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Trust, Trust Repair, and Public Health: A Scoping Review Protocol

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Review question: What is the scope of evidence related to trust, trust repair, and public health?

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Background

Trust can be defined as “a willingness to be vulnerable to another for a given set of tasks”¹ and thus, trust and public health are inextricably linked. State actors are key participants in population health, organizing, among other things, mandates and guidelines that target health behaviors and encourage the uptake of medicines, screenings, diagnostics, and control of health conditions. Effective implementation of these crucial, government-sponsored health efforts is conditional on the public’s belief that the state is trustworthy and has one’s best interest in mind – positioning trust in government as a central determinant of public health. Trusting relationships between patients, health systems, and health care providers are also essential, as high-quality, safe care and adherence with healthcare professionals’ recommendations heavily depend upon trust. In many countries, trust in government and health care providers are inseparable, as governments are the primary providers of healthcare.

Despite these critical relationships, existing studies that link trust and public health outcomes often focus on contemporaneous factors, many of which are endogenous to public health outcomes (e.g., support for the incumbent political party). For example, Sopory and colleagues reported a comprehensive examination of the phenomenon of trust during public health emergency events among 68 studies from 28 countries that included individuals who were directly affected by a public health emergency (**Table 1**).² Importantly, no studies from South America or Africa were included. The shortage of research on the sociostructural, historical, economic, and political sources of low trust limits our understanding of how trust deficits might be remedied so as to improve population health. Understanding why trust is low as well as how to repair trust are thus of critical importance.

Objective

The objective of this scoping review is to produce a scoping review of the existing literature with a focus on: 1) describing coverage of the literature on trust, trust repair, and public health, including sources of trust in public health and strategies to repair trust, 2) clarifying key concepts related to historical determinants of trust, 3) identifying knowledge gaps, 4) characterizing research design strategies, 5) summarizing the scope and types of available evidence, and 6) proposing research priorities.

Methods

Our approach will be guided by the methods outlined by Arksey and O’Malley to map relevant literature in the field and identify gaps in existing research,³ and the reporting will be guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) Checklist.^{4,5} Our team includes an information specialist (MD) to initially search for and analyze published evidence synthesis reports (e.g., scoping and systematic reviews) and their corresponding primary research studies related to trust, trust repair, and public health. We will search systematic review registers and contact the corresponding authors of published reports to identify ongoing studies and emerging concepts. We will also conduct an updated search to identify primary research studies that explicitly explore sociostructural, historical, economic, and political sources of trust in public health and studies of trust repair in public health. We will also search for primary studies where evaluating trust in public health is a study outcome. We will identify research gaps and propose research priorities based on our results by extending recommendations from previous reports, including those from professional organizations such as the American Board of Internal Medicine Foundation and Academy Health (**Table 2**).^{1,2,6-8}

Review Question

What is the scope of evidence related to trust, trust repair and public health?

Eligibility criteria

In this scoping review, original quantitative, qualitative, or mixed methods studies will be included. Eligible studies will have a link between trust, trust repair, and public health in the different concepts of public health as related to health status, prevention, promotion, surveillance, and investigations, including public health outcomes related to health behaviors and uptake of medications, screenings, diagnostics, and control of health conditions. Trust and trust repair concepts will be explored, including competency, caring, character, honesty, transparency, consistency, fiduciary responsibility, confidentiality, confidence, and loyalty, as well as other related concepts that will emerge during the search. We will include quantitative or qualitative studies as well as empirical and theoretical study designs published from January 1990 until the search date. We will not create any language restrictions.

Population

There will be no restrictions in terms of the population or location. We will include studies that evaluated trust repair and public health on the individual, community, health system, or institutional level.

Exposure or intervention

We will include and review studies related to trust, trust repair, and public health at any level, including but not limited to individuals, communities, institutions (e.g., public, political) and other authorities. Any study that investigates public health concepts without a specific link to trust will not be included. We will include studies that evaluate the direct relationship between trust, trust repair, and public health both on the global and local scale within the parameter set above. Studies that report trust outcome (i.e., strategies to improve trust) or target for intervention (i.e., trust repair strategies to improve public health implementation, outcomes, or both) will be sought and included.

Outcomes

Co-primary outcomes will include levels of trust or public health outcomes measured by any one of 10 public health core functions defined by the Centers for Disease Control and Prevention.⁹

1. Assess and monitor population health status, factors that influence health, and community needs and assets.
2. Investigate, diagnose, and address health problems and hazards affecting the population.
3. Communicate effectively to inform and educate people about health, factors that influence it, and how to improve it.
4. Strengthen, support, and mobilize communities and partnerships to improve health.
5. Create, champion, and implement policies, plans, and laws that impact health.
6. Utilize legal and regulatory actions designed to improve and protect the public's health.
7. Assure an effective system that enables equitable access to the individual services and care needed to be healthy.
8. Build and support a diverse and skilled public health workforce.
9. Improve and innovate public health functions through ongoing evaluation, research, and continuous quality improvement.
10. Build and maintain a strong organizational infrastructure for public health.

Information sources

We will carry out a systematic search using databases such as PubMed/MEDLINE, Cochrane, EMBASE and other information sources, including gray or unpublished literature that

focuses on trust, trust repair, and public health.¹⁰ To find ongoing investigations and new ideas related to trust and public health, we will also evaluate reference lists and trial registers and will contact corresponding authors of included studies.

Search strategy

With the help of an information specialist librarian (MD), we will develop comprehensive search terms related to the concepts of trust repair and public health and then use Boolean operators like AND, OR, and NOT to narrow or broaden our search.¹¹ This will utilize keywords relating to and not limited to trust, trust repair, public health, governments, health care providers, and health care systems. A manual search will also be conducted with key words and terms incorporated. The search strategy will involve publications no later than 1990 for the sake of feasibility. This approach may be modified upon review, with all pertinent changes recorded.

Study selection

With the support of a librarian information specialist (MD), titles of retrieved studies will be independently screened by three reviewers (PK, AF, GW) for inclusion using Covidence with disagreements resolved through consensus or with another author (MDH). Full texts will be retrieved and similar reviewed independently by three reviewers (PK, AF, GW). Studies that are irrelevant or not credible will be excluded from the review process with reasons for exclusion documented at the full-text review stage.

Data extraction process

A data extraction form will be used by three authors (PK, AF, GW) to independently extract data from included study reports. Data that will be collected include: authors, date, country, study period, study design, study population, sample size, conceptual model, exposure/intervention type and level, and public health outcomes. Reviewers will meet regularly to review and compare extracted data to achieve consensus and strategies to organize results. A senior author (MDH) will help resolve disagreements.

Data synthesis

Once data extraction has been completed, the study team will organize the included studies and corresponding data to create tables and figures to show the range of available research. The study team will utilize a socio-ecological model to initially orient and organize the results, with conceptual model updating planned as additional data are collected.

Conclusion

This scoping review seeks to understand the available evidence that evaluates the links between trust, trust repair, and public health. Findings may be able to inform how best to conceptualize trust and public health and how to advance trust repair within public health systems, including effective (and ineffective) strategies among stakeholders.

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Table 1. Key synthesized findings from the report by Sopory et al. on trust in public health emergencies.

Element	Finding
1	Trust in authorities is a multi-component construct.
2	High trust in authorities can lead to both positive and negative psychological and behavioral outcomes.
3	Trust in authorities is a strong predictor of risk perceptions.
4	Trust varies greatly across different message sources, with people usually assessing differently the credibility of 3 information sources: industry, citizen groups, and health-related departments.
5	Trust in authorities varies across the course of an emergency event, type of hazard, and demographics.
6	People use credibility of information sources as a primary means of resolving the conflict among multiple voices typical in a public health emergency situation.
7	Trust in authorities occurs in a life context and should not be seen in isolation for just a specific hazard.
8	Trust in authorities can depend on the extent of coordination among different agencies, institutions, and the media
9	Past experience with authorities contributes to perceptions of trust.
10	Trust in authorities as an outcome is predicted by several person-level factor.
11	Trust in authorities as an outcome is predicted by several organizational message and action factors.

Table 2. Key recommendations among reports on trust and public health.

Source	Focus	Key recommendation(s)
American Board of Internal Medicine Foundation, AcademyHealth ⁵¹	Research agenda, general health care	<ul style="list-style-type: none"> • Use Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey and safety culture surveys to identify areas in health systems that already exhibit high levels of trust • Create a national, population-based trust study to assess patients' trust in clinicians and institutions over time • Pursue research to answer 10 research questions outlined related to advancing trust at organization, clinician, patient, and community levels
Sopory et al. ²	Public health emergencies	<ul style="list-style-type: none"> • Pursue research in low-income countries • Define components of trust, including similar but distinct components (e.g., confidence) • Evaluate longitudinal changes in trust • Evaluate how mass media and social networks interact during public health emergencies, including how people use varied sources of information • Integrate model building and invest in theory construction
Adjekum et al. ⁴	Digital health systems	<ul style="list-style-type: none"> • Tools and metrics for patient trust in telemedicine services should be developed, validated, and implemented • Reliable measures to assess trustworthiness should be developed, validated, and implemented • Stakeholders should develop governance models for digital health systems
Kim ⁶	Health information systems	<ul style="list-style-type: none"> • Evaluate how to modify individual-, website-, and consumer-to-interface antecedents to enhance trust.