

# A Study to Assess the Effectiveness of Health Education on Knowledge Regarding Prevention of Home Accidents among Mothers of Preschooler in Selected Community Area of Dehradun, Uttarakhand

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**Abstract:** *Accidents are undoubtedly among the chief causes of morbidity and mortality. Accidents are the main cause of injury and even death in children. People only relate accidents to traffic accident or accidents in outdoor activities. However, as a matter of fact, the place where people regard as the safest place-home-hides many hazards. The main cause of home accident is general negligence of safety at home. No matter how loving and careful you are, it's impossible to shield your children from all of life's little injuries. But by taking some important precautions, you can help ensure your child avoids serious home accidents. The incidents of accidental injury are increasing in India especially home accident in children; hence the knowledge of mothers is essential for undertaking measures to prevent them. A quantitative research approach was used to assess the knowledge level of mothers of pre-schooler. The research design selected was pre experiment one group pre-test post-test design, non-probability sampling technique was used and sample size was 60. The study was conducted at Soda Saroli village Raipur Dehradun. The conceptual framework was based on Nola Pander health promotion modal. The self-structured questionnaire used as a tool for data collection. Reliability is 0.75. The collected data was analyzed and interpreted by using descriptive and inferential statistics by the help of SPSS software. The frequency and percentage distribution of mothers depicts that the majority (42%) of subjects are of above 30 age, (30%) are of 26-30 age and remaining (28%) are of 21-25 age. All the samples are 60 in numbers out of which maximum percentage (38%) of subjects are having educations up to high school level, (28%) up to Intermediate, (25%) up to primary level, (3%) are graduates and no one is illiterate. After the intervention post-test level of knowledge score 53.3% of mothers are having average level of knowledge, 46.7% of them having good level of knowledge, none of them are having poor level of knowledge. In 60 samples majority (81.7%) of mothers had good knowledge regarding prevention of home accidents in children. The present study concluded that majority of mothers had poor knowledge on prevention of home accidents and health education was effective in improving the knowledge of mothers how to prevent home accidents of preschoolers and what are the safety measures they can take after accidents.*

**Keywords:** Prevention of Home Accidents, Preschooler, Health Education

## 1. Introduction

Home accident among the children is a big issue in our life. They are a leading cause of death and different type of disabilities among the children. We can define home accidents as "Any damage to a child whether it is physically or mentally, which had occurred unintentionally at home by any type of outer force" is called home accident among children. These days' people only take accident as an event which can only took place outside their home. They take their home as the safest place in planet. But they don't get the dangers which are inside their own home like many "hazards" which hides in their home and other dangers like falls, poisoning, burnings, cuts, sports injuries, drowning, ingestion and aspiration of foreign bodies etc.

According to a study of The Centre for disease control statistics in the US says that every hour a child dies from injury and each year more than 50,000 children get hospitalized due to home accident-related injuries. Likewise, the safety Report Card Summary for 18 countries in the European Union says that each year over 10,000 children and adolescents less than 20 years old die as a result of unmeant accidents, which is almost one child losing life

each hour of each day. Besides, the studies took place in Oman, the UAE, Saudi Arabia, Greece, and the UK, found that home accidental injuries are higher among the children aged less than five years.

In general, we can say that we can't avoid the home accidents completely, but we can prevent its occurrence. To prevent accident to children, adults must pay more attention to home safety. They should also make sure that there are no "hazards" at home and teach children about safety. If accidents happen then don't panic, just keep calm and call for help immediately and give the first aid to children.

The community health nurse will try to ensure that people know how to prevent accidents. When home visiting is done accidents hazards will be identified and advice is given to correct them. Community health nurse is responsible to prevent injuries in their communities at home, schools and work place. Injury prevention requires acute observation skills in noticing potential safety hazards and collaborative skills in working with others to rectify unsafe conditions to promote personal safety. Also, community health nurses are in key position in educating families about how to promote home safety, eliminating hazards before exposure occurs and

screening for environmental hazard that may threaten the health.

In 1993 Armstrong and Barker mentioned that the main role of the nurse is to prevent accidents and educate the people how to prevent them and then to know how to manage and educate the people about management of home accidents. 40% of deaths due to home accidents are preventable if prevention measures are taken to avoid accidents. So, it is important to improve the mother knowledge, attitude and practice to prevent accidents at home.

## 2. Material and Methods

Data collection is the process of acquiring subject and collecting information needed for the study. The written permission was obtained from principal of state college of nursing. The data collection was scheduled from 24 Aug 2020-25 Sep 2020. The researcher informed the sample about purpose of the study; consent was taken from samples and assured confidentiality.

### Section A

60 mothers of preschooler were selected by purposive sampling technique. Pre-test was given to the samples to assess the knowledge level regarding prevention of home accidents. The time taken by the samples to answer the questionnaire was around 5-10 minutes. After pre-test health education was executed to the samples. Post-test was conducted after 14 days by administering the same tool.

**Section A:** Description of demographic variable among mothers of preschooler.

**Section B:** Assessment of knowledge level of mothers regarding prevention of home accidents in pre- test and post-test.

**Section C:** Comparison of pre-test and post-test knowledge scores by using paired 't' test.

**Section D:** Association between pre-test knowledge score with their selected demographic variable.

**Table 1:** Frequency and Percentage distribution of demographic variables

Demographic Variables	F	%
<b><u>Age in Years</u></b>	-	-
21-25	17	28.33
26-30	18	30
More than 30	25	41.66
<b><u>Educational Status</u></b>	-	-
Illiterate	0	0
Primary school	15	25
High school	23	38.33
Intermediate	17	28.33
Graduation	5	3
<b><u>Occupation</u></b>	-	-
Housewife	44	73.33
Self employed	3	5
Govt Employee	0	0
Private	13	21.66
<b><u>Type of Family</u></b>	-	-
Nuclear	29	48.33
Joint Family	31	51.66
<b><u>Previous History of Accident</u></b>	-	-
Yes	34	56.66
No	26	43.33
<b><u>Type of Accidents</u></b>	-	-
Burn	10	16.66
Fall	12	20
Poison	0	0
Chocking	2	3.33
Cut	10	16.66
None	26	43.33
<b><u>Number of Child</u></b>	-	-
1	20	33.33
2	40	66.66
More than 2	0	0

This section deals with findings related to pre-test and post-test knowledge scores regarding prevention of home

accidents in preschoolers, mean and standard deviation of knowledge aspects in dimensions in pre-test, and post-test.

**Table 2:** Percentage of pre- test & posttest knowledge scores regarding prevention of home accidents for children among mothers

Level of Knowledge	Pre-Test Number of Mothers	%	Post-Test Number of Mothers	%
Poor	43	66.7	0	0
Average	16	26.7	32	53.3
Good	4	6.7	28	46.7
Total	60	100	60	100

The table- 2 depicts the overall pre-test and post-test level of knowledge on prevention of home accidents among mothers. 66.7% of mothers are having poor knowledge, 26.7% of the having average knowledge and 6.7% of them having good knowledge. In 60 samples majority of them had poor Knowledge regarding prevention of Home accidents in preschoolers.

53.3% of mothers are having average level of knowledge, 46.7% of them having good level of knowledge, none of them are having poor level of knowledge. In 60 samples majority (81.7%) of mothers had good knowledge regarding prevention of home accidents in children.

**Section C**

**Table 3:** Comparison of Pre-Test and Post-Test Knowledge Regarding Prevention of Home Accidents in Children in Various Dimensions by Paired T-Test, N= 60

Knowledge Score	Mean	SD	DF	T-Value	P-Value
Pre-Test	13.71	8.53	59	35.29	<0.001
Post-Test	22.25				

In the above table we compared the pre-test knowledge to the post-test knowledge of the mothers regarding prevention of home accident in children and after carefully examining the scores we calculated the t-value. The calculated ‘t’ value is 35.29 (df 59) which is greater than tabulated ‘t’ value (3.46). This indicates that gain in knowledge is statistically significance at P <0.001 level.

**Section D**

Findings related to association between pre-test knowledge score regarding prevention of home accidents among mothers of preschooler with selected demographic variables.

Statistic significant was calculated by using statistical paired ‘t’ test.

**Table 4:** Association between pre-test knowledge score with the selected demographic variables (N= 60)

Demographic Variables	F	Knowledge			Chi square & df	T value	P value	Inference
		Poor	Average	Good				
<b>Age in Years</b>								
21-25	17	13	4	0	4.918, df=4	9.49	0.296	NS
26-40	18	11	4	3				
More than 30	25	16	8	1				
<b>Educational Status</b>								
Illiterate	0	0	0	0	55.97, df=6	12.59	0	S
Primary School	15	15	0	0				
High School	23	21	2	0				
Intermediate	17	4	12	1				
Graduate	5	0	2	3				
<b>Occupation</b>								
Housewife	44	31	10	3	3.006, df=4	9.49	0.557	NS
Self Employed	3	1	2	0				
Govt Employee	0	0	0	0				
Private	13	8	4	1				
<b>Type of Family</b>								
Nuclear	28	21	5	2	2.093, df=2	5.99	0.351	NS
Joint family	32	19	11	2				
<b>Previous History of Accident</b>								
Yes	34	26	7	1	3.852, df=2	5.99	0.146	NS
No	26	14	9	3				
<b>Type of Accidents</b>								
Burn	10	7	2	1	5.379, df=8	15.51	0.716	NS
Fall	12	9	3	0				
Poison	0	0	0	0				
Chocking	1	1	0	0				

Cut	11	9	2	0				
None	26	14	9	3				
<b>Number of Child</b>								
1	20	13	6	1				
2	40	27	10	3	0.263,	5.99	0.87	NS
More than 2	0	0	0	0	df=2			

The given table 4 portrays the association between pre-test level of knowledge and their demographic variables. There is no significant association between post-test knowledge score and age with p value 0.296, Occupation with a p value of 0.557\*, Type of family with a p value 0.351, previous history of accidents with a p value 0.146, type of accident with a p value 0.716 and no. of child with a p value 0.877. Hence, the research hypothesis H2 is rejected and null hypothesis is accepted for this. The obtained chi-square value for Education with p value 0.001 which is less than 0.05 which indicates that there is a significant association between pre-test knowledge score and with selected demographic variable. Hence, the research hypothesis H2 is accepted and null hypothesis is rejected for this.

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