

Conclusion Therapeutic Hypothermia on OHCA patients with underlying kidney dysfunction was less effective than with normal kidney function.

Conflict of interest None

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CHARACTERISTICS OF PAEDIATRIC TRAUMA PATIENTS ATTENDED BY EMERGENCY MEDICAL SERVICES IN VICTORIA, AUSTRALIA

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Aim Few studies have described the epidemiological profile of paediatric trauma patients attended by emergency medical services (EMS). This study describes the characteristics of paediatric trauma patients attended by EMS in Victoria, Australia.

Method A retrospective review was conducted of all paediatric trauma patients (≤ 15 years) attended by EMS in Victoria, Australia between 1 July 2012 and 30 June 2017. Descriptive analyses were conducted.

Results Paediatric trauma patients represented 2.2% of the EMS emergency caseload during the study period. Most patients were male (59.9%), and the median age was 8 years. The most common final paramedic diagnoses were pain (21.4%), lacerations (14.1%) and fractures (12.5%). Falls, sporting injuries and traffic-related trauma were the most common mechanisms of injury. The majority of patients were transported to hospital (69.5%) and 55.9% received clinical treatment by paramedics. A total of 19.3% of patients were transported to the paediatric major trauma facility in Victoria. Analgesia was administered to 57.9% of treated patients, with administration increasing with age. A splint was applied most commonly to patients aged 5 to 12 years, and spinal immobilisation was most commonly used in patients aged 13 to 15 years. Patients aged ≤ 4 years had the highest proportion of patients with an initial pain score of 0 (49.5%), indicating no pain.

Conclusion The characteristics of paediatric trauma patients differ according to age. Pain, lacerations and fractures are the most common reasons for EMS attendance. Understanding the characteristics of paediatric trauma patients may assist in refining protocols to improve patient outcomes.

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EVALUATION OF AMBULANCE DISPATCH WHEN TWO TRIAGE SCALES ARE USED IN THE PRE-HOSPITAL SYSTEM

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Aim Most of the Emergency medical communication centres (EMCC) in Sweden uses the criteria based dispatch protocol (CBD), Medical Index¹ which has three levels of priority. In the ambulance service, RETTS (Rapid Emergency Triage and Treatment System)² is used and consists of four levels. This study evaluates the accuracy of dispatching ambulances, by evaluating the feedback sent from the ambulance crew after the first evaluation of the patients' severity and condition.

Method This is a retrospective study from October 2014 to June 2015. Sensitivity and specificity were used to estimate the agreement of assessed priority levels between ambulance priority Red to EMCC priority 1. The priority level assessed by ambulance crew was considered the 'gold standard.' Over and under triage was described for the six most frequent conditions assessed.

Results There were 66 983 missions during the study period. Sensitivity for detecting highest priority indicated 67.1% correctly identified (95% confidence interval (CI): 65.6 to 68.7) and specificity indicated 61.8% of non-highest priority missions not dispatched as priority 1 (95% CI: 61.2 to 62). Consistency of condition between EMCC and ambulance for the six most common dispatched assignments was: chest pain 82%, minor injuries 81%, stroke 78%, breathing difficulties 74%, abdomen 71%, and undefined problems 29%. The rate of over- and under triage for highest priority was 33.49% and 4.02% respectively.

Conclusion Compared to the first evaluation of the patients' severity and condition by the ambulance crew, EMCC assessment had moderate sensitivity and specificity. The lack of universal metrics is a limitation when concluding dispatch accuracy.

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REGISTRATION OF PREHOSPITAL VITAL PARAMETERS

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Aim The North Denmark Region implemented an electronic Prehospital Patient medical Record (PPR) in 2006. In 2015 a new version of PPR was implemented. Implementation of new technologies can be challenging, including structurally and organisational obstacles,¹ which causes difficulty in achieving data completeness. We aimed to examine registrations of vital parameters in PPR before and after the new version of PPR.

Method The cohort includes all patients to whom an ambulance was dispatched after an emergency 112-call in the North Denmark Region from 2007–2014 and 2016. We examined the distribution and registration of the first measurement of vital parameters.

Results We identified 213.466 patients. Percentage of registrations from 2007 to 2014 vs 2016: Blood pressure (BP) 73%