0887

PAEDIATRIC MOBILITY AID-RELATED INJURIES TREATED IN US EMERGENCY DEPARTMENTS FROM 1991 TO 2008

A M Barnard, N G Nelson, H Xiang, L B McKenzie* *Correspondence: The Research Institute at Nationwide Children's Hospital, Center for Injury Research and Policy, 700 Children's Drive Columbus, OH 43205, USA*

10.1136/ip.2010.029215.887

Although mobility aids such as crutches, walkers and wheelchairs are typically beneficial, they can be associated with injury. The objective was to describe the incidence, patterns and trends of mobility aid-related injuries to children and adolescents who were aged ≤ 19 years and treated in US emergency departments from 1991 to 2008. A retrospective analysis was conducted by using data from the National Electronic Injury Surveillance System database. Sample weights were used to calculate national estimates of mobility aid-related injuries on the basis of 2301 actual cases. An estimated 63 309 cases of children and adolescents who were aged ≤ 19 years were treated in US emergency departments for mobility aid-related injuries. Approximately 70% of mobility aid-related injuries occurred while patients were using wheelchairs. Children who were aged 2 to 10 years were more likely to sustain injuries while using walkers and wheelchairs, injure their heads and sustain traumatic brain injuries. Children who were aged 11 to 19 years were more likely to sustain injuries while using crutches, injure their lower extremities and sustain sprains and strains. Injuries involving wheelchairs were more likely to be traumatic brain injuries and result in hospitalisation. Injuries involving crutches were more likely to involve misuse and be triggered by stairs or curbs. Injuries related to crutches, walkers and wheelchairs have distinct patterns, mechanisms of injury, and trigger factors. Injury patterns between younger and older children were different. Additional research is needed to identify effective injury prevention strategies for the paediatric population.

Reference

Thompson DC and Rivara F. Pool fencing for preventing drowning in children. *Cochrane Database of Systematic Reviews* 1998; Issue 1. DOI:10.1002/14651858.CD001047.