

Eighty percent of children with a fracture experience compromise in their daily function. Understanding the functional outcomes of fractures will help optimize discharge instructions for at-home care. The primary objective of our study was to describe caregivers' perspectives on the impact of their child's fracture on: (1) child functioning, (2) caregiver functioning and (3) family life. **Methods:** We performed a qualitative study interviewing caregivers of children (5 to 11 years) who received care for acute (< 24 hours old), non-operative long bone fractures at a Canadian tertiary care pediatric ED. Audio-recorded, semi-structured telephone interviews were completed 1-2 weeks post-ED visit, until thematic saturation was achieved. Transcripts were read and coded by two researchers concurrent with data collection. We applied content analysis to the interview material, explicating themes to summarize the data utilizing NVivo software. **Results:** Twenty-five interviews were completed. Most children (23/25) suffered upper extremity fractures and most participants were mothers (21/25). All caregivers reported a change in their child's function. The most commonly affected areas included: sleep, play and activities of daily living (ADL's; ie. dressing, bathing, eating). Children were impacted by pain and related negative emotional responses. All children required additional help from their caregivers to carry out ADL's. Strategies included changing household routines and missing work. Importantly, caregivers described a disrupted family dynamic. Adapting to their injured child's functional deficits and caring for pain and distress took time and attention away from the household's previously well-functioning routine. This burden was felt by all family members. Key concerns from caregivers included pain management, fracture healing/complications, and regression of their child's independence. **Conclusion:** Function is universally impaired in younger children with fractures. We suggest 5 main points to include in discharge instructions: (1) monitoring pain and providing analgesia, (2) helping children with ADL's, even if previously independent, (3) allotting extra time for morning and bedtime routines, (4) offering safe choices for play and (5) coaching children in positive thinking and problem-solving.

Keywords: children, fractures, functional outcomes

P093

Evaluating factors related to effective interpersonal communication during mandatory paramedic patches

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Introduction: Delegation of controlled medical acts by physicians to paramedics is an important component of the prehospital care framework. Where directives indicate that physician input is needed before proceeding with certain interventions, online medical control (a "patch") exists to facilitate communication between a paramedic and a Base Hospital Physician (BHP) to request an order to proceed with that intervention. Many factors contribute to success or failure of effective interpersonal communication during a patch call. The aim of this study was to examine areas of potential improvement in communication between paramedics and physicians during the patch call. **Methods:** Prehospital paramedic calls that included a mandatory patch point (excluding requests for termination of resuscitation and those records which were unavailable) were identified through review of all patch records from January 1, 2014 to December 31, 2017 for Paramedic Services in our region. Written Ambulance Call Reports (ACRs) and audio recordings of paramedic patches were

obtained and reviewed. Pre-specified time intervals, clinical factors, specific patch requests and resulting orders from the BHP to the paramedics were extracted. Differences between groups were compared using t-tests. **Results:** 214 records were initially identified and screened. 91 ACRs and audio patch records were included in the analysis. 51/91 (56%) of patch order requests for interventions were granted by the BHP. Clarification of information provided by the paramedic or reframing of the paramedic's request was required less often, but not statistically significant, in calls ultimately resulting in granted requests versus those that were not granted (mean 1.4 versus 1.7, Δ -0.28; 95% CI -0.75-0.18 p =0.64). The mean time from first contact with the BHP to statement of the request was similar in patches where the request was granted and not granted (44.9 versus 46.3, Δ -1.4; 95% CI -12.9-10.2, p =0.49). **Conclusion:** The communication between BHPs and paramedics is an important and under-investigated component of prehospital emergency care. This retrospective review presents some novel targets for further research and potential education in patch communication to improve efficiency and quality of prehospital care for patients.

Keywords: mobile communication, online medical control, prehospital

P094

Use of high fidelity simulation to improve quality of care within Correction Canada's maximum security facilities: A Canada's first

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Innovation Concept: Nurses working in corrections facilities are routinely faced with acute care scenarios requiring skilled management. There are also increasing numbers of inmates with chronic health conditions and acute exacerbations. Correctional Service Canada (CSC) has partnered with the Clinical Simulation Lab at Queen's University to develop a simulation-based training program aimed at improving acute care skills of Corrections nurses and staff. This novel quality improvement program encompasses a range of presentations that commonly occur in correctional environments. **Methods:** The program consisted of two laboratory sessions focused on acute care and trauma followed by an in-situ simulation session. The sessions were organized around the 4-component instructional design that enhances complex learning. Both lab sessions began with scaffolded part-task training (IV insertion, ECG interpretation, airway, circulatory support, etc) and then progressed to six team-based high-fidelity simulations that covered cardiac arrhythmias, hypoglycemia, agitated delirium, drug overdoses, and immediate trauma management. Participants rated the effectiveness of each session. Lastly, an in-situ session was conducted at the Millhaven maximum security facility for nursing and correctional staff. It comprised of five scenarios that incorporated actors, a high-fidelity manikin, and simulated security issues. Participants completed a validated self-assessment before and after the session grading themselves on aspects of acute care. **Curriculum, Tool, or Material:** Our multi-modal simulation curriculum enhanced self-assessed knowledge of CSC learners. Of 71 attendees in the acute care skills session, 70 agreed or strongly agreed that the exercise enhanced their knowledge, satisfied their expectations, and conveyed information applicable to their practice. All 13 participants in the trauma session agreed or strongly agreed to these sentiments. We used Wilcoxon signed rank test item by item on the in-situ questionnaire. There was significant improvement in majority of skills