World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:11, No:01, 2017

## Knowledge, Attitudes, and Practices of Army Soldiers on Prehospital Trauma Care in Matara District

Authors: Hatharasinghe Liyanage Saneetha Chathaurika, Shreenika De Silva Weliange

Abstract: Background and Significance of the Study: Natural and human-induced disasters have become more common due to rapid development and climate change. Therefore hospitalization due to injuries has increased in the midst of advancement in medicine. Prehospital trauma care is critical in reducing morbidity and mortality following injury. Army soldiers are one of the first responder categories after a major disaster causing injury. Thus, basic life support measures taken by trained lay first responders is life-saving, it is important to build up their capacities by updating their knowledge and practices while cultivating positive attitudes toward it. Objective: To describe knowledge, attitudes and practices on prehospital trauma care among army soldiers in Matara District. Methodology: A descriptive cross sectional study was carried out among army soldiers in Matara district. The whole population was studied belonging to the above group during the study period. Self-administered questionnaire was used as the study instrument. Cross tabulations were done to identify the possible associations using chi square statistics. Knowledge and practices were categorized in to two groups as "Poor" and "Good" taking 50% as the cut off. Results: The study population consists of 266 participants (response rate 97.79%). The overall level of knowledge on prehospital trauma care is poor (78.6%) while knowledge on golden hour of trauma (77.1%), triage system (74.4%), cardio pulmonary resuscitation (92.5%) and transportation of patients with spinal cord injury (69.2%) was markedly poor. Good knowledge is significantly associated with advance age, higher income and higher level of education whereas it has no significant association with work duration. More than 80% of them had positive attitudes on most aspects of prehospital trauma care while majority thinks it is good to have knowledge on this topic and they would have performed better in disaster situations if they were trained on pre-hospital trauma care. With regard to the practice, majority (62.8%) is included in the group of poor level of practice. They lack practice on first-aid, cardiopulmonary resuscitation and safe transportation of the patients. Moreover, they had less opportunity to participate in drills/simulation programs done on disaster events. Good practice is significantly associated with advance age and higher level of education but not associated with level of income and working duration of army soldiers. Highly significant association was observed between the level of knowledge and level of practice on prehospital trauma care of army soldiers. It is observed that higher the knowledge practices become better. Conclusion: A higher proportion of army soldiers had poor knowledge and practice on prehospital trauma care while majority had positive attitudes regarding it. Majority lacks knowledge and practice in first-aid and cardiopulmonary resuscitation. Due to significant association observed between knowledge and practice it can be recommended to include a training session on prehospital trauma care in the basic military curriculum which will enhance the ability to act as first responders effectively. Further research is needed in this area of prehospital trauma care to enhance the qualitative outcome.

Keywords: disaster, prehospital trauma care, first responders, army soldiers

Conference Title: ICDEM 2017: International Conference on Disaster and Emergency Management

Conference Location: Zurich, Switzerland Conference Dates: January 13-14, 2017