



## ENHANCING MOTHERS' KNOWLEDGE ON PREVENTING DOMESTIC ACCIDENTS AMONG TODDLERS: EXPLORING THE IMPACT OF SOCIO-DEMOGRAPHIC FACTORS IN ODISHA

Ms. Saraswati Behera\* | Dr. Geeta Chaudhary\*\*

\*Research Scholar, Himalayan University, Itanagar, Arunachal Pradesh, India.

\*\*Research Supervisor, Himalayan University, Itanagar, Arunachal Pradesh, India.

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### ABSTRACT

Domestic accident is accident which takes place in the home or in its adjacent surroundings which is a worldwide public health problem. The accidents impair homeostasis of an individual by influences on physical, psychological and social health of child and may cause disease, disability or even deaths. Home accident and its related death are common among children aged 1 to 19 years and is the fifth leading cause of death among infants. To assess the effectiveness of STP on knowledge regarding prevention of domestic accidents among mothers of toddlers; non-experimental approach was selected. The research design for this study was pre-experimental. The target population of the present study was mothers of toddlers living in a selected area of Odisha. Convenient sampling technique was used to select the sample. One area was selected to conduct the study. A total sample of 955 elderly people was selected from ten elderly institutions.

**Key Words:** knowledge, demographic variables, STP.

### INTRODUCTION

At present, health care specialists have powerful influence on many aspects of children's diseases. However less care has been given to childhood accidents and the number of medical studies about childhood accidents is inadequate. Accidents at home are an important cause of admission to hospital for children (Afkar Ragab Mohammed, Nesreen Sayed Mohammed, Madiha Hassan Byoumi, (2013). Injury has been identified as a major public health problem in India and internationally. In most developing countries, children, especially 0 – 6 years age group, are at increased risk for home accidents. Every year, the mortality rate of children under 1 year of age increases because of injury, falling from high chairs, swallowing buttons, darting in front of cars, worse accidents, and burns (Emad Girgis Kamel, Shima Anwer Emam, Eman Sameh Mohammed (2015). Most injuries occur at home, more often in the kitchen, bedroom, bathroom and terrace than anywhere else. Almost all of these injuries can be avoided if simple prevention measures are taken. Although the common reasons of mortality for children under 4 years age are gastroenteritis, respiratory system diseases, malnutrition and infectious diseases such as measles, accidents are the leading cause of mortality in the 5-14 yr-old age group. More than 30 % of all victims under 14 are killed in accidents (Dr. Ulhas Patel, (2008). Most of the studies revealed that incidence of home accidents may be augmented by unsuspected dangers of equipment's, playground activities and environmental factors. Although most of the mothers undoubtedly have positive influence on many aspects of child development, they seem to need alternative explanations about childhood accidents (Jagjeeth kaur (2013).

### REVIEW OF LITERATURE

A non-experimental descriptive study was conducted in selected rural area of Ambala, Haryana to assess the knowledge of parents regarding prevention of home accidents among under five children and to determine the association of the knowledge with selected characteristics. The data were collected from 60 parents of under five children by structured knowledge questionnaire. There were 30 knowledge items. Major findings of the study revealed that most of the parents (41.7%) were in the age group of 23-27 years. Majority of the subjects (80%) were females and (38.3%) had done senior secondary. Majority of the subjects (66.7%) were home makers. Majority of subjects (65%) belonged to the joint family. Seven sample (11.7%) were having very good knowledge, 35 subjects (58.3%) were having good knowledge and 18 subjects (30%) were having average level of knowledge regarding prevention of home accidents and 62.5% had knowledge on first aid management of home accidents. (Kuldeep Kaur, Simranjit Kaur, Herbaksh Kaur, 2014)

A pre-experimental one group pretest posttest design study was conducted in Belgaum to assess the knowledge of mothers of toddlers regarding prevention of house hold injuries and to evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of house hold injuries. Thirty mothers were selected



using purposive sampling technique. The tool used for data collection was structured knowledge questionnaire with 30 items. Findings of the study was that in the pretest 8(27%) had poor knowledge where as in posttest none of the samples had poor knowledge. In the pretest 16(53%) had average knowledge and in the posttest 77% had average knowledge. In the pretest 6(20%) had good knowledge and in the post test (23%) had good knowledge. The mean post test score (26) was higher than the mean pretest knowledge score (10.16) which proved that STP was effective method in significant ( $P < 0.05$  level). Based on the finding of the study, the overall pretest knowledge on prevention of household injuries among mothers of toddlers was average which suggested there is need for STP for mothers of toddlers regarding prevention of household injuries among toddlers. Post test result shown the significant improvement in the level of knowledge regarding prevention of household injuries among toddlers .It can be concluded that STP was an effective method of teaching the mothers of toddlers to improve the knowledge regarding prevention of household injury. (Kole, Devulkar, 2014)

## RESEARCH METHODOLOGY

To assess the effectiveness of STP on knowledge regarding prevention of domestic accidents among mothers of toddlers; non-experimental approach was selected. The research design for this study was pre-experimental. . The target population of the present study was mothers of toddlers living in a selected area of Odisha. Convenient sampling technique was used to select the sample. One area was selected to conduct the study. A total sample of 955 elderly people was selected from ten elderly institutions.

## DATA ANALYSIS AND INTERPRETATION

**Table .1 Chi square table of Sociodemographic and post-test knowledge to find out the association between them.**

Sociodemographic Variable	Chi-Square Value	Critical Chi-Square Value	Degrees of Freedom	Alpha Value	Result
Age Group	12.15	7.81	3	0.05	Significant
No. of Children	11.01	7.81	3	0.05	Significant
Employment Status	14.29	7.81	3	0.05	Significant
Internet Access at Home	13.42	5.99	2	0.05	Significant
Frequency of Seeking Healthcare Services	9.85	7.81	3	0.05	Significant

### 1. Age Group ( $\chi^2 = 12.15$ , $p < 0.05$ ):

The chi-square test shows a significant association between age group and post-test knowledge. The oldest age group (35-39 years) has the highest percentage of correct answers, indicating a positive correlation between age and knowledge.

### 2. Number of Children ( $\chi^2 = 11.01$ , $p < 0.05$ ):

The chi-square test reveals a significant association between the number of children and post-test knowledge. Participants with 1-2 children have the highest percentage of correct answers, suggesting a possible correlation between family size and knowledge.

### 3. Employment Status ( $\chi^2 = 14.29$ , $p < 0.05$ ):

The chi-square test shows a significant association between employment status and post-test knowledge. Employed participants have a higher percentage of correct answers, indicating a possible correlation between employment and knowledge.

### 4. Internet Access at Home ( $\chi^2 = 13.42$ , $p < 0.05$ ):

The chi-square test reveals a significant association between internet access and post-test knowledge. Participants with high-speed internet have a higher percentage of correct answers, suggesting a possible correlation between internet access and knowledge.

### 5. Frequency of Seeking Healthcare Services ( $\chi^2 = 9.85$ , $p < 0.05$ ):

The chi-square test reveals a significant association between frequency of seeking healthcare services and post-test knowledge. Participants who seek healthcare services regularly have a higher percentage of correct answers, indicating a possible correlation between healthcare utilization and knowledge.



## DISCUSSION

The chi-square test outcomes indicate significant links between post-test knowledge and various sociodemographic factors like age group, number of children, employment status, internet access, and healthcare service utilization frequency. However, no significant associations were identified with education level, marital status, household income, living arrangement, and exposure to information on domestic accidents. Comparing our results to Khan et al.'s (2019) study, similarities emerge. They noted significant correlations between mothers' knowledge of accident prevention and age, education, and socioeconomic status. Our research also discovered significant relationships with age, employment status, and internet access, underscoring the pivotal role of these variables in knowledge acquisition.

The significant associations uncovered in our study emphasize the importance of targeted interventions focusing on specific sociodemographic groups, such as older mothers, employed mothers, and those with internet access. Additionally, our findings highlight the crucial role that healthcare services should play in educating mothers about preventing domestic accidents. In contrast to the findings of Khan et al.'s study, we did not find significant associations with education level and socioeconomic status. This discrepancy could be attributed to differences in the study populations or contextual factors.

Overall, the results of our study contribute significantly to the understanding of the factors influencing mothers' knowledge about preventing domestic accidents. They underscore the necessity for tailored interventions to address this critical issue effectively. By recognizing the specific groups that would benefit most from educational programs, such as older mothers and those with internet access, targeted interventions can be developed to enhance awareness and prevent accidents in households with toddlers. Moreover, the role of healthcare services in disseminating this vital information to mothers should be emphasized to ensure widespread education and prevention efforts. These insights can guide future initiatives aimed at improving safety measures and reducing domestic accidents among toddlers.

## CONCLUSION:

The study findings unveiled that post-test knowledge exhibited significant associations with age, number of children, employment status, home internet access, and healthcare service utilization frequency at a statistically significant level of  $p < 0.05$ . It is crucial to conduct further research to enhance mothers' knowledge concerning domestic accidents involving toddlers to ensure their safety and prevent injuries effectively. By delving deeper into this area, we can develop targeted interventions and educational programs tailored to empower mothers with the necessary information and skills to create safer environments for their toddlers. This emphasis on increasing awareness and knowledge among mothers can significantly contribute to reducing the incidence of accidents and injuries in households with young children. Strengthening this knowledge base not only benefits individual families but also contributes to broader community safety efforts. Therefore, continued research and educational initiatives are essential in safeguarding the well-being of toddlers and promoting a culture of safety within households.

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