

Prevention of Childhood Injuries

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The word 'injuries' has replaced the erstwhile terminology of 'accident'. Rightly so, as the term 'accident' denotes an event which has occurred suddenly and there was no way to anticipate or prevent it. On the other hand, injuries can both be anticipated and prevented.

Injuries in children are major health hazards. Childhood injuries are also considered to be the second most common cause of mortality in school age children [1]. Other than stray data from localized or hospital-based studies, the exact magnitude of this major public health problem remains unexplored in a nation-wide survey, specifically in children. To prevent this major burden, it is imperative that we understand where injuries occur (at home, at school, at play or on road), which children are affected (age group, urban/rural, gender), what are the various types of injuries, and most importantly, what is the magnitude or burden of the problem.

Recognizing that injuries in children is a major public health problem and lack of data from both observational and interventional research in this arena, Indian Council of Medical Research (ICMR) issued a call for research proposals related to childhood injuries, a few years back. Individual proposals pertaining to descriptive research focusing on prevalence and risk-factors associated with unintentional childhood injuries were collated into a Taskforce and a multicentric cross-sectional, community-based study was envisaged, to cover 11 diverse geographical locations in India. The Taskforce ensured to have representation of urban and rural areas; and also plains and hills. The study commenced in 2018 and was completed in September, 2020. Detailed findings of this study are presented in this focused issue of *Indian Pediatrics* [2]. The study covered 31,000 children (6 mo-18y) in more than 25,000 households. WHO definitions and protocols were followed for collecting data through cloud-based software, and quality was ensured. Overall prevalence was 14%. Injuries were more common between 5-14 years age, in boys (2:1), and in rural areas. Falls were the most common type of injuries, followed by road traffic

injuries. Authors also concluded that more than 50% injuries occurred in home environment. This is; however, perplexing, as the most common types of injuries noticed in this study are expected to occur outdoors! The study also identified poor housing conditions and lack of safety measures at home and play areas as the key factors in causation of injuries.

A randomized controlled trial, published in this issue [3] as part of the ICMR initiative, has shown reduction in home injuries following an appropriate home safety supervisory hazard reduction teaching program, aimed at caregivers of children below 5 years, residing in a rural area of Karnataka. These results assume importance since the main taskforce study concluded that most injuries occur at home. Another cluster randomized study [4] evaluated the effectiveness of school-based intervention program in 1100 children (studying in 5-7 standards) over 10 months. Children were trained on periodic and regular basis on inculcating safety and injuries prevention strategies. There was a marked decline in the incidence of injuries in the interventional arm compared to control (50% vs 13%). Another study from Ujjain [5] on educational school-based intervention in 1944 adolescents also demonstrated an increase in the knowledge of prevention of unintentional injuries and first aid significantly.

Other than these studies funded by ICMR, this issue has several other reports on diverse facets of injuries. The spectrum of injuries totally changes when we move from community-based or school-based studies to hospital-based studies. Road traffic injuries emerge as the predominant cause of pediatric injuries presenting to a trauma center [6].

Safety and security of children is an integral component of 'nurturing care' of children and is considered essential to ensure an optimal early childhood development (ECD). Indian Academy of Pediatrics has already declared Nurturing Care for ECD as the flagship program of the Academy in 2021 [7]. The efforts of the Academy in promotion of all the components have been

acclaimed by WHO, UNICEF, and Government of India. This issue of *Indian Pediatrics* is being released at a very apt moment when the emphasis on nurturing care is also being focused on safety and security of children.

It is also the need of the hour to formulate a comprehensive plan for prevention of childhood injuries on a national basis. This necessitates inclusion of prevention of injuries in both pre-service and in-service medical education programs. WHO has taken a lead in this aspect and already formulated guidelines on training of under-graduate students in prevention of injuries [8]. However, this needs to be re-emphasized and ingrained in medical curricula of health universities in India regulated by the National Medical Commission.

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