



**A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING  
PROGRAMME ON PREVENTION OF FIRE ACCIDENTS DUE TO  
DOMESTIC GAS LEAKAGE AMONG ADULT WOMEN IN SELECTED  
RURAL AREA IN BHOPAL, M.P.**

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**ABSTRACT**

Every year about 25,000 people die of fire accidents and related causes on an average. Majority of the victims are women comparing to men. Fire accidents have major effects on health of the individual. Fire accidents cause undefined morbidity and mortality which can be prevented through creating awareness and education of the adult women. The study was carried out using a quantitative, true experimental design. 60 adult women between 21 – 60 years of age were selected as experimental group and 60 from were selected for control group. Samples were selected using a multi stage sampling with simple randomization. Pre existing knowledge was assessed for adult women in both the groups using a structured questionnaire prepared by the investigator and validated by the nursing experts. Structured teaching programme on prevention of fire accidents due to domestic gas leakage was given to the participants in experimental group using flash cards. Control group was not provided with any intervention. Post test was conducted in both the group after a week of intervention.

## **INTRODUCTION**

Fire accidents affect the human with injuries as minimal effect on the loss of life as the maximum. The cylinders explode while getting in contact with the high temperature. The damage will be more severe once there is an explosion. The impact of fire accidents in the kitchens will cause not only a loss to the self but also to the environment. Burns caused by explosions are not only the leading cause of the disease but also lead to disability and disfigurement. Even a scald leaves its scar for many days, and then the impact of the major burns might not have to be explained.

Here and there, on and off, we come across the news of cylinder explosions all over the country. This might be in the bakeries, wedding ceremonies or even at homes. At home, cooking is an important activity carried out every day. Most women used to cook food with the use of biomass which had created huge smoke and was time-consuming. India is home to more than 25 Crore households, out of which about 10 Crore households rely on firewood, coal, dung – cakes etc. as a primary source of cooking. The smoke from burning such fuels causes severe household pollution and affects the health of Women & children adversely causing several respiratory diseases/ disorders. As per a WHO report, smoke inhaled by women from unclean fuel is equivalent to burning 400 cigarettes in an hour. Moreover, the time spent by women in search of such fuels is huge. The invention of LPG and gas stoves has brought a good solution for such problems.

## **OBJECTIVES**

1. To assess the pretest knowledge on prevention of fire accidents due to domestic gas leakage in experimental and control group
2. To evaluate the effectiveness of structured teaching program on prevention of fire accidents due to domestic gas leakage. To compare the posttest level of knowledge score in experimental and control group
3. To find association between the post-test knowledge on prevention of fire accidents due to domestic gas leakage and selected demographic variables among experimental and control group.

## **HYPOTHESIS**

The hypotheses will be tested at 0.05 level of significance.

H<sub>1</sub>- There will be a significant difference between the pretest and posttest knowledge scores on prevention of fire accidents due to domestic gas leakage in experimental group

H<sub>2</sub> - There will be a significant association between the posttest knowledge score on prevention of fire accidents due to domestic gas leakage and selected demographic variables

## **METHODS AND MATERIAL**

Quantitative research approach was used in the study. The research design used was Quasi-experimental two group pre-test post-test designs. The total sample selected for the study was 120 samples. 60 in experimental group & 60 in control group. The research study was conducted by non-probability purposive sampling technique. The collected data was analysed by using both descriptive and inferential statistics.

## **RESULT**

Out of the total study population most of the samples 26 (43.33%) in experimental group and 28 (46.67%) in control group belong to the age group of 31 to 40 years.

Of the total adult women participated in the study 52(86.67%) in experimental group and 50(83.33%) in control group were married.

Considering the education predominant samples about 19(31.66%) in experimental and 18(30%) in control group have completed higher secondary education.

In view of occupation 39(65%) in experimental and 35(58.33%) in control group are unemployed.

Contemplating to the income of the family, majority of the participants about 32(53.33%) in experimental and 34(56.66%) in control group are earning Rs.6214 to Rs.10, 356 per month as family income.

With regard to the period of using gas appliances, 30(50%) in experimental and 25(41.67%) in control group are using the gas appliance for 6 to 10 years.

In view of previous experiences, more number of participants about 21(35%) of participants in experimental group had previous experiences of burns and in control group the previous experience of burns reported about 17(28.33%). Out of which scalds were experienced by the huge number of participants of about 20(95.24%) in experimental group and about 15(88.24%) in control group.

Concerning the previous experience with gas leakage, about 15(25%) in experimental group and 10(16.67%) in control group have reported the previous experience of gas leakage. 13(86.67%) in experimental group and 8(80%) in control group called for help during the time of gas leakage.

### **CONCLUSION**

The study results showed that there is an effectiveness of structured teaching programme on prevention of fire accidents due to domestic gas leakage. Community Health Nurse can inculcate such education in community to reduce the incidents of fire accidents.

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