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Making 'resilience' useful again: recognising health system resilience as an effective boundary object

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INTRODUCTION

In the wake of the COVID-19 pandemic, the use of the concept of 'resilience' has boomed in the field of global health. The European Union and agencies such as the World Bank, WHO and the Global Fund now embrace strengthening resilience as the best way to prepare health systems for shocks. Resilience emerged only relatively recently in global health and it can be traced back to the outbreaks of severe acute respiratory syndrome, Middle East respiratory syndrome and especially Ebola.[1] It crossed over from international development, food and nutrition security, and humanitarian aid, where it has been used from the 2000s onwards as a frame to look into how communities could be strengthened to deal with crises. In global health, the initial focus was on emergency preparedness, aligning well with the health security paradigm.[2] Gradually, authors widened the scope, for instance, from 'community responses' to 'social resilience',[3] and from 'minimising exposure to acute shocks' to 'dealing with chronic or everyday stressors'.[4] The objective of strengthening resilience is commonly formulated as ensuring that health systems and services cover the needs of people affected by a shock while maintaining the continuity of services for all other people. Shocks are typically defined as disturbances or stressors to people and health systems, such as natural disasters, conflicts, extreme weather events, sudden migration influxes or economic crises. Cynics may say that the objective of strengthening resilience and the broad range of shocks may the only things authors agree on, given the multitude of definitions of resilience,[5] the diversity of methods to assess health system resilience[6] and the limited consensus on how resilience can be enhanced.[7 8]

SUMMARY BOX

⇒ With the increased use of the concept of 'resilience' in global health came a wide range of definitions, a multitude of frameworks and a dilution of its meaning.
⇒ Diffuse definitions can be useful if they allow a concept to be a boundary concept: a term that connects fields and allows for a dialogue between actors from different disciplines.
⇒ In this paper, we propose (1) a set of key principles drawn from the pioneering work on resilience and governance in the field of social-ecological systems theory and (2) a number of research areas that merit more attention.

With the increased use of 'resilience' came a divergence of its meaning[9]; yet, diffuse definitions can sometimes be useful. The concept has become a boundary object, facilitating 'communication across disciplinary borders by creating shared vocabulary although the understanding of the parties would differ regarding the precise meaning of the term in question.'[10] In this comment, we go back to the pioneering work on governance and resilience in the field of social-ecological systems (SES) theory, to which several authors refer.[11–13] Cote and Nightingale argued that SES theory overemphasises the role of physical shocks in defining vulnerability, ignoring political and social determinants.[3] Such critique led to the more comprehensive concepts of social resilience[14] and equitable resilience,[15] which have not yet been taken up fully in the field of health: many frames of resilience have 'no in-built moral compass'[16] and ignore the role of unequal power positions.[17] We argue that revisiting key concepts

of SES theory with this critique in mind can help in identifying core principles that may both enable a shared vocabulary and a critical view on how the concept is currently being operationalised in global health. Our aim is, indeed, to facilitate a dialogue among different actors and disciplines on the definition, value and role of resilience as a potential health system goal, and the conditions under which it can be achieved.

REVISITING THE ORIGINS

More than 50 years ago, resilience emerged in psychology, political science, agricultural sciences, engineering and ecology. The work of Folke *et al*[18] in the latter field is highly relevant for health. Building on the seminal work of Holling,[19] their initial definition of resilience emphasised the robustness of systems, meaning the capacity of a system to deal with a shock while maintaining its functions.[20] This evolved to viewing resilient systems as systems able to react to a shock by learning and innovation. Over the years, the body of SESs theory was developed and important innovations were made in the field of governance, including adaptive governance and the negotiated nature of resilience. Below, we present insights from SES theory that may help in transforming the concept of health system resilience into a useful boundary concept.

First, resilience is about agility and transformation, more than just mitigation of and adaptation to shocks.[18] Enhancing resilience requires learning lessons from past and current responses to shocks in order to initiate transformations that address structural weaknesses. Inherent in such transformation is the need to manage or cope better with so-called existential risks that cannot be controlled.[17] Yet, many global health actors seems stuck in reductive, short-term responses,[21] which typically prioritise better early warning systems and emergency response plans. This is considered a more manageable approach than changing institutions and systems, which would be needed to address the social, commercial and other structural determinants of vulnerability of people and health systems alike.

Second, Lebel *et al* identified polycentric institutions, multilayered institutional arrangements, effective accountability processes, public participation, deliberation and social justice as core governance attributes that enhance resilience and equity.[22] Applying these principles to health systems, Blanchet *et al* identified four capacities to manage resilience: knowledge, uncertainty, legitimacy and interdependence.[12] Lebel *et al* pointed to 'self-organisation' and 'learning and adaption' as outputs of adaptive governance that enhance resilience. This is especially relevant for health systems, not only because it fits the complex nature of decentralised health systems,[23] but also because such arrangements stimulate the emergent action required both to deal with shocks and to learn and initiate positive transformation. This is in sharp contrast with the dominant frames of outbreak control in global health that emphasise a top-down approach, with centralised command-and-control procedures, emergency operations centres and crisis management strategies.[24]

Third, individuals, members of households and communities, health providers, managers and policy-makers play a central role in resilience of health systems. Yet, the prevailing practice in global health research is to consider resilience within each scale, separating individual resilience from community and organisational resilience. Furthermore, cross-scale interaction between factors shaping resilience at the microlevels, mesolevels and macrolevels of health systems is often ignored.[25] More fundamental perhaps, 'resilience' is often reified in the direction of resilience being an a-personal system characteristic. Instead, we argue resilience is best conceived as resulting from the interaction between people (agency) and context (structure).

Fourth, resilience can be considered as a function of pre-existing resilience capacities and vulnerabilities of people and systems, and of the nature of the shock.[25] Particular social, political and economic factors contribute to making places and people vulnerable and others resilient, while personal wealth and (social) capital shape how people can mitigate risks or transform situations to their advantage.[26] Yet, historical contingency, pre-existing societal inequities and unequal power positions are often ignored.[27] Chaffin *et al* emphasise the importance of taking into account disparities in resource distribution, inequities, power relations and the societal capacity for change.[28] Transformation—and resilience as such—is not a neutral concept and attention should be given to how interventions to strengthen resilience lead to equitable resilience.[15]

REFINING THE RESEARCH AGENDA

Recently, Saulnier *et al*[29] proposed a research agenda for resilience, indicating five priority areas: measuring and managing dynamic performance, linking societal and health system resilience, governing for resilience, legitimacy and the influence of private and voluntary sectors on resilience.[30] Based on our reading of SESs theory, we propose some additional research questions. First, the processes and context conditions that allow health system actors to move from 'adaptation' to 'transformation' need more research. How does adaptive governance foster resilience and in which conditions? Does it lead to more equity-oriented reforms and responsive health systems? The hypotheses proposed by Lebel *et al* that link adaptive governance to just, accountable and resilient systems[22] remain to be tested in the field of health. Second, how can a multiscale perspective be applied to resilience of health systems: how does resilience of individuals, households and communities shape the resilience of health organisations and (local) health systems? Third, what are the causal processes underlying resilient health systems? How do, for instance, mechanisms of social cohesion, solidarity and reciprocity work in 'knitting' individuals and families into resilient communities? Which management and leadership practices are required to make health workers

and the systems they work in more resilient? Fourth, how can we make sense of multiple shocks and their impact on health systems? Developing long-term prospective studies and methods to analyse temporal dynamics would enable a better understanding of the transitions people and health systems go through between shocks. Fifth, methods for multiscale analysis and empirical research are scarce.[29 31] Many health system resilience (assessment) frameworks[7 32 33] start from WHO's six building blocks model, designed to assess health system strengthening, not resilience. Finally, given the diverging interpretations of the concept of resilience and the ideological underpinnings of some views,[34] a critical analysis of the discourses shaping the debates needs to be maintained. Health system resilience is more than the object of a technocratic or managerialist exercise; it forces us to engage with the messiness of power, politics and governance in a turbulent world.[35]

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