



## effectiveness of planned teaching programme with mock drill on level of knowledge on fire accident preparedness.

Mrs.Manila Mathews

MSc Nurse Father Muller College of Nursing Mangalore. Karnataka.

### ABSTRACT

Today's child is tomorrow's citizen. In India about 35% of the total population is children below 15 years of age. This group is considered vulnerable at the time of disasters but they also have the ability to take some steps to ensure their safety. Over the last two decades there has been reported about 800 disasters in India. Among these half of them are manmade disasters. India was affected with 133 disasters related to fire and other explosion. So disaster preparedness forms an integral part of the national system responsible for developing plans, programmes for disaster management.

**KEYWORDS :** Fire accident preparedness, mock drill, high school children, planned teaching programme.

### Introduction

A disaster is a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses. It can be natural disaster or manmade disaster. A disaster may have certain feature such as unpredictability, unfamiliarity, speed, urgency, uncertainty, and threat.

Adolescents contribute 21% of India's total population and they spend most of their time in school. The school is an ideal place for learning and growing up. Schools can do more than any institution in society to help young people to live healthier, longer, more satisfying and more productive lives.

Over the last two decades there has been reported about 800 disasters in India. Among these half of them are manmade disasters. India was affected with 133 disasters related to fire and other explosion. The Annual Disaster Statistical Review in the year 2011 reported 332 disasters worldwide. The report shows that 6.6% of the accident was fire accidents. In 2004, a major fire tragedy had happened in the Lord Krishna Middle School Kumbakonam District, Tamil Nadu in which 94 children were burned alive and 18 children badly injured by the cooking gas explosion.

The children are a vulnerable group when a disaster strikes and thus there is a need for disaster preparedness. Further more limited information exists regarding their unique needs in humanitarian emergencies. Keeping this in view, the pediatric nurse researcher will develop a Planned Teaching Programme with a mock drill and employ it to the children so as to prepare the children in case of an occurrence of a fire accident. These children in turn share this valuable information to the family and community.

### DESIGN AND METHODS

An evaluative study approach was used to assess the effect of planned teaching programme with mock drill on knowledge of fire accident preparedness among high school children. Randomized sampling technique by lottery method was used to select the school and then convenient sampling technique was used to select the subjects. The study was conducted among 200 high school children of 8<sup>th</sup> and 9<sup>th</sup> standard at Milagris High School, Mangalore. The data was collected using a baseline Proforma and structured knowledge questionnaire on the first day. Then the planned teaching programme with mock drill was administered on the same day, after which the post-test knowledge of the students was assessed after a gap of seven days using the same knowledge questionnaire. The data obtained is analyzed using both descriptive and inferential statistics based on the objectives and hypothesis of the study.

### TOOLS

Tool 1: baseline proforma

Tool II: structured knowledge questionnaire.

### RESULT

#### Section 1: Sample characteristics

The data reveals that among the participants majority (85%) of them were males and 83.5% of them stay in urban area. This also reveals that mass media is the major source of information about fire accidents for the participants.

#### Section II – Knowledge level of the high school children regarding fire accident preparedness

Knowledge level of 200 high school children were assessed using a structured knowledge questionnaire and was analyzed using descriptive statistics which reveals that the majority of participants, 126 (63%) had average knowledge in the pre-test, whereas in post-test, majority of the participants, 133 (66.5%), had good knowledge on fire accident preparedness.

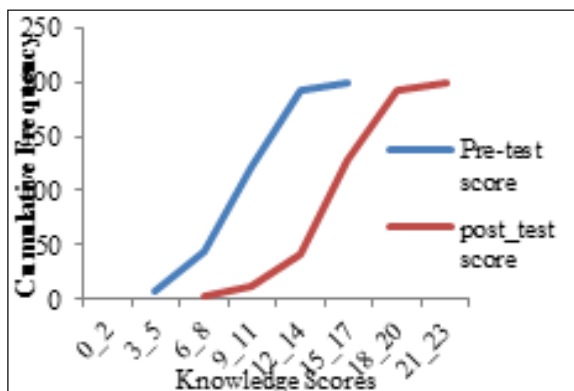


Figure 2: Comparison of pre-test and post- test knowledge scores

The data in figure 1 shows that the post-test ogive lies right to pre-test ogive the entire range, showing that the post-test knowledge scores were consistently higher than pre-test knowledge score.

#### Section III – Evaluation of the effectiveness of planned teaching programme on fire accident preparedness

Table 1: Evaluation of the effectiveness of planned teaching programme on fire accident preparedness

Group	Mean knowledge score		Standard deviation		t value	pvalue
	Pre test	Post test	Pre test	Post test		
High school children	10.62	16.32	2.68	2.64	26.99	0.0001*
Maximum score – 23 p <0.05 t <sub>199</sub> .1.960, *Highly significant s						

The data in table 1 shows that, the computed p value is less than 0.05. Hence, the null hypothesis ( $H_{01}$ ) is rejected and research hypothesis ( $H_1$ ) is accepted. This indicates that the planned teaching programme with mock drill in increasing knowledge of high school children on fire accident preparedness was effective.

#### **SECTION IV: Association between pre-test knowledge score and selected variables.**

This section deals with the findings of the association between pre test knowledge scores and the selected variables.

In order to test the association between the pre-test knowledge scores and the selected variables, the following null hypothesis was formulated. Chi square test was computed using contingency table to test following null hypothesis:

$H_{02}$ : There will be no significant association between the pre test knowledge of high school children regarding fire accident preparedness and selected demographic variables

The data in table 1 shows that the computed 'p' values between the pre –test knowledge scores of the participants and selected base line variables. The calculated 'p' values were greater than 0.05. Therefore, the null hypothesis ( $H_{02}$ ) is accepted and research hypothesis ( $H_2$ ) is rejected for all the variables. Therefore, it is inferred that there was no association between pre-test knowledge score of the participants and the selected variables.

#### **CONCLUSION**

The nurse can make use of the schools as channels to impart knowledge to the subjects and the rest of the community. The problem selected for this study is an upcoming threat with high potential for children's safety in all aspects. The planned teaching programme with mock drill on fire accident preparedness is the best weapon to improve the knowledge and helps in preparing them to face the disaster.

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