

# The Syndemics of Emergency: How COVID-19 Demands a Holistic View of Public Health Promotion and Preparedness

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## ABOUT THE AUTHOR

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For all the suffering brought on by the COVID-19 pandemic, a broader examination of 2020 news headlines reminds us that it is not an event occurring in a vacuum—but rather within a complex interplay of crises in global public health. Some of these crises are acute events with immediately devastating consequences, such as the Australian wildfires. Others, such as the epidemic of misinformation, are more insidious and slowly erode at a population's ability to promote and protect health. To borrow language from clinical medicine, most crises are “acute-on-chronic,” as with the boiling over of longstanding racial tensions in the United States following the murder of George Floyd. When COVID-19 is placed in the context of these other public health crises, it is clear that their causes and effects are deeply intertwined. The current pandemic has changed my perspective of

public health by demanding a reckoning of the “syndemics of emergency.”

Health emergencies encompass both acute events (e.g., pandemics, mass casualty events) and chronic ones (e.g., climate change, systemic racism and inequality) because both can overwhelm a community's ability to respond to them, albeit on different timescales.<sup>1</sup> Syndemics, or synergistic epidemics, are the presence of multiple disease states that adversely interact with one another as well as their social and environmental contexts—ultimately amplifying their deleterious effects.<sup>2,3</sup> COVID-19 is undeniably a syndemic. Environmental degradation contributed to the original viral spillover event, globalization fostered the virus's rapid spread, and political partisanship and failures in governance resulted in the pandemic spiraling out of control in countries such as the United States. In the months that

followed, COVID-19 triggered economic freefall, ravaged those with preexisting conditions such as asthma and diabetes, and threatened progress on a wide range of health and development targets<sup>4</sup>—all of which disproportionately affect marginalized communities.

By considering the syndemics of emergency, the necessary future directions for a postpandemic recovery are clear: holistic efforts to address all cooccurring health emergencies and not merely targeting the “disaster du jour.”<sup>1</sup> This view is not Sisyphean but empowering because it inherently values cross-cutting initiatives. For example, efforts to curb carbon emissions as seen through this lens would not only strive to reduce the consequences of extreme weather events but also recognize the need for social justice as communities of color are disproportionately affected by the downstream effects of air pollution. In the context of emerging infectious diseases, a syndemics approach mitigates ongoing crises and prevents outbreaks, snuffs out outbreaks before they turn into pandemics, and guides communities to equitable recoveries. Syndemics ultimately is a useful framework across the spectrum of public health initiatives.

There are five tangible ways to incorporate a syndemics lens into the work of the next generation of public health professionals. First, systems thinking offers public health practitioners an important conceptual and methodological toolbox for understanding and tackling problems in real-world environments.<sup>5</sup> This toolbox is vital because health emergencies involve many actors (i.e., individuals, communities, and institutions) whose interactions and interdependencies lead to outcomes as emergencies arise and unfold.

Second, we must seek and use data for precision and population-level interventions.<sup>6</sup> Accurate, timely, and actionable data are necessary both to understand the extent of issues threatening community health and to measure the effectiveness of solutions for health promotion and protection. This may also involve critically appraising and filling gaps in surveillance infrastructure; for example, the reliance on fax machines has been widely held as a limitation in the public health response to COVID-19 across jurisdictions.

Third, holistically addressing health emergencies requires collaboration across disciplines. As a student in a clinician–scientist training program, I am training to bridge the gap between clinical medicine and public health. However, these perspectives alone are not sufficient. As I have emphasized throughout this editorial, health emergencies are “wicked problems” and necessitate collaboration between experts in economics, governance, engineering, environmental science, and more. Uniting professionals across these disciplines with the common goal of promoting and protecting health, perhaps also with systems thinking as a shared toolbox, can ensure that solutions to health emergencies are not “dead in the water” because of critical oversights when relevant expertise goes unfilled.

Fourth, public health practitioners must have a firm commitment to emergency prevention and response that is grounded in intersectionality. This is important because individuals at the intersection of multiple marginalized groups (e.g., a temporary worker who is housing insecure and a racial/ethnic minority woman) face interlocking systems of oppression from structural inequities and are at the highest risk of morbidity and mortality during

emergencies.<sup>7</sup> We must strive to ensure that health promotion and emergency preparedness are tailored to addressing the different experiences and needs of these intersecting groups and not settle for one-size-fits-all solutions.

Finally, as the next generation of public health professionals, we must not hesitate to champion our communities in the political arena. Evidence is only as good as the decisions that are made with it, and thus public health concerns must be taken into consideration when and where political decisions are made. COVID-19 has propelled many of the ideas I have outlined into public awareness, and ongoing democratic engagement can allow us to capitalize on this momentum to enact lasting change. These suggestions are relevant not just for COVID-19 but also for crises yet to come.

In Greek mythology, Heracles’s second labor was to slay Hydra, a multi-headed monster who could regenerate its heads when they were severed. As public health practitioners, we are now facing our own Hydra. Addressing one crisis at a time is doomed to fail, as crises are not discrete and distinct entities but rather are deeply linked. Adopting a syndemics approach is a sorely needed change in strategy by which we can address the root issues underlying these crises and work toward preventing new ones from emerging. Only by doing so, can we prevail. **APPH**

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## CONFLICTS OF INTEREST

V. Harish has no conflicts of interest to disclose.

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