respond to the unique pace and culturally distinct factors influencing this disaster.

Methods: A non-probability sample of 273 farmers was identified and surveyed in 2007. The survey included standardized assessments of health status: the Brief Patient Health Questionnaire (Brief PHQ), the Short Form (SF)-36 Health Survey, the Psychological Stress Measure, and the Medical Outcomes Study (MOS) Social Support Survey.

Results: Sixty (23.3%, 95% CI 18.1 – 28.4) of the 258 respondents who provided Brief PHQ ratings exceeded the traditional cut-point of 10 + on the scale indicating presence of depression. As many men as women reported depression. An inverse relationship between financial comfort scores and depression was highly significant. Depression was significantly related to poor health status and to a decline in health in the last year. In linear regression, poor financial comfort, poor health status, and a decline in health in the last year were related to higher rates of depression even when age and sex were controlled.

Conclusion: The results support the contention that a major disaster was created for farmers by the BSE outbreak and that it had long-term mental health consequences. These results also highlight the need for disaster management building on resilience and tailored to the unique needs of this population.

Understanding the Psychological Impacts of Disasters on First Responders and Health Care Professionals in Magway, Myanmar

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Study/Objective: To determine the psychological impacts of disasters on first responders and health care professionals in Magway, Myanmar.

Background: According to the UN Risk Model, Myanmar ranks as the "most at-risk" country for natural disasters. Past events, including Cyclone Komen of 2015, have resulted in progress in disaster management, processes, and law. They have also resulted in recommendations, including strengthening coordination, engaging in disaster response drills, and enhancing communication. While the number of victims and survivors of disasters have been well recorded by local clinics, a lack of evidence remains surrounding the psychological impacts of disasters on first responders and health care professionals in Myanmar.

Methods: An epidemiological study was conducted in July 2016 using a written survey in the local Burmese Language with 119 items that assessed demographics, type of disaster response, and psychological status. A total of 234 participants, 48 (21%) health care professionals, 45 (19%) firefighters, and 141 (60%) disaster volunteers, completed the survey. 160 were male, 73 were female, and the average age was 33 years. The data were organized using Excel and analyzed using SPSS and the Depression, Anxiety, and Stress Scale.

Results: The psychological health of first responders in Magway was determined as follows: no depression (18%), no anxiety (19%), no stress (48%), mild depression (10%), mild anxiety (4%), mild stress (15%), moderate depression (15%), moderate anxiety (16%), moderate stress (16%), severe depression (22%), severe anxiety (14%), severe stress (16%), extremely severe depression (29%), extremely severe anxiety (48%), and extremely severe stress (5%).

Conclusion: The psychological health status of disaster responders in Magway, Myanmar include high incidences of depression, anxiety, and stress. Further studies are needed to explore the causation and potential interventions to improve the psychological well being of disaster responders in Myanmar.

Enhancing Community Resilience during Emergencies by Building Organizational Resilience in Routine Times

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Study/Objective: To examine the influence of support groups utilizing an integrative model of coping and resiliency (BASIC-PH) on the resilience of senior decision makers. To help the participants develop coping mechanisms for daily stressors and extreme situations, in order to enhance their personal and organizational resilience.

Background: The impact of resilient organizations on community resilience during emergencies has been established. Organizations provide social, occupational and economic frameworks for community members. Senior decision makers play an essential role in society while being exposed to extreme pressure, loneliness and conflicts. Management of their day-to-day challenges and extreme scenarios can benefit from improving their coping strategies.

Methods: A program was devised to strengthen the preparedness of the participants by developing and enhancing their stress coping skills. The BASIC PH resilience model, which was developed in Israel and has been in use for 35 years in various types of organizations, was applied to four support groups of senior decision makers routinely experiencing high

level of stress, 36 participants in total. The components of the BASIC PH model were put into practice using cognitive, emotional and creative supporting tools. The sessions culminated in the creation of a teamwork plan designed to preserve the program's achievements.

Results: The act of sharing difficulties within the support group generated cohesion and hope, which are components of resilience. The relationships within the group became more open, and the participants were more easily able to communicate their difficulties and felt more connected (also factor of resilience). The intervention provided the participants with a support framework, and enhanced their ability to cope with stressful situations.

Conclusion: Organizational support based on a resiliency model can strengthen the individual's ability to cope with daily stressful situations and enhance cohesion, that in turn may have a positive influence on the organization's ability to handle changes and crisis.

First Official Disaster Relief Activities of the Japan DMORT Association in Collaboration with Police Department in the 2016 Kumamoto Earthquakes, Japan

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Study/Objective: To report the first disaster relief activities of the Japan DMORT association officially collaborating with the police department of a disaster stricken area.

Background: The 2016 Kumamoto Earthquakes are a series of earthquakes, including a magnitude 7.0 main shock on April 16, 2016 and a magnitude 6.2 foreshock on April 14th, which struck Kumamoto and Oita prefectures, Japan. Fifty people were killed and about 3,000 people were injured. The Japan DMORT Association is a private society which consists of physicians, nurses, forensic pathologists, and social workers. We had planned to support disaster victims' families, but had been frustrated by the police's systematic barriers because, in Japan, disaster victims' identification and care of their families had been monopolized by police.

Methods: On April 15th, a nurse and a driver/secretary were dispatched to the disaster area after quick negotiation by DMORT administrator with Kumamoto prefectural police, through the police department of our own prefecture. On April 16th, we were advised to work in the makeshift morgue in the police school.

Results: On April 16th and 17th, we assisted families of 17 victims when they saw the corpses and listened to their grieving stories showing sympathy. We also provided makeup for the victims. Some of the families showed appreciation to us. These activities helped the members of the police's victim supporting section, to concentrate on victim's identification and paperwork. We paid attention to the police

through conversation and provided them the manuals for caregivers' stress.

Conclusion: Activities of Japan DMORT as specialists of grief care in collaboration with police, are supportive for both victims' families and caregivers in early phases of disasters.

Optimal Protection of Networks in Social Media while Counteracting Disasters and Emergencies

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Study/Objective: The study is devoted to optimal protection investment for networks, to withstand diverse threats and improve efficiency of social media in emergency management.

Background: Some recent works have offered formal models that reveal features and importance of balanced security expenses. However, best security practices in networks are not thoroughly presented.

Methods: To clarify the issue we have stratified social media systems into three components: device (computer, iPad, IPhone), software communication environment (Facebook, LinkedIn, etc.) and social (interpersonal) ones. A structurally dependent security model for each strata is developed using consideration of threats, vulnerabilities and countermeasures for individual nodes. Original program tools are designed for estimations of topological risks for the networks, which element 'nodes' are provided with protection and 'links' are inserted for the component consolidation in whole. Both processes depend on the financing volumes.

Results: Several representatives of real networks, which are of different nature and synthetic ones that reflect social relations, have been selected to simulate their exposition to structural threats. Two different financial strategies are taken into consideration. The first strategy corresponds to a uniform distribution of expenses among all the elements. Another one implies dividing the budget proportionally to 'node' connectivity. The calculations demonstrate the latter as the more effective option for protection and consolidation. We show that among social networking components, device networks manifest their greatest sensitivities to coordinated threats of disintegration and robustness to random ones. The metric of a network security level is proposed, and it's found that optimal investment does not demand the value of this metric to