

<https://doi.org/10.33472/AFJBS.6.13.2024.4353-4358>



African Journal of Biological Sciences

Journal homepage: <http://www.afjbs.com>



Research Paper

Open Access

A STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVENTION OF HOME ACCIDENTS AMONG MOTHERS OF UNDER FIVE CHILDREN IN SELECTED HOSPITAL, CHENNAI.

Ariya S Kurup^{1*}, Dr. Sathiyalatha Sarathi², Dr. V. Hemavathy³

^{1*}Ph.D Scholar, Sree Balaji college of Nursing, Bharath institute of Higher Education and Research, Chennai, Tamil Nadu, India.

²Supervisor, Vice Principal, Department of Obstetrics and Gynaecology Nursing, Sree Balaji college of Nursing, Bharath institute of Higher Education and Research, Chennai, Tamil Nadu, India

³Principal, Department of psychiatric Nursing, Sree Balaji college of Nursing, Bharath institute of Higher Education and Research, Chennai, Tamil Nadu, India

Corresponding Author: Ariya S Kurup

Article Info

Volume 6, Issue 13, July 2024

Received: 04 June 2024

Accepted: 05 July 2024

Published: 31 July 2024

doi: [10.33472/AFJBS.6.13.2024.4353-4358](https://doi.org/10.33472/AFJBS.6.13.2024.4353-4358)

ABSTRACT:

Background: Home accidents, characterized by their unexpected and unplanned nature, often result in fatal or severe outcomes. Common types of home accidents include burns, falls, drowning, poisoning, suffocation, and injuries caused by sharp objects. **Aim:** The study aimed to assess the Knowledge regarding Prevention of Home Accidents among mothers of under five children in selected hospital, Chennai. **Methods:** Descriptive Cross section design was used for the study. The study was conducted among 80 mothers of under-five children in a selected hospital at Chennai. The samples were selected using a convenient sampling technique who fulfils inclusion criteria. **Finding:** The study revealed that the majority (52.5%) of the respondents had moderate knowledge, a small percentage (3.8%) had adequate knowledge, and 43.8% had inadequate knowledge on preventing home accidents. **Conclusion:** The study concluded revealed that the majority of the mothers had moderate knowledge. The analysis found no significant association between knowledge levels and selected baseline variables such as age, religion, family type, number of children, mother's education, or child accident history.

Keywords: Knowledge, Preventions, Home accidents, Under-five children, Mothers

1. INTRODUCTION

A child represents humanity's most precious treasure, embodying pure innocence. Fragile and entirely dependent on caregivers, a fetus enjoys safety within the mother's womb. Upon birth, however, the child enters an unpredictable world. Ideally, this environment should be a secure haven for the child's growth, free from hazards, but the reality can be perilous. It is crucial to ensure children are cared for and shielded from environmental dangers. [1] [2]

In childhood, the mortality rate from injuries sustained at home exceeds that of other childhood diseases. Home accidents, characterized by their unexpected and unplanned nature, often result in fatal or severe outcomes. Common types of home accidents include burns, falls, drowning, poisoning, suffocation, and injuries caused by sharp objects.[3] The World Health Organization reports that approximately 830,000 children die each year due to home accidents, which translates to about 2,000 child deaths daily. Additionally, millions of children are hospitalized annually with injuries from home accidents, often leading to permanent disabilities.[4]

In 2019, approximately 5.2 million children under the age of five died, largely due to preventable and treatable causes. Of these deaths, children aged 1 to 11 months accounted for 1.5 million, while those aged 1 to 4 years accounted for 1.3 million. The remaining 2.4 million deaths occurred among newborns under 28 days old. [5] A study conducted in Belgaum, India, evaluated the knowledge of 30 mothers of toddlers on preventing household injuries and assessed the impact of a structured teaching program (STP). Using a structured knowledge questionnaire, the results showed that pre-test, 27% of mothers had poor knowledge, 53% had average knowledge, and 20% had good knowledge. Post-test, no mothers had poor knowledge, 27% had good knowledge, and the mean score increased, demonstrating that the STP effectively enhanced the mothers' knowledge.[6]

Aim of The Study

The study aimed to assess the Knowledge regarding Prevention of Home Accidents among mothers of under five children in selected hospital, Chennai.

2. METHODOLOGY

Study Design and Settings

Descriptive Cross section design was used for the study. The study was conducted among 80 mothers of under-five children in a selected hospital at Chennai. The samples were selected using a convenient sampling technique who fulfils inclusion criteria.

Inclusion criteria:

- Mothers of under-five children in selected hospital.
- Mothers who are willing to participate in the study

Exclusion criteria:

- Mothers who do not understand English and Tamil.

Data Collection

Informed consent was obtained from the mothers. Data was collected using a demographic information, structured knowledge questionnaire regarding Prevention of Home Accidents.

Statistical Analysis

The data was analysed using SPSS version 25. Descriptive statistics, including frequency and percentage, were utilized to summarize the data. Inferential statistics, specifically chi-square tests, were performed to evaluate the associations between demographic variables and the level of knowledge scores.

3. RESULTS

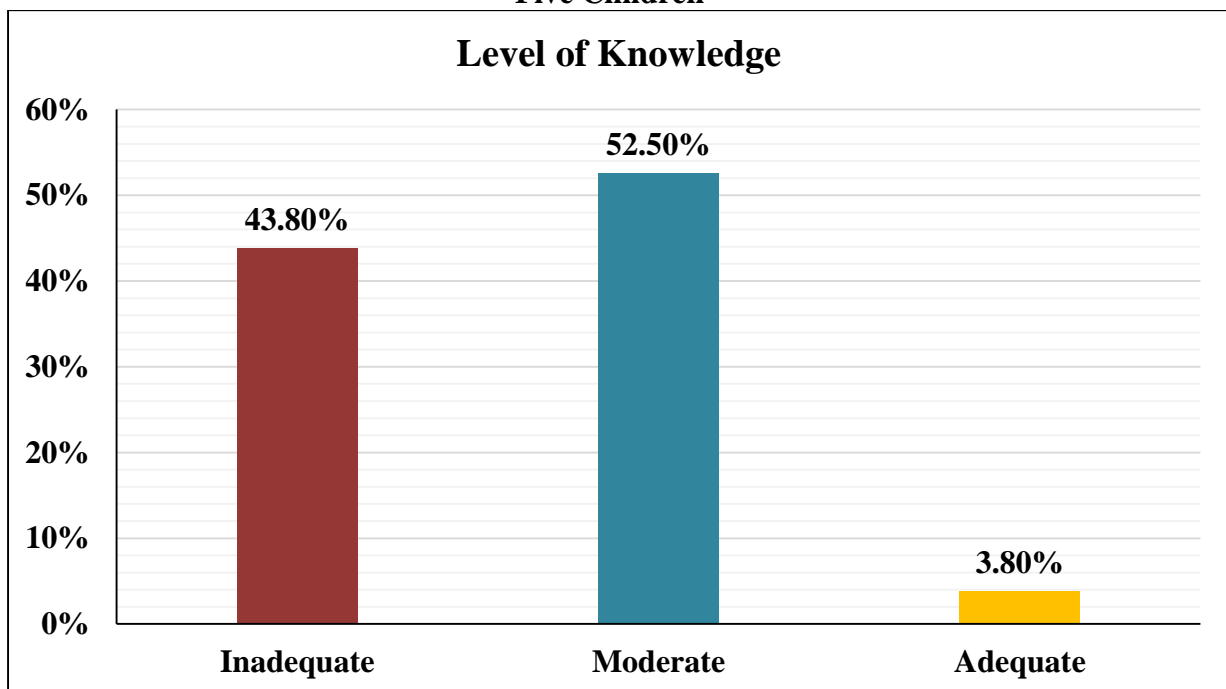
Table 1: Frequency and Percentage Distribution of Samples (n=80)

Sl. No.	Characteristics	Frequency	Percentage
1.	Age Group (years)		
	19-24	22	27.5
	25-31	26	32.5
	32-37	32	40.0
2.	Religious Affiliation		
	Hindu	9	11.3
	Muslim	37	46.3
	Christian	34	42.5
3.	Family Structure		
	Nuclear	32	40.0
	Joint	29	36.3
	Extended	19	23.8
4.	Number of Children Under 5 Years		
	One	40	50.0
	Two	24	30.0
	Three	16	20.0
5.	Mother's Education Level		
	Primary	30	37.5
	Secondary	19	23.8
	Pre-university	13	16.3
	Undergraduate	18	22.5
6.	Child Accident History		
	Yes	8	10.0
	No	72	90.0

Table 2: Frequency and Percentage Distribution of Knowledge Levels Among Mothers of Under-Five Children

Knowledge Level	Score Range	% of Score	Frequency	Percentage
Inadequate	0-9	0-36	35	43.8
Moderate	10-18	37-72	42	52.5
Adequate	19-25	73-100	3	3.8

The data in Table 2 shows that the majority (52.5%) of the respondents had moderate knowledge, a small percentage (3.8%) had adequate knowledge, and 43.8% had inadequate knowledge on preventing home accidents.

Figure:1 Percentage wise distribution of knowledge level Among Mothers of Under-Five Children**Table 3: Mean, Median, and Standard Deviation Percentage of Knowledge Regarding Prevention of Home Accidents Among Mothers of Under-Five Children (n = 80)**

Knowledge Area	Max. Score	Min. Score	Range	Mean	SD	Mean %
Knowledge	19	3	16	10.52	4.24	42.08

Table 3 presents the mean, standard deviation, and mean score percentage of knowledge regarding the prevention of home accidents among mothers of under-five children. The maximum knowledge score is 19, the minimum score is 3, the range is 16, the mean score is 10.52, the standard deviation is 4.24, and the mean percentage is 42.08%.

The chi-square values calculated for the relationship between the level of knowledge and various demographic variables. The specific chi-square values are as follows: age ($\chi^2 = 1.152$), religion ($\chi^2 = 2.309$), type of family ($\chi^2 = 2.782$), number of children under 5 years of age ($\chi^2 = 0.424$), educational status of the mothers ($\chi^2 = 1.970$), and whether the child had experienced any accidents ($\chi^2 = 0.395$). None of these values were significant at the 0.05 level.

4. DISCUSSION

The study was conducted on 80 mothers of under-five children to understand their demographic characteristics and knowledge levels regarding the prevention of home accidents. The age distribution revealed that 40% of the participants were aged 32-37. Most were either Muslim (46.3%) or Christian (42.5%), and 40% lived in nuclear families. Half had one child under five years old. Regarding education, 37.5% had primary education, and 22.5% had undergraduate degrees. Only 10% reported their child had experienced an accident. Knowledge assessment showed that 52.5% of mothers had moderate knowledge, 43.8% had inadequate knowledge, and just 3.8% had adequate knowledge on preventing home accidents. The mean knowledge score was 10.52 out of 19, with a standard deviation of 4.24, translating to a mean percentage score of 42.08%. Chi-square analysis found no significant relationships between knowledge levels and demographic variables such as age, religion, family type, number of children, mother's education, or child accident history.

A study conducted in India yielded similar findings, revealing that the majority (91%) of participants were aged 20-35 years. Among the families surveyed, 65% were Muslim and 35% were Hindu. Most of the children (55%) came from joint families, and 57 (35.6%) children had no history of domestic injuries in the past month.[7]

A similar study in India found that 56% of mothers had average knowledge about preventing home accidents, 32% had good knowledge, 7% had poor knowledge, 4% had excellent knowledge, and only 1% had very poor knowledge. [8]

5. CONCLUSION

The assessment of knowledge among mothers of under-five children on the prevention of home accidents revealed that the majority (52.5%) of the respondents had moderate knowledge, 43.8% had inadequate knowledge, and only a small percentage (3.8%) had adequate knowledge. Contrary to expectations, the analysis found no significant association between knowledge levels and selected baseline variables such as age, religion, family type, number of children, mother's education, or child accident history. This highlights the necessity of educating mothers to ensure they take adequate precautions to prevent home accidents among under-five children.

6. REFERENCES

1. Adenine, A. E. and Okanogan. (2015) Prevention of toddler injury. Australian journal of rural health .13(2):97-101 2.
2. Debnath M, Reang T. A study to assess the knowledge of rural mothers regarding common domestic childhood injuries and home-safety measures adopted by them in west district of Tripura, India. 2014 May, Journal of Evolution of Medical and Dental Sciences. 19; 3(20):5522 8. DOI: 10.14260/jemds/2014/2623
3. Daniel, Bent .G.T., and Lee, Selma, khadebwal. (2012).Causes of toddler accidents. A Review article. Journal of pediatrics. 25(6): 48-51.

4. World Health Organization: World report on child injury prevention. (2014) Accessed from https://www.who.int/violence_injury_prevention/child/injury/world_report/report/en/ on;December 15, 2019
5. https://www.cdc.gov/safechild/child_injury_data.html
6. Kole, Devulkar. A study to assess the effectiveness of structured teaching program on knowledge regarding prevention of household injuries among the mothers of toddlers in selected village of Belgaum.
7. 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.
8. Surendra S. Assess the knowledge and attitude of mother regarding prevention of home accidents among under 5years children in selected hospital, Punjab. *International Journal in Management and Social Science*. 2016; 4(6): 248-53