

patient intake. The remaining 4 hours are in the emergency department where students collaborate with a nurse on a number of tasks including preparing and administering medications, starting intravenous lines, and inserting Foley catheters. **Conclusion:** Healthcare systems are shifting to a more collaborative team oriented approach, and IPE has been shown to prepare students for this changing workplace. We seek to understand third year medical students' experience of the nursing shift, and to evaluate any changes in attitudes towards inter-professional collaboration after engaging in this intervention. Evaluation of this novel implementation will enable us to assess and optimize the nursing shift, and if it is well received, encourage widespread adoption.

Keywords: inter-professional education, undergraduate medical education, emergency medicine

P042

Are we ready for a gunman in the emergency department? A qualitative study of staff perceptions of personal health risks, workplace safety, and individual and institutional readiness to respond to "code silver"

K. Dainty, PhD, M. Seaton, MSc, M. McGowan, MHK, S.H. Gray, MD, St. Michael's Hospital, Toronto, ON

Introduction: Hospital-based gun violence is devastatingly traumatic for everyone present and quite tragically on the rise. The Ontario Hospital Association (OHA) has recently designated active shooter situations as "Code Silver" and advised member hospitals to develop policies and train health care workers on how best to respond. Given that emergency departments (ED) are particularly susceptible to opportunistic breach by an active shooter and staff members are likely to be called upon as first responders, the impact of a Code Silver on ED functioning and staff members may be particularly severe. We hypothesized that there may not be a simple, one-size-fits-all-hospital-staff solution about how best to prepare ED physicians and staff to respond to a Code Silver situation. **Methods:** In order to inform and support future staff training initiatives related to Code Silver and other disaster situations in hospitals, we conducted a robust qualitative study to investigate perspectives and behaviour related to personal safety at work and Code Silver in particular among the multi-disciplinary ED staff at a single tertiary care centre in Toronto, Ontario. Participants for in-depth interviews and focus groups were recruited using a combination of stakeholder and maximum variation sampling strategies. Data analysis occurred in conjunction with data collection and standard thematic analysis techniques were employed. **Results:** Initial data analysis has revealed the following thematic concepts: the ubiquitous banality of personal health risk as an expected, acceptable feature of everyday life at work for ED staff, the perception of active shooters as a transgressive threat that violates the boundaries of professional responsibility, and the perceived fallacy of "readiness" to respond to disastrous situations. A fulsome analysis will be ready for presentation in June. **Conclusion:** Knowledge from this study indicates that ED staff members have unique and specific training needs in relation to an active shooter situation, and gives us deeper insight into potential areas of focus for training and opportunities for knowledge translation on the topic of Code Silver for EDs across the country.

Keywords: workplace violence, code silver, policy

P043

Outcomes associated with prehospital refractory ventricular fibrillation

M. Davis, MSc, MD, A. Schappert, MD, B. Chau, BSc, A. Leung, BSc, K. Van Aarsen, MSc, BSc, London Health Sciences Centre, London, ON

Introduction: When ventricular fibrillation (VF) cannot be terminated with conventional external defibrillation, it is classified as refractory VF (RVF). There is a paucity of information regarding prehospital or patient factors that may be associated with RVF. The objectives of this study were to determine factors that may be associated with RVF, the initial ED rhythm for patients with prehospital RVF, and the incidence of survival in patients who had RVF and were transported to hospital. **Methods:** Ambulance Call Records (ACRs) of patients with out of hospital cardiac arrest between Mar. 1 2012 and Apr. 1 2016 were reviewed. Cases of RVF (≥ 5 consecutive shocks delivered) were determined by manual review of the ACR. ED and hospital records were analyzed to determine outcomes of patients who were in RVF and transported to hospital. Descriptive statistics were calculated and all variables were tested for an association with initial ED rhythm, survival to admission, and survival to discharge. **Results:** Eighty-five cases of RVF were identified. A history of coronary artery disease (47.10%) and hypertension (50.60%) were the most common comorbidities in patients transported to the ED with RVF. Upon arrival to the ED, 24 (28.2%) remained in RVF, 38 (44.7%) had a non-shockable rhythm, and 23 (27.1%) had return of spontaneous circulation. Thirty-four (40%) survived to admission, while only 18 (21.2%) survived to discharge. Pre-existing comorbidities, time to first shock, time on scene, and transport time were not statistically associated with initial ED rhythm, survival to admission or discharge. Patient age was statistically associated with improved rhythm on ED arrival ($p = 0.013$) and survival to discharge (58.24 yrs vs 67.40 yrs, $\Delta 9.17$, 95% CI 1.82 to 16.52, $p = 0.015$). **Conclusion:** The majority of patients with prehospital RVF have a rhythm deterioration by the time care is transferred to the ED. Of these patients with a rhythm deterioration, few survive to hospital discharge. Younger patients are more likely to remain in RVF and survive to discharge. Further research is required to determine prehospital treatment strategies for RVF, as well as patient populations that may benefit from those treatments.

Keywords: ventricular fibrillation, prehospital, return of spontaneous circulation

P044

Factors influencing laboratory test ordering by physicians and nurses in the emergency department

L. Delaney, MSc, A. Gallant, MPH, S. Stewart, PhD, J. Curran, PhD, S.G. Campbell, MB, BCh, Dalhousie University, Halifax, NS

Introduction: Understanding factors that influence laboratory test ordering in emergency departments (EDs) can help to improve current laboratory test ordering practices. The aim of this study is to compare patterns and influences in laboratory test ordering between emergency physicians and nurses at two ED sites, Halifax Infirmary (HI) and Dartmouth General (DG). **Methods:** A mixed-methods approach involving administrative data and telephone interviews was employed. Data from 211,279 patients at HI and DG EDs were analyzed. Chi-square analysis and binary logistic regression were used to determine significant factors influencing whether a test was ordered, as well as significant factors predicting likelihood of a nurse or a physician ordering a test. All significant associations had a p-value of < 0.0001 . Interviews were conducted ($n = 25$) with doctors and nurses in order to explore areas of potential influence in a clinician's decision-making process, and discuss what makes decision making difficult or inconsistent in the ED. These interviews were analyzed according to the Theoretical Domains Framework. The interviews were coded by two individuals using a consensus methodology in order to ensure accuracy of coding. **Results:** Overall, laboratory tests were more likely to be