A study to evaluate the effectiveness of structured teaching program on knowledge regarding prevention of home accidents among mothers of under five years children at Alwar city, Alwar

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Abstract
Home accidents is the one of the leading cause of deaths and disabilities. This study assess the existing knowledge of mothers and to determine the effectiveness of structured teaching programme on prevention of home accidents.

Methodology:
Evaluatory approach with Non-probability simple convenient sampling technique one group Pre-test-Post-test design was used in Alwar city, Alwar.

Result:
The overall mean pre-test knowledge score was 13.35(SD=2.59) and Post-test knowledge score was 15.13(SD=2.29). Calculated paired ‘t’ value was 7.86(df=1.78) which is greater. This indicates that gain in knowledge is statistically significant at p < 0.05 level, also this result revealed significant association between knowledge of mother and selected socio-demographic variables.

Conclusion:
Mothers were lacking knowledge about accidents and its prevention. The designed health education and training program led to significant improvement in knowledge about prevention of accidents.

Keywords: disabilities, effectiveness of structured and accidents among mothers

Introduction
Children aged between the 1-5 years are generally known as under five year children. Under five year children represent the 22% of the general population. The mortality rate is high in the under five years compare to all deaths. This age group is of high risk for many health problems. Among all the health problems one of the most important problems is home accidents among under five years children

Accidents were an unexpected and undesirable score of event; especially one’s resulting in damage or harm. As per WHO, unintentional injuries are a leading cause of death among children under five years of age. The unintentional injuries comprises of accidents such as falls, burns, drowning, poisoning, and aspiration of foreign material. This challenges the children’s morbidity and mortality

Since mothers are the primary caregiver of children. It is the necessary to learn more about a mother’s perceptions, attitudes and behaviors towards child safety from home accident. It was found that lack of awareness or knowledge about the causes of home accidents among mother leads to more number of home accident. It was observed by investigator that home accident was preventive in under five years children By providing education to the mother about preventive aspects of home accidents of the investigator planed to a STP.

Objectives
This study endeavored to : (1) Evaluate the pre-test level of knowledge on the prevention of home accidents among mothers of under five year children.(2) To evaluate the post-test level of knowledge on the prevention of home accidents among mothers of under five year children.(3) To evaluate the effectiveness of Structured Teaching Program on prevention of home accidents among mothers of under five year children. (4) To find out association between pre-test and post-test knowledge score with selected demographic variables.

Methodology
The research approach adopted for this study is an evaluative approach. The theoretical framework for the present study is developed from the Health Belief Model (modified from Beaker MH and Miaman LA medicare was prepared, 1974). It was modified to suit to the
The present study. The research design selected for this study belongs to the pre experimental design with one group pre-test and post-test design. The design carried out by non-probability convenient sampling with no control group. The present study was conducted in Alwar city area which comes under Alwar District in Rajasthan State.

The selected setting was provided the required samples adequately, feasibility and accessibility of the samples. Selected 40 mothers of under five year children who fulfilled the inclusion and exclusion criteria. The socio demographic profile and pre-test knowledge assessed by using the semi structured questionnaire regarding prevention of home accidents was administered. The Structured Teaching Program was given soon after pre-test. The family members of the mothers were also included during Structured Teaching Program. The mothers were eager to know and took active participation in asking questions seeking clarification. Post-test was conducted after the 7th day by using the same semi structured questionnaire to find out the effectiveness of Structured Teaching Program.

The tools used for data collection were

Part 1 socio-demographic data with items on sample no., age in years of mothers, religion, types of family, educational qualification, occupation, number of own children, and sources of health information about the home accidents

Part 1 knowledge questionnaire on consists of 20 questions to evaluate the knowledge of prevention of home accidents. For each correct response a score ‘1’ was given and for the incorrect response ‘0’ score was given. The total score of this section is 20. The items includes introduction on home accidents, causes and signs and symptoms of home accidents, and first aid, management and prevention of home accidents. The sample characteristics described by using the descriptive statistics such as mean, SD and Percentage. The effectiveness of Structured Teaching Program analyzed by using paired 't' test. The socio demographic variable associate with knowledge by using the chi-square test.

Result and Discussion

Conclusions drawn from the study were as follows:

Table 3 shows that among the samples, 10% of them were from age group of 18-20 year, 60% of them were from age group of 21-30 year and 30% of them were from age group of 31- 40 year. All the samples were Hindus. Among the samples, 30% were from nuclear family and 70% were from joint family. Among the samples, 70% were from housewives, 28% of them were labors and 2% of them were business women. Among the head of family of samples, 10% were illiterates, 45% of them had primary education, 35% of them had qualified high school and 10% of them were graduates. Among the samples, 65% of them had single child and 35% of them had two children. Among the samples, 28% of them had obtained information from television, 7% of them had obtained information from newspapers, 43% of them had obtained information from health personnel and 22% of them had obtained information from contact with relatives.

The present study, table-3 The overall mean of the posttest knowledge score (15.13) is apparently higher than overall mean of pre-test scores (13.35). The mean difference being (1.78). The paired’ value at df (39) obtained is 7.68 significant at 0.05 level. And mean percentage in posttest is greater than mean percentage in pre-test. Therefore the null hypothesis is rejected and research hypothesis is accepted. Therefore the teaching program is effective.

The table-4 depicts that in pre-test, 13% of the home accident among mother under five year children having inadequate knowledge, 65% are having moderate knowledge and 9% is having adequate knowledge regarding prevention of home accidents among mothers of under five year children. Similarly in post-test 8% of the home accident among mother under five year children having inadequate knowledge, 40% are having moderate knowledge and 53% are having adequate knowledge. There for the enhancement of the adequate knowledge of the home accident among mother under five year children is 30%. Inadequate knowledge decreasing in post-test is 13% from 8%.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Demographic Data</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Type of Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Educational Qualification</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>Health Resources</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 4: Percentage of knowledge improvement

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D</th>
<th>Inadequate</th>
<th>Moderate</th>
<th>Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of mothers</td>
<td>%</td>
<td>No. of mothers</td>
<td>%</td>
<td>No. of mothers</td>
</tr>
<tr>
<td>Pre test</td>
<td>13.35</td>
<td>2.59</td>
<td>5</td>
<td>13%</td>
<td>26</td>
</tr>
<tr>
<td>Post test</td>
<td>15.13</td>
<td>2.29</td>
<td>3</td>
<td>8%</td>
<td>16</td>
</tr>
<tr>
<td>Enhancement</td>
<td>1.78</td>
<td>0.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Among the demographic variables analyzed in this study, age, religion, type of family, educational qualification are found to have high significant association with knowledge scores in the pre-test. Type of family, no of children, health resources has high significant association with knowledge score in the post-test. There was no significant association found between occupations.

There was significant change found between the pre-test mean(13.35) and post-test (15.13) knowledge scores regarding home accidents in mothers of Under five year children at P < 0.001 level (5%) with a paired ‘t’ test value of 7.68. Hence, the stated hypothesis is accepted since, there was a significant improvement (30%) in knowledge scores of mothers after conducting the Structured Teaching Program.

### Conclusions

Conclusions drawn from the study were as follows:

Knowledge of mothers of under five year children regarding prevention of home accidents was inadequate before the administration of STP. The STP was effective in increasing the knowledge of mothers of under five year children i.e., overall and in all aspects in the post-test. There was a significant association between the mean percentage knowledge scores with selected demographic variables in the aspects of age, religion, type of family and educational qualification in the pre-test and type of family, no. of children and health resources in the post-test. There was no significant association found between occupations of information about prevention of home accidents with knowledge score.

### Reference