# Poster Abstracts 17th World Congress for Disaster and Emergency Medicine

(P1-1) The Daily Risk

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Background: Can Health Professionals do something to diminish the risks in big cities? Civilian society is in need of protection and training when emergencies occur. The objective is to develop the capacity to feel competent when daily violence occurs and to diminish the risks of possible tragic, daily and unexpected events. Inexperience and lack of knowledge has a direct impact on Public Health. Through orientation and training with appropriate tools we prevent and diminish the effects on daily catastrophes: insecurity, violence, loss of material things, mourning to elaborate for loss after tragedies, car accidents, effects on financial emergencies, social alert states, etc.

Methodology and Objective: Through questionnaires and observation directed to city residents data was generated for evaluation. We reached the conclusion that non-government organizations (NGO) and government organizations (GO) together can diminish the effects of daily tragedies. Approximately 4500 citizens were trained directly and indirectly to give them the tools and techniques to support groups in communities in order to diminish the risk among high impact psychosocial events and abrupt events produced by nature or men that expose persons to disruptive situations that need to be solved. The modules include First Aid, Psychological Support, Debriefing and Stress.

Conclusion: Diminishing the risks depends on the people's vulnerability, resilience, social, institutional and family support groups and training. The use of participative techniques allows participants to assimilate the content of the course directed to men and women from different ages. It is necessary to generate an emergency culture for a society at risk.

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(P1-2) Incidence and Pre-Hospital Care of Acute Coronary Syndrome in Emergency Department Banja Luka

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Introduction: The acute coronary syndrome is a leading cause of heart death among adults. The treatment of such patients begins during the first contact with the doctor who is in most cases neither an internist or cardiologist, but an emergency medicine specialist or general practitioner working in the emergency department. For that reason it is of great importance to educate doctors who will be able to establish a fast and precise diagnosis,

start therapy and organize quick transport to the nearest catheterization room or coronary unit.

Objective: The primary objective was to measure frequency of patient's visits to the Emergency Department because of an acute coronary syndrome. The Secondary objective was to examine the choice of treatment in pre-hospital conditions.

Methodology: Through the statistical retrospective analysis we collected the data from the Emergency Department protocols for the period between June 1, 2008 and December 31, 2008.

Results: In 14,986 patients during the six-month period, 343 of them had acute coronary syndrome. Men were more affected ((59.5%) than women (40.5%). Most cases belonged to the age group from 65 to 80 years (39.6%) and prevalence after 50 years shows abrupt growth. According to the diagnoses, most patients had unstable pectoral angina (42%) and then followed stenocardia (31%) and AIM (27%). Other therapy included NTG (22%), antihypertensives (21%), acetyl-salicylic acid (20%), analgesics (13%), antiarrhythmics (4%). Fifty-seven percent of the patients had complications. STEMI was diagnosed in 69% of patients, and most often the anterior wall was involved (35%).

**Conclusion:** The diagnosis of acute coronary syndrome was established in 343 patients based on the clinical image, electrocardiographic changes and level of cardiospecific enzymes (troponin T).

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#### (P1-3) Frequency of Cerebrovascular Diseases and Risk Factors in Emergency Department in Banja Luka

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Introduction: Cerebrovascular disease include all disorders in which a part of brain is transiently or persistently damaged by ischemia or bleeding and/or where one or more blood vessels of brain are primarily damaged by pathological processes. The research confirmed the influence of risk factors.

Objective: The primary objective was to measure frequency of patients with cerebrovascular diseases in the Emergency Service during the period from September 1, 2008 to March 1, 2009. The secondary objective was to prove co-morbidity between the risk factors and cerebrovascular diseases.

Method: Numerical indicators for patients with cerebrovascular diseases are extracted retrospectively by statistical work-up for the six-month period. The data indicating the risk factors predisposing cerebrovascular diseases are obtained through the (hetero)anamnesis.

Results: From the overall number of 24,600 patients, 127 patients had a diagnosis of cerebrovascular diseases. The frequency of cerebrovascular diseases is linearly increasing with age; after the age of 50, frequency is doubled. The frequency of cerebrovascular diseases is higher in women than in men, the role of heredity is significant, and risk factors influenced development of cerebrovascular diseases as follows: 50.40% of patients had hypertension, 16.54% diabetes mellitus, 48.82% smoking cigarettes, 40.94% obesity, 20.47% alcohol abuse, 11.02% migraine-like headaches, 30.71% cardiovascular diseases and 22.05% hyperlipidemias.

Conclusion: Cerebrovascular diseases are increasing in developing countries. The main reason is poor control of risk factors. In the majority of cases it is possible to produce decrease of frequency of cerebrovascular diseases by elimination and reduction of risk factors through the change of life style. Pre-hospital urgent concept of therapy and improving of organization of emergency service will contribute to decreasing mortality and morbidity of cerebrovascular diseases.

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## (P1-4) Building Resilient Extended-Care Facilities during Natural Disasters – Lessons Learned From the 2007 Tulsa, Oklahoma Ice Storm

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Building Resilient Extended-Care Facilities During Natural Disasters - Lessons Learned from the 2007 Tulsa, Oklahoma Ice Storm. In the last decade, increasing importance has been placed on building resiliency into critical healthcare systems. This has meant shifting the paradigm from focusing on response to one of preparedness. In 2007, an ice storm as part of a series of winter storms occurred in the south central United States causing extensive power outages, in Tulsa, Oklahoma, for a period of up to 3 weeks. Five of the six tertiary care hospitals in Tulsa suffered power outages, phone system failures or oxygen and/or suctioning system failures. Local water treatment plants were without power for 48 hours. During this time, multiple extended-care (nursing home) patients were discharged to homes or transferred to hospitals because the nursing homes were not prepared to cope with an extended power outage. This paper is a retrospective analysis and discussion of lessons learned with respect to the vulnerability of these extended-care healthcare systems and the public health response during natural disasters.

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### (P1-5) How Does Land use Pattern could Effect to Mitigate the Risk Flash Floods" a Success Story on a Model Project Implementing at the Upper Catchments Area of Badullu River in Sri Lanka

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The watersheds are the home for our key natural resources and have been one of the basic elements in land use management systems throughout the hydraulic civilization of our country.

"Badulla River" is one of the main watersheds in Sri Lanka extend about 1400sq.km consisting five sub catchments high steep lands. It mainly represents tea estates and agricultural lands with a weak land use pattern due to poor maintenance and unsuitable human involvements. This has contributed to reduce the rain water infiltration in to the soil increasing a huge amount of runoff water drainage. Situation has resulted frequent floods even in a small precipitation causing widespread damages to community. Hence, an initial project was started on surface water management, soil conservation and livelihoods development to control the frequent floods highlighting the urgent actions for an optimal land use management with support of field experts. Improved surface water drainage and soil conservation are the main options that might lead to mitigate the flash floods. Efforts were sharpened by integrating GIS Mapping for such initiation to enhance the effectiveness of the design. Results achieved could address many issues in relation to flood protection, habitat management, water protection and water quality management. Food risk generally related to the specific characters in a particular catchments and this model project proved that such issues can effectively be addressed through a joint program properly designed.

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### (P1-6) Community-Based Disaster Management: An Effective Approach in Bangladesh

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Natural disaster like cyclone, tidal bore, flood, tornado etc. is a common phenomenon in Bangladesh. Tropical cyclones associated with tidal surges occur at the rate of 1.3 a year in the coastal districts, cyclone in 1970 and 1991 claimed over 500,000 and 138,000 lives respectively in the coastal districts and offshore islands. The vulnerability is so miserable that they have to go and settle in the newly accreted land in Bay of Bengal and its surrounding areas which is occasionally hit by tidal bore or devastating cyclone. The main susceptibility comes from weak social and economic structures of the country. Housing quality, preexisting poor health and nutritional status, social welfare infrastructure, and economic resilience determine the magnitude of a disaster's effect and its long term consequences. In recent years, improved early warning systems and preparedness measures have helped reduce mortality, but no significant change in morbidity. However the effective disaster preparedness systems and capabilities for post-disaster emergency phase usually provides through volunteer contributions and local authority at the neighborhood level. The government's relief team, NGOs and foreign teams took couple of days to few weeks to start operation properly after devastating disasters like Sidr in 2007. However the basic survival and emergency assistance like clothes, shelter, food and medicine which saved thousand of lives were managed by community people themselves. Active participation of local communities, those have rich experience of coping with natural disaster both in preparedness and emergencies are essential for successful disaster reduction policy and practice, also putting value on our traditional social and cultural bondage. So strategies for disaster preparedness should be focused at family