



Domestic Accidents Among Children Under Five Years: A Study of a Growing Public Health Concern

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Abstract

Background:

Domestic accidents among children under five years of age are a significant and growing public health concern. Young children are particularly vulnerable due to their developmental stage, curiosity, and lack of awareness about potential hazards within the home environment.

Objectives: To assess the prevalence of domestic accidents among children under five and to determine the association between selected socio-demographic variables and the occurrence of domestic accidents.

Methods: A descriptive cross-sectional study was conducted among **80 families** having children under five years of age in a selected community area. Data were collected using a structured questionnaire that covered socio-demographic characteristics and the history of domestic accidents. Data were analyzed using descriptive and inferential statistics, including the chi-square test to assess associations.

Results: The findings revealed that a considerable proportion of children experienced domestic accidents. The majority of respondents were aged 20–35 years. A slight male preponderance was observed among children. Most children belonged to the 2–3-year age group. A higher proportion of families belonged to joint family systems and had 1–2 siblings. Fathers were mostly employed, while mothers were predominantly homemakers. A statistically significant association was found between socio-economic status and the occurrence of domestic accidents, whereas other variables such as parental education and occupation showed no significant association.

Conclusion: Domestic accidents among children under five remain a major public health issue. There is a need for increased awareness among parents and caregivers regarding home safety measures. Preventive strategies and health education programs can play a crucial role in reducing the incidence of such accidents.

Keywords: Domestic accidents, under-five children, prevalence, socio-demographic factors, and public health

Introduction

Domestic accidents among children under five years of age represent a significant and preventable public health problem worldwide. According to the World Health Organization, unintentional injuries are one of

the leading causes of morbidity and mortality among young children, particularly in low- and middle-income countries. These accidents commonly occur within the home environment, where children spend

most of their time and are exposed to various hazards. Children under five years are especially vulnerable due to their developmental characteristics such as curiosity, lack of risk perception, and increasing mobility. Common types of domestic accidents include falls, burns, poisoning, drowning, and choking. Among these, falls are reported as the most frequent cause of injury, followed by burns and ingestion-related incidents. The United Nations Children's Fund highlights that inadequate supervision, unsafe home environments, and a lack of parental awareness significantly contribute to the occurrence of such injuries.

In India, domestic accidents among children under five are increasingly recognised as a major public health concern. Rapid urbanisation, overcrowding, and unsafe housing conditions further increase the risk of injuries. Studies have shown that socio-demographic factors such as parental education, occupation, socio-economic status, and family structure play a crucial role in determining the risk of domestic accidents. Children living in joint families or with multiple siblings may have differing levels of supervision, which can influence accident rates. Despite being largely preventable, domestic accidents continue to contribute substantially to childhood morbidity. Many of these injuries can be avoided through simple interventions such as improved home safety measures, parental education, and community-based awareness programs. Therefore, understanding the prevalence and associated risk factors is essential for planning effective preventive strategies. Hence, the present study aims to assess the prevalence of

domestic accidents among children under five years of age and to determine their association with selected socio-demographic variables. *It is important to* know the pattern of trauma in children from developing countries, as significant differences exist in socioeconomic patterns and government regulatory policies in comparison with the developed nations. The largest number of accidents happens in the living room, and the most serious accidents happen in the kitchen.

Objectives

1. To determine the prevalence
2. To identify injury
3. To assess demographic risks
4. To map environmental factors
5. To identify anatomical patterns

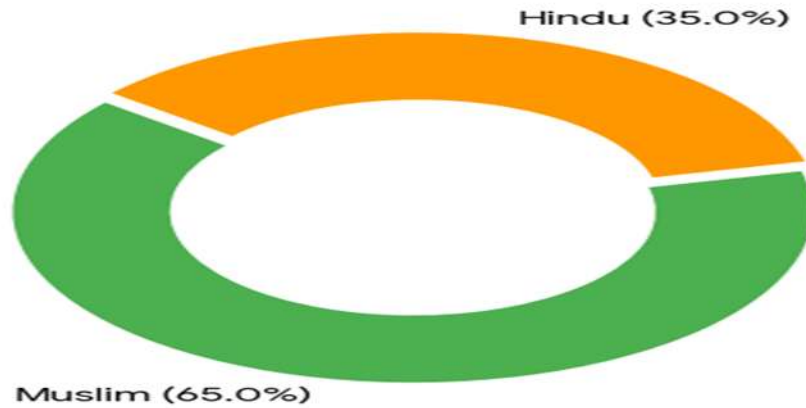
Methodology

The Study is a descriptive, cross-sectional study observing the point prevalence of injuries. **Participants** Paediatric population separated by sex (boys and girls) and split into specific early childhood age groups (under 5 years; strictly citing 2 to <3 years and 4 to <5 years). **Sample Size: 80 families of children.** **Data Collection: Retrospective parental recall.** Data points were logged based on parents' ability to remember injury incidents at the exact time of collection actively. **Time Frame: A one-month recall period** (specifically tracking domestic injuries sustained in the past 1 month).

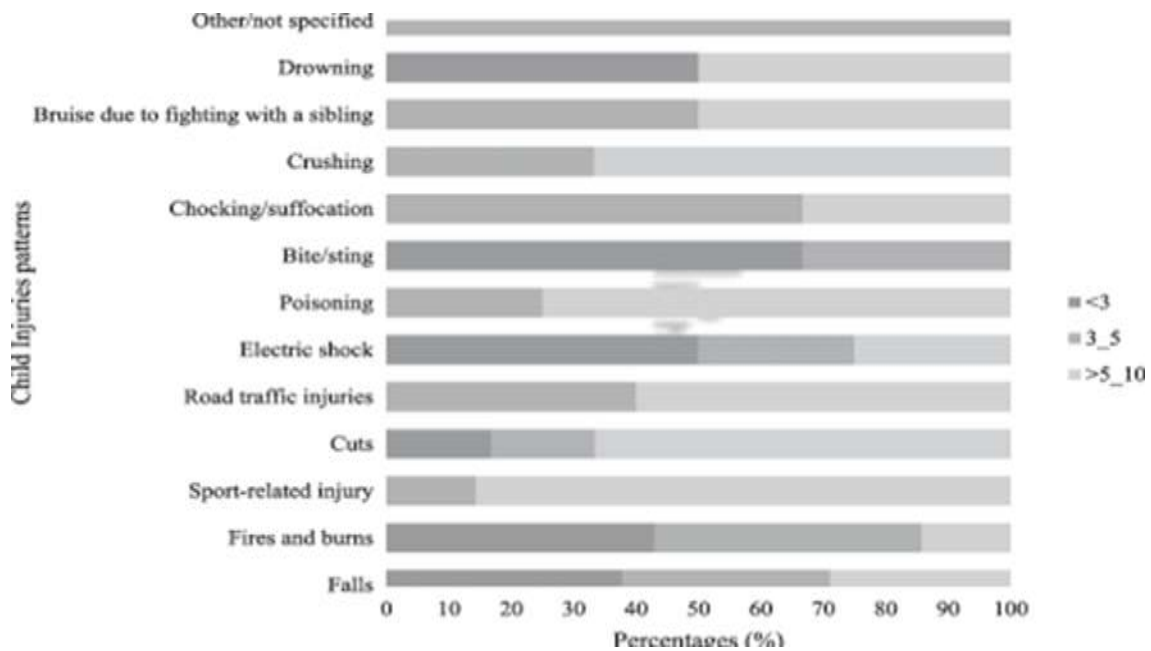
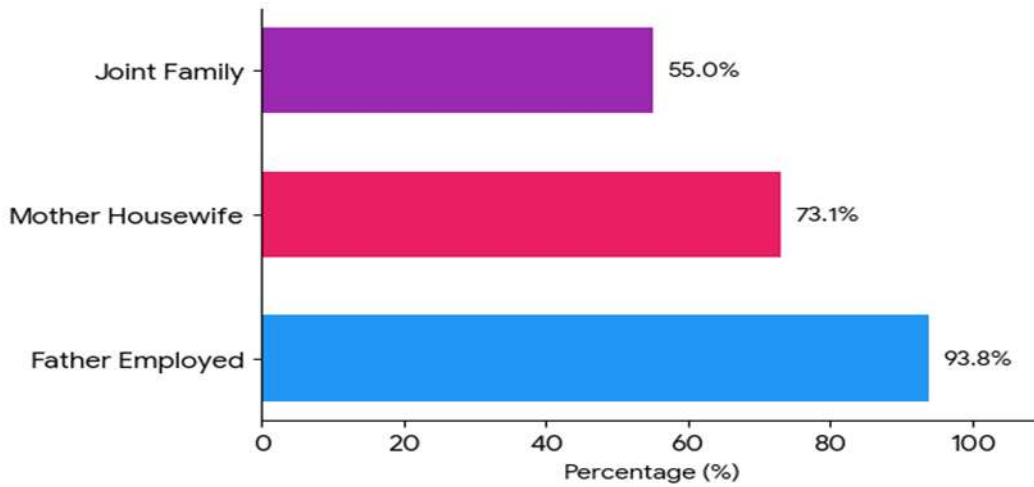
Results And Interpretation

Graph: Association of Socio-Demographic Variables with Domestic Accidents (n = 80)

Religious Distribution of Families (n=80)



Family & Employment Characteristics



Summary:

Sample Size are 80 families. Respondent Age: Predominantly young adults, with 91% in the 20–35 age range. Gender Distribution: Slight male preponderance (57.5% male, 43.5% female) [Note: Percentages sum to 101%, likely due to rounding in original data]. Children's Profile Age Group: The largest group of children was 2–3 years old (25.6%). Siblings: A large number of children (66.2%) have 1–2 siblings. Family and Socio-Economic Background Religion: Majority Muslim (65.0%) compared to Hindu (35.0%). Family Structure: The majority (55.0%) reside in joint families. Parental Education: The highest proportion of fathers (40.0%) and mothers (26.9%) completed graduation. Employment: Most fathers were employed (93.8%), while a majority of mothers were housewives (73.1%). Socio-demographic profile

The study was conducted among 80 families. The majority (91%) of respondents were aged 20–35 years. In the present study, a slight male preponderance was observed, with 57.5% males and 42.5% females among the participants. Most children belonged to the age group of 2–3 years (25.6%). Among all families, 35.0% were from Hindu families and 65.0% were from Muslim families. Regarding parental education, the majority of fathers (40.0%) and mothers (26.9%) were educated up to graduation. Most fathers were engaged in work (93.8%), while a majority of mothers were homemakers (73.1%). A large proportion of children had 1–2 siblings (66.2%), and most children (55.0%) belonged to joint families.

Conclusion:

High Prevalence: Domestic injuries are highly frequent among preschool children in the study area, primarily driven by falls from height. **Sociocultural Barrier:** Caregivers largely view these accidents as an inevitable part of normal childhood growth, leading to a lack of awareness and neglect regarding home safety. **Non-Discriminatory Risk:** Occurrence rates did not differ significantly based on the child's age, sex, family type, or parental occupation. **The Solution:** To protect children, policymakers must implement a multifaceted approach that combines targeted community education on wound care with active home safety measures.

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