

provide valuable information in the management of non-traumatic PEA or asystole, but should not be viewed as the sole predictor in determining outcomes in these patients.

Keywords: cardiac arrest, focused echocardiography, point-of-care ultrasound

LO43

Simulation curricular content in postgraduate emergency medicine: a multicenter delphi study

N. Kester-Greene, BSc, MD, A. Hall, MD, MMed, C. Walsh, MD, MEd, PhD, Sunnybrook Hospital, Toronto, ON

Introduction: There is increasing evidence to support the integration of simulation into medical training; however, no national emergency medicine (EM) simulation curriculum currently exists. Using Delphi methodology, we aimed to identify and establish content validity evidence for EM curricular content best suited for simulation-based training to inform national postgraduate EM training. **Methods:** A national panel of experts in EM simulation-related education iteratively rated potential curricular topics, on a 4-point scale, to determine those best suited for simulation-based training. After each round, responses were analyzed and topics scoring $<2/4$ were removed. Remaining topics were resent to the panel for further ratings until consensus was achieved, defined as Cronbach $\alpha \geq 0.95$. At conclusion of the Delphi process, topics that were rated $\geq 3.5/4$ were considered core curricular topics, while those rated 3.0-3.5 were considered extended curricular topics. **Results:** Forty-four experts from 13 Canadian centres participated. Two hundred and eighty potential curricular topics, in 29 domains, were generated from a systematic review of the literature, analysis of relevant educational documents and a survey of Delphi panelists. Three rounds of Delphi surveys were completed before consensus was achieved, with response rates ranging from 93-100%. Twenty-eight topics, in 8 domains, reached consensus as core curricular topics. An additional 35 topics, in 14 domains, reached consensus as extended curricular topics. **Conclusion:** Delphi methodology allowed for achievement of expert consensus and content validation of EM curricular content best suited for simulation-based training. These results provide a foundation for improved integration of simulation into postgraduate EM training and can be used to inform a national simulation curriculum to supplement clinical training and optimize learning.

Keywords: curriculum development, postgraduate education, simulation

LO44

Simulation in the continuing professional development of Canadian academic emergency physicians: a national survey

C. Forristal, MD, E. Russell, MD, MSc, T. McColl, MD, A. Petrosioniak, MD, MSc, G. Mastoras, MD, K. Caners, MD, B. Thoma, MD, MMed, MSc, A. Szulewski, MD, MHPE, J. Huffman, MD, C. Dakin, MD, T. Chaplin, MD, K. Woolfrey, MD, A. Hall, MD, MMed, Kingston Health Sciences Centre, Kingston, ON

Introduction: Capitalizing on the success of Simulation-Based Education (SBE) in residency-training programs, simulation has been gradually integrated into Continued Professional Development (CPD) programs for Emergency Physicians (EPs) in Canada. This study sought to characterize how Canadian academic emergency medicine (EM) departments have implemented SBE for CPD.

Methods: We conducted two national surveys: 1) the National Faculty Simulation Status Assessment Survey, administered by telephone to the simulation directors (or equivalent) at 20 Canadian academic EM sites and 2) the Faculty Simulation Needs Assessment Survey administered online to all full-time EPs across 9 Canadian academic EM sites. **Results:** The response rates for the National Status and Needs Assessment Surveys were 100% (20/20), and 40% (252/635), respectively. The majority (60%) of Canadian academic EM sites reported utilizing SBE for CPD, though only 30% reported dedicated funding support. EPs reported participating in a median of 3 hours per year of SBE (IQR 1-6 hours). Reported incentivization offered in the form of continued medical education credits varied between simulation directors (67%) and EPs (44%). Simulation directors identified several significant barriers to SBE including a lack of faculty time, fear of peer judgment, and faculty inexperience. In contrast, EP-identified barriers included time commitments outside of shift, lack of opportunities, and lack of departmental. The three most common topics of interest for SBE by EPs were performance of rare procedures, pediatric resuscitation, and neonatal resuscitation. Interprofessional involvement in SBE CPD was valued by both simulation directors and EPs, with most EPs (79%) indicating it is useful. **Conclusion:** Most Canadian EPs and simulation directors recognize the value of SBE for CPD, yet it is only utilized, infrequently, by 67% of Canadian academic EM departments for this purpose. This may be explained, in part, by poor incentivization for participation. Simulation directors and EPs noted different barriers to SBE implementation for CPD suggesting the need for dialogue to improve utilization. As SBE for CPD is incorporated more frequently, and at more sites, content should be guided by local needs assessments with an emphasis on interprofessional participation.

Keywords: continuing professional development, emergency medicine, simulation

LO45

Simulation-based research in emergency medicine in Canada: priorities and perspectives

T. Chaplin, BSc, MD, B. Thoma, MD, MSc, MA, A. Petrosioniak, MD, MEd, K. Caners, MD, T. McColl, MD, C. Forristal, MD, C. Dakin, MD, J. Deshaies, MD, E. Raymond-Dufresne, MD, M. Fotheringham, MD, D. Ha, MD, N. Holm, MD, J. Huffman, MD, A. Lonergan, MD, G. Mastoras, MD, M. O'Brien, MD, M. Paradis, MD, N. Sowers, MD, E. Stern, MD, A. Hall, MD, MEd, Queen's University, Kingston, ON

Introduction: Simulation has assumed an integral role in the Canadian healthcare system with applications in quality improvement, systems development, and medical education. High quality simulation-based research (SBR) is required to ensure the effective and efficient use of this tool. This study sought to establish national SBR priorities and describe the barriers and facilitators of SBR in Emergency Medicine (EM) in Canada. **Methods:** Simulation leads (SLs) from all fourteen Canadian Departments or Divisions of EM associated with an adult FRCP-EM training program were invited to participate in three surveys and a final consensus meeting. The first survey documented active EM SBR projects. Rounds two and three established and ranked priorities for SBR and identified the perceived barriers and facilitators to SBR at each site. Surveys were completed by SLs at each participating institution, and priority research themes were reviewed by senior faculty for broad input and review. **Results:** Twenty SLs representing all 14 invited institutions

participated in all three rounds of the study. 60 active SBR projects were identified, an average of 4.3 per institution (range 0-17). 49 priorities for SBR in Canada were defined and summarized into seven priority research themes. An additional theme was identified by the senior reviewing faculty. 41 barriers and 34 facilitators of SBR were identified and grouped by theme. Fourteen SLs representing 12 institutions attended the consensus meeting and vetted the final list of eight priority research themes for SBR in Canada: simulation in CBME, simulation for interdisciplinary and inter-professional learning, simulation for summative assessment, simulation for continuing professional development, national curricular development, best practices in simulation-based education, simulation-based education outcomes, and simulation as an investigative methodology. **Conclusion:** Conclusion: This study has summarized the current SBR activity in EM in Canada, as well as its perceived barriers and facilitators. We also provide a consensus on priority research themes in SBR in EM from the perspective of Canadian simulation leaders. This group of SLs has formed a national simulation-based research group which aims to address these identified priorities with multicenter collaborative studies.

Keywords: emergency medicine, simulation

LO46

Lost to follow-up post-sexual and domestic assault: An evaluation of prevalence and correlates of cases presenting to the emergency department

F. Blaskovits, BSc, K. Muldoon, MPH, PhD, A. Drumm, BSc, T. Leach, NP, M. Heimerl, MSW, K. Sampsel, MD, MSc, University of Ottawa, Department of Emergency Medicine, Ottawa, ON

Introduction: Domestic violence (DV) and sexual assault (SA), together called sexual and gender-based violence (SGBV), are traumatic and life-changing events. Post-assault follow-up care is essential for survivor recovery through medical care, mental health functioning, and injury reassessment. The objective of this analysis was to determine the frequency of loss to follow-up (LTFU) in a SGBV population, and the characteristics most commonly associated with LTFU. **Methods:** The Sexual Assault and Partner Abuse Care Program (SAPACP) is the only Ottawa program for emergency/forensic care. Demographic and assault characteristics were abstracted from the SAPACP clinical case registry (1 Jan 2015 to 20 Dec 2017). Descriptive analyses and bivariable/multivariable logistic regression modelling assessed factors most strongly associated with LTFU using odds ratios (OR), adjusted OR (AOR), and 95% confidence intervals (CI). **Results:** Among 894 initial SAPACP visits, 482 (53.9%) were LTFU. Of those LTFU, 445 (92.3%) were female, 185 (38.4%) arrived by ambulance, 284 presented acutely (58.9%), 70 (14.5%) had substance use issues, and 82 (17.0%) were re-victimized. There were 229 (47.5%) sexual assaults, 201 (41.7%) physical assaults, and 92 (19.1%) verbal assaults. LTFU patients were more likely to arrive by ambulance (AOR: 1.09, 95% CI: 1.34-2.69), experience re-victimization (AOR: 1.94, 95% CI: 1.25-3.03), and have a substance use disorder (AOR: 1.67, 95% CI: 1.02-2.73). Those more likely to attend follow-up included sexual assault survivors (AOR: 0.37, 95% CI: 0.27-0.50) and acute presenters (AOR: 0.58, 95% CI: 0.44-0.78). **Conclusion:** Over half of patients arriving for initial SAPACP visits did not follow-up. LTFU was more likely among cases that arrived by ambulance, and those involving revictimization or substance use disorders. Follow-up is critical for maintaining mental and physical health post-trauma. While

some characteristics increased follow-up likelihood, this study has identified groups that need attention to reduce LTFU.

Keywords: domestic violence, intimate partner violence, sexual assault

LO47

Concussions in minor hockey players before and after implementation of a policy to limit body checking

N. Loewen, L. Gaudet, MSc, B. Franczak, PhD, B. Rowe, MD, MSc, University of Alberta, Edmonton, AB

Introduction: Concussions are one of the most common sports-related injuries presenting to emergency departments (EDs), and are particularly frequent among players of contact sports such as ice hockey (hockey). Studies of youth hockey players report increased concussion incidence when participating in levels of hockey that allow body-checking. In 2016, an Edmonton minor hockey organization implemented a policy to remove body checking from play for non-elite levels of Bantam (13-14 years) and Midget (15-17 years). This study aimed to evaluate the effect of this policy on occurrence of concussions in male minor hockey players. **Methods:** Alberta Health Services Sport and Recreation codes (SR = 54) were used to identify Bantam and Midget hockey players presenting to Edmonton Zone emergency departments (ED) during the 2013/2014 to 2016/2017 hockey seasons from the National Ambulatory Care Record System. Injured hockey players with a concussion were identified using International Classification of Diseases 10-CA diagnosis code S06.0. Odds ratios (OR) of concussions among total hockey injuries before (2013-2016) and after (2016-2017) the policy are reported with 95% confidence intervals (CIs). Differences were assessed using Pearson's χ^2 test. **Results:** During the study period, 1978 minor hockey players presented to an Edmonton Zone ED with a hockey-related injury, including 272 players with a concussion (14%). Most of the injuries occurred to Midget players (n = 1274). The proportions of concussion were similar before and after the policy change for players of all ages (OR = 0.78; 95% CI: 0.37 to 0.92) and for injured Bantam players (OR = 0.97; 95% CI: 0.59 to 1.55); however, there was a significant reduction in concussions as a proportion of all injuries for Midget players before and after the policy change (OR = 0.61; 95% CI: 0.36 to 1.00). **Conclusion:** In the initial year of implementation, the policy to limit body-checking to elite levels of play had mixed results. While the policy change did not result in a significant reduction in concussions overall, or for Bantam players, Midget players did experience a significant reduction in concussions after the policy change. The reasons behind these age-related differences require further investigation. Moreover, further evaluation of the policy using additional years of post-policy data, as well as hockey registration numbers, is needed to evaluate the sustainability of its effect.

Keywords: concussion, sports injuries

LO48

Similarities and differences between sports and recreation-related concussions and concussions from non-sport activities

L. Gaudet, MSc, L. Eliyahu, MD, M. Mrazik, PhD, J. Beach, MD, G. Cummings, MD, D. Voaklander, PhD, B. Rowe, MD, MSc, University of Alberta, Edmonton, AB

Introduction: Patients with concussion often present to the emergency department (ED). Although sports and recreation (SR) activities account for less than half of all adult concussions, guidelines