



An analysis of the Positive impact of an organized Educational Approach on Mothers ' knowledge of preventing Mishaps at Home for their Children at selected urban area of Bangalore, Karnataka, India

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Citation of this Article: Dr. Vijaymalar, “An analysis of the Positive impact of an organized Educational Approach on Mothers ' knowledge of preventing Mishaps at Home for their Children at selected urban area of Bangalore, Karnataka, India.” IJMSAR – December – 2023, Vol. – 6, Issue - 6, Page No. 49-58.

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Type of Publication: Original Research Article

Conflicts of Interest: Nil

ABSTRACT

Introduction

According to the World Health Organization, an accident is any unplanned, unexpected event that results in bodily or mental harm. Children who are less conscious of danger are among the most vulnerable, and this can be explained by the way that their neuromotor, cognitive, physical, sociopsychological, and sensory skills are still developing. Injury does not occur on purpose. It is possible to prevent about 90% of accidents using safety precautions.(5) According to a WHO research, a young child's chance of dying increases during the second year of life in the age range of 1-4 years. Fifty percent of all deaths in developing nations occur in people between the ages of one and four during the

second year of life. (WHO, 2011)

Methods

There were 60 respondents from Kerendahalli who participated in a quasi-experimental study to evaluate the impact of an organized strategy on parents' understanding of preventing accidents at home for their kids. The sample for this study was selected using the non-probability purposive sampling technique. A structured interview schedule has been established by the researcher to collect data from the participants. Using both descriptive and inferential statistics, the collected data was examined and represented using graphs and charts

Results

Out of 60 individuals, 14 (23.3%) lacked sufficient information about preventing accidents during the pretest. Before intervention, no one had good knowledge about preventing home accidents among children among mothers; only 31 (51.7) and 15 (25%), respectively, had acceptable and good knowledge on the subject of home accidents. However post test score out of 60 respondents 21 (35%) had moderate knowledge and 39(65%) had good knowledge regarding prevention of home accidents among children's .the pretest total knowledge mean score was found to be 16.32and SD Was 6.62 compared to posttest mean was 31.02 and SD was 4.99 knowledge score .It demonstrates the intervention's efficacy. There is a strong correlation between mothers' age, occupation, education, and level of knowledge regarding accident avoidance for kids. The results of the study show that. A coordinated educational strategy proved successful in increasing moms' awareness of how to prevent mishaps at home with their children.

Conclusion

This study's findings indicate that moms' understanding of infant safety precautions was much enhanced by the organized instruction approach. Childhood accidents are a major concern. Children under the age of five are particularly vulnerable to injuries from home mishaps.

Keywords

Positive impact, organized educational approach, Home accident, Mothers, knowledge Quasi experimental research design, Sampling.

1. INTRODUCTION

Creating a safe and secure living environment should

be a top priority for every homeowner because home accidents can happen without warning and can result in significant injuries or property damage. Many home accidents can be avoided with the right knowledge of the most frequent causes of mishaps as well as by putting practical safety and preventative measures into practice.(1)

Slips and falls, electrical hazards, kitchen accidents, possible outside threats, carbon monoxide safety, and the significance of childproofing for families with small children are all factors that fall under the category of home safety. Whether you are a seasoned homeowner or a first-time renter, you can protect your home, be aware of potential risks, and create a safe and accident-free living environment by doing simple things like installing safety devices and learning the best safety practices to more extensive actions like knowing when to get professional help for complex repairs.

Home accidents rank among the world's most common causes of preventable disability and deaths among children and youth. (2)

1. The literature contains numerous definitions of accidents. Any incident "that occurs unwillingly and causes physical and mental damage by sudden external force" is classified as an accident by the World Health Organization.
2. The unintentional house accident is the subject of this study. It is defined as "any event occurring inside the home or in the immediate vicinity of the home that resulted in injury"
3. It is an accident that happened by accident rather than by design.
4. The phrases "home accidents" and "unintentional home accidents" shall be used synonymously in this essay.

According to data from the US Center for Disease Control Statistics, there is an injury-related death in children every hour, and over 50,000 children are admitted to hospitals as a result of accidents.⁵ Moreover, the Safety Report Card Summary for eighteen European Union nations said that over 10,000 deaths from unintentional incidents occur each year among children and adolescents under the age of twenty. Six it translates to nearly one child dying every hour of the day. Six Furthermore, research from Oman, the United Arab Emirates, Saudi Arabia, Greece, and the United Kingdom revealed that children under five years old also have a high rate of home-related accidents.⁽³⁾

Children frequently escape accidents with long-term physical or mental impairments that limit their activities. Open wounds, poisoning, and head traumas are the most often reported unintentional injuries. Treating accident-related injuries requires a significant financial investment for families and health care institutions, even in cases when the consequences are transient.

While research on unintentional home accidents involving children in Oman exists, no study to date has examined the frequency of home accidents involving children of different ages, as well as the nature and consequences of the injuries. Thus, the purpose of this study was to determine the frequency of children who, over the course of six months, were brought to the emergency department (ED) of a university-tertiary hospital in Oman as a result of unintended home accidents. The study details the most frequent reasons why children in various age groups have accidents at home, along with the extent and results of injuries.⁽⁴⁾

According to the World Health Organization, an accident is any unplanned, unexpected event that results in bodily or mental harm. Children who are less conscious of danger are among the most vulnerable, and this can be explained by the way that their neuromotor, cognitive, physical, sociopsychological, and sensory skills are still developing. Injury does not occur on purpose. It is possible to prevent about 90% of accidents using safety precautions.⁽⁵⁾

According to a WHO research, a young child's chance of dying increases during the second year of life in the age range of 1-4 years. Fifty percent of all deaths in developing nations occur in people between the ages of one and four during the second year of life. (WHO, 2011)

The living/lounge area accounts for the most mishaps, with household cleaning products typically being the source of poisoning. Every year, 35,000 kids younger than 4 go down the steps. Falling over toys or clothing left on the floor might result in 3000 injuries. Every year, 130,000 kids get hurt in the garden. Three percent of toddlers drown in the bathtub, while swimming, by the sea, or in garden ponds.

By protecting infants and children in their care, offering sound advice to parents on accident prevention, and providing positive role models for safe behavior, community health nurses can help avoid accidents involving infants and children. Nurses can help prevent mishaps in the community or in hospitals by encouraging parents to watch their kids closely.

This study aim to examine the effect of an organized educational approach on mothers ' knowledge of preventing mishaps at home for their childrentherefore

this study clarifies and proving about educational intervention play a major role in enhancing the knowledge of the mother in prevention of accidents among the children's at home

2. METHODS

2.1 Search strategy

Eight electronic databases, i.e. PubMed, Cochrane Library, Web of Science, CINAHL Complete, Chinese Biomedical Database (CBM), Weipu Database (VIP), China Knowledge Resource Integrated Database (CNKI) and Wanfang Database, were searched for articles that evaluated AAT on children's pain, and were published from the database's inception to October 2019. We also checked the reference lists of relevant articles for additional studies, utilizing backward and forward searching for relevant articles. The search terms of the MeSH and free text terms included preschooler, mothers, urban, educational intervention, and role of community health nurses

2.2 Study design and participants

A quasi-experimental study was conducted. This study was conducted in the Keregundahelli urban part of North Bangalore, Karnataka, India .There were 60 Mothers with children's were the part of this study as respondents .The inclusion criteria was follows as the mothers who have children age group between 0-5 yrs., mothers who were interest to participate in this study and the mother who were available at the time of data collection. The sample was calculated based on means with standard deviation $(3.1+1.7= 4.8)$ of the pilot study finding assuming that 80% power at 0.05 level of significance and 2.6 clinical differences $N=z \{z1+z1-b/d\}$ s $n= 2.6$ this result shows that 60 sample needed to conduct this present study so the

mothers were selected based on inclusion and exclusion criteria.

2.3 Research design

In this study the researcher has adopted quasi experimental one group pre and posttest design and in this study the independent variable is educational approach regarding knowledge of prevention of home accidents among childrens between the age group 0-6 years the dependent variables in knowledge of prevention of home accidents among children Extraneous variables is those variables that are present in research environment that may interfere with research findings by acting as unwanted independent variables .In this present study Extraneous variables are age ,educational status ,occupation of the mother

2.4 Construction of the Tool and teaching approach

Objectives of the study and the researcher has to answer for following question

- To evaluate parents' understanding on preventing Mishaps at home for their kids through a pre-test
- To create and implement an educational approach aimed at educating mothers on how to prevent Mishaps at home for their children.
- To evaluate mothers' knowledge on preventing Mishaps this topic through a post-test.
- To evaluate the effectiveness of regarding preventing Mishaps at Home for their Children by pretest and post test score
- To determine the association with posttest knowledge score and selected demographic variables regarding preventing Mishaps at Home for their Children

Under the direction of subject matter specialists and based on an assessment of relevant literature, the research tool and teaching module were created. Five

experts evaluated the tool's content validity: one pediatrician and four professionals in the field of child health nursing. The required recommendations and adjustments were included in the tool's final preparation. The test-retest approach was used to evaluate the tool's reliability ($r = 0.08$). Results demonstrated the tool's dependability.

On the basis of Mother knowledge level, educational programme regarding prevention of home accidents among children's were developed by using following structure like Development of the course out line .development of criteria rating scale, preparation of the learning programme in that the researcher has given more important to meaning and definition of home accidents, Type and causes of home accidents ,first aid measures and preventive measures

2.5 Ethical consideration

The current study was carried out in our chosen village with permission from the Primary Health Center's medical officer. Before the study began, the participants gave their consent in order to safeguard their legal right to participate in research. The mothers took part in the program voluntarily and were free to leave at any moment.

2.6 Data collection

Formal permission was obtained from the concern authority to conduct the study. 60 samples were chosen as per laid down criteria consent was obtained from the each subjects after giving assurance of confidentiality, pretest was given on day one followed

by educational intervention and on the day seventh posttest was taken with unchanged tools

2.7 Data analysis

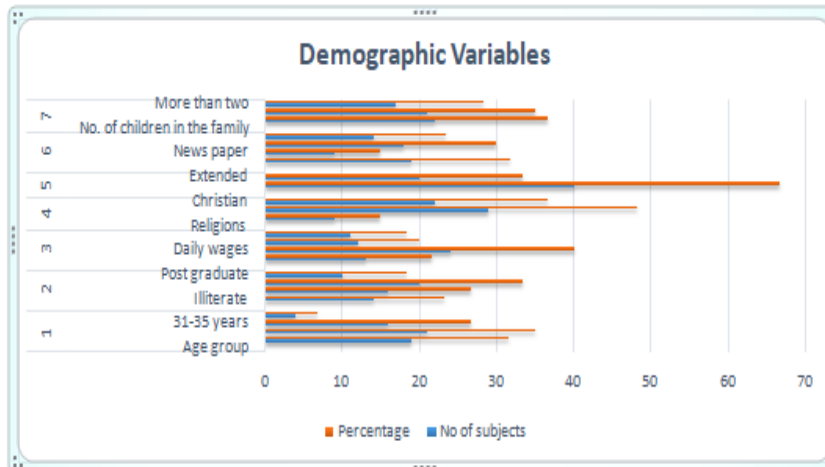
The collected data was coded and transformed to master sheets for analysis and analyses result was portrait in the form of charts The information was arranged, tallied, condensed, and subjected to both inferential and descriptive statistical analysis. The "t" test was used to do the analysis. Using the χ^2 (chi-square) test, the relationship between the chosen demographic variables and knowledge was examined and deduced.

3. RESULTS

In this study data collected were organized tabulated, analyzed and interpreted by means of statistical table and graphs and it's organized under the following headings Section A which is constrict of sociodemographic variables Section B level of mothers knowledge .The domain wise distribution of pretest knowledge scores of samples regarding prevention of accidents , over all distribution of pretest knowledge scores of samples regarding prevention of accidents The domain wise distribution of Posttest knowledge scores of samples regarding prevention of accidents , over all distribution of Posttest knowledge scores of samples regarding prevention of accidents and comparison of pretest knowledge scores of mothers regarding prevention of home accidents with selected sociodemographic variables

Table shows the sociodemographic variables

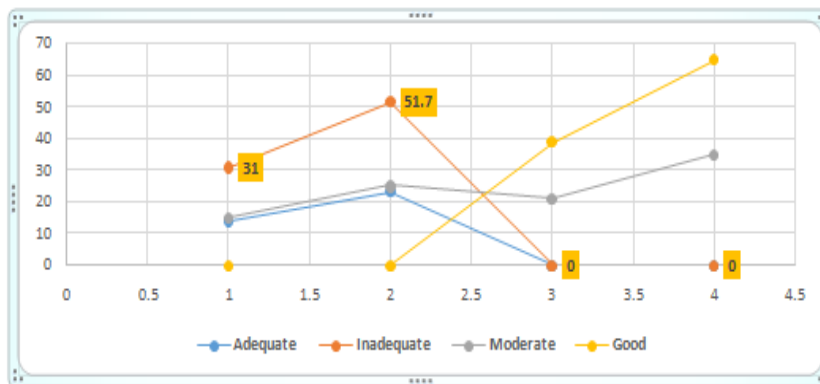
S. No.	Sociodemographic Variables	No Of Subjects	Percentage
1	Age group		
	20-24 years	19	31.60
	25-30 years	21	35.00
	31-35 years	16	26.70
	Above 36 years	04	06.70
2	Education		
	Illiterate	14	23.30
	literate	16	26.70
	Graduate	20	33.30
	Post graduate	10	18.30
3	Occupation		
	Home maker	13	21.70
	Daily wages	24	40.00
	Self employed	12	20.00
	Skilled worker	11	18.30
4	Religions		
	Hindu	09	15.00
	Muslim	29	48.30
	Christian	22	36.70
5	Type of Family		
	Nuclear	40	66.6
	Extended	20	33.3
6	Source of Previous Knowledge		
	Television	19	31.67
	News paper	09	15
	Health workers	18	30
	From family members	14	23.33
7	No. of children in the family		
	One	22	36.67
	Two	21	35
	More than two	17	28.3



In regards with age of the sample out of 60 respondents 19 (31.6%) of mothers were in the age group between 20 -24 years and 21% of the respondents were in the age group between 25-30years and 16(26.7%) mothers were in the age group between 31-35 years and 4 (6.7) mother were in the age group of above 36 years ,Here the researcher is concluding that majority of the respondents who took

part in this study age group between 25-30 years, In regards with education majority of the responds were graduate 20(33%) ,majority of the responds were daily wages and majority of the responds were belongs to Muslim since that area is belongs to Muslim Table shows the level of Knowledge on preventing Mishaps at Home for their Children

S.No	Level of Knowledge	Pre -Test		Post test		Chi square
		Number of respondents	Percentage	Number of respondents	Percentage	
1	Adequate	14	23.3	0	0	X ² -120.50 p=0.001**
2	Inadequate	31	51.7	0	0	
3	Moderate	15	25.0	21	35	
4	Good	0	0.0	39	65	



The above table shows that Pre -test and post –Test level of Knowledge prevention of accidents among mothers, before and after intervention 23.3% of women had appropriate knowledge prior to the structured interventional program, 51% had inadequate information, and 15% had moderate awareness about preventing accidents at home for their children following the interventional program.

There is a favorable influence of educational approach as evidenced by the fact that 21% of mothers had moderate knowledge on preventing disasters at home for their children, compared to 39% of respondents who had high knowledge. The significance was evaluated using the Chi square test. Thus, the researcher rejects the null hypothesis and accepts the research hypothesis.

Comparison of overall Knowledge score regarding preventing Mishaps at Home for their Children

S.No	Test	Number of Mothers	Mean	SD	statistical paired t Test
1	Pre test	60	16.31	6.61	t=32.10 p=0.001*** Significant
2	Post test	60	31.08	4.93	

Significant at $P < 0.05$ ** highly significant at $P < 0.001$



The overall knowledge score between the pretest and posttest is displayed in the above table. Generally speaking Mothers have an average mean score of 16.31 on the pretest and roughly 31.05 on the posttest. The pretest knowledge score varies significantly and is statistically significant. It indicates that they can answer 15 questions more correctly on the posttest than on the pretest. The paired t test was used to examine the differences.

4. DISCUSSION

Regarding the sample's age distribution, of the 60 respondents, 19 (31.6%) of the mothers were in the age range of 20 to 24 years, 21% were in the age range of 25 to 30 years, 16 (26.7%) were in the age range of 31 to 35 years, and 4 (6.7) were in the age range of over 36 years. Here, the researcher draws the conclusion that the majority of the study participants were between the ages of 25 and 30. Regarding

education, the majority of respondents were graduates (20%), the majority reported daily wages, and the majority of respondents were Muslim since that region is home to Muslims.-from the results of pretest and the post test score were considerably less compared to posttest performances in all aspects of knowledge under preventing mishaps at home under the study .The findings showed that the enhancement of mean present score in found in the aspects of regarding prevention of mishaps among children's between the age group 0-5 years .

The pretest total knowledge mean score was 40.8% with a standard deviation of 6062%, and roughly 51.5 percent of respondents knew about definition and meaning mistakes at home. 37.9% knew the different kinds and reasons of accidents. 44% were familiar with first aid protocols. However, the posttest total knowledge mean score was shown to be 77.6% with a

standard deviation of 4.99, indicating that almost 93.55 percent of respondents knew the definition and meaning of mishaps at home. Of those who knew about house accidents, 74.4% were aware of their causes, and 75.2% were aware of safety precautions and first aid protocols.

The mean and standard deviation of mothers' knowledge variables about preventing accidents in children aged 0 to 5 are compared. In the pretest, moms' mean score for overall knowledge level was 40.08 percent, with a standard deviation of roughly 6.62. The aforementioned data indicates that, in accordance with the investigator's previously acknowledged Research Hypothesis H1, there was a significant difference in mothers' knowledge about how to prevent accidents in children between the ages of 0 and 5 before and after educational approach intervention. The fact that the subjects' awareness of safety measures and first aid procedures for children at home significantly improved suggests that the educational interventional program that the investigator gave to all of the subjects was beneficial.

5. IMPLICATION

The study's conclusions provide light on the implications for nursing practice, research, education, and administration.

5.1 Nursing Education

Public health nurses employed in every area within child health departments can be taught child safety practices by in service nurse educators. A child safety seminar, symposium, role play, or workshop might be held as part of an in service educational program for nursing staff members and students.

5.2 Nursing Practice

For the mothers of children in the pediatric wards, nurses and other medical personnel can arrange health education sessions and provide information on child safety precautions the community health nurse can lead a program in the community to educate moms about child safety. Children admitted to the pediatric ward watched videos on child safety precautions.

5.3 Nursing Research

Journals for nursing may publish an abstract of the study. A community health nurse can suggest studies on different age groups in the neighborhood that are relevant to child safety precautions. It will be beneficial to novice researchers for their upcoming research.

6. LIMITATION

A few mother who had been pretested presented challenges to the researcher since they were unavailable for the house visit on the day of the posttest. New samples were taken when such samples were refused.

7. RECOMMENDATION

It is possible to compare moms in urban and rural areas' understanding of infant safety precautions through research. Many samples can be used to conduct the investigation. A study evaluating mothers' practices on child safety may be carried out periodically, an accident prevention study for primary school teachers might be carried out

8. CONCLUSION

This study's findings indicate that moms' understanding of infant safety precautions was much enhanced by the organized instruction approach. Childhood accidents are a major concern. Children under the age of five are particularly vulnerable to injuries from home mishaps. The most

frequent cause of injuries to children under five is falls. A mother's awareness of home accident prevention is crucial in reducing the risk of injuries in children. The study found that moms should receive greater education about preventing home accidents involving children under the age of five.

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