

# Mother's Knowledge on First Aid Management of Domestic Accidents in Children

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**Abstract:** *It is crucial to understand that children are like discovering machines, constantly exploring and learning. However, this natural curiosity makes them more susceptible to injuries. To prevent accidents and injuries at home and in the community, it is imperative to have a thorough understanding of different types of injuries. Falls, burns, and drowning are just a few examples of the types of injuries that children are more likely to sustain due to their active nature. As adults, it is our responsibility to protect and provide a safe environment for children to thrive in. Every child has the fundamental right to a healthy environment at home, school, and in the community as they grow and develop. Creating a secure and nurturing environment for our children is crucial to their future success. **Methodology:** For this investigation, a descriptive survey method was used. The investigation was carried out at selected setting of a hospital in Mangaluru. A total of Ninety-five mothers were included in the research sample and were by purposive sampling technique. Data on mothers' first aid management knowledge were gathered using a structured knowledge questionnaire. **Result:** The study showed that more than half (50.5%) of them had a good knowledge (48 individuals), whereas 45.3% (43 individuals) had an average knowledge, and only a few (4.2%) mothers scored an excellent knowledge (4 individuals). Mothers demonstrated good knowledge in the area of managing poisoning, with a mean percentage knowledge score of 63%, compared to other areas. However, in the area of managing animal bites, they had a poor knowledge score, with a mean percentage of 47%. The information demonstrates that knowledge and the kind of residence have a P-value of 0.01 at a significance level of 0.05. The concept of the null hypothesis was only partly accepted. The baseline factors and expertise of first aid personnel in handling domestic accidents are not significantly correlated; thus, the idea of the null hypothesis is accepted. Consequently, the research premise is disproven. **Conclusion:** The majority of mothers had a strong understanding of first aid treatment for home accidents involving children, according to the study's findings. A child may be at risk for injury. Therefore, information in this regard to create awareness among mothers will be the focus of the study.*

**Keywords:** Knowledge, Mothers, First aid management, Domestic accident, Children.

## 1. Introduction

Children should inherit a world that is more secure, fair, and wholesome. The preservation of their surroundings is the most vital duty. Living in a healthy environment at home, school, and in the community is one of a child's fundamental rights. Worldwide, illnesses that affect where children live, learn, and play at home, school, and in the community cause more than 5 million deaths in children aged 0 to 14 every year. Learning about illnesses is the first step in lowering the risk of accidents and injuries at home and in the community, as children are the "discovering machine." The early years of life are a highly precious and delicate time. Creating a secure environment for kids to develop and flourish is essential for the future success of every person, family, community, and nation.<sup>1</sup>

It is a fact that the types of injuries most likely to occur at a certain age are partially dependent on the child's developmental stage. It is imperative to note that children who are most curious to explore and learn, and have the ability to run and walk, are at a higher risk of sustaining various injuries such as falls, burns, and drowning<sup>2</sup>.

The practice of first aid is as old as life on Earth. First aid is an essential component of life-saving in case of accidents and natural calamities during the period when qualified help is not readily available. Reducing pain and providing comfort to the injured through good first aid practices constitute acts of mercy, which can be highly recommended to a first aid

practitioner. First aid is the skilled help given by trained individuals to the victims of accidents and sudden illnesses before medical aid is obtained.<sup>3</sup>

Information from developing nations, especially India, is notably deficient. Nonetheless, investigations conducted in Chandigarh have revealed a surge in the incidence of minor injuries among children under five years old, escalating from 14.2% and 15.3% to as much as 67%. According to the same study, out of the 220 households surveyed, a majority of injuries (62.6%) occurred within the home environment. Most of these injuries were self-inflicted (60%) and took place during playtime (60.5%). It was observed that 22.4% of these injuries involved topical treatments for localized wounds, such as the application of turmeric, mustard oil, and facial lotions. The research indicates that parents feel ill-equipped to manage various childhood injuries.

## 2. Methodology

The present investigation utilized a descriptive survey method at a tertiary care hospital situated in Mangalore, South India. The ethical clearance was obtained prior to the investigation. The sample size consisted of 95 mothers who fulfilled the inclusion criteria, selected through purposive sampling technique. Data was collected using a structured knowledge questionnaire validated by 8 experts and the reliability coefficient of the tool was calculated using Karl Pearson's correlation coefficient. The reliability of the questionnaire was found to be  $r = 0.7$ , which was statistically significant and

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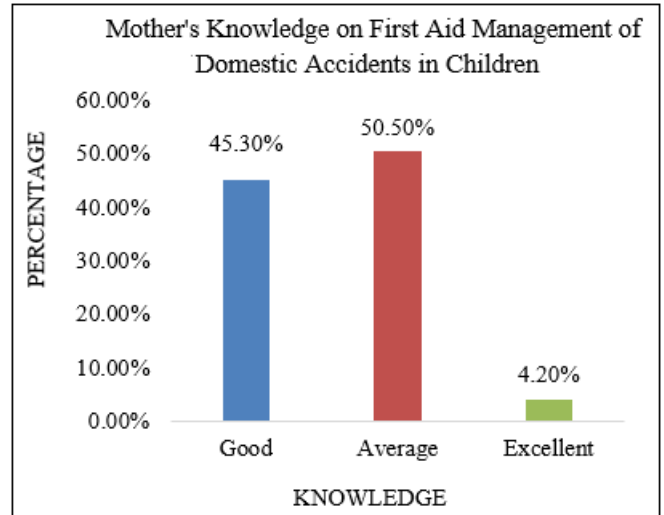
the tool was reliable hence the tool was provided to the participants. The data was analysed utilizing both descriptive and inferential statistics. The investigation ensured that the sample size was carefully selected, and the data was collected with utmost accuracy. The utilization of descriptive and inferential statistics in the data analysis enabled a precise and detailed examination of the findings. The report provides a comprehensive description of the study's results and their implications.

### 3. Results

**Table 1:** Frequency and Percentage distribution of mothers according to baseline Characteristics, n=95

S.No	Variables	Frequency	Percentage
1	Age of mother (in years)		
	20-29	21	22.1
	30-39	47	49.5
	40-49	27	28.4
2	Age of child (in years)		
	<1	14	14.7
	1-2	29	30.5
	3-4	27	28.4
	5-6	25	26.4
3	Educational status		
	No formal education	4	4.2
	Primary education	46	48.4
	Secondary education	30	31.6
	Graduate and above	15	15.8
4	Occupational status		
	Professional	10	10.5
	Coolie Worker	5	5.3
	Home Maker	71	74.7
	Any other	9	9.5
5	Type of family		
	Nuclear	69	72.6
	Joint	26	27.4
6	Residence		
	Rural	50	52.6
	Urban	45	47.4
7	Attended session on first aid management		
	Yes	4	4.2
	No	91	95.8

Table 1 data clearly indicates that the vast majority of the mothers who participated in the study were homemakers (74.7%) living in nuclear families (72%). Furthermore, it's important to note that most of the mothers lived in rural areas (52.6%). Almost half of the mothers (49.5%) belonged to the age group of 30-39 years, and 30.5% of their children were aged between 1-2 years. It's quite concerning that only 4.2% of the mothers attended the session on first aid management.



**Figure 1:** Bar diagram showing distribution of mothers according to their knowledge level on First aid Management of domestic accidents in children

As revealed by Figure 1, an impressive majority of mothers, precisely 48 (50.5%) of them, had a remarkable knowledge score ranging between 11 and 15 concerning the First Aid Management of domestic accidents in children. Meanwhile, 43 (45.3%) mothers had an average knowledge score, while a mere 4 (4.2%) mothers had an excellent knowledge score on the same topic.

**Table 2:** Area wise mean, standard deviation and mean percentage of knowledge score, n= 95

Areas	Maximum score	Mean ±SD	Mean%
Falls	4	2.16 ±1.17	54
Bleeding	2	1.64 ±0.91	54.67
Burns	3	1.73 ± 0.69	54.67
Electrical Hazard	2	1.22 ± 0.64	61
Choking	2	0.98 ± 0.71	49
Poisoning	2	1.27 ± 0.64	63
Animal bite	2	0.94 ±0.67	47
Drowning	2	1.06 ± 0.71	53

The data presented in Table 2 clearly indicates that Mothers possess the highest level of knowledge when it comes to managing poisoning, with an average percentage score of 63% compared to other areas. It is also evident that managing animal bites is an area where there is a significant lack of knowledge, as indicated by the lowest average percentage score of 47%.

**Table 3:** Association between knowledge score and selected baseline characteristics, n=95

Variables	>Median	≤Median	Chi Square Value	P Value
	11	11		
AGE OF MOTHER (IN YEARS)				
20-29	9	12		
30-39	19	28	1.97	0.37
40-49	7	20		
AGE OF CHILD (IN YEARS)				
<1	2	12		
1-2	12	17	3.99	0.26
3-4	12	15		
5-6	9	16		
EDUCATIONAL STATUS				
No formal education	0	4		

Primary education	18	28		
Secondary education	11	19	2.5	0.47
Graduate and above	6	9		
OCCUPATIONAL STATUS				
Professional	3	7		
Coolie Worker	1	4	1.02	
Home Maker	27	44	(Fisher Exact)	0.84
Any other	4	5		
TYPE OF FAMILY				
Nuclear	25	44	0.04	0.51
Joint	10	16		
Residence				
Rural	24	26	5.65	0.01*
Urban	11	34		
ATTENDED SESSION ON FIRST AID MANAGEMENT				
Yes	3	1	-	0.14
No	32	59	(Fisher Exact)	

As per the study, there is no significant association found between the knowledge score and various factors such as the age of the mother (0.37), the age of the child (0.26), education (0.47), occupation (0.84), type of family (0.51), and previous knowledge (0.14). However, a p-value of 0.01 was calculated between knowledge and type of residence at a significance level of 0.05, leading to the partial rejection of the null hypothesis.

#### 4. Discussion

The purpose of the research was to evaluate mothers' knowledge of first aid and the management of household accidents involving children in a particular Mangaluru environment. The main results of the study are covered in this chapter, along with a comparison to other similar studies that the researchers have carried out.

The results depict that the majority (48, 50.5%) of mothers had a good knowledge score, 43 (45.3%) had an average knowledge score, and (4.2%) of mothers had an excellent knowledge score regarding first aid management of domestic accidents. This study reveals that there is no association between knowledge score and the age of the mother (0.37), age of the child (0.26), education (0.47), occupation (0.84), type of family (0.51), and previous knowledge (0.14). However, the p-value computed between knowledge and type of residence (0.01) is significant at the 0.05 level. Hence, the null hypothesis was partially rejected. Comparing the results of the current research to those from a descriptive study where 300 moms participated in a study in South India to gauge their knowledge of child household accidents using a non-probabilistic sampling method, the baseline data revealed that 54.7% of the population had enough understanding of the different forms of domestic collisions, 25.3% had average knowledge, and 20% had insufficient information<sup>4</sup>. The study also showed that when it came to first aid knowledge for home accidents, 48.7% of the population had a basic understanding, 31.6% had appropriate knowledge, and 19.7% had inadequate knowledge.

#### 5. Conclusion

The study indicated that an awareness program regarding first aid management of domestic accidents can be given to mothers of children under six who visit the hospital. The research can be repeated with a large sample, and the results may be extrapolated to a sizable population. It is possible to undertake a comparative study between suburban and rural locations to assess how first aid knowledge for household accidents is used in practice. Community settings may be utilized to replicate similar studies.

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**Conflict of interest:** There are no conflicts of interest.

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