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A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF SELECTED HOME ACCIDENTS AMONG MOTHERS OF UNDER-FIVE CHILDREN AT SELECTED RURAL AREAS OF CHITRADURGA

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ABSTRACT

Home accidents are a major cause of morbidity and mortality among under-five children, particularly in rural communities where awareness regarding preventive measures is often inadequate due to lack of education and awareness. The present study is to assess the effectiveness of a structured teaching programme (STP) on knowledge regarding prevention of selected home accidents among mothers of under-five children. A quantitative approach with a pre-experimental one-group pre-test and post-test design was adopted. The study was conducted in selected rural areas of Chitradurga district. It has samples involving 60 mothers selected through convenient sampling. Data were collected using a structured questionnaire, followed by implementation of the STP. Post-test assessment was conducted after 8–9 days. The mean pre-test knowledge score was 9.3 (SD=2.8), which significantly increased to 20.5 (SD=2.2) in the post-test. The calculated t-value (24.197, p<0.001) indicated a statistically significant improvement in knowledge. A significant association was found between post-test scores and educational status. The findings suggest that structured teaching programmes are effective in enhancing maternal knowledge and can contribute to the prevention of home accidents among children.

Keywords: *Accident prevention; Child safety; Home accidents; Mothers; Rural health; Structured teaching programme*

INTRODUCTION

Child is the most precious possession of mankind most loved and perfect in its innocence Fragile, helpless, completely dependent on its caretakers, Before entering to the world, the foetus is safe in mother‘s womb but the moment the infant enters the world in an uncertain place, where environment should be a safe heaven for the child to grow free from any hazards, although the surrounding at times be dangerous. Children are to be cared and protected from environmental hazards. In today‘s world, both developed as well as the developing countries, danger prevails not only on the roads, but also exists in the home and playgrounds. Accidents are one of the five leading cause of death in developing countries yearly. 10% of children suffer from accident for which it is necessary to contact the health care services. In childhood injury mortality at home is greater than other childhood diseases, because Home accidents occur as an unexpected, unplanned event which usually produces death or damage. Home accidents have been identified as the largest single cause of death after the age of one year and are among the most severe health problems facing the world today. In both the industrialized world and developing countries, accidents remain one of the major five leading causes of deaths.

Health education is a key strategy to address this gap. Structured teaching programmes can effectively improve knowledge and promote safe practices. Therefore, this study was undertaken to evaluate the effectiveness of a structured teaching programme in improving knowledge regarding prevention of selected home accidents among mothers of under-five children in rural areas of Chitradurga.

OBJECTIVES OF THE STUDY

- To assess the pre-test knowledge of mothers of under-five children regarding prevention of selected home accidents
- To evaluate the effectiveness of the structured teaching programme by comparing pre-test and post-test knowledge scores
- To find the association between post-test knowledge scores and selected demographic variables

HYPOTHESES

- **H1:** There will be no significant difference between pre-test and post-test knowledge scores regarding prevention of home accidents
- **H2:** There will be no significant association between post-test knowledge scores and selected demographic variables

Conceptual Framework

The study was based on Imogene King's Goal Attainment Theory, which emphasizes interaction between nurse and client, mutual goal setting, and actions to achieve desired outcomes. In this study, the structured teaching programme represents the interaction process, where knowledge transfer and communication help mothers achieve improved understanding and preventive practices related to home accidents.

METHODS

Research Approach and Design

A quantitative research approach with a pre-experimental one-group pre-test and post-test design was adopted to evaluate the effectiveness of the intervention.

Setting and Sample

The study was conducted in selected rural areas of Chitradurga district from 17 June 2024 to 15 July 2024. A total of 60 mothers of under-five children were selected using convenient sampling.

Inclusion Criteria

- Mothers having children below five years
- Residents of selected rural areas
- Willing to participate in the study

Data Collection Tool

The tool consisted of two sections:

SECTION I: DEMOGRAPHIC VARIABLES

- Age, education, occupation, religion, family type, number of children, income, and source of information

SECTION II: STRUCTURED QUESTIONNAIRE (27 ITEMS) COVERING:

- Basic concepts of home accidents
- Causes and prevention
- First aid and complications

Tool validity was established through expert review, and reliability was ensured through pilot testing.

INTERVENTION

A structured teaching programme was administered after the pre-test. The content included types of home accidents, risk factors, preventive measures, and first aid management.

Data Collection Procedure

After obtaining permission from the Medical Officer of GR Halli PHC and informed consent from participants, pre-test data were collected (25–30 minutes per participant). The STP was then delivered, followed by post-test assessment after 8–9 days.

Data Analysis

Data were analysed using descriptive statistics (mean, percentage, standard deviation) and inferential statistics (paired t-test and chi-square test). Significance level was set at $p<0.05$.

RESULTS AND DISCUSSION

Table .1: Distribution of Demographic Characteristics of Mothers (N = 60)

Sl. No.	Variable	Category/Description	Frequency (%)
1	Occupation	Housewives	75%
2	Type of Family	Joint family	60%
3	Number of Under-Five Children	One child	71.7%
4	Source of Information	Mass media	48.3%
5	Educational Status	Graduates	26.7%

The majority of mothers were housewives and belonged to joint families. Most had one under-five child and relied on mass media for information. Educational status varied, with a considerable proportion being graduates, which may influence knowledge acquisition.

Table .2: Comparison of Pre-test and Post-test Knowledge Scores

Test	Mean Score	Standard Deviation (SD)	Mean Difference
Pre-test	9.3	2.8	
Post-test	20.5	2.2	11.2

The post-test mean score is significantly higher than the pre-test score, indicating a substantial improvement in knowledge following the structured teaching programme.

Table .3: Paired t-test Showing Effectiveness of Structured Teaching Programme

Variable	t-value	p-value	Level of Significance
Knowledge Scores	24.197	<0.001	Highly Significant

The calculated t-value (24.197) at $p<0.001$ indicates a statistically highly significant difference between pre-test and post-test scores. Hence, the structured teaching programme was effective, and the null hypothesis (H1) is rejected.

Table .4: Aspect-wise Knowledge Scores

Aspect	Pre-test Observation	Post-test Observation
Basic concepts of home accidents	Moderate	Highest (85%)
Causes and prevention	Moderate	Improved
First aid and complications	Lowest	Improved but comparatively lower

The lowest pre-test knowledge was observed in first aid and complications, indicating a gap in critical emergency knowledge. Post-test scores showed maximum improvement in basic concepts, reflecting the effectiveness of the teaching programme.

Table .5: Association Between Post-test Knowledge Scores and Demographic Variables

Variable	Association with Knowledge	Significance Level	Result
Educational Status	Significant	$p < 0.001$	Accepted
Age	Not Significant	$p > 0.05$	Rejected
Occupation	Not Significant	$p > 0.05$	Rejected
Religion	Not Significant	$p > 0.05$	Rejected
Type of Family	Not Significant	$p > 0.05$	Rejected
Income	Not Significant	$p > 0.05$	Rejected
Number of Children	Not Significant	$p > 0.05$	Rejected

A significant association was found only with educational status, indicating that higher education contributes to better understanding. Other variables showed no significant association. Therefore, H2 is partially rejected.

DISCUSSION

The findings confirm that structured teaching programmes are highly effective in improving knowledge among mothers. The improvement may be attributed to clear, focused, and need-based educational intervention. Education level plays a crucial role in comprehension and retention of information.

These findings align with previous studies that emphasize the importance of maternal education in preventing childhood injuries. Enhancing awareness through community-based programmes can significantly reduce the incidence of home accidents.

CONCLUSIONS

The findings of the study revealed that there is significant difference in the mean pre-test and post-test knowledge scores of mothers of under five children. The mean post-test knowledge scores were higher than mean pre-test scores. There was significant improvement in the knowledge after the intervention among the mothers of under five children. It can be concluded the STP was effective in improving the knowledge of mothers of under five children, H_{01} is rejected. There is significant association between the post-test knowledge scores and selected demographic variable such as educational status of mothers of under-five children. Therefore H_o2 is rejected.

Implementation of such programmes at the community level can contribute to reducing preventable childhood injuries and improving child safety.

IMPLICATIONS

Nursing Practice

Nurses can play a key role in educating mothers about home safety

Nursing Education

Curriculum should emphasize accident prevention strategies

Nursing Administration

Health authorities should organize regular awareness programmes

Nursing Research

Further studies can be conducted with larger samples and experimental designs

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