## Abstracts of Scientific Papers-WADEM Congress on Disaster and Emergency Medicine 2017

Community Disaster Risk Reduction using Indigenous Knowledge, Integrating with Climate Smart Interventions in Coastal Andhra Pradesh

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**Study/Objective:** Using indigenous techniques to reduce the dependency on outside resources.

Background: Andhra Pradesh (AP) is a state that has suffered the most from the adverse effects of severe cyclones, floods, and drought. It is estimated that about 90% of AP's total territory are vulnerable to tropical storms, floods, and related hazards, while the coastal belt is even more vulnerable to natural disasters, and the state's population is compounded by the recurrent impact of disasters.

Methods: Vulnerability Analysis, Situational Analysis, Participatory Vulnerability Capacities Assessment, Hazard Hunt Capacity building.

Results: The project is a model to all the vulnerable communities; capacities of vulnerable communities are increased and confident of combating the disaster situations. Innovative elements and results: Horizontal trainings by trained taskforce members in other vulnerable villages are conducted on their own initiation. Cost Effectiveness: There is no need to purchase anything from outside to implement this initiative at vulnerable villages. Workshop with the Education Department officials: Workshops with the department and regular one-on-one meetings have been organized. Lessons Learned: Flexibility and patience in order to survive and grow the structures, admit to mistakes, and correct them.

Conclusion: CHALLENGES: Initially, there was no response from the government as well as from the local communities. How to improve similar initiatives in the future? A similar intervention can be implemented in other villages overcoming the above mentioned challenges, involving the trained children and task force groups of this project. Replication: This intervention can be replicated in any part of the world, at a vulnerable village or school based on the type of disaster - but same methodology can be adopted for any type of disaster. This can be replicated to any context either for Tsunami or Cyclone prone, floods or flash floods, fire accident zone, or in a peacetime.

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## Risk Factors of an Earthquake Hospitalized Patient Death in the Wenchuan Earthquake Victim Database

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**Study/Objective**: This paper is aimed at identifying the contributing factors of mortality and providing a clinical reference for the management of those injured in earthquakes.

Background: Few epidemiological studies have been conducted on the determinants of the mortality of patients hospitalized after an earthquake. The West China Hospital Earthquake Database includes earthquake injury cases who were treated in Sichuan Hospitals in the Wenchuan Earthquake, the Luahan Earthquake, and the Yushu Earthquake.

Methods: A hospital-based, case-control study was conducted. Records from West China Hospital Earthquake Database included all deaths (n = 36) due to earthquake injuries. Controls were the quake survivors from the same hospital. A conditional logistic regression was performed to assess the Odds Ratio (OR) of variables used in the study. A chi-squared test for trend was performed to reveal the possible relations between risk factor (variable) number and case fatality.

Results: People with a severe Traumatic Brain Injury (TBI) had the greatest risk of death (adjusted OR = 63.3). Multisystem Organ Failure (MSOF) and infection significantly increased the risk of earthquake-related death (adjusted OR = 87.8 and 11.2).

Conclusion: Based on the West China Hospital Earthquake Database, Severe Traumatic Brain Injury, Multisystem Organ Failure, and infection are the significant determinants of earthquake-related inpatient death.

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## Physical Rehabilitation in the Context of Natural Disasters: A Case Study in Nova Friburgo, Rio de Janeiro, Brazil

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**Study/Objective:** To identify and analyze the needs of physical rehabilitation, and the health care seeking behavior related to recovery and preservation of physical capacities of people affected by disaster

Background: Disasters may cause physical injury and generate incapacities and deficiencies as consequences. In January 2011, the major disaster registered in Brazil occurred in the Mountain Region of Rio de Janeiro. Rains caused floods and landslides, killing approximately a thousand people.