

# Knowledge And Self-Declared Practices Of Parents Regarding Home-Based Accidents And Its Prevention Among Pre-School Children

**Sujyotsna Jena**, Assistant Professor, Department of Medical-Surgical Nursing, Faculty of Nursing, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar – 751003, Odisha, India  
*Corresponding author; Email ID: [sujyotsnajena@gmail.com](mailto:sujyotsnajena@gmail.com)*

**Abstract:** *Home-based accidents that occur in and around the home are of major concern among the parents of children below 5 years of age. Many children of pre-school age end up in hospitals after serious injuries due to common accidents like falls, burns, scalds, swallowing objects, etc. The purpose of the study was to assess the relationship of knowledge and self-declared practices of parents regarding home-based accidents and its prevention among pre-school children. A non-experimental descriptive approach with survey method was adopted. Parents of 200 children within the age group of 3-5yrs were selected conveniently as the study sample. A self-structured questionnaire was used to collect the data. Results suggested that 24% of parents had extremely good knowledge regarding home-based accidents and 25.5% of parents are good in self-declared practices. Knowledge had no statistical association with age and had a statistical association with other selected demographic variables such as education of parents, number of children and type of family, and also statistical association was found between self-declared practices and selected demographic variables ( $p > 0.05$ ). The study concluded that though there is no relationship between knowledge and practices to prevent home-based accidents practices are influenced by various factors. Hence more sensitization is required to strengthen the parents to prevent various home-based accidents which are more prevalent among the pre-school children.*

**Keywords:** *Knowledge, self-declared practices, home-based accidents, prevention, pre-school children*

## Introduction

Home-based accidents occurring in and around the home are of major concern among the parents of children below 5 years of age. Many children of pre-school age end up in hospitals after serious injuries due to common accidents like falls, burns, scalds, swallowing objects, etc. According to a report in 2019, 76,000 children are admitted to emergency units, of which nearly 40% are under 5 years of age.<sup>1</sup> Children are more prone to accidents due to their desire of exploring and learning new things and the inability to sense the extent of danger related to their actions. However these accidents sometimes being seriously fatal they are preventable by providing them with a safe environment. Child injuries have been considered as a public issue in the world by WHO in 2012. The leading cause of death among pre-school children comprises mainly infections and accidents among 40% population of developing countries. Home-based accidents are the greatest risk for injuries among 4 million pre-school children globally.<sup>2</sup> According to a study conducted in a rural area of Sharkia, Egypt, maximum children were injured due to incidents that occurred at homes, the majority of the injuries being due to cuts and other causes being fall, burn, animal bites and poisoning.<sup>3</sup> Another recent study in the peri-urban areas of Aligarh, India suggested that injuries due to domestic accidents were highly prevalent in the area among the pre-school children with male children being more prone to injuries. Injuries due to fall from height being the common cause of home accidents in the study.<sup>4</sup> Hence, the above study was conducted to evaluate the relationship of knowledge and self-declared practices of parents regarding home-based accidents and its prevention among pre-school children.

## Materials & methods

This study was conducted with a non-experimental descriptive approach with a survey method in which parents of 200 children within the age group of 3-5yrs were selected conveniently from Bharatpur village of Bhubaneswar. The disabled parents were excluded from the study. Those parents were also excluded who did not give their consent to participate. Information regarding the purpose of the study, benefits for the parents, and time duration was informed verbally and through written consent.

A self-structured questionnaire was prepared containing three sections seeking demographic information, information on knowledge regarding home-based accidents, and its prevention and information regarding self-declared practices acquired by the parents for the prevention of home-based accidents. The questionnaire was validated by five experts and then used for data collection. The data was collected over four weeks.

Frequency and percentage (descriptive statistical analysis) were used to describe demographic information, knowledge, and self-declared practices of the parents in terms of poor, good and extremely good knowledge, and average, good and excellent practices. Inferential statistics in terms of chi-square tests were used for the association of self-declared practices and knowledge with selected socio-demographic variables and correlation test was used to find out the relationship of knowledge with self-declared practices.

## Results

The results of the study reveal that 55.5% of parents were in the age of 28-32 years, 45% of samples had only primary education, 57.5% of samples have two children, 65.5% of the samples were from the nuclear family, 65.5% of samples had occupation other than any Government or private job or any business (Table 1). Knowledge regarding home-based accidents and its prevention among parents was recorded as 97% having poor knowledge, 55% having good knowledge and 48% having extremely good knowledge (Figure 1). Self-declared practices regarding the prevention of home-based accidents among parents were recorded as 103% declared poor practice, 46% declared average practice, and 51% declared good practice (Figure 2).

The chi-square tests reveal that knowledge has no significant association with age and self-declared practices have a significant association with the age of parents. There is a significant association of self-declared practices and knowledge with the education of parents, number of children, and the type of family (Table 2).

The correlation test reveals that no substantial evidence for the relation between knowledge and self-declared practices regarding home-based accidents and its prevention ( $p < 0.05$ ) (Table 3).

## Discussion

The results of the study indicate that maximum parents are having poor knowledge and are poorly practicing to prevent home-based accidents. Knowledge and self-declared practices are being influenced by age, education, number of children, and type of family.

A study conducted to identify the knowledge of 30 mothers regarding the prevention of home accidents among toddlers revealed no significant relationship between knowledge of mothers with selected demographic variables and the mothers should be alert towards home accidents and aware of prevention measures.<sup>5</sup> A study included 307 parents of children within 3-7 years to assess knowledge attitudes of parents on first aid and accident prevention. The results revealed that knowledge of first aid among the parents was very low. Only 10 parents could answer all the first aid questions correctly.<sup>6</sup>

Another study was conducted in Ilesa Metropolitan city to assess the effect of maternal education on home accidents among pre-school children. A survey was conducted on 187 nursing mothers and results revealed that mother's knowledge and the education they obtained regarding the causes of home accidents and its prevention had a significant difference. Further the results indicated that older mothers obtained more knowledge regarding the causes of home accidents and its prevention.<sup>7</sup>

One other study conducted on safety practices adopted by 1129 mothers to prevent domestic accidents among pre-school children and the results suggested that the safety practices adopted by the mothers needed to be judged for moderately safe or unsafe. The study further suggested that safety practices

for one accident type are not consistent for the other type of accident and there is no relation between mother's education and the safety measures adopted.<sup>8</sup>

**Conclusion**

According to the results of the study, the parents are aware of home-based accidents among pre-school children. Though there is no relationship between knowledge and practices to prevent home-based accidents practices are influenced by various factors. Hence more sensitization is required to strengthen the parents to prevent various home-based accidents which are more prevalent among the pre-school children.

**Funding:** None

**Ethical Statement:** This study was approved by the institutional review board, SUM Nursing College, and written consent of the samples before data collection was done.

**Conflict of interest:** The author declares that there is no conflict of interest.

**References**

1. El Seifi OS, Mortada EM, Abdo NM. Effect of community-based intervention on knowledge, attitude, and self-efficacy toward home injuries among Egyptian rural mothers having preschool children. PLoS One. 2018;13(6):e0198964.
2. Arulogun OS, Ikolo O, Oluwasanu M. knowledge and practices relating to domestic accidents among mothers of pre-school children in Ibadan Southwest Local Government Area, Nigeria. Vol. 6, IOSR Journal of Dental and Medical Sciences 2013; 6(3): 49-45.
3. Ali El-Sabely A, El-Aziz Ismail Yassin A, Ahmed Zaher S. Mother's education and her knowledge about home accident prevention among preschool children in rural areas in Sharkia Governorate. IOSR Journal of Nursing and Health Science 2014; 3(1): 32-40.
4. Khan S, Tauheed N, Nawab S, Afzal S, Khalique N. Domestic accidents among under-5 year children: a study on the modern-day epidemic. Int J Community Med Public Health 2019;6:1529-35.
5. Kogilla C, Bhuvaneshwar P. Prevention of home accidents among mothers of toddler. J Nurs Trendz 2(1): 1-4.
6. Bánfai B, Deutsch K, Pék E, Radnai B, Betlehem J. Accident prevention and first aid knowledge among preschool children's parents. Kontakt 2015, 17(1):e42-e47
7. Olutayo OG. Mother's Education, Age and Knowledge about Home Accident Prevention among Preschool Children in Ilesa Metropolitan City: A Relational Approach Journal of Education and Practice 2013; 11(4): 221-228.
8. Wortel E, de Geus GH. Prevention of home-related injuries of pre-school children: safety measures taken by mothers. Health Educ Res 2020 17;8(2):217-31.

**Table 1.** Demographic distribution of samples

Demographic Variables	Characteristics	Percentage (%)
Age (in years)	18-22	7
	23-27	19.5
	28-32	55.5
	33-37	18
Education	Illiterate	16.5
	Primary education	45
	Higher secondary	34
	Graduation	4.5
Number of children	One	24.5
	Two	57.5
	>Two	18
Type of family	Nuclear	65.5
	Joint	34.5
Occupation	Business	11

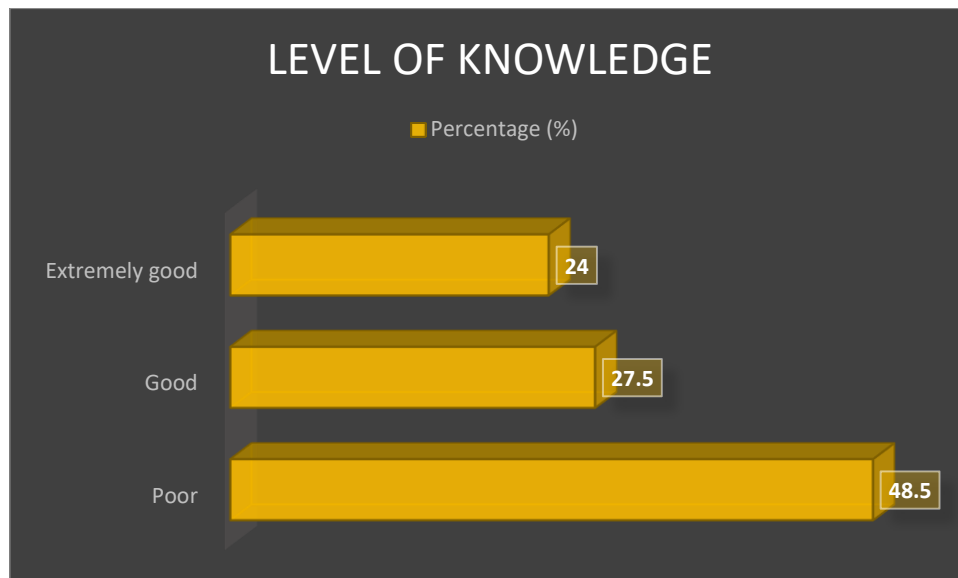
Gov. job	8
Private job	15.5
Others	65.5

**Table 2.** Association of knowledge and self-declared practices with selected demographic variables

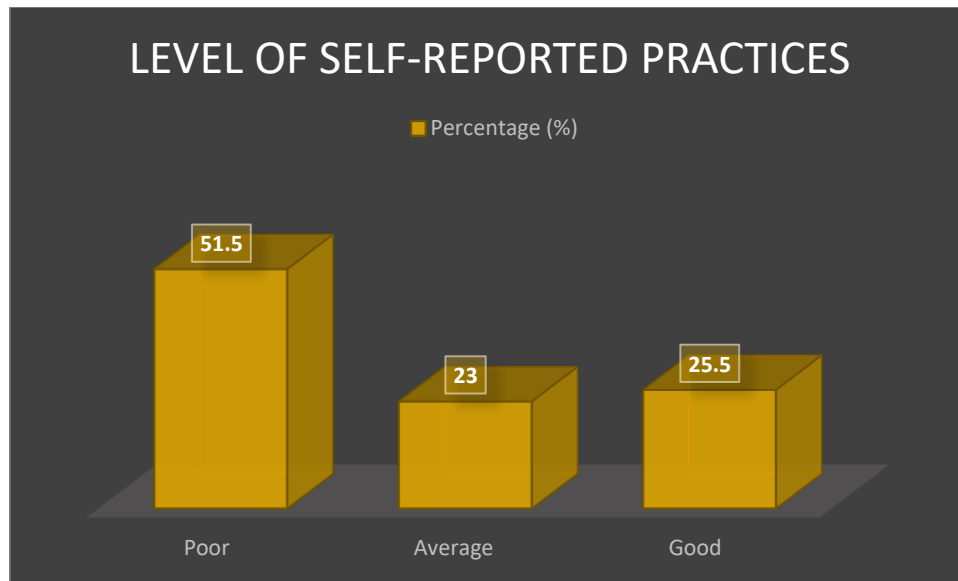
Demographic Variables	DF	Knowledge			Self-Declared Practices		
		chi-square value	critical p value	inference	chi-square value	critical p value	inference
Age	3	4.51	0.21	not significant	29.75	< 0.00001	significant
Education	3	43.22	< 0.00001	significant	72.74	< 0.00001	significant
Number of children	2	99.26	< 0.00001	significant	57.04	< 0.00001	significant
Type of family	1	44.65	< 0.00001	significant	30027.9	< 0.00001	significant

**Table 3:** Relationship of knowledge with self-declared practices

Relationship	R-Value	P-Value	Inference
Knowledge & self-declared practices	0.97	0.15	Not significant



**Figure 1:** Sample distribution according to the level of knowledge regarding home-based accidents



**Figure 2:** Sample distribution according to level of self-declared practices regarding prevention of home-based accidents