



TO ASSESS THE PREVALENCE OF UNINTENTIONAL CHILDHOOD INJURIES

Community Medicine

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ABSTRACT

Background Injuries, especially unintentional injuries, are considered to be a leading cause of death among children and adolescents and a serious public health problem around the world. The present study was conducted to assess the prevalence of unintentional childhood injuries. **Material & methods** The present cross-sectional study was conducted among a 300 consecutive sample of parents accompanying children aged ≤ 12 years. A self-administered questionnaire was used to collect the data, eliciting information about the attending child, details of unintentional injuries. The data was collected and analyzed using Statistical Package for Social Sciences (SPSS) for Windows, version 26.0. (IBM Corp., Armonk, NY, USA). $P < 0.05$ was considered statistically significant. **Results** In the present study 300 children were selected for the study who was accompanied by the parents. Maximum children were of age group ≤ 3 years (44.66%) followed by age group > 9 years (22.33%). Males (56%) were more than females (44%). Unintentional childhood injuries was maximum in age group ≤ 3 (31.34%) followed by age group 7-9 years (27.11%). Unintentional childhood injuries were maximum in males (16.07%). **Conclusion** The study concluded that Unintentional childhood injuries were maximum in age group ≤ 3 and maximum in males.

KEYWORDS

Unintentional childhood injuries, trauma, prevalence

INTRODUCTION

Globally, injuries and violence are major public health problems. Children are at a higher risk for injuries due to their physical and psychological attributes. Their small body size and the softness of tissues lead to greater vulnerability for severe impact. Children's risk perception is limited, making them more susceptible to involvement in road accidents, drowning, burns, and poisoning. Psychological characteristics of children like impulsiveness, curiosity, experimentation, an inadequate judgment of distance/speed, and low levels of concentration make them vulnerable to injuries. A subset of injuries comprises unintentional injuries or accidents for which there is no evidence of predetermined intent. According to the World Health Organization (WHO), loss of life as a result of injuries to children under the age of 15 which in 2011 reached 630,000, and has been the common cause of death during the 1st year of life in many countries²⁻⁵. Many risk factors for unintentional childhood injuries have been identified. Factors such as parents' socioeconomic status, sociodemographic characteristics, age, education, and immigration status have been linked to an increased risk of unintentional childhood injuries and their severity and accidents at home.⁶⁻⁹

Injuries to children can have long-term health, educational, social, and occupational consequences in later life, such as physical disability, psychological morbidity, cognitive or social impairment, and lower educational achievement.¹⁰ The present study was conducted to assess the prevalence of unintentional childhood injuries.

MATERIAL & METHODS

The present cross-sectional study was conducted among a 300 consecutive sample of parents accompanying children aged ≤ 12 years. Because data could not be collected from children, the parents were the informants. Thus, only children accompanied by parents were included in the study. The exclusion criteria for the study were parents who had completed the survey during any previous visits, children not accompanied by parents, children with special needs. Unintentional injuries or accidents are those injuries for which there is no evidence of predetermined intent.

A self-administered questionnaire was used to collect the data, eliciting information about the attending child, details of unintentional injuries. Because it was difficult to determine the difference between intentional and unintentional injuries, for the purposes of this study, we considered an injury to be unintentional if there was no evidence of predetermined intention from the caregiver. The data was collected and analyzed using Statistical Package for Social Sciences (SPSS) for Windows, version 26.0. (IBM Corp., Armonk, NY, USA). $P < 0.05$ was considered statistically significant.

RESULTS

In the present study 300 children were selected for the study who was accompanied by the parents. Maximum children were of age group ≤ 3 years (44.66%) followed by age group > 9 years (22.33%). Males (56%) were more than females (44%). Unintentional childhood injuries was maximum in age group ≤ 3 (31.34%) followed by age group 7-9 years (27.11%). Unintentional childhood injuries were maximum in males (16.07%).

Table 1: Demographic characteristics of the children

Variable	N(%)
Age group	
≤ 3	134(44.66%)
4-6	40(13.33%)
7-9	59(19.66%)
> 9	67(22.33%)
Gender	
Male	168(56%)
Female	132(44%)

Table 2: Prevalence of unintentional childhood injuries

Variable	N(%)
Age group	
≤ 3	42(31.34%)
4-6	10(25%)
7-9	16(27.11%)
> 9	15(22.38%)
Gender	
Male	27(16.07%)
Female	13(9.84%)

DISCUSSION

In the present study 300 children were selected for the study who was accompanied by the parents. Maximum children were of age group ≤ 3 years (44.66%) followed by age group > 9 years (22.33%). Males (56%) were more than females (44%). Unintentional childhood injuries was maximum in age group ≤ 3 (31.34%) followed by age group 7-9 years (27.11%). Unintentional childhood injuries were maximum in males (16.07%).

As per the reports from several studies done in various parts of India, the prevalence of injury ranges from 11% to 64%.¹¹⁻¹³

Male participants demonstrated significantly higher prevalence of UI compared to females, suggesting that gender can be a significant factor. Similar findings were also observed by studies conducted by Shriyan et

al. and Parmeswaran et al.^{14,15} Another study from WHO showed the double prevalence of injuries amongst males compared to females.¹⁶

An Indian study in 2018 reported that the prevalence of unintentional childhood injuries was 16.6%, but that the majority of injuries occurred on roads rather than at home.¹⁷

Nooyi SC, et al studied the prevalence of and assess the factors associated with unintentional injuries among children aged 6 month - 18 years in various regions. In the 25751 households studied, there were 31020 children aged 6 months - 18 years. A total of 1452 children (66.1% males) had 1535 unintentional injuries (excluding minor injuries) had occurred in the preceding one year. The overall prevalence of unintentional injuries excluding minor injuries was 4.7% (95% CI: 4.4-4.9). The commonest type of injury was fall-related (842, 54.8%) and the least common was drowning (3, 0.2%). Injuries in the home environment accounted for more than 50% of cases.

Sato et al. revealed that unintentional injuries among preschool children were higher in those whose fathers had high-school certificates and in families with multiple siblings, but these findings were not statistically significant.¹⁸

CONCLUSION

The study concluded that Unintentional childhood injuries were maximum in age group ≤ 3 and maximum in males.

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