

EDITORIAL

Resilient and Responsive Health Systems in a Changing World

Anne Mills

This supplement of Health Policy and Planning links to the 2016 Fourth Global Symposium on Health Systems Research in Vancouver, and reflects the richness of its discussions. Global symposia on health systems research are organised every two years by Health Systems Global (HSG), which is a membership organisation dedicated to promoting health systems research and knowledge translation. Each symposium is intended to:

- Share new state-of-the-art evidence;
- Review the progress and challenges towards implementation of the global agenda of priority research;
- Identify and discuss the approaches to strengthen the scientific rigour of health systems research including concepts, frameworks, measures and methods;
- Facilitate greater research collaboration and learning communities across disciplines, sectors, initiatives and countries.

For 2016, the HSG Board chose the theme of 'Resilient and Responsive Health Systems in a Changing World'. Given the turbulence of recent years, this theme was an obvious one. The Ebola epidemic in West Africa seriously disrupted and damaged the local health systems, which were anyway at an early stage of rebuilding following decades of conflict. The humanitarian crises in the Middle East were similarly challenging health systems through physical destruction, health worker deaths and migration, and high levels of need for health care. More slowly developing pressures on health systems, but with massive long-term implications, include increased burden of chronic diseases, and environmental challenges including climate change. As the theme description put it, 'health systems must be resilient – able to absorb the shocks and sustain the gains already made – or risk having decades of investment wiped out' (Health Systems Global 2016a).

But resilience – a supply side concept – must be matched by responsiveness if health systems are truly to be able to serve communities. Hence the call paired the concepts of resilience and responsiveness – responsiveness not just to current needs, but also to future needs. Responsiveness has been a health system attribute studied for many years, first brought to attention by the WHO 2000 World Health Report (WHO 2000). Resilience, however, is a more recent addition to the health system lexicon. While not a new term – it has for example been applied extensively in relation to an individual's capacity to survive major trauma – in recent years it has been used widely in a number of different disciplines and spheres (Castleden et al 2011). In the context of health systems, it has been used to refer to the capacity of a health system to both survive sudden shocks, such as disease outbreaks, and the ongoing strain of structural, policy, managerial and community instability (Gilson et al 2017, Barasa et al this volume). The hope of the theme call was that it would enable HSR2016 to 'explore ways of preserving public value and public goods in the face of systemic changes that populations, governments and health systems as a whole have to confront, both today and in the future' (Health Systems Global 2016a).

This supplement demonstrates the richness of the research presented at the Symposium, though it can provide just a tiny proportion of the material presented by the 2062 delegates from 101 countries at the 53 organised sessions, 248 oral presentations, 362 posters, and 155 e-posters, and 74 satellite and skills building sessions (Health Systems Global 2016b). The papers in this supplement comprise:

- 11 papers presenting original research and two commentaries
- 8 papers addressing aspects of resilience, and 3 of responsiveness
- Insights from 12 countries, ranging from the most vulnerable (e.g. DRC, Sierra Leone) to the relatively more stable and better off (e.g. Uganda, South Africa, Bangladesh), and providing evidence from two continents - Africa and Asia
- Studies relating to various aspects of health system functioning, especially health workers, but also use of information technology, management information systems, decentralisation of management, and outcome of services
- Papers testing methodological innovations and exploring conceptual and framing issues.

The papers also demonstrate the variety of data collection methods and types of data drawn on in health system research. Qualitative methods included in-depth interviews including those which elicit life histories, focus group discussions, and general observations. Quantitative methods included structured observations, interviews, and use of secondary data such as previously conducted large-scale surveys, and routine data from health management information systems (HMIS). Statistical approaches included various regression methods, modelling of outcomes, and use of geographical information systems. One study tested an approach to obtaining accurate human resources information, and another drew on action research.

Resilience was addressed from a number of different angles. Several papers included material drawn from Ebola-affected countries. Witter et al used life histories to draw lessons on how to enhance health worker resilience (comparing also with countries affected by other types of shocks), and Ling et al explored how the Liberian health system adapted to crisis, what aspects of resilience were prioritised by global and national actors, and how these related to local priorities. Sochas et al used HMIS data to demonstrate the magnitude of likely deaths due to decreased utilisation of routine health services in Sierra Leone.

Earthquakes represent another source of sudden shocks. Balen et al enquired about the use of Information and Communication Technologies (ICT) within both informal and formal health system responses to the earthquake in Nepal. They proved an important part of the informal responses by individuals and also relief agencies. But there was very limited use of ICT in the formal health system, reflecting broader challenges in improving ICT use in health systems across the world.

Other papers addressing resilience were concerned with the broader strengthening of aspects of health systems. Likofata et al tested an innovative open source approach to improving payroll information in DRC, demonstrating a huge problem of ghost workers receiving payment, as well as thousands of uncompensated health workers who could be paid by reallocating funds. Alonso-Garbayo et al explored the perceived scope for district health management teams in Uganda to use their decision space to improve human resource management, arguing that greater decentralisation of authority and resources is desirable.

The three papers on responsiveness address different angles, though all demonstrate the importance of developing and deploying appropriate tools to measure responsiveness. Joarder et al explored the relative responsiveness of publicly and privately employed physicians in Bangladesh, including a quantitative tool which demonstrated that private physicians scored higher in certain domains, and public physicians in other domains, thus adding more nuanced analysis to what is often a simplistic comparison. Responsiveness to local health needs was studied by Lee et al, looking at whether an index of readiness to deliver malaria services was related to degree of endemicity of malaria. They suggested that malaria control programmes might use the tool to identify under-performing facilities in malarious areas. And Rossouw et al tested for reporting bias according to educational status in the data set for South Africa from the WHO Study on Global Ageing and Adult Health (SAGE). They found large differences in responsiveness ratings between lowest and highest education groups.

As the commentary by Van de Pol emphasises, the concept of resilience (and indeed responsiveness) can be seen as just the latest fashion in global health systems debates, no doubt to be displaced in a few years' time by a new buzz word. As a number of authors also point out, it risks supporting the status quo rather than addressing fundamental inequalities of power and access to resources. However, given the complexities of health systems, there is never going to be only one lens through which to view health systems, and different ways of examining health system functioning can all provide valuable insights. The final commentary by Barasa et al, for example, argues that using the lens of complex adaptive systems to explore resilience can address the weaknesses highlighted in the resilience concept.

The papers in this supplement demonstrate the vitality of health systems research, provide useful information for local and global decision makers, and indicate areas for further development of the knowledge base of health systems research.

Anne Mills was an inaugural Board member of Health Systems Global, from 2012-2016

Acknowledgements

The preparation of this supplement has been overseen by Virginia Wiseman, with support from section editors Beverley Essue, Dan Maceira, Seye Abimbola, Jeremy Shiffman, Mishal Khan, and Yusra Shawar. We also thank Natasha Salaria for communications, Diana Epstein for managing the supplement, and the Health Systems Global Board for their guidance.

Castleden M, McKee M, Murray V, Leonardi G (2011). Resilience thinking in health protection. *J Public Health* 33: 369–377.

Gilson L et al (2017). Everyday resilience in district health systems: emerging insights from the front lines in Kenya and South Africa. *BMJ Global Health* 2017; 2:e000224. doi:10.1136/bmjgh-2016-00224

Health Systems Global (2016a). *Theme*. <http://healthsystemsresearch.org/hsr2016/about/theme/> accessed 09/08/2017.

Health Systems Global (2016b). *Vancouver Statement*.

<http://healthsystemsresearch.org/hsr2016/wp-content/uploads/Vancouver-Statement-FINAL.pdf>
accessed 09/08/2017.

WHO (2000). *World Health Report*. Geneva: WHO.