

Original Research Article

## A Descriptive Study to Assess the Prevalence of Home Accidents in Children Less Than Ten Years of Age in a Selected Rural Area

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Received: 12/01/2016

Revised: 12/02/2016

Accepted: 19/02/2016

### ABSTRACT

**Objective:** To assess the prevalence of home accidents in children less than ten years of age in a selected rural area.

**Material and methods:** The study was conducted at village Khera and Jhammat, Ludhiana. The study sample comprised of children less than ten years of age living in rural area. Convenience sampling technique was used. The total sample size was 100. A self structured questionnaire and checklist was used to collect the data. The time period for data collection was two weeks. As far as the sample from the rural community was concerned, it was approached by house to house visits.

**Results:** The results of the study revealed that the total cases of home accidents in sample population were 78% whereas the unaffected cases were 22%. The prevalence of home accidents is more in female children (43%) than in male children (35%). In infants prevalence of home accidents is 6.41%, in toddlers it is about 32.05%, in preschoolers 23.08% and in school going children it is about 38.46%. Falls are most prevalent accident (28.57%) and poisoning is least prevalent accident (6.12%).

**Conclusion:** The findings of the study concluded that there is large prevalence of home accidents in rural area with less number of unaffected cases. Home accidents are more prevalent in female children population than male children population. The prevalence of home accidents is more in school going children and less in infants.

**Key words:** Prevalence, Home accidents, Children.

### INTRODUCTION

Children have great excitement for manipulation and interpretation of their surrounding environment which is new for them. Due to their more curious behaviour children are more prone to physical injuries. Children are likely to have minor as well as major physical injuries due to home accidents. In rural areas prevalence of home accidents is more as compare to the children living in urban areas. Most of the accidents occurred during their school time. In India both parents and teachers are lacking knowledge about causes & prevention of home accidents and also lacking in first aid

training. <sup>[1]</sup> Younger children are more likely to have physical injuries from home accidents. Children living in rural areas of farms are more likely to sustain injuries because location of residence, demographic characteristics of children and parents are also associated with the occurrence of injuries. <sup>[2]</sup>

In general, if we talk about home accidents in rural and urban areas, the common injuries found in both areas includes falls, burns, poisoning, cuts and injuries, ingestion and aspiration of foreign bodies, sports injuries, drowning, road traffic injuries. <sup>[3]</sup>

The rural areas are still trying to deal with the consequences of home accidents and using traditional harmful practices to treat them. Thus there is great need to identify the exact statistics of home accidents in rural areas in India and to develop a framework of preventive measures to deal with occurrence of home accidents

The aim of the present study was to assess the prevalence of home accidents in children less than ten years of age in a selected rural area.

### MATERIALS AND METHODS

A descriptive research design was used. The present study was conducted on 100 children less than ten years of age living in village Khera and Jhammat, Ludhiana. The sample was selected by convenient sampling technique. A self structured questionnaire and checklist was used to collect the data. House to house visit approach was used to collect the data. A written permission was taken from the HOD, Rural Health Centre, Pohir to conduct the project work. An informed verbal consent was taken from the subjects as well. Anonymity of subjects and confidentiality of information was maintained.

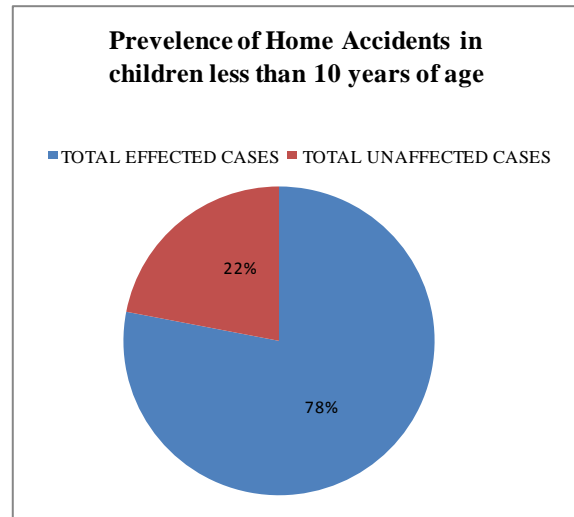
### RESULTS

The total cases of home accidents in sample population are 78% and unaffected cases are 22%.

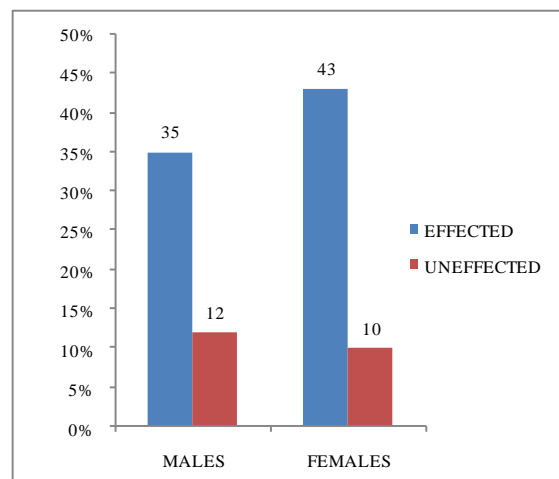
**Table 1: Prevalence of Home Accidents in children less than 10 years of age**

S.No.	Parameters	(f)	(%)
1.	Total cases of Home Accidents	78	78%
2.	Total Unaffected	22	22%
3.	Total Sample Population	100	100%

Fig. 2 depicts the distribution of home accidents according to gender. It concluded that prevalence of home accidents is more in female children (43%) than in male children (35%). Thus unaffected cases are more in male children population (12%) than in female children (10%).



**Fig. 1:- Prevalence of Home Accidents in children less than 10 years of age**



**Fig. 2 Distribution of home accidents according to gender**

Table 2 shows the prevalence of home accidents according to age group. In infants prevalence of home accidents is 6.41%, in toddlers it is about 32.05%, in preschoolers 23.08% and in school going children it is about 38.46%.

**Table 2: Prevalence of home accidents according to age group**

Age (in years)	Number of children (f)	Percentage
0-1	5	06.41%
1-3	25	32.05%
3-6	18	23.08%
6-10	30	38.46%

Fig. 3 shows the prevalence of home accidents according to the type of home accidents i.e. poisoning (6.12%), drowning (10.20%), burns (14.28%), falls (28.57%), sports injuries (6.12), cuts and injuries (18.36%), bites and stings (16.32%).

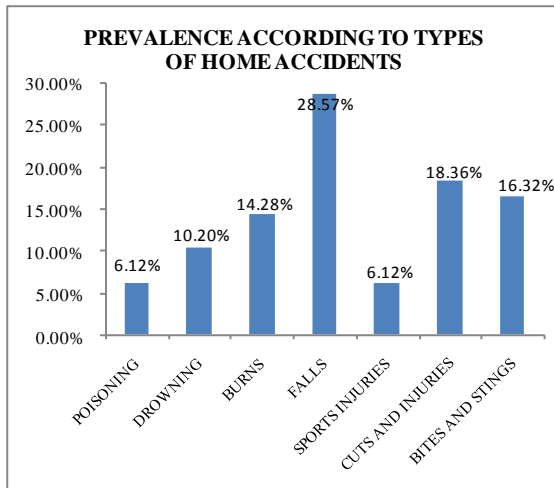


Fig. 3 Prevalence of home accidents according to types of home accidents

## DISCUSSION

The total cases of home accidents in sample population are 78% and unaffected cases are 22%.

The prevalence of home accidents is more in female children (43%) than in male children (35%).

According to CDC childhood injury report on United States published in 2008 also revealed that males had higher injury death rates than females. The death rate for males was almost two times the rate for females, and males had a higher injury death rate compared to females in all childhood age groups. [4]

As per the type of injury injuries due to fall were most prevalent in children less than ten years of age (28.57%) followed by cuts & injuries (18.36%), bites and stings (16.32%), burns (14.28%), Drowning (10.20%). Sports injuries and poisoning found to be least responsible for home injuries among children less than ten years of age.

Similarly, Bhanderi DJ and Choudhary S. (2008), conducted a cross sectional study to assess the incidence of domestic accident in a semi-urban community and its association with various epidemiological factors. The study was conducted in 796 households consisting of 4086 individuals residing in a semi-urban area. Complete information was collected through semi-structured, pre-tested

questionnaire. The incidence of domestic accidents was found to be 1.7%. The most common accident reported was fall. Occurrence of falls was found to be associated with age and overcrowding. Other accidents noted were burns, scalds, electrocution, injuries and accidental poisoning. Accidents were reported in significantly higher proportion in extreme age groups and in females. [5]

The prevalence of home accidents is more in school going children (38.46%) and less in infants (06.41%).

Similarly, Sudhir, Krishna D, Channabasappa AN, Dhar M (2010), conducted a cross-sectional study on prevalence of domestic accidents in rural India. The study was done on 3500 subjects by using simple random sampling technique, in rural field practice area of a medical college in South India between Jan to Dec 2010. Information regarding domestic accidents was gathered by interviewing the head of the family or the adult informant by using pretested and pre structured questionnaire.

Total 330 domestic accidents were found in our study. 210 domestic accidents were due to falls, 225 accidents were seen in female, 217 subjects with accidents were illiterates 49.7% of accidents took place in the courtyard, 56.8% of accidents took place while playing or doing domestic work and 39.2% of accidents took place in the afternoon.

Domestic accidents are more common in extreme age groups and in females. The reasons may be the higher amount of time spent at home and greater participation in daily home activities. Falls being the most frequent type of accidents, proper designing of house and adequate illumination may help in reducing their occurrence. [6]

## CONCLUSION

Hence, it is concluded that there is large prevalence of home accidents in rural area with less number of unaffected cases.

Home accidents are more prevalent in female children population than male children population and the prevalence of home accidents is more in school going children and less prevalent in infants. Out of all other types of home accidents falls are most prevalent accident and poisoning is least prevalent accident.

#### ACKNOWLEDGEMENT

We thank all people who have helped us in carrying out the study and the Head of Department, RCH, Pohir, Ludhiana, our principal Dr. (Mrs.) Jasbir Kaur and Mrs. Rupinder Deol for permission to publish the data.

**Each Authors Contribution:** All authors contributed equally to the study.

**Conflict Of Interest:** The study was conducted and prepared for publication without any conflict among all authors and with any other organization.

**Funding Sources:** Any Governmental and non-Governmental agency or any other source did not provide any type of fund or financial aid for the study.

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How to cite this article: Kaur M, Deol R, Kaur J. A descriptive study to assess the prevalence of home accidents in children less than ten years of age in a selected rural area. *Int J Health Sci Res*. 2016; 6(3):202-205.

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