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