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A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Prevention of Home Accidents in under Five Children among Mothers at Selected Rural Community in Jaipur, Rajasthan

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ABSTRACT

Aim: *present study attempts to assess the effectiveness of structure teaching program on knowledge regarding prevention of home accidents in under five children among mothers at selected rural community in Jaipur, Rajasthan*

Methods and Material: *purposive sampling technique with the experimental and pre-post-test design was used. The sample of this study comprised 60 mothers who were living in the rural community. A structure knowledge questionnaire was used to collect data from the subject. the collected data was analyzed using descriptive and inferential statistics and interpreted in terms of the objective and hypothesis of the study.*

Result: *In this study the assessment show pre-test knowledge score of mothers of under five-year children majority of 10-16 (63.34%) mothers had average knowledge, 0-9 (26.67%) mothers had poor knowledge, and 17-25 (10%) mothers had good knowledge, regarding home accident in children among mothers of under-five year children. post-test knowledge score of mothers of under-five year children majority of 10-17 (53.34%) mothers had average knowledge.0-10 (13.34%) mothers had poor knowledge, and 17-25 (33.33%) mothers had good knowledge, regarding home accident in children among mothers of under-five year children.*

There is a mean improvement of 3.15 in the score of pre-test and post-test as the mean score of pre-test is 19.90 with the SD is 3.17 and mean score of post-test is 16.75 with SD of 5.41 respectively which reveals that a mean improvement is significant at 0.05 level of significance. In this study the ***calculated 't' value is greater than tabular 't' value*** *so the STP makes significant difference to improve the knowledge level of mothers of under-five year children.*

Keywords*: Structured Teaching Programme, Rural Community, Pre-Post-Test, 't' Value, Mean Score.*

Introduction

Today's Children are the citizens of tomorrow. They deserve to inherit a safer, fairer and healthier world. There is no task more important than safe guarding their environment. The future development of our children depends on their enjoying good health today. A house is an exciting place for infants and small children, who love to explore but aren't aware of the potential dangers. Life can't be risk-free, but most household accidents can be prevented by utilizing a household safety list. The incidence of accidental injuries is increasing in India, especially home accidents in children. Hence the knowledge of mothers is essential for undertaking measures to prevent them.

Objectives

- To assess the pre-test level of knowledge regarding prevention of home accidents in under five children among mothers at selected rural community in Jaipur, Rajasthan.

- To assess the post-test level of knowledge regarding prevention of home accidents in under five children among mothers at selected rural community in Jaipur, Rajasthan.
- To find out the differences between pre-test and post- test level of knowledge regarding prevention of home accidents in under five children among mothers at selected rural community in Jaipur, Rajasthan.
- To find out the association between pre-test level of Knowledge regarding prevention of home accidents in under five children among mothers with their selected socio demographic variables at selected rural community in Jaipur, Rajasthan.

Hypotheses

H_1: There will be the Significant differences between pre-test and post-test level of knowledge regarding prevention of home accidents in under five children among mothers at selected rural community in Jaipur, Rajasthan.

H_{01}: There will be no Significant differences between pre-test and post-test level of knowledge regarding prevention of home accidents in under five children among mothers at selected rural community in Jaipur, Rajasthan.

H_2: There will be the significant association between pre-test level of knowledge regarding prevention of home accidents in under five children among mothers with their selected Socio demographic variables at selected rural community in Jaipur, Rajasthan.

H_{02}: There will be no significant association between pre-test level of knowledge regarding prevention of home accidents in under five children among mothers with their selected Socio demographic variables at selected rural community in Jaipur, Rajasthan.

Operational Definition

- **Assess:** In this study, it refers to the way of finding the level of knowledge of mothers regarding prevention of home accidents in under five children.
- **Effectiveness:** In this study, it refers to evaluate the knowledge regarding prevention of home accidents for children among mothers after administrating Structure Teaching programme.
- **Structured Teaching Programme:** In this study, it refers to the systematically organized teaching design to enhance the knowledge regarding prevention of home accident for children among mothers.
- **Knowledge:** In this study, it refers to correct response from mother during structured knowledge questionnaire regarding prevention of home accidents for children.
- **Mother:** In this study, mother refers to who have under five age group children.
- **Home Accident:** A home accident refers to an unexpected and unintentional event that causes harm or injury and takes place within a home or its immediate surroundings. Common examples include falls, burns, cuts, poisoning, or injuries caused by electrical hazards. Such accidents often occur due to unsafe conditions, lack of awareness, or unforeseen circumstances in a residential setting.
- **Prevention:** In this study, it refers to precautionary measures which are utilized by the mothers to prevent home accidents such as falls; burns; poisoning; drowning; injury by sharp instruments; inhalation of foreign objects.
- **Under Five Children:** In this study, child refers to who have age group under five (0-5 age). It includes infant, toddler and pre-school children.

Research Methodology

- **Research Approach**

There will be **quantitative research approach** is adopted for purposive sample collection technique may be used.

- **Research Designs**

In this **experimental study** the one group **Pre-test & Post-test designs.**

- **Variables**
  - **Independent Variable:** In this present study the independent variable is **structured teaching programme**.

- **Dependent Variable:** In this present study the dependent variable is **level of knowledge** regarding prevention of home accidents in children.
- **Socio Demographic Variables:** Age of mother (in year); Educational status; Occupation; Family income (per month in Rs/-); Number of children; Type of family.

- **Setting**

The study was conduct at rural community area at **Dadiya, Jaipur, Rajasthan.**

- **Sample Size**

The study sample size was **60 Mothers of under-five children**.

- **Sampling Technique**

The study sampling setting technique was **purposive sampling technique.**

Criteria for Selecting Sample

Selections of sample were adopted by purposive sampling technique.

- **Inclusive Criteria for Sampling**
  - The mothers who have children age group under five years.
  - The mothers who are willing to participate in this study
  - The mothers who are available during the period of data collection.
- **Exclusive Criteria for Sampling**
  - The mothers who are not co-operating with the study.
  - The mother who are ill.

Tools and Techniques

Individuals who fulfilled the inclusion criteria were involve in the study with their consent. The tool for the study comprised of a structured knowledge questionnaire, which consisted of two sections.

Description of Tools

A structured knowledge questionnaire was constructed by reviewing related literature and in-consultation with subject experts in the field, by consulting various books, journals and reports on home accident in under five children.

Based on the objective of the study, demographic profile, structured knowledge questionnaire was prepared to assess the knowledge.

The tool consists of:

- **Section- A:** socio-demographic variables consist of mother of Age (in year); Educational status; Occupation; Family income (per month in Rs/-); Number of children; Type of family.
- **Section- B:** The section contains structured knowledge questionnaire relates to home accident in under five children.

Table 1: Scoring Procedure for Assessing the Knowledge

Knowledge Level	Score	Percentage
Good knowledge	17-25	38.34%-53.34%
Average knowledge	10-16	20%-36.67%
Poor knowledge	0-9	<18.34%

Pilot Study

Pilot study is a small-scale version on trial run of the major study. Its function is to obtain information of improving the project or for assessing its feasibility. The principle focuses in the assessment of the adequacy of the measurement.

The pilot study was conducted at gram panchayat **Bhambhoriya, Jaipur, Rajasthan,** from date **00-00-0000** to **00-00-0000,** the prior obtaining formal administrative approval from the Village Development Officer, 10 samples were selected by adopting purposive sampling technique.

Method of Data Collection

The study was conducted at Dadiya Jaipur, Rajasthan, for 10 days. The investigator met the mothers of rural community and obtained consent to assess the knowledge level, and the purpose of the

study was explained to them. The sample for the study was selected by randamized method. The investigator give a brief introduction about the tool, and pre-test was conducted using the questionnaire. STP was administered using lecture cum discussion method. On the 5 day, the post-test was assisted by using the same questionnaire.

The data was collected in following Three steps:

- **Pre-test**

Pre-test was conducted among under five-year children mothers at **Dadiya, Jaipur, (Rajasthan),** by giving questionnaire to assess the knowledge on home accident, before implementation of STP.

- **Implementation of STP**

Immediately after pre-test, STP was given to the same under five-year children mothers regarding home accident.

- **Post-test**

Evaluation was done by conducting post-test after 3 days of implementation of STP. Post-test was conducted by using the questionnaire used for the pretest.

Results

Section 1: Description of the Demographic Variables

The above table shows the percentage and frequency distribution of home accident among mothers of under five children according to their socio-demographic variables.

S.no.	Demographic Variables	Frequency(f)	Percentage (%)
1.	**Age of mother**		
1.1	19-24	14	23.34%
1.2	25-30	17	28.33%
1.3	31-36	18	30%
1.4	>36	11	18.33%
2.	**Educational status of mother**		
2.1	Primary school	13	21.67%
2.2	Secondary school	9	15%
2.3	Higher secondary school	13	21.67%
2.4	Graduate and above	25	41.66%
3.	**Occupation of mother**		
3.1	Home maker	15	25%
3.2	Private employee	9	15%
3.3	Government employee	15	25%
3.4	Other	21	35%
4.	**Family income (per month in Rs/-)**		
4.1	<20,000	23	38.34%
4.2	20,001-35,000	18	30%
4.3	35,001-50,000	10	16.66%
4.4	>50,000	9	15%
5.	**Number of children in family**		
5.1	One	16	26.67%
5.2	Two	12	20%
5.3	Three	12	20%
5.4	More than three	20	30.33%
6.	**Type of family**		
6.1	Nuclear	19	31.67%
6.2	Joint	19	31.67%
6.3	Extended	22	36.66%

Section 2

Part 1: Assessment of Pre-Test Knowledge of Level among Samples

Table 3 shows the overall knowledge among the mothers in the selected area. The pre-test shows the 38 (63.34%) had average knowledge on home accidents, 16 (26.67%) had poor knowledge, and 6 (10%) had good knowledge regarding home accidents among under five children.

Level of Knowledge	Marks	Pre-test	
		Frequency	Percentage
Poor Knowledge	0-9	16	26.67%
Average Knowledge	10-16	38	63.34%
Good Knowledge	17-25	6	10%

Part 2: Assessment of Pre-Test Knowledge of Level among Samples

Table 4 shows that in the assessment of post-test knowledge score of mothers of under-five year children majority of 10-17 (53.34%) mothers had average knowledge.0-10 (13.34%) mothers had poor knowledge, and 17-25 (33.33%) mothers had good knowledge, regarding home accident in children among mothers of under-five year children.

Level of Knowledge	Marks	Post-test	
		Frequency	Percentage
Poor Knowledge	0-9	8	13.34%
Average Knowledge	10-16	32	53.34%
Good Knowledge	17-25	20	33.33%

SECTION III

Table 4: Difference between Pre-test & Post-test Level of Knowledge Regarding Home Accident among Mothers of under-Five Year Children

Over all pre- test and post-test knowledge Score	Pre-test		Post-test		Mean difference	Paired 't' test value	Degree of freedom	Inference
	Mean	Sd	Mean	Sd				
	19.90	3.17	16.75	5.41	3.15	3.34	59	S*

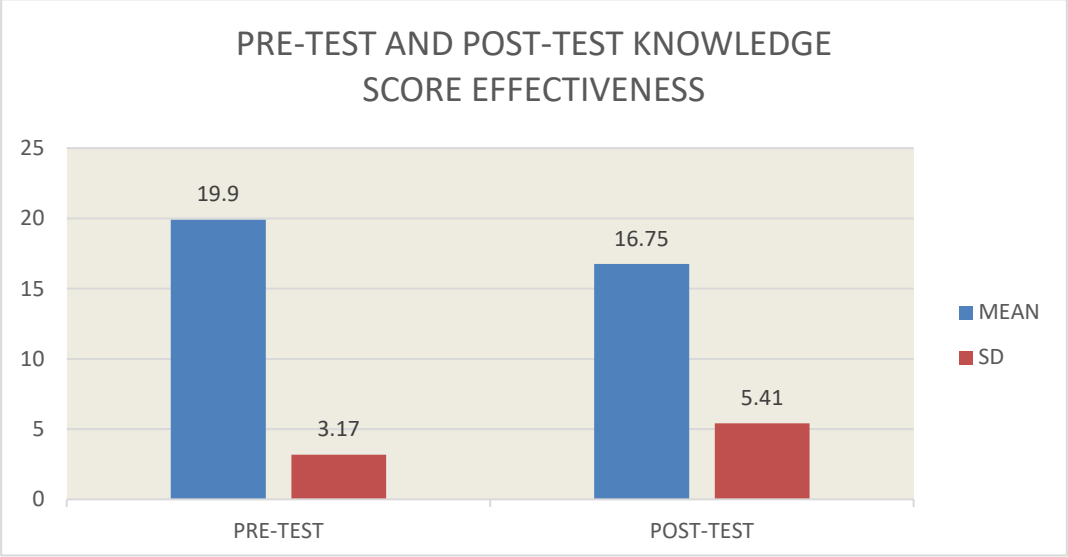

Table 4: shows that there is a mean improvement of 3.15 in the score of pre-test and post-test as the mean score of pre-test is 19.90 with the SD is 3.17 and mean score of post-test is 16.75 with SD of 5.41 respectively which reveals that a mean improvement is significant at 0.05 level of significance. In this study the **calculated 't' value is greater than tabular 't' value** so the STP makes significant difference to improve the knowledge level of mothers of under-five year children.

Section IV

Table 5 Association between Level of Knowledge among Mothers of under-Five Year Children with their Selected Socio- Demographic Variables

In this study the calculated **chi-square X^2 value 17.93** was more than **table value 12.59** at 0.05 level of significance, which indicates that is **significant association** between the level of knowledge and **age of mother** of under-five year children.

Hence the **age of mother of under-five year children and level of knowledge are significant association** in socio demographic variables.

In this study the calculated **chi-square χ2 value 18.087** was more than **table value 12.59** at 0.05 level of significance, which indicates that is **significant association** between the level of knowledge and **educational status** of mother of under-five year children.

Hence the **educational status of under-five year children and level of knowledge are significant association** in socio demographic variables.

In this study the calculated **chi-square χ2 value 13.54** was more **than table value 12.59** at 0.05 level of significance, which indicates that is **significant association** between the level of knowledge and **occupation of mother** of under-five year children.

Hence the **occupation of mother of under-five year children and level of knowledge are significant association** in socio demographic variables.

In this study the calculated **chi-square χ2 value 5.806** was less than **table value 12.59** at 0.05 level of significance, which indicates that is **no significant association** between the level of knowledge and **family income** of mother of under-five year children.

Hence the **family income of under-five year children and level of knowledge are significant association** in socio demographic variables.

In this study the calculated **chi-square χ2 value 17.722** was more than **table value 12.59** at 0.05 level of significance, which indicates that is **significant association** between the level of knowledge and **number of children** in family of mother of under-five year children.

Hence the **number of children of under-five year children and level of knowledge are significant association** in socio demographic variables.

In this study the calculated **chi-square χ2 value 15.714** was more than table value 9.49 at 0.05 level of significance, which indicates that is **significant association** between the level of knowledge and **type of family** of mother of under-five year children.

Hence the **type of family of under-five year children and level of knowledge are significant association** in socio demographic variables.

S.no	Demographic Variables	Knowledge score			Chi-square	df	Tabulated Value	Los@ 0.05
1.		Poor	Average	Good				
	Age of mother							
1.1	19-24	2	11	1	17.93	6	12.59	S
1.2	25-30	11	2	4				
1.3	31-36	9	4	5				
1.4	>36	5	5	1				
2.	**Educational status of mother**							
2.1	Primary school	9	4	0	18.007	6	12.59	S
2.2	Secondary school	3	5	1				
2.3	Higher secondary school	2	9	2				
2.4	Graduate and above	2	20	3				
3.	**Occupation of mother**							
3.1	Home maker	9	5	1	13.54	6	12.59	S
3.2	Private employee	3	5	1				
3.3	Government employee	2	11	2				
3.4	Other	2	17	2				

4.	**Family income(per month in Rs/-)**							
4.1	<20,000	7	15	1	5.8065	6	12.59	NS
4.2	20,001-35,000	5	12	1				
4.3	35,001-50,000	2	5	3				
4.4	>50,000	2	6	1				
5	**Number of children**							
5.1	One	9	5	0	17.722	6	12.59	S
5.2	Two	4	7	1				
5.3	Three	2	9	1				
5.4	More than three	1	17	4				
6.	**Type of family**							
6.1	Nuclear	1	7	11	15.741	4	9.49	S
6.2	Joint	11	6	2				
6.3	Extended	11	5	6				

Discussion

Objective 1: To assess the pre-test level of knowledge regarding prevention of home accidents in under five children among mothers at selected rural community in Jaipur, Rajasthan

The study revealed the response had average knowledge about prevention of home accidents 38 (63.34%), 16 mothers had poor knowledge and 6 mothers had good knowledge which shows that an educational program is necessary to improve knowledge about prevention of home accidents among mothers of under five children.

Objective 2: To assess the post-test level of knowledge regarding prevention of home accidents in under five children among mothers at selected rural community in Jaipur, Rajasthan.

The study revealed the response had average knowledge about prevention of home accidents 32 (53.34%), 8 mothers had poor knowledge and 20 mothers had good knowledge which shows that an educational program is necessary to improve knowledge about prevention of home accidents among mothers of under five children.

Objective 3: To find out the differences between pre-test and post- test level of knowledge regarding prevention of home accidents in under five children among mothers at selected rural community in Jaipur, Rajasthan.

The study revealed that there is a mean improvement of 3.15 in the score of pre-test and post-test as the mean score of pre-test is 19.90 with the SD is 3.17 and mean score of post-test is 16.75 with SD of 5.41 respectively which reveals that a mean improvement is significant at 0.05 level of significance. In this study the **calculated 't' value is greater than tabular 't' value** so the STP makes significant difference to improve the knowledge level of mothers of under-five year children.

Objective 4: To find out the association between pre-test level of Knowledge regarding prevention of home accidents in under five children among mothers with their selected socio demographic variables at selected rural community in Jaipur, Rajasthan.

The result shows that there is significant association between pre-test knowledge and age of mother ($\chi 2 = 17.93$) were as the table value =12.59, pre-test knowledge and educational status of mother ($\chi 2 = 18.08$) were as the table value 12.59, pre-test knowledge and occupation ($\chi 2 = 13.54$) were as the table value 12.59, pre-test knowledge and number of children ($\chi 2 = 17.722$) were as table value 12.59 (df = 6), pre- test knowledge and type of family ($\chi 2 = 15.714$) table value 9.49 (df = 4) is significant at 0.05 level of significance and therefore, H2 is accepted with their selected variables age of mother, educational status of mother, occupation, number of children and type of family.

Conclusion

This chapter deals with the analysis and interpretation of the results of the study. The data gathered and analyzed by using descriptive and inferential statistics. Chi-square test was used to find association between the knowledge score with their selected socio-demographic variables. Findings revealed that majority of mothers of under-five year children had average knowledge regarding home accident.t-test used for difference between pre-test and post-test level of knowledge regarding home accident among mothers of under-five year children.

Recommendations

Keeping in view the findings of the present study, the following recommendation were made:

- A similar study can be conducted on larger and wider sample in order to draw generalization.
- A descriptive study may be conducted to the urban slum mothers of under-five year children.
- A similar study can be repeated with randomization of sample.
- A study can be made to compare the effectiveness a pre-test structured interview schedule with other methods of teaching.
- A descriptive study can be done, case control group and another with experimental group.
- A similar study can be conducted among mothers and both parents and grandparents.

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