Adiabu, S., & Bemo, V. N. (2026). Compassionate epidemiology: A catalyst for reawakening ecological and relational awareness in global health. *International Journal of Wellbeing*, *16*(2), 5597, 1-12.
https://doi.org/10.5502/ijw.v16i2.5597

ARTICLE

Compassionate epidemiology: A catalyst for reawakening ecological and relational awareness in global health

Sedem Adiabu · Valerie Nkamgang Bemo

Abstract: The field of global health has articulated a commitment to alleviate preventable suffering and advance health equity worldwide. Compassion is frequently invoked as a core ethical value for global health action. Recent attempts to quantify compassion—an epidemiology of compassion—reflect its perceived value in shaping effective action. However, compassion resists full measurement, because it is socially embedded, historically situated, and relationally enacted. Efforts to measure compassion in isolation from these contexts risk producing incomplete or misleading representations, ultimately constraining equity and community well-being.

In response, we propose compassionate epidemiology as a conceptual and methodological framework that reorients global health toward relational accountability, lived experience, and ethical responsiveness to preventable suffering. Compassionate epidemiology does not reject quantitative methods; rather, it challenges its epistemic dominance by centering participatory processes, narrative evidence, and culturally grounded knowledge as core components of epidemiological inquiry. This paper makes two contributions: it conceptualizes compassion as a social and epistemic phenomenon beyond metrics, and it proposes compassionate epidemiology as a paradigm for transforming evidence generation, interpretation, and policy translation.

Keywords: compassion, epidemiology, epistemic justice, well-being, holistic wellness, human dignity, health equity, relational care

1. Introduction: Calls to measure compassion

In 2020, a convening of over 70 participants from diverse backgrounds was held to understand how epidemiologic inquiry can contribute to compassion and to develop metrics to guide and validate compassion in global health programs. At the same time, growing reflection on inequitable research practices and interpretation within global health research and programming highlighted the need for renewed attention to the motivations driving global health action. This paper, situated within the field of ethics in global health proposes a conceptual paradigm—compassionate epidemiology—to extend what counts as evidence as well as how it is interpreted and translated into policy. It articulates compassion as arising within social and epistemic contexts, extending beyond individual relationships to include community knowledge.

Sedem Adiabu
Adiabu Global Consulting, GE2P2
adiabuglobalconsulting@gmail.com

2. Beyond metrics: A global health ethic of compassion

Historically, epidemiology evolved as a biomedical science grounded in measurement, demography, and causal inference, privileging what could be quantified and counted (Quirke & Gaudillière, 2008). Its primary goals have been to measure associations, establish causal pathways and inform population-level interventions (Institute of Medicine, 2002, chapter 2). These origins were reinforced by the rise of evidence-based medicine (EBM) models, which privileged randomized control trials and other quantitative methods as the gold standard of validity (Djulbegovic & Guyatt, 2017). Qualitative research, in contrast, has historically been ranked lowest in perceived rigor and relevance for public health, limiting its influence on policy and practice (Goldman & Shih, 2011).

This metric-centric approach is tied to broader economic logics that prioritize efficiency, standardization, scalability, and measurable outcomes (Gorsky & Sirrs, 2017; Shiffman & Shawar, 2020). For example, Gorsky and Sirrs (2017) show that the WHO Disability Adjusted Life Year (DALY) metric, while useful for resource allocation, reflects an economic rationale that values cost effectiveness and productivity. Similarly, Vincanne Adams (2016) argues that metrics-based global health systematically displaces knowledge rooted in lived experience, local caregiving practices, and community relationships. From an epistemic perspective, this emphasis risks marginalizing culturally specific health needs and relational dimensions of care that resist simplification.

Mixed methods approaches emerged as a response to bridge this gap by integrating qualitative insights with quantitative analyses. These approaches hold promise for capturing the complexity of health phenomena, especially in culturally diverse or structurally marginalized populations where lived experience cannot be understood through numbers alone (Creswell et al., 2011). However, as O'Cathain et al. (2008) demonstrate, qualitative data in mixed methods research is often treated as supplementary, useful for explaining quantitative findings but rarely recognized as an epistemically equal mode of inquiry. This preference for numerical data constrains the potential of research to illuminate structural inequalities through the relational realities of health, leaving critical dimensions of social well-being underexamined.

By highlighting these gaps, we underscore the need for a paradigm that moves beyond valuing metrics alone – one that situates compassion, lived experience, and relational knowledge at the core of epidemiological inquiry. Global health requires an evidentiary paradigm that integrates qualitative and participatory methods as central to understanding and responding to health in a culturally and socially situated way.

2.1 Metrics shape what health is allowed to be

The methodological privileging of quantitative data affects how health is measured and how it is conceptualized. Although the World Health Organization defines health as "a state of complete physical, mental, and social well-being," scientific and policy discourse often narrows this definition to emphasize physical disease and mortality-based measures (Schramme, 2023). As a result, the relational, communal, and cultural dimensions of health, which we call social health, become systemically undervalued in both research and practice (Doyle & Link, 2024; Killam, 2024). This narrowing is reinforced by epistemic hierarchies such as peer-reviewed evidence, and quantitative methods that prioritize measurable outcomes over relational forms of knowledge production. They fail to capture the interactions of the mind, body, environment, and spirit that are valued in many holistic societies while inadvertently marginalizing lived experience and community knowledge which often resists quantification.

As Abimbola et al. (2024) demonstrate, global health knowledge production systematically privileges certain actors and methodologies while devaluing local epistemologies and community-based sense-making. Globally standardized metrics come to define what counts as legitimate knowledge. Such exclusions occur when local knowledge is dismissed as "unscientific" due to presumed deficits in formal Western education, or when problem framing and research agendas are shaped primarily by donors and external actors rather than affected communities.

3. A proposal for compassionate epidemiology

Against this backdrop, we propose *compassionate epidemiology* as a paradigm that extends beyond methodological integration to fundamentally reshape how health knowledge is produced and valued. For the purpose of this paper, compassion is defined as a response to suffering that involves cognitive awareness, empathy, and a response to alleviate suffering (Addiss et al., 2022). Compassion is often expressed through narrative, presence, or culturally specific practices, rather than discrete, measurable data points (Zieba et al., 2025). Through this relational interaction, individuals, and by extension communities, become attuned to suffering in themselves and others in ways that foster connection, ethical action, and collective care (Gilbert, 2023). Compassion thus operates simultaneously as both a marker and a mechanism of social health.

Contemporary epidemiological models often fail to capture the complex realities and lived experiences of marginalized populations (Buckee et al.,2021; Irfan et al., 2025). Addressing this limitation calls for human-centered approaches that attend to the physical, social and mental dimensions of health (Sahani et al., 2024; Zegarra-Parodi et al., 2024). These dimensions are most effectively examined through qualitative methods, such as narrative medicine, interviews, ethnography, and focus groups, that foreground lived experience and relational aspects of illness and care (Haydon & van der Riet, 2017).

For example, many African Indigenous knowledge systems have a culture of oral traditions where knowledge is produced through proverbs, storytelling, ceremonies, songs, rituals, plant biology produced from centuries of observing the external world (Zulu, 2006). While epidemiological models remain indispensable for identifying population-level trends, they sometimes decontextualize the lived realities of those they represent (Zulu, 2006). Particularly in many communities where relationships are intertwined with land, self, community and spiritual wisdom, a compassionate approach to scientific inquiry prompts researchers to ask what disparities exist, why they persist, how affected communities interpret data, and how health interventions intersect with everyday life.

Compassionate epidemiology is a proposal to humanize health issues by recognizing that each data point represents a human life embedded within social and more-than-human relationships. This way, data become not merely informational but ethical tools for care, accountability, and collective action to reduce preventable suffering. If health equity is the ultimate goal of global health, then compassion, a core value, should function not only as a moral ideal but as an actionable epistemic and methodological principle guiding research and intervention (Farmer, 2003).

Moving beyond the conventional focus on standardized metrics, compassionate epidemiology centers relational knowledge, contextual meaning, and lived experience as legitimate and essential sources of evidence (Kirby et al., 2026). This paradigm reorients research questions, study design, and interpretation of findings around human-centered concerns, particularly the social, mental, and structural determinants of health. It prioritizes participatory, context-sensitive processes that recognize cultural and community variability. At the same time, compassionate epidemiology integrates compassion both as an epistemic lens, shaping what and how we know, as well as a practical orientation, guiding ethical engagement, intervention, and policy translation.

3.1 Why social epidemiology is not enough

Social epidemiology shows what disparities exist and identifies critical systemic correlations such as race, income and socio-economic status. However, where it falls short is in deeper analysis of the social conditions that establish disparities (Kaplan, 2024). While both social and compassionate epidemiology recognize the importance of social context in shaping health outcomes, they diverge in scope, methods, and orientation. Compassionate epidemiology builds upon social epidemiology's documentation of systemic inequities, such as poverty, racism, and housing insecurity, but adds a human-centered perspective. It situates health data within the relational and cultural realities of individuals and communities as core epistemologies that reveal how people understand, endure, and resist illness and structurally produced suffering.

This approach also transforms the researcher-participant relationship from an extractive model to one of co-production, positioning communities as agents of knowledge and collaborators in shaping research. In Table 1 (below), which operationalizes compassionate epidemiology beyond abstract principle, we outline its defining concepts, ethical foundations, and methodological implications across the stages of epidemiological inquiry. In the following section, we share case examples of countries adapting human-centered health systems design.

When the value of compassion is tied to metrics, whether through self-report scales, behavioral indices, or neurobiological markers, it risks being reduced to individual dispositions rather than relational pathways to healing (Addiss et al., 2022). Compassionate epidemiology situates compassion in the relationships, social structures, and cultural contexts through which it is enacted, emphasizing that understanding health requires attending not only to what can be quantified, but also to how people experience, interpret, and respond to suffering. By centering relational knowledge, lived experience, and participatory processes, this framework operationalizes the principles discussed above in the "Beyond Metrics" section, ensuring that health research and policy capture the non-physical dimensions that conventional metrics tend to overlook.

4. Humanizing metrics: Seeing the faces within the data

Compassion is a socially situated phenomenon that emerges through interpersonal relationships, shaped by culture, and is enacted through intentional practice (Mascaro et al., 2020; Neilson & Syed, 2026). In this sense, compassion functions as a form of social health, reflecting the strength of relational ties and shared care within a community. Where compassion is cultivated, social cohesion and mutual responsibility are strengthened, reinforcing the networks that sustain collective well-being (Charter for Compassion, 2025; Farmer, 2003; Killam, 2025).

4.1 Narratives inspire action

Compassion shapes both perception and interpretation from the giver and receiver. It enables forms of knowledge about suffering and inequity that cannot be fully understood through metrics alone (Larco et al., 2024). Stories connect human experiences to decision makers, evoking emotions that resist quantification by nature. Storytelling is increasingly reflected in emerging global health practices that seek to embed social and contextual dimensions into health systems (Aellah & Davey, 2026; Khan et al., 2024).

Table 1. *Compassionate epidemiology definitions, ethical foundations, and methodological steps*

Definition		**Operation**	
Compassion	Compassionate epidemiology	*Examples of compassionate epidemiology in action	
Responds to suffering with action.	The ethical imperative to respond to suffering through relational accountability.	**Step** - Collection	Co-designed thesis through engagement with **epistemic communities who share (1) a set of normative and principled beliefs, (2) notions for producing knowledge and (3) shared commitment to solving specific issues (Haas, 1992).
Structures health systems to reduce inequity.	Intersectional and interdependent dimensions of well-being (social, physical and mental) while critically engaged with the human and systemic conditions that shape health.	**Step** - Analysis	Co-production and analysis of knowledge, oral histories and storytelling, narrative and discourse analysis, stakeholder co-analysis, meaning- making.
Prioritizes dignity, inclusion, and justice.	Positions those experiencing suffering, not as subjects of inquiry but as co-producers of knowledge.	**Step** - Integration	Mixed methods, puzzles, proverbs, ceremonies, songs, rituals, plant biology, storyboards, peer debriefs, co-designed indicators.

*Operational examples of compassion in action are not intended to be prescriptive, rather intentional based on the geographical context and scientific inquiry.

**Epistemic communities as defined by Peter Haas describes a community of knowledge" that transcends traditional boundaries, uniting experts via shared beliefs, validation methods, and goals (like enhancing human welfare) to influence policy, acting as a social group with a distinct, knowledge-driven "style of thinking" (a "thought collective") that shapes norms and problem-solving within a specific domain, akin to a "community of practice" focused on collective understanding and action, rather than just shared location or history.

For example, social prescribing is an approach that connects individuals with non-clinical services like mental health support, housing, and other community based initiatives to address the social determinants of health (Morse et al, 2022). The social prescribing around the world report illustrates how countries like Nigeria, Netherlands, and Hong Kong operationalize relational based care that extends beyond clinical settings (Khan et al., 2024). The report includes over 30 diverse countries highlighting how social prescribing initiatives have been adapted into their local systems supported by policymakers, health practitioners, academics and communities to build a shared practice and generate evidence.

Nigeria, for instance, employed folk songs with lyrics conveying health education messages, recognized as an effective medium for the local outreach program. “Welzijn op Recept” (wellbeing on prescription) was formalized in the Netherlands based on positive health, positive psychology, and social identity theory, focusing on overall well-being rather than addressing deficits. A wellbeing coach who is integrated into the community, is matched with the patient’s needs and addresses barriers like financial problems, safety or housing concerns. In Hong Kong, the social prescription method incorporated nature-based experiences like natural art, water sports, camping and forest bathing to promote mental wellness and family cohesion. Each country can implement its own model, adapting to local systems and cultural contexts reflecting relational care and accountability (Khan et al., 2024).

4.2 Compassion is epistemic

Empirical research reinforces the situated nature of compassion. Cross-cultural studies show that while compassion is broadly associated with empathy, kindness, and understanding, its enactment differs significantly across contexts. For example, comparative research in Ecuador and the United States found that Ecuadorian participants framed compassion as shared engagement with suffering, whereas U.S. participants emphasized reassurance and the maintenance of positive affect (Larco, 2024). Similarly, a multicultural study on the facilitators and inhibitors of compassion found that Sri Lankan participants reported higher levels of self-compassion compared to their UK counterparts yet also reported greater external shame and fear of compassion towards themselves and in receiving it from others (Kariyawasam et al., 2023).

In policy-making, such as the social prescribing model described above, compassion necessitates a focus on *how* decisions are made rather than assigning a universal definition of compassionate action. Compassion provides access to dimensions of health and well-being that remain contextually dependent. Together, these findings highlight compassion as a culturally mediated, relational form of knowledge by foregrounding context, meaning, and lived experience.

4.3 From individual to structural compassion

While relational compassion shapes interpersonal and community well-being, advancing health equity requires embedding compassion within structural and systemic contexts. Drawing on John A. Powell’s work on social suffering, inequality is understood as structurally produced and unevenly distributed across groups defined by race, class, gender, and geography (Abramson et al., 2024; National Academies of Sciences, Engineering, and Medicine, 2017; Powell, 2003). Powell argues that efforts to address suffering at the individual level alone are insufficient because the self is not autonomous but formed through relationships and embedded within broader social, cultural, and institutional contexts (Gobel & Miyamoto, 2024; Powell, 2003). Alleviating suffering therefore requires not only individual care but the transformation of the systems and communities in which people live.

This perspective reinforces the argument that compassion, if it is to advance health equity, must engage with the economic, environmental, and political structures that produce suffering in the first place (Prentice et al., 2024). When compassion is embedded systemically, it becomes visible through long-term relationships, institutional practices, and social outcomes rather than isolated acts. Because health disparities disproportionately affect historically marginalized groups, narrative data are essential for capturing the depth and texture of social suffering, dimensions that are often overlooked by conventional metrics yet increasingly acknowledged in global health discourse (WHO, 2025).

Practices such as trust-building, fostering belonging, and promoting cultural inclusion function as reparative actions that address the root causes of structural harm (Charter for Compassion, 2025; Long et al., 2022; O’Donnell et al., 2025). While longitudinal indicators of social cohesion offer a promising lens for assessing the relational impacts of compassionate systems, such measures remain underdeveloped and require further study (Choi, 2023; Qin et al., 2021). In the interim, narratives serve not only as documentation but as a form of relational evidence that complements quantitative metrics and captures the social and ethical dimensions of systems shaping health (Kruk et al., 2018).

Consistent with the World Health Organization's definition of health, which explicitly includes social and mental well-being, recent work calls for relational, contextual, and holistic approaches to understanding population health (WHO Commission on Social Connection, 2025). Together, these insights underscore that compassion, like social health, cannot be fully understood through numbers alone. Both are embedded in interdependent relationships and cultural contexts, requiring narrative and ethnographic methods to meaningfully assess their presence, impact, and ethical significance (Golden & Wendel, 2020; Killam, 2024).

5. Conclusion: Toward a compassionate epidemiology

In an increasingly interconnected and complex world, the question of what counts as evidence demands attention. Our central argument is two-fold. First, dominant metric-driven approaches in global health shape not only how health is measured but also how it is conceptualized and governed. While quantification has enabled important advances in disease surveillance and population-level analysis, its dominance has also narrowed the epistemic field, privileging forms of knowledge that are easily measurable while marginalizing relational, contextual, and lived dimensions of health. As a result, forms of social health, including compassion are frequently rendered invisible or reduced to individual traits, despite their central role in collective well-being and systemic health equity. Second, compassion, a concept embedded in relationships, is best understood and depicted in ways that center relational forms of knowledge. We propose that narrative data provides a valid and necessary complement to quantitative metrics in recognizing and responding to compassion in global health.

While compassion cannot be fully captured by standardized metrics due to its relational and contextual nature, this does not diminish its importance to health systems design. Rather compassion calls for an expansion of what is recognized as valid evidence, including narratives and participatory community approaches. These methods are well suited to illuminate the lived experiences of suffering and healing in marginalized communities.

Compassionate epidemiology invites global health practitioners and researchers to engage with the relational human and systemic dimensions of what can be measured and understood. Compassion is shaped by contextual norms, history, and value systems, which makes it difficult to generalize across populations or settings without distorting its meaning. Attempts to measure compassion in isolation from its social, historical, and relational context risk producing incomplete or misleading representations, limiting the potential for health equity and collective well-being. This epistemic tension underscores why narrative data or storytelling is essential, it honors compassion's specificity and complexity that conventional metrics may obscure.

The legitimacy of compassion in global health should not be dependent on its measurability. Moreover pursuing quantification through standardized indicators alone can inadvertently strip compassion of its social depth, contextual meaning and cultural variability. Greater acceptance and use of social prescribing, narrative data, longitudinal indicators, and attention to social health outcomes offers a promising direction for advancing relational care and health equity. As the African proverb goes, "Wisdom is like a baobab tree; no one individual can embrace it," emphasizing that understanding complex social systems—including compassion—requires multiple perspectives.

Authors

Sedem Adiabu
Adiabu Global Consulting, GE2P2
https://orcid.org/0009-0001-6546-5285
adiabuglobalconsulting@gmail.com

Valerie Nkamgang Bemo
Gates Foundation
https://orcid.org/0009-0007-0346-6593

Positionality Statement

Both authors (SA and VNB) have lived and practiced global health across communal, individualist, and hybrid social contexts. They bring multiple perspectives informed by professional practice and lived experience, including over 30 years of experience as a doctor and epidemiologist across various global, regional and community levels of healthcare and global health work (VNB). SA holds an MPH in global health with 10 years of expertise in program integrity, research ethics, and capacity-building initiatives. Both authors were born in developing countries and have been exposed to Indigenous knowledge systems.

Their combined backgrounds and training position them both as researchers, observers and, at times, as practitioner-participants, guided by scientific inquiry, community knowledge, and lived experience as distinct and complementary sources of insight. They do not claim to represent all communities, nor do they assert that lived experience alone confers epistemic authority. These experiences inform and justify their methodological choices reflect their relational positioning within the communities they study.

Demographically, both authors are holistic practitioners who approach health and wellness as an interconnected system encompassing mind, body, environment, and spirit.

Author contribution statement

All authors contributed to the conceptualization of the manuscript. Adiabu wrote the first draft of the article and incorporated edits into the final version.

Funding

There was no funding to support this work.

Conflict of interest statement

The authors declare that they have no conflict of interest.

AI statement

The authors acknowledge the use of artificial intelligence (AI), specifically OpenAI’s ChatGPT, to support the preparation of this manuscript. AI assistance was limited to the following tasks:

- Organize a working outline based on authors’ synthesized notes and themes;
- Improve grammar, syntax, and sentence structure for readability;
- Manage and format citations and references in accordance with APA 7th edition guidelines.

All intellectual content, diagrams, data interpretation, analysis, and conclusions were generated and verified solely by the authors. AI tools were not used to produce original research findings or perform critical thinking components of the study. The final manuscript reflects the authors' own work and scholarly judgment.

Acknowledgments

We thank the team at FACE and the evolving compassion community of practice for their support and contributions to this work.

Publishing Timeline
Received 31 August 2025
Revised version received 22 October 2025
Revised version received 22 January 2026
Accepted 29 January 2026
Published 4 March 2026

References

Abimbola, S., van de Kamp, J., Lariat, J., Rathod, L., Klipstein-Grobusch, K., van der Graaf, R., & Bhakuni, H. (2024). Unfair knowledge practices in global health: a realist synthesis. *Health Policy and Planning, 39*(6), 636–650. https://doi.org/10.1093/heapol/czae030

Abramson, C. M., Li, Z., Prendergast, T., & Sánchez-Jankowski, M. (2024a). Inequality in the Origins and Experiences of Pain: What "Big (Qualitative) Data" Reveal About Social Suffering in the United States. RSF. *The Russell Sage Foundation Journal of the Social Sciences, 10*(5), 34–65. https://doi.org/10.7758/RSF.2024.10.5.02

Adams, V. (2016). What is critical global health? (2016). *Medicine Anthropology Theory*, *3*(2). https://doi.org/10.17157/mat.3.2.429

Addiss, D. G., Richards, A., Adiabu, S., Horwath, E., Leruth, S., Graham, A. L., & Buesseler, H. (2022). Epidemiology of compassion: A literature review. *Frontiers in Psychology, 13*. https://doi.org/10.3389/fpsyg.2022.992705

Aellah, G., & Davey, G. (2026). 'The voice of that boy is still trickling in my ears': Ethnography and the Epidemiology of Compassion. *International Journal of Wellbeing*, *16*(2), 5517, 1–23. https://doi.org/10.5502/ijw.v16i2.5517

Buckee, C., Noor, A., & Sattenspiel, L. (2021). Thinking clearly about social aspects of infectious disease transmission. *Nature, 595*(7866), 205–213. https://doi.org/10.1038/s41586-021-03694-x

Charter for Compassion. (2026). "Build Compassionate Communities." https://charterforcompassion.org/what-we-do/build-compassionate-communities/build-compassionate-communities.html

Choi, E. Y. (2023a). Longitudinal Associations of Neighborhood Social Cohesion With Self-Perceptions of Aging and Loneliness. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 79*(1), gbad148. https://doi.org/10.1093/geronb/gbad148

Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). *Best practices for mixed methods research in the health sciences* (Report commissioned by the Office of Behavioral and Social Sciences Research). National Institutes of Health. https://obssr.od.nih.gov/sites/g/files/mnhszr296/files/Best_Practices_for_Mixed_Methods_Research.pdf

Djulbegovic, B., & Guyatt, G. H. (2017). Progress in evidence-based medicine: A quarter century on. *The Lancet, 390*(10092), 415–423. https://doi.org/10.1016/S0140-6736(16)31592-6

Doyle, D. M., & Link, B. G. On social health: History, conceptualization, and population patterning. *Health Psychology Review, 18*(3), 619–648. https://doi.org/10.1080/17437199.2024.2314506

Farmer, P. (2003). Pathologies of Power: Health, Human Rights, and the New War on the Poor (1st ed.). University of California Press. http://www.jstor.org/stable/10.1525/j.ctt1pnznf

Gilbert, P. (2023). Choose Compassion: Why It Matters and How It Works (2022) by James Kirby. University of Queensland Press. ISBN: 9780702265648. *Psychotherapy and Counselling Journal of Australia, 11*(1). https://doi.org/10.59158/001c.74361

Gobel, M. S., & Miyamoto, Y. (2024). Self- and Other-Orientation in High Rank: A Cultural Psychological Approach to Social Hierarchy. *Personality and Social Psychology Review, 28*(1), 54–80. https://doi.org/10.1177/10888683231172252

Golden, T. L., & Wendel, M. L. (2020). Public Health's Next Step in Advancing Equity: Re-evaluating Epistemological Assumptions to Move Social Determinants From Theory to Practice. *Frontiers in Public Health, 8*. https://doi.org/10.3389/fpubh.2020.00131

Goldman, J. J., & Shih, T. L. (2011). The Limitations of Evidence-Based Medicine: Applying Population-Based Recommendations to Individual Patients. *AMA Journal of Ethics, 13*(1), 26–30. https://doi.org/10.1001/virtualmentor.2011.13.1.jdsc1-1101

Gorsky, M., & Sirrs, C. (2017). World health by place: the politics of international health system metrics, 1924–c. 2010. *Journal of Global History, 12*(3), 361–385. https://doi.org/10.1017/S1740022817000134

Haas, P. M. (1992). Introduction: Epistemic Communities and International Policy Coordination. *International Organization*, *46*(1), 1–35. http://www.jstor.org/stable/2706951

Haydon, G., & van der Riet, P. (2017). Narrative inquiry: A relational research methodology suitable to explore narratives of health and illness. *Nordic Journal of Nursing Research, 37*(2), 85–89. https://doi.org/10.1177/2057158516675217

Institute of Medicine (US) Committee on Assuring the Health of the Public in the 21st Century. (2002). Understanding population health and its determinants. In The future of the public's health in the 21st century. National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK221225/

Irfan, B., Abu Shammala, A., & Abu Alamrain, A. (2025). Motivations, Tensions, and Ideals in Global Health: Moving From Aspirations to Action. *Cureus, 17*(3), e81169. https://doi.org/10.7759/cureus.81169

Kaplan, G. A. (2004). What's wrong with social epidemiology, and how can we make it better? *Epidemiologic Reviews, 26*(1),124–135. https://doi.org/10.1093/epirev/mxh010

Kariyawasam, L., Ononaiye, M., Irons, C., & Kirby, S. E. (2023). A cross-cultural exploration of compassion, and facilitators and inhibitors of compassion in UK and Sri Lankan people. *Global Mental Health, 9*, 99–110. https://doi.org/10.1017/gmh.2022.10

Killam, K. (2024). The art and science of connection: Why social health is the missing key to living longer, healthier, and happier. Piatkus.

Kirby, J. N., Sherwell, C., & Hsieh, T. (2026). The flows of compassion to help create a more connected world. *International Journal of Wellbeing*, *16*(2), 5601, 1–19. https://doi.org/10.5502/ijw.v16i2.5601

Khan, A., Giurca, B., et al. (2024). Social prescribing around the world. *National Academy for Social Prescribing.* https://socialprescribingacademy.org.uk/media/thtjrirn/social-prescribing-around-the-world-2024.pdf

Kruk, M. E., Gage, A. D., Arsenault, C., Jordan, K., Leslie, H. H., Roder-DeWan, S., Adeyi, O., Barker, P., Daelmans, B., Doubova, S. V., English, M., García-Elorrio, E., Guanais, F., Gureje, O., Hirschhorn, L. R., Jiang, L., Kelley, E., Lemango, E. T., Liljestrand, J., & Pate, M. (2018). High-quality health systems in the Sustainable Development Goals era: Time for a revolution. *The Lancet. Global Health, 6*(11), e1196–e1252. https://doi.org/10.1016/S2214-109X(18)30386-3

Malenfant, S., Jaggi, P., Hayden, K. A., & Sinclair, S. (2022). Compassion in healthcare: An updated scoping review of the literature. BMC Palliative Care, 21, 80. https://doi.org/10.1186/s12904-022-00942-3

Mascaro, J. S., Florian, M. P., Ash, M. J., Palmer, P. K., Frazier, T., Condon, P., & Raison, C. (2020). Ways of Knowing Compassion: How Do We Come to Know, Understand, and Measure Compassion When We See It? Frontiers in Psychology, 11, 547241. https://doi.org/10.3389/fpsyg.2020.547241

Larco, S. S., Romo, M. G., Garcés, M. S., & Koopmann-Holm, B. (2024). People in Ecuador and the United States conceptualize compassion differently: The role of avoided negative affect. *Emotion, 24*(6), 1456-1467. https://doi.org/10.1037/emo0001356

Locke A. (2024). Using the values of integrative medicine to create the future of healthcare. *Global Advances in Integrative Medicine & Health, 13*, 27536130241253607. https://doi.org/10.1177/27536130241253607

Long, R., Cleveland Manchanda, E. C., Dekker, A. M., Kraynov, L., Willson, S., Flores, P., Samuels, E. A., & Rhodes, K. (2022). Community engagement via restorative justice to build equity-oriented crisis standards of care. *Journal of the National Medical Association, 114*(4), 377–389. https://doi.org/10.1016/j.jnma.2022.02.010

Loy, M., & Kowalsky, R. (2024). Narrative Medicine: The Power of Shared Stories to Enhance Inclusive Clinical Care, Clinician Well-Being, and Medical Education. *The Permanente Journal, 28*(2), 93–101. https://doi.org/10.7812/TPP/23.116

Morse, D. F., Sandhu, S., Mulligan, K., Tierney, S., Polley, M., Chiva Giurca, B., Slade, S., Dias, S., Mahtani, K. R., Wells, L., Wang, H., Zhao, B., De Figueiredo, C. E. M., Meijs, J. J., Nam, H. K., Lee, K. H., Wallace, C., Elliott, M., Mendive, J. M., Robinson, D., Palo, M., Herrman W., Nielson, R., Husk, K. (2022). Global developments in social prescribing. *BMJ Global Health*, *7*(5), e008524. https://doi.org/10.1136/bmjgh-2022-008524

National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Board on Population Health and Public Health Practice; Committee on Community-Based Solutions to Promote Health Equity in the United States (2017). "The Root Causes of Health Inequity." In Baciu, A., Negussie, Y., Geller, A., et al. (Eds.), *Communities in Action: Pathways to Health Equity*. Washington (DC): National Academies Press (US). Available from: https://www.ncbi.nlm.nih.gov/books/NBK425845/

Neilson, M. J., & Syed, S. B. (2026). Public health and compassion: Exploring the interface. *International Journal of Wellbeing*, *16*(2), 5633, 1–7. https://doi.org/10.5502/ijw.v16i2.5633

O'Cathain, A., Murphy, E., & Nicholl, J. (2008) The Quality of Mixed Methods Studies in Health Services Research. *Journal of Health Services Research & Policy, 13*(2), 92–98. https://doi.org/10.1258/jhsrp.2007.007074

O'Donnell, M., Collier, M., Pineda-Pinto, M., Cooper, C., Nulty, F., & Castañeda, N. R. (2025). Redefining co-design for social-ecological research and practice: A systematic literature review. *Environmental Science & Policy, 164*, 103998. https://doi.org/10.1016/j.envsci.2025.103998

Powell, J. A. (2003). Lessons From Suffering: How Social Justice Informs Spirituality. *University of St. Thomas Law Journal, 1*. https://researchonline.stthomas.edu/esploro/outputs/journalArticle/Lessons-From-Suffering--How-Social/991015131919203691

Prentice, K. R., Beitelshees, M., Hill, A., & Jones, C. H. (2024). Defining health equity: A modern US perspective. *iScience, 27*(12), 111326. https://doi.org/10.1016/j.isci.2024.111326

Qin, W., Wang, Y., & Cho, S. (2021). Neighborhood social cohesion, physical disorder, and daily activity limitations among community-dwelling older adults. *Archives of Gerontology and Geriatrics, 93*, 104295. https://doi.org/10.1016/j.archger.2020.104295

Quirke, V., & Gaudillière, J.-P. (2008). The era of biomedicine: Science, medicine, and public health in Britain and France after the Second World War. *Medical History, 52*(4), 441–452. https://doi.org/10.1017/S002572730000017X

Sahani, M. K., Maat, H., Balabanova, D., Woldie, M., Richards, P., Babawo, L. S., Berhanu, N., Koenraadt, S., Makonene, D., Mayhew, S. H., Mohan, V., Mokuwa, E., Namakula, J., Ngunjiri, E., Ssengooba, F., Sseviiri, H., Twinomuhangi, R., Vandi, A., Mayhew, S., & PARES Research Group. (2024). Engaging communities as partners in health crisis response: A realist-informed scoping review for research and policy. *Health Research Policy and Systems, 22*(1), 56. https://doi.org/10.1186/s12961-024-01139-1

Schramme, T. (2023). Health as complete well-being: The WHO definition and beyond. *Public Health Ethics, 16*(3), 210–218. https://doi.org/10.1093/phe/phad017

Shiffman, J., & Shawar, Y. R. (2020). Strengthening accountability of the global health metrics enterprise. *The Lancet, 395*(10234), 1452–1456. https://doi.org/10.1016/S0140-6736(20)30416-5

World Health Organization (2025), From loneliness to social connection - charting a path to healthier societies: report of the WHO Commission on Social Connection. World Health Organization; 2025. https://www.who.int/groups/commission-on-social-connection/report

World Health Organization (1946), Constitution of the World Health Organization. Basic documents. https://www.who.int/about/governance/constitution

Zegarra-Parodi, R., D'Alessandro, G., Baroni, F., Swidrovich, J., Mehl-Madrona, L., Gordon, T., Ciullo, L., Castel, E., & Lunghi, C. (2024). Epistemological flexibility in person-centered care: The Cynefin

Framework for (re)integrating indigenous body representations in manual therapy. *Healthcare (Basel, Switzerland), 12*(11), 1149. https://doi.org/10.3390/healthcare12111149

Zieba, M., Zatorski, M. P., & Wójcik, N. E. (2025). Narrative approach to understanding compassion: a mixed methods study in a Polish sample. *Frontiers in Psychology. 16*, 1476446. http://doi.org/10.3389/fpsyg.2025.1476446

Zulu, I. M. (2006). Critical indigenous African education and knowledge. *The Journal of Pan-African Studies, 1*, 32–49. https://www.jpanafrican.org/docs/vol1no1/CriticalIndigenousAfricanEducationandKnowledge.pdf