

A STUDY TO EVALUATE THE IMPACT OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF HOME ACCIDENTS AMONG MOTHERS OF UNDER FIVE CHILDREN IN SELECTED ANGANWADI CENTRE AT SIKAR (RAJASTHAN)

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ABSTRACT

Background and Purpose of the Study

Home accidents or accident at home is ridiculous but worrying as well, child is very close to mother in his early childhood hence knowledge of mother regarding burning issues like child safety and prevention from home accident is must. Every mother is concern about her child than also accidents occurs so the aim of study is to minimize such home based hazards by educating the mothers.

Statement of Problem

"A study to evaluate the impact of structured teaching programme on knowledge regarding prevention of home accidents among mothers of under five children in selected anganwadi centre at Sikar (Rajasthan)."

Objectives Of The Study

- To assess the knowledge of mothers regarding prevention of home accidents.
- To evaluate the impact of structured teaching programme on knowledge of mothers regarding home accidents.
- To assess the association between pre-test knowledge with selected demographic variables.

Methods

One group pre-test post-test design was used for the study. The sample consisting of 60 mothers having under five children. They were chosen by convenient purposive sampling technique. The study was conducted at anganwadi centre, at Sikar. The data was collected prior and after the structured teaching programme by a structured questionnaire.

Results

The data was analyzed by descriptive and inferential statistics. The knowledge gained through structured teaching programme was good as it was evidence with a highly significant difference ($t_{(99)} = 23.35$, $P < 0.01$) between the mean post-test ($X_2 = 14.98$) and pre-test ($X_1 = 8.63$) knowledge score.

There was a significant association between the pre-test knowledge score and all the taken variable like age, education, income and no. of child.

Key Words: home accident; mothers; structured teaching programme, under five children, knowledge.

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INTRODUCTION

The children growing up in today's world are tomorrow's future. In India, 13.12 percent population constitutes of 0-5 years of age. As saying goes "mother is a first teacher and home is a first school." Evidence shows that accidental deaths in the home are most commonly caused by falls, fire and flames, and poisoning. The principal causes of accidental injury in the home are falls, being struck by or collision with an object, being cut or pierced by an object, burns, scalds and poisoning. Government statistics show that there are about 2.8 million accidents in the home every year, where the victim visits an Accident and Emergency department for treatment. However, because the accidents happen behind closed doors in isolated incidents, they seldom attract public and media attention. Every year there are over 3,000 deaths caused by home accidents – more than on the roads. Annually almost a million children under the age of 5 attend hospital for treatment following an accident in the home.

There is a need for the caretakers to gain adequate knowledge and favorable attitude towards the Childs activities and accident occurring at home and knowledge for prevention of those common home accidents. The study is felt to conduct to prevent the child from getting accident because of negligence and lack of knowledge of mothers, to dwindle the demographic data such as infant mortality and morbidity rate. Study also felt need to keep abreast the mother with right way of care and handle a child. It's felt to conduct with the feeling of developing a healthy bond of love between mother and child. Because of researchers interest and curiosity regarding the actual effectiveness of teaching to mother for accidents prevention this study was felt to conduct.

There is a dearth of this study in Indian & the State of Rajasthan scenario. The researcher is felt to conduct to prevent the child from getting accident because of negligence and lack of knowledge of mothers, to dwindle the demographic data such as infant mortality and morbidity rate.

OBJECTIVES OF THE STUDY

- To assess the knowledge of mothers regarding prevention of home accidents.
- To evaluate the impact of structured teaching programme on knowledge of mothers regarding home accidents.
- To assess the association between knowledge Score with selected demographic variables.

REVIEW OF LITERATURE

The literature reviewed has been organized under the following headings:

1. Literature related knowledge of mother regarding home accident and incidence of home accidents:-

Janki Patel (2014) An evaluative research approach with pre-experimental design was used. The sampling technique used was non - probability convenient sampling. Data was collected from 50 mothers, from Pipariavillage, Vadodara. The tool consists of Demographic profile and knowledge component of Childhood accident consisting 30 items. The reliability of the tool was established by using split half and karlpearson method. the post-test knowledge score was in the range of (20-29) which was higher than the pre-test knowledge score range (11-17). The mean post-test knowledge score (24.14) also was higher than the mean pretest knowledge score (13.84). The comparison of pre-test and post-test knowledge score showed that there was a significant gain in knowledge scores of mothers after STP. The study findings revealed that structured teaching programme was highly effective in improving knowledge of mothers regarding childhood accident.

2. Literature related to prevention of home accidents:-

Mohammed Al. M (2016): A survey was conducted regarding caregiver's perception about the risk and preventive factors and its relation to various home injuries in children, Riyadh. A validated self-report questionnaire with 55 close ended questions A validated self-report questionnaire with 55 close ended questions was distributed to the 579 caregivers, who visited the pediatric emergency department. Results shows that Caregivers are well aware about the mortality and morbidity related home injuries in children. Though their knowledge about home injuries in children is considered to be adequate, their attitude towards injury prevention needs to be addressed. The perceptions about incidents like falls at home (33.9%), toxin ingestion (5.7%), burns (15.7%), drowning (8.1%), baby walker (19.5%) and television (TV) fall injuries (6.9%) are found to be statistically significant with related preventable and risk factors.

3. Literature related to practice of parents for prevention of home accidents:-

B A Morrongiello and M Corbett (2005) done a study on The Parent Supervision Attributes Profile Questionnaire: a measure of supervision relevant to children's risk of unintentional injury Results: Test-retest reliability and internal consistency scores were good, exceeding 0.70 for all subscales. Factor analyses confirmed the hypothesized model—namely that the 29 item questionnaire comprised four unique factors: protectiveness, supervision beliefs, risk tolerance, and fate influences on child safety.

Conclusions made by the researcher was Previous tests comparing the PSAPQ with indices of actual supervision and children's injury history scores revealed good criterion validity. The present assessment of the PSAPQ revealed good reliability (test-retest reliability, internal consistency) and established the convergent and divergent validity of the four factors. Thus, the PSAPQ has proven to have strong psychometric properties, making it a unique and useful measure for researchers interested in studying links between supervision and young children's risks of unintentional injury.

4. Literature related to any previous health education or structured teaching program regarding prevention of home accidents:-

Kendrick D, Smith S, et al (2009) studied on The effect of education and home safety equipment on childhood thermal injury prevention: meta-analysis and meta-regression. Results drawn were Home safety interventions were effective in increasing the proportion of families with a functional smoke alarm (odds ratio (OR) 1.83, 95% CI 1.22 to 2.74) and with a safe hot tap water temperature (OR 1.35, 95% CI 1.01 to 1.80). There was some evidence they increased possession of fitted fireguards (OR 1.39, 95% CI 1.00 to 1.94), but there was a lack of evidence that interventions reduced medically attended thermal injury rates (incident rate ratio (IRR) 1.12, 95% CI 0.81 to 1.56). There was no consistent evidence that the effectiveness of interventions varied by social group. they concluded that the Home safety education, especially with the provision of safety equipment, is effective in increasing some thermal injury prevention practices, but there is insufficient evidence to show whether this also reduces injury rates.

RESAECRH METHODOLOGY

Research Approach and Design

Evaluatory approach with Pre-experimental, one group pre-test & post-test design was selected.

Setting of the Study

This study has been conducted in selected Anganwadi at Sikar

Population

The population of the present study comprises of them others of under five children selected Anganwadi at Sikar. The accessible populations are those available at the time of conducting the study.

Sample and Sampling Technique

In this present research study the sample are drawn from women those have under five children and living in Sikar. In this study sample comprised of 60 mothers were selected by non-probability convenient sampling technique by the investigator.

Inclusion Criteria

- Mothers of under five children only are included.
- Mothers of children who are attending selected Anganwadi.
- Mothers who can comprehend Hindi language.
- Mothers who are willing to participate in study.

Variables

- **Dependent Variable:-**
In the present study it refers to the knowledge level of mothers regarding prevention of home accidents.
- **Independent Variable:-**
In this study independent variable refers to the structured teaching programme on prevention of home accident.

Description of Tool

To conduct these study two tools were prepared

Tool:

Structured interview schedule to assess the knowledge of mothers regarding home accidents and its prevention. It consisted of two parts:

Part I: Demographic Performa with 9 items:

Part II: Structured interview schedule for assessing the knowledge of mothers regarding the prevention of home accidents.

Total item was 25, with 25 total score. Arbitrary classification on knowledge score was done as good, average and poor.

Description of content

The STP was developed according to the objectives prepared. The investigator prepared the overall plan of STP and Audio visual aids such as flex print and power point presentation.

The structured teaching program consisted of the following content areas:

Definition of home accident, Causes of home accident, Fact & information regarding home accident, Types of home accidents, First aid management of home accident.

Procedure of data collection:-

In order to conduct the research study in the anganwadi Centre at Sikara written permission was obtained from the authorities like Child Development Officer, Sikar was sought and obtained. The data collection period extended from 02/04/2018 to 11/04/2018. The date, time and place were confirmed after discussing with the anganwadi supervisor. Investigator decided to take 5-10 mothers as sample per day for pre-test, treatment and post-test. Each day data were collected in the scheduled plan, anganwadi worker helped in convincing the mother for participating in study.

RESULTS

The data collected from the mothers are organized and presented under the following sections:

Section I- Description of socio-demographic variables.

Section II- Effectiveness of structured teaching program.

Section III- Association between knowledge of mothers and demographic variables

Section I - Frequency and percentage distribution of samples according to Demographic variables:-

Table 1 Distributions of samples according to age (N= 60)

Age limit in years	Frequency	Percentage
19-23	6	10.0
24-28	19	31.7
29-33	27	45.0
>34	8	13.3
Total	60	100.0

The sample age between 29-33 years total no of samples found with this age range were 27 with the 45%. 19 (31.7%) samples were from age range of 24-28 years. 8 (13.3%) mothers were aged more than 34 years whereas only 10 percents (6) mothers were from age range 19-23 years.

Table 2 Frequency and Percentage Distribution of Income (N= 60)

Income in Rs. Per month	Frequency	Percentage
Below 5000	21	35.0%
5001-10000	22	36.7%
10001-15000	8	13.3%
Above 15000	9	15.0%
Total	60	100.0

Maximum of mothers 22 (36.7%) were belongs to the income group from Rs. 5001-10000, 35 percent (21) were from less than 5000 income group, 9 (15%) belongs to income group of more than Rs.15,000 and rest 8 (13.3%) were from Rs. 10001-15000.

Table 3 Frequency and percentage distribution of education of mothers (N= 60)

Educational status	Frequency	Percentage
Primary education	13	21.7 %
Secondary education	11	18.3%
High secondary	7	11.7%
Graduate and pg	7	11.7%
Illiterate	22	36.7%
Total	60	100.0

The distribution of educational status of mothers shows maximum 22 (36.7%) of mothers were illiterate, 13 (21.7%) had primary education, 11 (18.3%) had secondary education, 7 (11.7%) had senior secondary education and same 7 (11.7%) were graduate or post graduate.

Table 4 Frequency distribution of No of children (N=60)

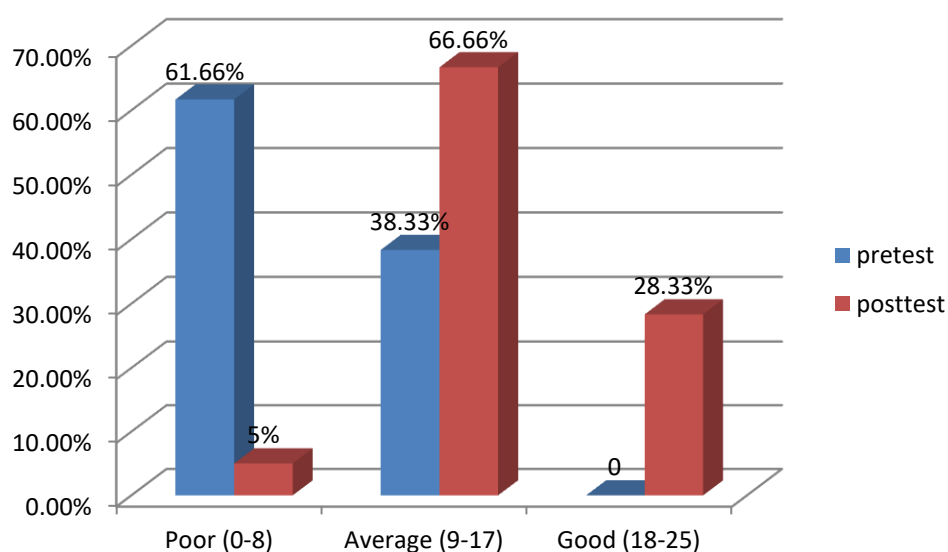
No. of Children	Frequency	Percentage
>3 children	10	16.7 %
3 children	27	45.0 %
2 children	13	21.7 %
Single child	10	16.7 %
Total	60	100.0

Maximum of mothers 27 (45%) had three children, 13 (21.7%) had two children, 10 (16.7%) had single child and same 10 (16.7%) had more than three children.

Section II Effectiveness of structured teaching program in terms of gain in knowledge

Figure 1 Comparison of pre-test and post-test knowledge scores (N=60)

Fig 7 bar diagram showing comparison of pretest and post test knowledge scores



The comparison table showing the knowledge scores of the mothers of under five children regarding prevention of home accidents was poor in 37 (61.66%), average in 23 (38.33%) mothers, no mothers have a score of good whereas in post-test 17 (28.33%) mothers have shown good knowledge scores, 40 (66.66%) mothers had score of average and only 3 (5%) mothers have shown poor knowledge regarding prevention of home accidents in under five children.

Table 5 Paired t- test, mean score, mean difference and standard deviation

Knowledge score	Mean score	Mean difference	S. D.	't' value
pre-test	8.63	6.35	4.51	23.35 (P< 0.05)
post-test	14.98		3.89	

P< 0.05*

P<0.01**

P< 0.001***

S – Significant

The effectiveness of structured teaching is assessed by using inferential statistics; a paired t test was applied to ensure significant increase of knowledge in post-test after administration of STP. The value of t at 59 degree of freedom is 23.35 at significance level $p < 0.05$ shows the structured teaching is highly effective in increasing knowledge of mothers regarding prevention of home accidents in under five children.

Section III Association between knowledge score of mothers and selected demographic variable.

Table .6 association table

(N = 60)

Groups	Poor	Average	Good	d.f	χ^2 value
Age in years					
• 19-23	1	5	0	3	16.836 S
• 24-28	7	12	0		
• 29-33	22	5	0		
• >34	7	1	0		
Income					
• <5000	19	2	0	3	32.299 S
• 5001-10000	17	5	0		
• 10001-15000	1	7	0		
• >15000	0	9	0		
Educational status					
• Primary	12			4	46.86 S
• Secondary	3	1	0		
• Sr. secondary	0	8	0		
• graduation	0	7	0		
• Illiterate	22	7	0		
		0	0		
No of children					
• >3 children	10	0	0	3	15.749 S
• 3 children	19	8	0		
• 2 children	6	7	0		
• Single child	2	8	0		

P< 0.05*

P< 0.01**

P< 0.001***

S – Significant

NS – Non significant

The data in Table 6 shows that there is significant association between knowledge score and age group of mothers, income of family, education of mother and no. of children. Computed χ^2 value (16.836) shows that, there is significant association between age group of mothers and knowledge score.

DISCUSSION

The baseline data of the mothers indicate that 10% of mothers were in the age group of 19-23 years and 31.7% were in the age group of 24-28 years and majority of mothers were in age group 29-33 and its percentage was 45% while 13.3% of mothers were in the age group of more than 34 years.

Out of 60 samples there were (35%) mothers from the category of less than Rs. 5000 monthly income, majority of mothers belonging from 5001-10000 monthly income their percentage was 36.7%, 13.3% of total mothers were falling in the range of 10001-15000 per month income and 15% were from more than 15,000 per month income category.

Educational status of mothers shows maximum 22 (36.7%) of mothers were illiterate, 13 (21.7%) had primary education, 11 (18.3%) had secondary education, 7 (11.7%) had senior secondary education and same 7 (11.7%) were graduate or post graduate.

Maximum of mothers 27 (45%) had three children, 13 (21.7%) had two children, 10 (16.7%) had single child and same 10 (16.7%) had more than three children.

Discussion of effectiveness of structured health teaching program

This study shows that there is a significant increase in knowledge of mothers after the structured health teaching program. Where the t-value is 23.35 (P<0.5)

In this study hypothesis RH_1 made by the investigator is accepted that there is a significant increase in level of knowledge after implementation of structured teaching regarding the prevention of home accident among the mothers of under five children who participated in study.

Discussion of association between pre tests score and selected demographic variable

The study shows that there is significant association between age of mothers, monthly income of family, mother's educational level and no. of children,

There was a significant $\chi^2 = 16.83$ (P< 0.001) association between age of mother and her knowledge on prevention of home accident.

There was a significant $\chi^2 = 32.29$ (P< 0.001) association between monthly income and knowledge on prevention of home accident.

There was a significant $\chi^2 = 46.86$ ($P < 0.001$) association between education level of mother and knowledge on prevention of home accident.

There was a significant $\chi^2 = 15.74$ ($P < 0.001$) association between number of children and knowledge on prevention of home accident.

CONCLUSION

There was significant association between knowledge on prevention of home accidents and age of mothers, monthly family income, educational status and number of under five children.

Hypothesis RH1:-

Made by the investigator that there will be a significant increase in level of knowledge after implementation of structured teaching programme regarding prevention of home accidents was accepted.

Hypothesis RH2:-

Made by the investigator that there will be a significant association between knowledge score and selected demographic variables on prevention of home accidents was accepted with all four variable age of mothers, monthly family income, educational status and number of under five children was accepted.

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