

Editorial

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Editorial: Special issue on public health resilience

<https://doi.org/10.1515/ohe-2023-0099>

received January 15, 2024; accepted January 15, 2024

The field of public health has faced a conglomerate of cascading risks and polycrises in recent times, including the COVID-19 pandemic, climate change and natural disasters, social inequalities, and other emerging challenges, along with altering social, political, commercial, and even planetary determinants of health [1]. The emergence of the term “new public health” that includes resilience as a goal descriptor indicates the deep-running transformation in which public health – as an academic and professional discipline as well as a distributed system – follows our world’s era of turbulent global and glocal change [2].

In the face of these developments, the concept of resilience has gained increasing attention as a critical framework for understanding how public health systems, communities, and individuals can prepare to effectively respond, adapt, and thrive in the face of adversity. Moreover, state-of-the-art reviews have identified health policy as an emerging “key element of building resilience” [3]. Planning and compiling this special issue, an integrated definition of “resilience” from the editor’s previous work is used:

*[R]esilience denotes an enduring power for transformation, renewal, and recovery through the flux of interactions and flow of events. It is based on the ability “to spring back into shape” (which is the original meaning of the word, deriving from its Latin root, the verb *resilire*) and the capacity to fast absorb difficulties, and/or the ability to withstand, adapt, and quickly recover from stresses and shocks. [4], for a similar definition with a public health focus, see [5].*

The World Health Organization (WHO) has defined building resilience as a key pillar of twenty first-century health within the framework of the United Nations Sustainable Development Goals [6]. As classically defined by Winslow in 1920, public health is “the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals” [7].

Hence, as a discipline, public health has always extended beyond the study of organized systems of delivery of related services. However, mainstream work on public health resilience centers on systemic resilience – the resilience of those systems that contribute to the delivery of public health services:

Developing resilient health systems ensures countries can effectively prevent, prepare for, detect, adapt to, respond to and recover from public health threats while ensuring the maintenance of quality essential and routine health services in all contexts, including in fragile, conflict and violence settings. [8]

A focus on public health systems as such when exploring public health resilience as a whole is valuable since it underlines that “[i]n organizational practices, the idea of resilience has often become symbolized by the need to be capable of managing the unexpected, or the need to be prepared to cope with surprises” [9]. However, while this is fundamental and critical, public health resilience transcends the resilience of the health sector itself [5,10,11]. “Resilience, individual to global, is at the core of the public health mission” as a whole [12]. In addition, the health system sector can benefit from lessons learned in other sectors, including in developing models for measuring resilience [13].

A broadened understanding of public health as a mission – a comprehensive whole-community effort – also leads to a more encompassing concept of public health resilience that spans from health system resilience to community resilience [5,14,15]. Following a United Nations definition, resilience is

[t]he ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions. [16]

United States policy for example early on defined public health resilience within a broader context of public sector, private sector, and public-at-large preparedness (i.e., a whole-community approach),

where local civic leaders, citizens, and families are educated regarding threats and are empowered to mitigate their own

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risk, where they are practiced in responding to events, where they have social networks to fall back upon, and where they have familiarity with local public health and medical systems, there will be community resilience that will significantly attenuate the requirement for additional assistance. The Federal Government must formulate a comprehensive plan for promoting community public health and medical preparedness to assist State and local authorities in building resilient communities in the face of potential catastrophic health events. [17]

In such a holistic approach, “[r]esilience and a culture of preparedness exist when resilience and preparedness become part of the way of life – the normal way of doing things, thinking about them, and planning for them” [18]. Or, as Seaman et al. put it:

The resilience perspective offers value to public health through supporting the development of strong communities. In the face of a growing complexity in global trends and processes, the unpredictable nature of risk and where and what the next crisis or challenge might be, the resilience perspective provides a framework for enabling people and communities to not only bounce back but crucially, thrive beyond crisis. [5]

Based on such an enhanced conceptual framework, the continuous virtual special issue of *Open Health* on “Public Health Resilience” will assemble original research articles, case studies, and state-of-the art reviews that contribute to the advancement of knowledge on the concept and goal of resilience in the context of public health.

The special issue aims to advance the understanding of elements, domains, and levels of resilience in public health and provide insights for policymakers, practitioners, and researchers to enhance public health preparedness, mitigation, response, and recovery in the face of complex challenges. This in particular includes the following:

- Different theoretical and conceptual approaches to resilient public health systems as well as resilient communities able to withstand and quickly and dynamically recover from health-impacting crises through adaptive (adjust to disturbances and shocks), absorptive (cope effectively with disturbances and shocks), anticipatory (preparedness and mitigation), and transforming capacity (system change for better dealing with change and uncertainty) [19].
- Novel frameworks for understanding public health resilience and fostering evidence-informed decision-making.
- Case studies identifying lessons learned and possible best practices to strengthen public health resilience at individual, community, and system levels and in different contexts (e.g., natural disasters, pandemics, social unrest).
- Approaches to health promotion and disease prevention planning that mitigates inequities.

- Resilience of public health systems and infrastructures in the face of disasters and emergencies, including in the context of global climate change.
- Resilience of communities and vulnerable populations to health disparities and social determinants of health.
- Resilience in the context of mental health and well-being (e.g., related to Antonovsky’s “salutogenesis” [20]).
- Resilience in the face of emerging infectious diseases and pandemics.
- Resilience of healthcare workers and public health professionals in times of crisis.
- Measuring and evaluating resilience in public health settings.
- Ethical considerations related to resilience in public health practice.
- The role of legislation, policy, governance, and public administration in building public health resilience.
- Opportunities for advancing the field of public health resilience: key areas for future research and implications for public health policy and practice.

As this is a continuous virtual special issue on an evolving topic, it will remain open for submissions. We welcome interdisciplinary perspectives from researchers, practitioners, policymakers, and other stakeholders engaged in the field of public health. Manuscripts that present innovative approaches, empirical research findings, theoretical frameworks, and evidence-based interventions related to public health resilience are particularly encouraged. You are invited to read and to contribute!

Conflict of interest: The author states no conflict of interest.

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