

emergency nurses experience secondary traumatic stress and compassion fatigue at significant rates. Many studies, including a meta-analysis, explore the correlation between burnout and secondary traumatic stress in workers exposed indirectly to trauma. This study seeks to explore the correlation between treating victims of intentional acts of violence in a mass casualty incident, and Emergency Department staffing changes.

Background: On July 20th 2012, a gunman opened fire in a movie theater in Aurora, Colorado, killing 12 and injuring 70 others. There were 23 victims treated in the Emergency Department of a local hospital, and additional patients were treated at two other local hospitals.

Methods: The frequency of terminations, department/unit transfers, and sick-days will be compared to the year prior to the mass casualty incident. Statistical variances will be analyzed and inferences reported.

Results: Preliminary informal data shows a larger than expected turnover in nursing at three local hospitals receiving patients from the Aurora Theater Shootings. Results may reveal implications for future staffing, and staff interventions post-mass casualty incidents in Emergency Departments.

Conclusion: s will discuss the effects of mass casualty incidents on emergency nurses and implications for future practice. Effects of mass casualty incidents are wide and varied, but relatively little research has been conducted into the effects on those treating patients in a hospital setting. Future research should explore the many repercussions for healthcare workers, and effectiveness of various interventions aimed at understanding and assisting with the psychological impact of mass casualty incidents.

Prehosp Disaster Med 2017;32(Suppl. 1):s141–s142

doi:10.1017/S1049023X17003922

Lessons Learned: How Much do we Really Take Forward?

Sandra Richardson, Paula (Polly) Grainger

Christchurch Hospital Emergency Department, Canterbury District Health Board, Christchurch/New Zealand

Study/Objective: This research focuses on the significance of learning from existing research, and the degree to which this occurs in the practice setting. The New Zealand emergency setting is used to present a case study identifying perceived utility of research findings.

Background: New Zealand has experienced a number of major earthquakes, with a series of significant quakes in 2010 following an initial 7.1 magnitude event, and more recently a second series of major earthquakes commencing with a 7.5 magnitude quake on November 14, 2016. There have been numerous studies in the intervening time period; the intention of this study is to identify the preparedness and awareness of staff of the recommendations from previous research, either from the NZ studies or from international research.

Methods: A survey of staff in the Wellington and Christchurch hospital EDs is being undertaken, together with a series of individual interviews seeking to understand where individual nurses gain knowledge in relation to disaster preparedness. These findings will be presented, together with the results from an integrated review of the literature around this topic.

Results: From the survey and interviews will be formulated and incorporated into the presentation prior to the conference.

Conclusion: Current literature suggests that there is a need to focus on disaster education for nurses, in both under and postgraduate levels. What has not been clearly shown is the degree to which nurses working within areas of known risk, whether from earthquakes or other natural disaster, are able to integrate the 'lessons learned' from previous experiences into their current workplace settings. This study hopes to clarify the degree to which nurses are aware of existing research regarding natural disaster threats in a country where this is a recognized hazard.

Prehosp Disaster Med 2017;32(Suppl. 1):s142

doi:10.1017/S1049023X17003934

A Study to Assess the Determinants of Self Extubation, the Predictive Factors for Reintubation, and the Role of Documentation and Compliance to Protocol in Reducing Reintubation. A Tertiary Care Neuro Trauma ICU

E.B Ashitha, Aswathy Indira

Nurse Informatics, Jai Praksh Narayan Apex Trauma Centre, AIIMS, New Delhi/India

Study/Objective: A study to assess the determinants of self extubation and the predictive factors for reintubation, and the role of documentation and compliance to protocol in reducing reintubation in a tertiary care Neuro Trauma ICU.

Background: Endotracheal extubation and reintubation are frequent events in the Intensive Care Unit's throughout the world, that can cause significant morbidity and mortality. Factors contributing to these events are not well recognized in Neuro patients, and needs to be explored further. The objectives of the study were to assess the determinants of self extubation in Traumatic Brain Injury (TBI) and Spinal Cord Injury (SCI) patients, to determine the predictive factors for reintubation, and to assess if ensuring documentation and compliance to protocols will be useful in reducing the rate of reintubation.

Methods: An intervention based observational study was done in a Level III, NeuroTrauma ICU, Jai Prakash Narayan Apex Trauma Center (JPNATC), AIIMS. The intervention was the introduction of an extubation/reintubation register and check list, maintained by Neuro-nurses. All intubated patients of TBI and SCI admitted during a six month period prior to intervention (May 1, 2014 - October 30, 2014) and six months following the intervention (November 1, 2014 - April 31, 2015) was included. The data collected from the Extubation Reintubation Register and a checklist were retrospectively analyzed.

Results: After the implementation of the register, reintubation rates reduced to 11% from 24% in the pre-implementation phase, and this was statistically significant ($p < 0.001$). Self extubation rates were found to be more in males, and in patients with head injury. The age group with maximal frequency of self extubation was 20-40 years. Self extubation was found to be higher when the assigned nurse cared for more than 1 patient in ICU. Reintubation was found to be

significantly associated with age, weaning status and GCS of the patient ($p < 0.05$). Patients with lower GCS had higher chances of reintubation. Reintubation was not associated with sex, operation status and time of extubation.

Conclusion: The rate of unwanted extubations and subsequent reintubations in Neuro ICU, can be decreased with protocol based monitoring, and through well maintained registers by neuro nurses. The knowledge of determinants of self extubation and the predictive factors of reintubation can be used as an effective tool by Nurses, for the prevention of self extubation and accompanying complications.

Prehosp Disaster Med 2017;32(Suppl. 1):s142–s143

doi:10.1017/S1049023X17003946

Assessment of the Knowledge and Skills in Caring for Life Threatening Arrhythmias among Nurses working in Critical Care settings at Muhimbili National Hospital, Dar-es Salaam, Tanzania

Dinnah I. Rubwanya

Emergency Medicine Department, MUHIMBILI NATIONAL HOSPITAL, DAR ES SALAAM/Tanzania

Study/Objective: The main objective of this study was to assess knowledge and skills in caring for life-threatening arrhythmias among nurses working in critical care settings at Muhimbili National Hospital (MNH).

Specific Objectives: 1. To determine the level of knowledge among nurses regarding caring for life-threatening arrhythmias in critical care settings at MNH. 2. To recognize skills of nurses regarding caring for life-threatening arrhythmias in critical care settings at MNH. 3. To identify barriers to acquiring higher knowledge and skills in caring for life-threatening arrhythmias among nurses in critical care settings at MNH.

Background: Life-threatening arrhythmias, if not intervened immediately, can cost a patient's life. There is no clear understanding on the nurse's knowledge and skill level in the areas of life-threatening arrhythmias, caring, and arrhythmia identification at Muhimbili National Hospital (MNH). Meanwhile, the intensity of barriers met by nurses on achieving higher levels of knowledge and skills in developing countries, including Tanzania, are significantly not analyzed. The aim of this study was to assess knowledge and skills in caring for life-threatening arrhythmias among nurses working in critical care settings at MNH.

Methods: A descriptive, cross-sectional study design was used while a convenience sampling method was employed. Data were analyzed by using SPSS Version 20.0. Results were presented in frequencies and percentages and presented using figures, tables, and text.

Results: The majority of the participants (60%) were identified as having high knowledge, while observational skills in caring for life-threatening arrhythmias among study participants was generally poor (15.6%). The most barriers identified in acquiring higher knowledge and skill was stress caused by overwhelming workload (68.8%).

Conclusion: The study revealed that nurses have a high knowledge level; however, the observational skills were low in

caring for patients with life-threatening arrhythmias. A high level of knowledge might be due to training performed; yet skills were low due to minimal usage of available equipment or guidelines.

Prehosp Disaster Med 2017;32(Suppl. 1):s143

doi:10.1017/S1049023X17003958

A Survey on Disaster Preparedness Knowledge and Attitudes of BAVU Nursing Department Students

Özcan Erdogan¹, Akif M. Donmez², Gizem Asar³, Duygu Yilmaz³

1. Disaster Management, bezmialemler vakif university, istanbul/Turkey
2. Dİsaster Medİcİne Doctorate Programme, BEZMİALEM VAKİF ÜNİVERSİTY INSTITUTION OF HEALTH SCIENCES, ISTANBUL/Turkey
3. Nursing Department, BEZMİALEM VAKİF ÜNİVERSİTY FACULTY OF HEALTH SCIENCES, ISTANBUL/Turkey

Study/Objective: The survey was aimed to determine knowledge and attitudes of BAVU (Bezmialem Vakif University/Istanbul-Turkey) nursing students as part of disaster preparedness.

Background: A disaster is something that affects our surroundings in such a negative way. It happens so unexpectedly and opens doors to many different crisis. The habitats for all human, plant, and animal has different kind of risks. Society had immigrated because of wars, diseases and seasonal differences. Health Professionals are expected to be ready for these catastrophic conditions.

Methods: Under the main three titles (demographic information, the level of information, attitude and behavior level), a total of 54 questions were addressed to 200 nursing students.

Results: All participants fulfilled the questionnaire. The results were adequate for assessment. The results emphasized that all factors (age, gender, class, marital status, city and country) affect the awareness of disasters. Health professionals are considered to have adequate knowledge and ability for disaster responses. Education procedures must be proactive and updated due to new situations.

Conclusion: As a result, countries of the whole World can stay in touch with disaster as a natural process. Last of all, disease, death, loss of function and reduction of labor due to disaster, countries must be ready to face such problems. The price to put against disaster, to minimize the loss and destruction of natural phenomena in the society against the general attitude, seems to depend on the level of knowledge and consciousness. Disaster planning, discipline and support should be implemented. It should not only be theoretical, but also ready for implementation. Nurses may encounter many traumatic situations and should be admitted to team work before and after the disaster. Participation in the exercises made within the scope of Hospital Disaster Plans can provide this.

Prehosp Disaster Med 2017;32(Suppl. 1):s143

doi:10.1017/S1049023X1700396X

Success Strategy for Nursing Professionals in Health and Disasters

Yudix Ferreira Rodríguez¹, Inarvis Medina González², Norberto Valcárcel Izquierdo³, Guillermo Mesa Ridel¹, Eva C. Apodaca Pérez¹