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March 2015

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Health and Global Policy Institute



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This issue brief is based on research funded by Global Health Workforce Alliance of World Health Organization. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of Global Health Workforce Alliance of World Health Organization.

Post Disaster Mental Health in Japan: Lessons and Challenges

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The short and long-term social and mental health impact felt by disaster survivors is often equally as severe as the physical, structural and economic damage felt by communities. To address this, Japan has made disaster mental health care a pillar of its disaster response strategy. Yet, as with all well-conceived plans, implementation reveals both strengths and areas for improvement. After the March 2011 Great East Japan Earthquake, tsunami and nuclear accident (3.11), mental health care teams and centers served thousands of disaster survivors. This emphasized the strength and vibrancy of the Japanese mental health community, which mobilized almost immediately to devote their time, energy, and expertise. However, fundamental questions persist about the appropriateness and efficacy of the response and services that were delivered. Mental health and psychosocial issues range widely, encompassing fear, anxiety, dementia in the elderly, acute stress disorder, post-traumatic stress disorder (PTSD), depression, and suicide. The unique, complex combination of earthquake, tsunami and a severe nuclear accident caused unforeseen problems and diverse and immeasurable psychological effects on the affected population, exacerbated by forced relocations and loss of families, livelihoods, and property. As of January 2015, approximately [230,000](#) people have been relocated or dislocated. Japan continues to struggle finding a better approach to coping with post-disaster mental health issues.

The Tohoku coastal disaster occurred on a Friday afternoon (2:46pm), when family and community members were in school or at work. Because they were away from family at the time of disaster, many survivors suffer from ambiguous loss, child/parent loss, and survivor guilt. This contrasts with those affected by the 1995 Hanshin-Awaji Earthquake, which struck Kobe city at 5:46am, when families were together at home, leading to fewer orphans and families with lost loved ones. The severity of such disasters dislocate people into crowded evacuation shelters and small temporary housing units where survivors face a variety of socio-economic stressors, including loss of social status, loss of livelihood and an enormous and sudden shift in long-term outlook. Although Evacuees do have direct access to health interventions, frequently reported symptoms of mental distress include those associated with dementia, drug interruption, neglect, isolation, and continued psychological stress. Due to reasons that could include fear of what the

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future holds, loss of property and community, and increased psychological stress from prolonged shelter-living, the number of long-term care applications from older persons in communities near Tohoku's nuclear facilities jumped 150-400% between 2010 and 2012 (Kobayashi and Niwa, 2012). Displaced seniors with dementia are at high risk, as families struggle to provide care for them, elevating stress on both parties. Domestic abuse and alcohol problem worsen due to stress from prolonged temporary living situations and distressed economic status. People in Fukushima Prefecture continue to suffer from prolonged stress as approximately [120,000](#) residents continue to be dislocated, including those forced to evacuate, and those who left voluntarily for fear of the impact of nuclear radiation.

Characteristically stoic and known for their strength in concealing emotions, people in the Tohoku region prior to 3.11 were associated with a high prevalence of mental health issues, with suicide rates in the northern Tohoku region regularly higher than the national average. While not uncommon in other parts of Japan, but especially prevalent in traditional, rural areas like Tohoku, stigma is especially associated with mental illness, and 3.11 brought further exacerbation in a location where mental health resources were already severely lacking. More than [63%](#) of suicides associated with 3.11 were of persons 50 years old and older, and the number of suicides related to the disaster has been increasing, especially in Fukushima. Isolated death and disaster-affected death is a huge concern, where many older persons, including those with behavioral and psychological symptoms of dementia (BPSD) and with schizophrenia who were relocated to temporary housing and institutions.

After the 1995 Kobe earthquake, post-disaster responses were completely revamped. A rapid-response Disaster Medical Assistance Team (DMAT) system was introduced, as was, for the first time in Japan, a mechanism to address mental health issues using specially-created Mental Health Care Teams (MHCT). The policy and interventions were designed to cope with the problems identified by the Kobe earthquake, a relatively common, single, urban centered disaster, with relatively low loss of life but a high injury rate. The new response system did not function as well in coping with Tohoku's rare, massively complex, rural-based "triple" disaster with a low injury rate and high death rate. Consequently, a fundamental re-think is required to create a comprehensive and flexible response system capable of dealing with a variety of disaster scenarios which take into account Japan's unique cultural factors. Fundamental to this will be addressing inter-agency, inter-organization, and chain-of-command issues which proved highly-problematic after 3.11. In April 2013, the Ministry of Health Labour and Welfare (MHLW) and Japan's psychiatric institutions created a mental health information system and scheme for

psychiatrist-centered Disaster Psychiatric Assistance Teams (DPAT). However, how to coordinate an intra-agency network and enable comprehensive information sharing, allowing other medical teams or rescue forces access, remains undecided. In a nation where profound stigma is attached to mental health, separate mental health teams would seem inappropriate, whereas Public Health Teams (PHT) that incorporate both physical and mental health expertise could be more suitable and capable of dealing with a various health issues in the acute phase. If trained adequately, the PHT can identify high-risk individuals and provide medications if necessary. As part of Japan's overall decentralization and community-enabling programs, local primary health workers should be trained to carry out community-level mental health outreach. This will also aid in reducing the stigma of accessing mental health care services, as persons in need may feel less intimidated to approach a team of mixed health professionals.

Increasingly critical is mid-long term monitoring and focused care for those populations at risk of PTSD and other chronic symptoms. Due to closure of all evacuation shelters in January 2012, a large number of people disseminated into temporary housing units, private apartments, and hospitals or institutions. Outreach and community mental healthcare consequently increase in importance. Since 3.11, responsibility for long-term mental health care has shifted to the prefectures through 15 mental healthcare regional centers, established with 25.8 billion yen (FY2012-14) of central government funds, which will be headed by local universities. These centers are expected to provide comprehensive and outreach mental health care support; yet, no means to evaluate cost to outcome efficacy currently exists, so that lessons learned will not be properly reflected in future policies and budget allocations. This critical deficiency is partly due to lack of evaluation mentality among the Japanese mental health community.

Japan remains in the adolescent stages of development in the field of mental health, which may play a role in the delayed application of evaluation measures. A common belief shared amongst Japanese mental health experts is that program evaluations in disaster mental health can induce increased stress on an already traumatized population. Ethical issues arising in collecting survey or other personal data from participants are also mentioned as reasons to be wary of evaluations of mental health services (Y. Suzuki, 2012). In fact, the National Center of Neurology and Psychiatry (NCNP) guidelines do not mention evaluation and monitoring of mental health activities, which is likely why municipalities, prefectural offices, or even the MHCT themselves did not have an evaluation mechanism in place. The request-based dispatching scheme for MHCT lacks incentive for evaluating mental health care results, as the MHCT cost is charged to affected local governments, although the majority is paid by the national government in case of severe disaster.

Therefore, no incentive exists for any party to develop a mechanism to assess how effectively mental health activities operated. What is urgently needed is a set of concrete and measurable objectives that can be communicated to all organizations possibly involved in the event of a disaster. A standardized method for measuring progress toward these objectives must also be established. This should comprise a limited number of measurement tools, such as K6/K10 and impact of event scale, revised (IES-R),² to increase analyzability; training for the ethical administration of these tools; and a system for sharing anonymized data between governments, institutions and other essential stakeholders.

Stigma remains a high barrier to accessing mental health services in Japan. Given the great stigma surrounding mental health in the Tohoku region, the local population will need increased sensitization and support in accessing mental health services, including the provision of trained personnel other than psychiatric specialists. However, Japan has a highly psychiatrist-centered system; and less emphasis placed on therapists, social workers, or public health nurses to be widely available to increase ease of access to care. Even though the MHLW recognizes the importance of more co-medicals to be included in expert teams and the importance of community-building and outreach, best-practice approaches for highly stigmatized populations for mental health have not been established due to disagreement on methodology among experts. Instead of relying on psychiatric institutions to set disaster-mental health policies, it is critical to disseminate basic understanding of disaster-mental health to the public. Japanese authorities therefore need to set basic principles, such as to adopt training guidelines that do not require psychological or psychiatric expertise. This does not conflict with NCNP direction because it has adopted the international concept of Psychological First Aid (PFA), as has the Cabinet Office, and provided training for humanitarian aid workers and mental health professionals (Yamashita and Shigemura, 2013). By proactively pushing PFA to be widely available for the general public, potential first responders, volunteers and NGOs can learn in advance how to approach disaster survivors, how to listen and what to observe and how best to connect with survivors and make best use of available resources. Volunteers, community members, and primary health workers have to be empowered to assist with critical outreach activities, and refer to psychiatrists when needed. Such activities could benefit from extension of tele-medicine practices. Given the shortage of mental health resources in rural areas, a psychiatric tele-medicine service would bestow

² The K10 and K6 scales were developed with support from the U.S. government's National Center for Health Statistics for use in the redesigned U.S. National Health Interview Survey to measure a person's level of depression. It has been translated to more than 10 languages including Japanese. IES-R is the revised version of impact of event scale to measure the post-traumatic stress responses and/or symptoms. The validity of Japanese version of K6/K10 and IES-R has been ensured. See Sakurai K. et al. "Screening performance of K6/K10 and other screening instruments" 2011; and Asukai N. et al. "Reliability and validity of the Japanese-language version of the impact of event scale-revised (IES-R-J)," 2002

significant benefits to Japan's countryside communities. It is wise to explore various means, including tele-medicine, for improving mental health care provision to the nation's underserved populations.

Conclusion

Japan was forced to deal with the world's worst and most complex 'triple' disaster. Yet, this experience could be used to create better disaster response mechanisms and processes as well as help shape international disaster-response guidelines. By setting measurable clear-cut goals and appropriate evaluation tools, Japan can introduce more effective systems and increase its capacity to deal with the next disaster, whatever it may be. A stronger commitment to overhauling and improving the post-disaster mental health care coordination system is needed and issues revealed from Great East Japan Earthquake must be addressed sincerely, accurately and comprehensively. By evaluating both the mental health needs of survivors and the mental health care services, disaster mental health professionals will be able to more effectively provide appropriate care to the communities they serve. In responding to natural and man-made disasters, psychosocial and mental health interventions will need to be tailored to the prevailing unique combination of risk, protection, environmental and cultural factors. By reflecting upon the Tohoku experience, policymakers in Japan and around the world can continue to improve upon their disaster response and recovery systems upon which the lives and welfare of future survivors of major disasters will so desperately depend.

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