M8 Alliance Kyoto-Fukushima Statement
The World Health Summit Regional Meeting – Asia in Kyoto and Fukushima 2015

Meeting Emerging Challenges: Toward Responsive and Resilient Health Systems

In 2011, the massive earthquake, tsunami, and subsequent nuclear reactor meltdowns produced one of the most severe disasters in the history of Japan. Fukushima Prefecture was the most severely affected by this ‘triple disaster’. The impact of the triple disaster on health and the health system was extreme, with adverse effects continuing to be felt.

Hit by this severe natural disaster, the health system in Fukushima also faces a second challenge: a hyper-aging society. A transformed health system is an imperative if Fukushima is to be able to respond to future disasters and demonstrate resilience to the rapidly emerging needs of the Japanese society. Lessons learned from Fukushima provide an opportunity for the rest of Japan and other countries of the world to build more responsive and resilient health systems that are key to sustainable development.

In this statement, we, the members of the M8 Alliance, consider ‘Responsiveness’ and ‘Resilience’ as two critically important attributes of a sustainable health system. We define responsiveness as the capacity of providers to respond to health needs of the population in the event of a catastrophe (such as a natural disaster), rapid change (such as emerging new infections) or cumulative effects of contextual changes (such as aging of its population). We define resilience as the capacity of a system to sustain its activities and adapt to major changes it faces over time (population aging, epidemiological transition leading to chronic illness and disability, economic crises, and migration, for example). Sustainable health systems are a critical ingredient for sustainable development.

The aftermath of the triple disaster revealed societal cohesion, as well as the strengths in the responsiveness and resilience of Fukushima’s health system. The societal response and resilience to the disaster was exemplary: not only did the social fabric remain intact, the society was able to weave a stronger fabric to protect its members, especially the vulnerable. Social violence, witnessed elsewhere with natural disasters, did not emerge. Most health professionals remained in Fukushima after the disaster and they struggled to protect lives and health of people in Fukushima. Voluntarism was evident – providing much needed additional human resources. Yet, the responsiveness of the health system was challenged, and its resilience is under pressure as the health system tries to meet the ongoing needs of vulnerable populations, in particular the elderly. Responsiveness challenges included integration of community and hospital responses, speed of communication, managing varied messages emerging from official sources and the media, transport – with consequent adverse effect on supply chain management for critical supplies – and the shortage of health human resources. There was strong public demand for transparency, timely communication and information dissemination.
Fukushima embodies the challenges faced by the health system in Japan and in other countries globally. These health systems are subject to rapidly changing contexts, with external shocks such as natural disasters and economic crises as well shocks from within the populations they serve, such as aging, rapid rise of chronic illness, growing disability and emerging infections. Nothing less than a transformation is needed to create health systems in Japan and globally that are responsive and resilient to future shocks and emerging contextual challenges, including the rapid aging of society. Such a transformative change will require a set of actions we recommend below, not as a prescription but as a set of considerations to inform health system transformation.

**Addressing emerging infections and disasters**

**Responsiveness**

- Establish a framework for rapid decision-making and action in health systems.
- Ensure timely information dissemination to the public and gathering intelligence for rapid strategic responses.
- Create sufficient reserves to rapidly mobilize and fill health system “gaps” that emerge due to limited supply of critical resources and increased demand for these resources immediately after a disaster.
- Provide immediate access to transportation, communication, temporary shelter, clothing, and food to assure individual and population health security needs.
- Create just-in-time management systems to deploy mobile health teams units and health workers in health systems.
- Integrate medical and societal actions for a more comprehensive response.

**Resilience**

- Monitor the long-term effects of disasters, including mortality, disability, destitution, and social welfare in different population groups, especially the vulnerable, to inform current and future policies.
- Establish multi-sector action plans involving public agencies and the private sector.
- Enable community mobilization through social networks and build social capital.
- Allocate resources not according to historical burden, but to meet current and future needs.

**Responding to the needs of a hyper-aging society**

**Responsiveness**

- Emphasize healthy aging.
- Transform the response paradigm from “find it and fix it” to “predict risk and prevent”.
- Focus on proactive management of outcomes to enable reactive diagnosis and treatment.
- Focus on targeted services and support to maintain the health and functionality of frail elderly, who often have multi-morbidities and would otherwise use a disproportionate share of medical resources.
Resilience

- Transform the health system from a hospital-centric to a community- and primary care-centered model, where primary care physicians work within multidisciplinary teams and play an important role in personal, public, and environmental health.
- Establish more robust and comprehensive health information systems as a foundation for resilient healthcare systems.
- Foster development of “hybrid doctors” who provide personal health care and simultaneously manage population health.

Leadership and governance

Strong leadership and governance is critical for transforming health systems to be more responsive and resilient. We recommend:

- Developing and strengthening leadership at all levels of the health system to improve communication and decision making in the event of a disaster.
- Establishing a multi-sectoral and inter-sectoral response that involves all parts of the government and non-health institutions in health systems planning and implementation of strategic action plans.
- Involving the private sector in the building of partnerships to design and apply new technologies, information systems, and innovation.
- Engaging medical academia and academic health science centers to foster collaborative research, monitoring, and evaluation across disciplines to inform and support health systems reform.
- Introducing formal education programs into health care systems and health professional training courses to address the acquisition of responsiveness and resilience knowledge and skills.

Looking forward

We must learn from responses to external shocks and rapidly changing contexts. Building an evidence base through rigorous scientific research is critical for managing emerging challenges and future crises that provide opportunities for transformative change in health systems. Policy-makers, academics, and practitioners must collaborate to maximize the societal benefit of fostering the health workforce, generating new evidence for policy-making, and designing health systems that bridge gaps between primary care and specialized services delivered in hospitals. This call to action is directed not only to policymakers and academics, but to the whole of society.