The Missing Link in Child Injury Prevention: Linking Hospital Child Fatality Review to Community Injury Prevention Efforts

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Abstract

Background: Preventable injuries are the leading cause of death in children, with disparities in race and socioeconomic status affecting all injury areas. State or local Child Fatality Review studies injuries, but only a small percentage, and data publication is delayed leaving injury prevention teams unsure where to focus efforts. Implementing a hospital-based fatality review team aims to address these issues.

Methods: A mixed methods design was developed to gather quantitative and qualitative data from chart reviews and hospital-based child fatality review participants. Charts were examined to identify gaps in injury prevention ICD-10 coding. For charts involving preventable injuries, reviews collected injury information and patient demographics. Biweekly team meetings were held to review fatal and near-fatal injuries, emphasizing inequities and generating prevention recommendations. A post implementation survey evaluated the team's satisfaction, opportunities for improvement, and impact on reducing burnout.

Results: 165 patients had preventable injuries, with 34% missing injury ICD-10 codes. Injuries were highest among children aged 1-4, males, English speakers, and Medicaid recipients. Black children (n=6, 66.7%) were more likely to die from injuries compared to white children (n=2, 22.2%). Top fatal injuries were motor vehicle collisions and drownings, and non-fatal injuries were falls and cannabis ingestions. The review team made 52 prevention recommendations. The post-intervention satisfaction survey had a71.4% response rate, with all respondents expressing a desire to continue review meetings.

Conclusions: Implementing child fatality reviews provided valuable insights into the current trends and inequities in pediatric injuries and provided opportunities to link them to future public health prevention efforts. The study underscores the value of leveraging hospital data to understand injury trends and the need to improve data collection on injuries. The findings demonstrate public health and clinician satisfaction and reduced burnout among clinicians.

Implications: This study underscores the critical importance of learning from preventable injury deaths and targeting injury prevention strategies to avert future fatal and near-fatal injuries and address inequities in pediatric injuries.

Keywords: injury prevention, child fatality review, injury equity, injury ICD 10, pediatric injury