

A Comparative Study to Assess the Level of Knowledge Regarding Prevention of Home Accidents Among Mothers of Under Five-Year Children in Selected Urban and Rural Area of Bhilai, Durg, Chhattisgarh

Ashulata Mishra*

Principal, C.M. Nursing Institute, Bhilai, Chhattisgarh, India

Abstract: **Introduction:** Each year, tens of thousands of accidents occur worldwide. Accidents can take place in a wide variety of environments and there is a possibility of accidents in every sphere of human life: at home, while travelling, at play and at work. However, the home is the most likely location. Home accidents are a major cause of death and injury. They produce major costs in terms of loss of life, pain and suffering as well as lost production and wages for the employed injured. The living condition in the rural areas as cooking over open areas leads to burns and scars badly build poor houses and poor maintenance such as they're without railing might cause falls. Accidental drinking of kerosene stored in soft drink bottle leading to poisoning of children this and all happened in the house for lack of supervision of the mothers. In fact, children under 5 years of age home accidents account for half of unintentional deaths, because small children can easily choke on food or other small objects. They are inclined to put their mouths common objects found around your house such as plastic shopping bags and other safe material also pose a danger burns and scalds are more serious in children than in adults. Accidents all over the world are one of the leading health problems. Therefore various programs have been developed to prevent accidents. The most important way to protect against accidents in the primary prevention is to educate society, especially parents is to be educated about prevention of accidents and first aid to reduce accidents. **Aim:** The aim of the study was to assess the level of knowledge regarding prevention of home accidents among mothers of under five-year children in selected urban and rural area of Bhilai, Durg (C.G.) **Material and Method:** Comparative research design was adopted to conduct the study. Target population was mothers of under five year children. A purposive sampling was used for selecting mothers from Urban area Kohka Bhilai Durg Rural area Jeora Durg (C.G.). To obtain necessary data for the study, the tool was developed which included self structured socio demographic data and self structured questionnaire. And self structure questionnaire consist of 40 questions and each questions contain 4 multiple choice option. Data analysis was done using descriptive and inferential analysis. **Results:** A Comparative study was undertaken to assess the level of knowledge regarding prevention of home accidents among mothers of under five-year children. The results conveyed that in overall analysis majority 21 (70%) mothers had good knowledge, 9(30%) mothers had excellent knowledge and none of

the mothers had poor and average knowledge score regarding prevention of home accident. While in rural area , majority 15 (50%) mothers had average knowledge, 8(26.66%) mothers had good knowledge, 7(23.33%) mother had poor knowledge and none of the mothers had excellent knowledge score regarding prevention of home accident. In the comparison between urban area mother and rural area mother level of knowledge score regarding prevention of home accident, in urban area mother mean score is 27.4 and rural area mother mean score is 16.66. This clearly show that there was significant difference between the urban area mother and rural area mother mean score. In the urban area mother mean score 27.4 is greater than the rural area mother mean score 16.66. **Conclusion:** The study data concluded that urban area mothers level of knowledge regarding prevention of home accident is high as compare to rural area mothers knowledge regarding prevention of home accident.

Keywords: compare, assess, knowledge, prevention, home accidents, mothers of under five-year children.

1. Introduction

Along with cardiovascular diseases and cancers, accidents currently form the 3 leading causes of morbidity and mortality in developed and developing countries . In a World Health Organization (WHO) report, the number of deaths caused by accidents was estimated to be 3.5 million annually. This figure corresponds to an average of 10 000 deaths per day. Intentional and unintentional accidents are the cause of 15% of years of life lost globally (13% in the Eastern Mediterranean Region) which is greater than any other cause of death.

Home accidents rank highly among all accidents and occur in or around the house. The home is the place where children spend most of their time. Most home injuries occurs especially among children of 4-5 years because they are not aware of the hazards and are more susceptible to environmental risks and are curious and desire to master news kills.

Worldwide surveys (2023) have shown about the pediatric emergency varies from country to country. The 5 million

*Corresponding author: sayreenakhan2023@gmail.com

children died from injuries with a global mortality rate of 83.7 per 1,00,000 per annum. A total of 2,83,000 death was reported due to falls. In the year 2023 an estimated 3,76,000 children drowned approximately 97% of drowning deaths occurred in low and middle income countries.

According to data released by the Centres for Disease Control and Prevention more than 12% of injury related deaths in the 0-5 age group in the India result from home accidents. For children less than 1 year of age, two-thirds of injury deaths were due to suffocation. Drowning was the leading cause injury death for those 1 to 4 years of age. In 2022 an estimated 5.2 million children under 5 years died mostly from preventable and treatable causes. Children aged 1 to 11 months accounted for 1.5 million of these deaths while children aged 1 to 4 years accounted for 1.3 million deaths. Newborns (under 28 days) accounted for the remaining 2.4 million deaths

In India is accounts for an estimated of 12,75,000 children are grievously injured. A total of 22,000 deaths was reported due to drowning. In Karnataka at least 30,000 children's are dying annually due to accidents, drowning and poisoning. In developing countries pediatric emergency are shown to be as numerous as in developed countries.

In Chhattisgarh the number of neonatal injuries would be much higher as date from those children seen in other hospitals, general practioners managed at home have not been included thus it is estimated that the city of Raipur, Bilaspur would witness on an average 250 deaths an early ten thousand children hospitalized every year. In Estimated of two lakh five thousand children are grievously injured. A total of Seven thousand four hundred deaths were occurring annually due to accidents, poisoning and drowning.

As home accident becoming important cause of death in children world over ,it can be minimized or prevented through measures that can be taken by parents at home so Parents should control and supervise the environmental conditions, elimination of hazardous condition from the areas where children play and live which can minimize the frequency of home accidents. So, training should be given to parents especially mothers on risk factors and ways to prevent home accidents so as to protect the 0-6 age group children from accidents.

2. Need for the Study

Home accidents or domestic accidents are now a days a major reason of death or disabilities in this world. Where as Children less than 5 years are most likely prone to home accidents due to many reasons such as their curious nature of knowing the things better ,lack of supervision of care takers, mothers lack of knowledge on prevention of home accidents etc. As a primary care giver mothers knowledge about home accidents plays an important role in avoiding unintentional injuries among children.

L. Madhu (2024) in India is accounts for an estimated of 12,75,000 children are grievously injured. A total of 22,000 deaths was reported due to drowning. In Karnataka at least 30,000 children's are dying annually due to accidents, drowning and poisoning. In developing countries pediatric emergency are shown to be as numerous as in developed

countries.

According to WHO report (2023) says that in the age group of 1-4 years, the second year is the period when the young child runs the highest risk of dying. In the developing countries, death in the second year of life commonly accounts for 50% of all deaths between 1-4 years of age.

G. Konnur (2023) The mother should know about the home safety needs of under five children because mothers are usually the caregivers and who will be at home with the child. A study was conducted to assess mother's knowledge and practice towards home accidents among children under 6 years. The above study revealed that the incidence of home accidents was (50.3%) and shows highly statistical difference between mother's knowledge and age and between mother's knowledge and education. About three-quarters (74.5%) of mothers had incomplete knowledge regarding home accidents among their children.

G. Mina (2023) A descriptive cross-sectional study aimed to find out Awareness and Practice of Mothers having Under-five children regarding Prevention of Childhood Accident was conducted in Asam. The study findings revealed that more than half of the respondents 68.4% had fair knowledge and more than one fourth (31.6%) of the respondent had good knowledge score regarding Prevention of Childhood Accident. Similarly, more than half (59.2%) of the respondent had satisfactory practice. The study concluded that there was need among mothers about educational programs related to prevention of accidents.

The majority of home accidents can be prevented. In recent years, legislative measures and the development of new multi-factorial injury prevention interventions, as well as modernization of homes and improved facilities for cooking, heating, lighting and laundering, have been shown to reduce injuries and their fatalities in the home in developed countries . However, information about the pattern of accidents is needed to plan and implement programmes of accident prevention. Additionally, no comparative study has been undertaken to evaluate the longitudinal trend of these accidents over a period of time, and finally, the morbidity and mortality rates of these accidents are unknown.

The current study was undertaken to address these issues in order to identify and prioritize areas for prevention. So there is a need to conduct a study on the parent's knowledge in the prevention of home accidents among children. Parents should be motivated to have knowledge about the risk factors of child injuries and safety measures to be taken to prevent home accidents among children. Hence the researcher felt there is need to study on knowledge regarding prevention of home accidents for children among parents.

3. Objectives

1. To assess the level of knowledge regarding prevention of home accidents among mothers of under five-year children in selected urban area and rural area
2. To compare level of knowledge regarding prevention of home accidents among mothers of under five-year children in selected urban and rural area.

3. To find out the association between level of knowledge regarding prevention of home accidents among mothers of under five-year children in selected urban and rural area with selected socio demographic variable.

4. Assumptions

- Mothers of under five year children's may lack of knowledge regarding prevention of home accident.
- In urban and rural area mothers of under five year children's may have varying level of knowledge regarding prevention of home accidents

5. Material and Method

The theoretical framework adopted for the present study is developed from Stufflebeam's evaluation model. Comparative research design was adopted to conduct the study. Target population was mothers of under five year children. A purposive sampling was used for selecting the sample. The present study will be conducted in Urban area Kohka Bhilai, Durg and Rural area Jeora Durg (C.G.). In this study, dependent variable was knowledge level of both urban and rural area mothers regarding prevention of home accidents and socio demographic variables such as age (in year), religion, educational status, occupational status, type of family, monthly family income, age of the child, Previous knowledge regarding prevention of home accidents, source of information. To obtain necessary data for the study, the tool was developed which included self structured socio demographic data and self structured questionnaire. And self structure questionnaire consist of 40 questions and each questions contain 4 multiple choice option. Data analysis was done using descriptive and inferential analysis.

6. Description of the Tool

The tool for the present study consists of two sections.

Section A: Socio-demographic variable consists total 8 variables.

Section B: Self structured questionnaire regarding prevention of home accidents consists of total 40 question.

7. Criterion Measures

- Each correct answer is given '1' mark.
- Each wrong answer in given '0' mark.

Table 1

S. No.	Level	Range
1	Poor	0-10
2	Average	11-20
3	Good	21-30
4.	Excellent	31-40

8. Organization of Data

The analyzed data has been organized and presented in the following section

Section I: Distribution of subjects according to the socio-demographic variables by using frequency and percentage.

Section II: Overall analysis to assess the level of knowledge regarding prevention of home accidents among mothers of under five-year children in selected urban and rural area.

Section III: Analysis to compare level of knowledge regarding prevention of home accidents among mothers of under five-year children in selected urban and rural area.

Section IV: Chi-square analysis to find the association between level of knowledge regarding prevention of home accidents among mothers of under five-year children in selected urban with selected socio demographic variable

9. Result and Discussion

A. Section I

1) Distribution of Subjects According to Socio Demographic Variables

In urban area the present study majority mothers 11 (36.66%) were belongs to 29-33 year, 7 (23.33%), majority 26 (86.66%) mothers were Hindu, majority 11(36.66%) mothers had higher secondary education, majority 21(70%) mothers were house wife, majority mothers 15(50%) are reported to earn Rs. 10,001-20,000 monthly family income, majority 24 (80%) mothers belong to joint family, majority 9 (30%) mothers had 5 year child, majority 18 (60%) mothers had no any previous knowledge regarding prevention of home accidents, majority 5 (16.66%) mothers had get knowledge through family member.

While in Rural area majority 13 (43.33%) mothers were belongs to 24-28 year, majority 22 (73.33%) mothers were Hindu, majority 17(56.66%) mothers had illiterate, majority 20 (66.66%) were house wife, majority mothers 14 (46.66%) are earn Rs. 5001-10000 monthly family income, majority 12 (40%) mothers belong to joint family, majority 13 (43.33%) mothers had 5 year child, majority 19(63.33%) mothers had no any previous knowledge regarding prevention of home accidents and majority 4(13.33%) mothers had get knowledge through family member,

B. Section II

1) Overall Analysis to Assess the Level of Knowledge Regarding Prevention of Home Accidents Among Mothers of Under Five-Year Children in Selected Urban and Rural Area

In the urban area, majority 21 (70%) mothers had good knowledge, 9(30%) mothers had excellent knowledge and none of the mothers had poor and average knowledge score regarding prevention of home accident. While in rural area, majority 15 (50%) mothers had average knowledge, 8(26.66%) mothers had good knowledge, 7(23.33%) mothers had poor knowledge and none of the mothers had excellent knowledge score regarding prevention of home accident.

C. Section-III

1) Analysis to Compare Level of Knowledge Regarding Prevention of Home Accidents Among Mother of Under Five-Year Children in Selected Urban and Rural Area

The comparison between urban area mothers and rural area mothers' level of knowledge score regarding prevention of home accident, in urban area mothers mean score is 27.4 with SD 6.9 and rural area mothers mean score is 16.66 with SD 5.4.

This clearly show that there was significant difference between the urban area mothers and rural area mothers mean score.

D. Section-IV

1) Chi-Square Analysis to Find the Association Between Knowledge Regarding Prevention of Home Accidents Among Mothers of Under Five-Year Children in Urban and Rural Area with Selected Socio Demographic Variable

In urban area mothers, there was significant association found between age ($\chi^2=13.69$) is greater than the ($P=7.81$), type of family ($\chi^2=10.15$) is greater than ($P=3.81$), and age of child ($\chi^2=14.96$) is greater than the ($P=9.48$) at 0.05 level of significance. In rural area mothers, there was significant association found between educational status ($\chi^2=27.23$) is greater than the ($P=12.59$), monthly family income ($\chi^2=18.81$) is greater than ($P=12.59$), type of family ($\chi^2=14.64$) is greater than ($P=9.48$), and previous knowledge regarding prevention of home accident ($\chi^2=7.03$) is greater than the ($P=5.99$) at 0.05 level of significance.

10. Implications

A. Nursing Practice

- The nurses need adequate knowledge regarding effects of home accident and its preventive measures.
- The finding of the study clearly highlighted the importance of knowledge regarding the prevention of home accident. The nursing personnel both in hospital and community can conduct an educational program regarding prevention of home accident.
- The nurse educator needs to prepare charts and posters related to prevention of home accident which can be placed in the wards and educational departments.

B. Nursing Education

- Nurse educators help to conduct educational programs among mothers regarding prevention of home accident.
- Nursing curriculum should provide opportunity to plan, develop and administration of innovative method for health teaching regarding prevention of home accident in various setting along with other audio visual aids.
- Nurse educator should encouraged to prepare structured teaching programme regarding prevention of home accident.

C. Nursing Administration

- Nurse administrator can motivate the nursing personnel to develop health promotion strategy regarding prevention of home accident.
- Nursing administration should take care initiation in creating policies and plans in providing education people. Nurse administrator should plan and organize continuing nursing education in conducting programs on prevention of home accident.
- Provide funds for conducting seminar, workshop and conferences. Encourage the staff to actively participate

in in-service education programme regarding prevention of home accident.

D. Nursing Research

- The emphasis on research is to improve the findings of the study help to expand the scientific body of professional knowledge upon which further research can be conducted.
- Nurse researcher should be motivated to conduct more studies on knowledge regarding prevention of home accident.
- Findings can be used to determining the curriculum plans for future.
- Present study provides a tool to assess the knowledge regarding prevention of home accident.

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