SUBSTANCE USE IN PAEDIATRIC TRAUMA: SETTING THE STAGE FOR AN INJURY PREVENTION PROGRAMME

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Injury prevention initiatives provide education to increase awareness of high-risk behaviours and teach strategies to prevent injury. To be successful, these initiatives must identify at risk populations and understand how factors interact and lead to injury. Substance use is an injury risk factor, however, research is lacking in the paediatric population. This study was undertaken to describe trends in substance use and screening in the paediatric trauma population. A review of the London Health Sciences Centre (LHSC) Trauma Database (1999–2009) was conducted to identify patients <18 years who suffered severe injury (ISS >11). A total of 799 patients met inclusion criteria. Blood alcohol concentration (BAC) testing was completed in 30% of patients of whom 21% were positive. Toxicology screens were done in 7% of patients, of whom 44% were positive. Increasing age was associated with screening for alcohol; while, screening for drug use had a bimodal distribution with no children ages 4–10 tested. Those screened for drugs and alcohol had significantly higher ISS than those not tested (BAC 28 vs 23, p<0.001, toxin screening 29 vs 24, p=0.003). The most common drugs ingested were alcohol, benzodiazepines, cannabinoids and opiates. Screening for substance use is sporadic in the paediatric trauma population at LHSC providing incomplete data on its true prevalence and impact. This lack of understanding limits our ability to create effective, age-appropriate injury prevention programmes. A prospective study utilising universal screening is needed to further delineate the true impact of substance use in this young population.