity and medical mistrust among churchgoing Latinos in Long Beach, CA. *Translational Behavioral Medicine*. 2021 Feb 11;11(1):114–21. doi:10.1093/tbm/ibz151
121. Makowska M, Ozaki A, Boguszewski R. Prevalence of pharmaceutical industry conspiracy theories among the polish population. *Sci Rep.* 2025 Mar 29;15(1):10857. doi:10.1038/s41598-025-95626-2
122. Maljichi D, Limani B, Spier TE, Angjelkoska V, Stojković Zlatanović S, Maljichi D, et al. (Dis)trust in doctors and public and private healthcare institutions in the Western Balkans. *Health Expectations.* 2022 Aug;25(4):2015–24. doi:10.1111/hex.13562
123. Mankell A. Community influences on trust in Swedish healthcare. *Wellbeing, Space and Society*. 2025 Dec;9:100285. doi:10.1016/j.wss.2025.100285

ARTICLE IN PRESS

124. Menon A, Kavanagh NM, Falkenbach M, Wismar M, Greer SL. The role of health and health systems in shaping political engagement and rebuilding trust in democratic institutions. *The Lancet Regional Health - Europe*. 2025 Jun;53:101326. doi:10.1016/j.lanepe.2025.101326
125. Meyer SB. Investigations of trust in public and private healthcare in Australia: A qualitative study of patients with heart disease. *Journal of Sociology.* 2015 Jun;51(2):221–35.doi:10.1177/1440783313500855
126. Meyer SB, Little J, Ward PR, Brown P, Calnan M. Development and validation of the S-TIMHSS: a quality metric to inform and evaluate interventions to (re)build trust. *Front Public Health.* 2025 Apr 30;13:1568836. doi:10.3389/fpubh.2025.1568836
127. Meyer S, Ward P, Coveney J, Rogers W. Trust in the health system: An analysis and extension of the social theories of Giddens and Luhmann. *Health Sociology Review.* 2008 Aug;17(2):177–86. doi:10.5172/hesr.451.17.2.177
128. Mishra A. 'Trust and teamwork matter': Community health workers' experiences in integrated service delivery in India. *Global Public Health*. 2014 Sep 14;9(8):960–74. doi:10.1080/17441692.2014.934877
129. Moucheraud C, Mboya J, Njomo D, Golub G, Gant M, Sudhinaraset M. Trust, Care Avoidance, and Care Experiences among Kenyan Women Who Delivered during the COVID-19 *Pandemic. Health Systems & Reform*. 2022 Jan 1;8(1):2156043. doi:10.1080/23288604.2022.2156043
130. Niv-Yagoda A. Association between trust in the public healthcare system and selecting a surgeon in public hospitals in Israel: a cross-sectional population study. *Isr J Health Policy Res.* 2020 Dec;9(1):38. doi:10.1186/s13584-020-00396-z
131. Oakley LP, López-Cevallos DF, Harvey SM. The Association of Cultural and Structural Factors with Perceived Medical Mistrust Among Young Adult Latinos in Rural Oregon. *Behavioral Medicine*. 2019 Apr 3;45(2):118–27. doi:10.1080/08964289.2019.1590799
132. Ogueji IA, Ogunsola OO, Abdalla NM, Helmy M. Mistrust of the Nigerian health system and its practical implications: Qualitative insights from professionals and non-professionals in the Nigerian health system. *J Public Health (Berl)*. 2024 Feb;32(2):303–14. doi:10.1007/s10389-022-01814-z
133. Østergaard LR. Trust matters: A narrative literature review of the role of trust in health care systems in sub-Saharan Africa. *Global Public Health.* 2015 Oct 21;10(9):1046–59. doi:10.1080/17441692.2015.1019538
134. Özdemir Ş, Şantaş F. The Mediating Effect of Distrust of the Health System on the Relationship Between Health Literacy and Anti-Vaccination. *Evaluation Clinical Practice.* 2025 Jun;31(4):e70140. doi:10.1111/jep.70140
135. Panda S. Public trust in government doctors and hospitals in India. *IJSE*. 2023 Nov 17;50(11):1602–17. doi:10.1108/IJSE-07-2022-0498
136. Papalamprakopoulou Z, Ntagianta E, Triantafyllou V, Kalamitsis G, Dharia A, Dickerson SS, et al. Breaking the vicious cycle of delayed healthcare seeking for people who use drugs. *Harm Reduct J.*2025 Mar 5;22(1):27. doi:10.1186/s12954-025-01166-3
137. Paquin V, Miconi D, Aversa S, Johnson-Lafleur J, Côté S, Geoffroy M-C, Gülöksüz S. Social and mental health pathways to institutional trust: a cohort study. *Soc Sci Med.* 2025;379:118199. doi:10.1016/j.socscimed.2025.118199
138. Parker L, Brown A, Wells L. Building trust and transparency: health consumer organisation–pharmaceutical industry relationships. *Australian Health Review*. 2021 Jun 2;45(3):393–4. doi:10.1071/AH20206

ARTICLE IN PRESS

139. Paul E, Fancourt D, Razai M. Racial discrimination, low trust in the health system and COVID-19 vaccine uptake: a longitudinal observational study of 633 UK adults from ethnic minority groups. *JR Soc Med.* 2022 Nov;115(11):439–47. doi:10.1177/01410768221095241
140. Pellowski JA, Price DM, Allen AM, Eaton LA, Kalichman SC. The differences between medical trust and mistrust and their respective influences on medication beliefs and ART adherence among African-Americans living with HIV. *Psychology & Health.* 2017 Sep 2;32(9):1127–39. doi:10.1080/08870446.2017.1324969
141. Piltch-Loeb R, Gibbs SG, Lowe JJ, Gorman S, Wyka K, White TM, et al. U.S. trust in physicians as key public health messengers during the H5N1 avian influenza outbreak. *Sci Rep*. 2025 Aug 23;15(1):31011. doi:10.1038/s41598-025-12304-z
142. Platt JE, Jacobson PD, Kardia SLR. Public Trust in Health Information Sharing: A Measure of System Trust. *Health Services Research*. 2018 Apr;53(2):824–45. doi:10.1111/1475-6773.12654
143. Platt J, Goold SD. Betraying, earning, or justifying trust in health organizations. *Hastings Cent Rep.* 2023;53(Suppl 2):S53–S59. doi:10.1002/hast.1524
144. Powell W, Richmond J, Mohottige D, Yen I, Joslyn A, Corbie-Smith G. Medical Mistrust, Racism, and Delays in Preventive Health Screening Among African-American Men. *Behavioral Medicine.*2019 Apr 3;45(2):102–17. doi:10.1080/08964289.2019.1585327
145. Prall S, Scelza B, Davis HE. Medical mistrust, discrimination and healthcare experiences in a rural Namibian community. *Global Public Health*. 2024 Dec 31;19(1):2346207. doi:10.1080/17441692.2024.2346207
146. Pyne JM, Kelly PA, Fischer EP, Owen RR, Cucciare MA, Miller CJ, et al. Trust and perceived mental health access: Exploring the relationship between perceived access barriers and veteran-reported trust. *Psychological Services.* 2024 Feb;21(1):102–9. doi:10.1037/ser0000829
147. Rabelo VC, Holland KJ, Cortina LM. From distrust to distress: Associations among military sexual assault, organizational trust, and occupational health. *Psychology of Violence.* 2019 Jan;9(1):78–87. doi:10.1037/vio0000166
148. Radević I, Alfirević N, Lojpur A. Corruption, public trust and medical autonomy in the public health sector of Montenegro: Taking stock of the COVID-19 influence. Romano G, editor. *PLoS ONE*. 2022 Sep 8;17(9):e0274318. doi:10.1371/journal.pone.0274318
149. Ramos SR, Warren R, Shedlin M, Melkus G, Kershaw T, Vorderstrasse A. A Framework for Using eHealth Interventions to Overcome Medical Mistrust Among Sexual Minority Men of Color Living with Chronic Conditions. *Behavioral Medicine*. 2019 Apr 3;45(2):166–76. doi:10.1080/08964289.2019.1570074
150. Reinhardt M, Findley MB, Countryman RA. Policy liberalism and source of news predict pandemic-related health behaviors and trust in the scientific community. Sarker MNI, editor. *PLoS ONE*. 2021 Jun 17;16(6):e0252670. doi:10.1371/journal.pone.0252670
151. Reiter V, Tzafrir SS, Laor N. Patterns of Trust and Collaboration among Nonprofit Organizations and Health Funds: A Case Study. *J Public Nonprof Aff*. 2018 Aug 1;4(2):134–55. doi:10.20899/jpna.4.2.134-155

ARTICLE IN PRESS

152. Renzaho A, Polonsky M, McQuilten Z, Waters N. Demographic and socio-cultural correlates of medical mistrust in two Australian States: Victoria and South Australia. *Health & Place*. 2013Nov;24:216–24. doi:10.1016/j.healthplace.2013.09.010
153. Richmond J, Powell W, Maurer M, Mangrum R, Gold MR, Pathak-Sen E, et al. Public Mistrust of the U.S. Health Care System's Profit Motives: Mixed-Methods Results from a Randomized Controlled Trial. *J GEN INTERN MED*. 2017 Dec;32(12):1396–402. doi:10.1007/s11606-017-4172-1
154. Rockers PC, Kruk ME, Laugesen MJ. Perceptions of the Health System and Public Trust in Government in Low and Middle-Income Countries: Evidence from the World Health Surveys.*Journal of Health Politics, Policy and Law.* 2012 Jun 1;37(3):405–37. doi:10.1215/03616878-1573076
155. Rockwell MS, Chang B, Zagarese V, Turner JK, Southworth A, Wu Y, et al. Patients' experiences with 'sludge' (administrative burden) in the cancer screening process and its relationship with screening completion, experience and health system distrust. *Fam Med Com Health.* 2024 Sep;12(Suppl 2):e002933. doi:10.1136/fmch-2024-002933
156. Roder-DeWan S, Gage A, Hirschhorn LR, Twum-Danso NAY, Liljestrand J, Asante-Shongwe K, et al. Level of confidence in and endorsement of the health system among internet users in 12 low-income and middle-income countries. *BMJ Glob Health.* 2020 Aug;5(8):e002205. doi:10.1136/bmjgh-2019-002205
157. Rovetta A. World Health Organization is losing online credibility towards health-sensitive topics: Infodemiological analysis of Facebook users' reactions. *Health Promot Perspect*. 2022 Dec 31;12(4):367–71. doi:10.34172/hpp.2022.48
158. Russo S, Lalot F, Roccato M. Support for Technocratic and Authoritarian Governance in Times of The Role of Trust and COVID-19 Concerns. *International Journal of Public Opinion Research.* 2025 Jun 17;37(3):edaf042. doi:10.1093/ijpor/edaf042
159. Sassa M, Eguchi A, Maruyama-Sakurai K, Fujita T, Kawamura Y, Kawashima T, et al. Heterogeneity in willingness to share personal health information: a nationwide cluster analysis of 20,000 adults in Japan. *Arch Public Health*. 2025 Apr 18;83(1):109. doi:10.1186/s13690-025-01599-z
160. Saulnier DD, Saidi C, Hambokoma T, Zulu JM, Zulu J, Masiye F. Truth, humane treatment, and identity: perspectives on the legitimacy of the public and private health sectors during Covid in Zambia. *Humanit Soc Sci Commun*. 2024 Mar 20;11(1):436. doi:10.1057/s41599-024-02913-w
161. Scandurra C, Bochicchio V, Dolce P, Valerio P, Muzii B, Maldonato NM. Why people were less compliant with public health regulations during the second wave of the Covid-19 outbreak: The role of trust in governmental organizations, future anxiety, fatigue, and Covid-19 risk perception. *Curr Psychol.* 2023 Mar;42(9):7403–13. doi:10.1007/s12144-021-02059-x
162. Sestini E, Muscillo A, Lombardi G, Garbin F, Pin P. Enhancing Institutional Trust: Evidence from an Experimental Study with Adolescents in Italy. *Soc Indic Res.* 2025 Mar;177(2):449–88. doi:10.1007/s11205-024-03507-4
163. Shea JA, Micco E, Dean LT, McMurphy S, Schwartz JS, Armstrong K. Development of a Revised Health Care System Distrust Scale. *J GEN INTERN MED*. 2008 Jun;23(6):727–32. doi:10.1007/s11606-008-0575-3
164. Slatore CG, Disher N, Scott JY, Golden SE, Hooker E, Govier DJ, et al. Resistance to Switching Health Care Institution Among Veterans Referred for

ARTICLE IN PRESS

VA-Purchased Care. *J GEN INTERN MED*. 2025 Aug;40(11):2740–53. doi:10.1007/s11606-025-09404-x
165. Smith AC, Woerner J, Perera R, Haeny AM, Cox JM. An Investigation of Associations Between Race, Ethnicity, and Past Experiences of Discrimination with Medical Mistrust and COVID-19 Protective Strategies. *J Racial and Ethnic Health Disparities.* 2022 Aug;9(4):1430–42. doi:10.1007/s40615-021-01080-x. Epub 2021 Jun 11.
166. Smith C. First, do no harm: institutional betrayal and trust in health care organizations. *JMDH. 20*17 Apr;Volume 10:133–44. doi:10.2147/JMDH.S125885
167. Sripad P, Gottert A, Abuya T, Casseus A, Hossain S, Agarwal S, et al. Confirming—and testing-bonds of trust: A mixed methods study exploring community health workers' experiences during the COVID-19 pandemic in Bangladesh, Haiti and Kenya. Probandari A, editor. *PLOS Glob Public Health.* 2022 Oct 7;2(10):e0000595. doi:10.1371/journal.pgph.0000595
168. Stephenson-Hunter C, Yusuf Y, Larson R, Campanella J, Gutnick DN. What matters to us: Bridging research and accurate information through dialogue (BRAID) to build community trust and cultivate vaccine confidence. *Preventive Medicine Reports.* 2023 Aug;34:102253. doi:10.1016/j.pmedr.2023.102253
169. Stevens SC, Valadez L, Moghimi F, Vazquez MG, Miller HN, Byiringiro S, et al. Measuring trust in medical research: Perspectives from racial and ethnic communities underrepresented in research. *J Clin Trans Sci*. 2025;9(1):e109. doi:10.1017/cts.2025.40
170. Svensson A, Nardoni M, Svalastog AL, Vidmar M, Machado H, Kopilaš V, et al. Vaccine Hesitancy in Public Healthcare During Pandemics: An International Study to Inform Management Learning. *Health Science Reports.* 2025 Aug;8(8):e71190. doi:10.1002/hsr2.71190
171. Tchounwou PB. Environmental Research and Public Health. *IJERPH.* 2004 Apr 30;1(1):1–2. doi:10.3390/ijerph2004010001
172. Thomas G. The Cost of Trust: The World Health Organization and Vaccination's Contested Economization in France. *Journal of Contemporary History*. 2022 Oct;57(4):939–58. doi:10.1177/00220094211057833
173. Thomas MK, Amstutz C, Orr-Roderick D, Horter J, Holben DH. Medical Mistrust Among Food Insecure Individuals in Appalachia. *Family & Community Health*. 2023 Jul;46(3):192–202. doi:10.1097/FCH.0000000000000362
174. Topp SM, Tully J, Cummins R, Graham V, Yashadhana A, Elliott L, et al. Building patient trust in health systems: A qualitative study of facework in the context of the Aboriginal and Torres Strait Islander Health Worker role in Queensland, Australia. *Social Science & Medicine*. 2022 Jun;302:114984. doi:10.1016/j.socscimed.2022.114984
175. Tsai TI, Yu WR, Lee SYD. Is health literacy associated with greater medical care trust? *International Journal for Quality in Health Care.* 2018 Aug 1;30(7):514–9. doi:10.1093/intqhc/mzy043
176. Tunç T, Demirci HF, Ermiş A. The mediating role of health literacy in the relationship between trust in public health authorities and distrust in health systems. *BMC Public Health.* 2025 Mar 11;25(1):967. doi:10.1186/s12889-025-22123-6
177. Usta S, Kundu N, Gowlett-Park D, Lin A, Misura A, Czibere K, et al. Incorporating biobanking into the future of healthcare: exploring patient and healthcare worker perspectives at a Canadian tertiary academic hospital. *Eur J Hum Genet.* 2025 Sep;33(9):1194–202. doi:10.1038/s41431-025-01898-7

ARTICLE IN PRESS

178. Von Bubnoff F, Werner J, Hebach NR, Chopra DA, Schubert MC. Medical Mistrust in Online Cancer Communities: A Large-Scale Analysis Across 10 Cancer Entities. *Psycho-Oncology*. 2025 Jun;34(6):e70180. doi:10.1002/pon.70180
179. Ward PR, Rokkas P, Cenko C, Pulvirenti M, Dean N, Carney S, et al. A qualitative study of patient (dis)trust in public and private hospitals: the importance of choice and pragmatic acceptance for trust considerations in South Australia. *BMC Health Serv Res.* 2015 Dec;15(1):297. doi:10.1186/s12913-015-0967-0
180. Williamson LD. Beyond Personal Experiences: Examining Mediated Vicarious Experiences as an Antecedent of Medical Mistrust. *Health Communication*. 2022 Jul 29;37(9):1061–74. doi:10.1080/10410236.2020.1868744
181. Williamson LD. Testing Vicarious Experiences as Antecedents of Medical Mistrust: A Survey of Black and White Americans. *Behavioral Medicine*. 2023 Jan 2;49(1):40–52. doi:10.1080/08964289.2021.1958740
182. Williamson LD, Smith MA, Bigman CA. Does Discrimination Breed Mistrust? Examining the Role of Mediated and Non-Mediated Discrimination Experiences in Medical Mistrust. *Journal of Health Communication.* 2019 Oct 3;24(10):791–9. doi:10.1080/10810730.2019.1669742
183. Foley WT, Thompson JW, Payne BC, Kelly KE, Kutty K, Miller T, et al. Dialogue: nonprofit health care organizations and the public trust. *Inquiry.* 2006;43(3):190–4. doi:10.5034/inquiryjrnl_43.3.190
184. Voils CI, Oddone EZ, Weinfurt KP, Friedman JY, Schulman KA, Bosworth HB. Who trusts healthcare institutions? Results from a community-based sample. *Ethn Dis.* 2005;15(1):97–103
185. Tian CY, Mo PKH, Dong D, Qiu H, Cheung AWL, Wong ELY. Associations between health literacy, trust, and COVID-19 vaccine hesitancy: the case of Hong Kong. *Vaccines*. 2023;11(3):562. doi:10.3390/vaccines11030562
186. Verma N, Fleischmann K, Zhou L, Xie B, Lee M, Rich K, Shiroma K, Jia C, Zimmerman T. Trust in COVID-19 public health information. *J Assoc Inf Sci Technol.* 2022;73(12):1709-1724. doi:10.1002/asi.24712
187. Armstrong K, McMurphy S, Dean LT, Micco E, Putt M, Halbert CH, et al. Differences in the patterns of health care system distrust between Blacks and Whites. *J Gen Intern Med.* 2008;23(6):827–833. doi:10.1007/s11606-008-0561-9
188. Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, Brand H; (HLS-EU) Consortium Health Literacy Project European. Health literacy and public health: a systematic review and integration of definitions and models. *BMC Public Health.* 2012;12:80. doi:10.1186/1471-2458-12-80
189. Paasche-Orlow MK, Wolf MS. The causal pathways linking health literacy to health outcomes. *Am J Health Behav.* 2007;31(Suppl 1):S19–S26. doi:10.5993/AJHB.31.s1.4
190. Ozawa S, Sripad P. How do you measure trust in the health system? A systematic review of the literature. *Soc Sci Med.* 2013;91:10–14. doi:10.1016/j.socscimed.2013.05.005
191. Aboueid SE, Herati H, Nascimento MHG, Ward PR, Brown PR, Calnan M, Perlman CM, Meyer SB. How do you measure trust in social institutions and health professionals? A systematic review of the literature (2012–2021). *Sociology Compass.* 2023;17(7):e13101. doi:10.1111/soc4.13101

ARTICLE IN PRESS

ARTICLE IN PRESS

192. Karikumpu V, Häggman-Laitila A, Terkamo-Moisio A. Measuring trust in healthcare with instruments developed in different disciplines – a scoping review. *Nurs Ethics.* 2025;32(3):724-737. doi:10.1177/09697330241272806
193. Knaak S, Mantler E, Szeto A. Mental illness-related stigma in healthcare: barriers to access and care and evidence-based solutions. *Healthc Manage Forum.* 2017;30(2):111-116. doi:10.1177/0840470416679413
194. Menon A, Kavanagh NM, Falkenbach M, Wismar M, Greer SL. The role of health and health systems in shaping political engagement and rebuilding trust in democratic institutions. *Lancet Reg Health Eur.* 2025;53:101326. doi:10.1016/j.lanepe.2025.101326

ARTICLE IN PRESS