A Study to Assess the Effectiveness Planned Teaching Program on Knowledge Regarding Ill Effects of Exposure to the Crackers Bursting among the Mothers of Children

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# A Study to Assess the Effectiveness Planned Teaching Program on Knowledge Regarding Ill Effects of Exposure to the Crackers Bursting among the Mothers of Children

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#### **ABSTRACT**

**Background:** A fire cracker is a small explosive device which burnt produce a loud noise along with colorful sparkles it is made up of harmful chemicals and produce harmful gases when burnt which dissolves in the atmosphere and add to its contamination. fire accidents due to crackers, burn injuries.

**Methodology:** Pre-experimental one group pre test post test was conducted to assess the knowledge of mothers of children having ill effects of exposure to the crackers bursting in the selected area of Sangli Miraj, Kupwad Corporation. The reliability coefficient 'r 'of the questionnaire was 0.81, hence it was found reliable. Total 75 samples were selected by Non probability convenient sampling technique. A Structured questionnaire of 17 items was administered to collect data. Pre test was given on the 1st day followed by planned teaching and Post-test was administering done 7th day.

**Result:** Before giving planned teaching mothers of children were unaware of the knowledge regarding ill effects of exposure to the crackers bursting. It was found maximum mothers of

children had good knowledge regarding ill effects of exposure to the crackers bursting The pre test average score was 6.07 with standard deviation of 1.83. The post test average score was 13.63 with standard deviation of 1.62. The test statistics value of the paired 't' test was 36.17 with p value 0.00 Shows that calculated value is more than table value there was significant difference in the average knowledge score, at 5% level of significance.

**Conclusion:** Thus it was conclude that, of the study clearly indicated that there are changes in pre-test and post-test knowledge score.

**Keywords:** Knowledge Planned teaching, crackers bursting.

#### Introduction

Fireworks are a class of <u>low explosive pyrotechnic</u> devices used for aesthetic and entertainment purposes. The most common use of a firework is as part of a fireworks display (also called a fireworks show or pyrotechnics), a display of the effects produced by firework devices.

Fireworks take many forms to produce the four primary effects: noise, light, smoke, and floating materials (confetti for example). They may be designed to burn with colored flames and sparks including red, orange, yellow, green, blue, purple, and silver. Displays are common throughout the world and are the focal point of many cultural and religious celebrations.

Fireworks are generally classified as to where they perform, either as a ground or aerial firework. In the latter case they may provide their own propulsion (skyrocket) or be shot into the air by a mortar (aerial shell)

#### New Year fireworks

The most common feature of fireworks is a paper or pasteboard tube or casing filled with the combustible material, often pyrotechnic stars. A number of these tubes or cases are often combined so as to make when kindled, a great variety of sparkling shapes, often variously colored. A skyrocket is a common form of firework, although the first skyrockets were used in warfare. The aerial shell, however, is the backbone of today's commercial aerial display, and a smaller version for consumer use is known as the festival ball in the United States. Such rocket technology has also been used for the delivery of mail by rocket and is used as propulsion for most model rockets. [citation needed]

Fireworks were originally invented in China. Cultural events and festivities such as the Chinese New Year and the Mid-Autumn Moon Festival were and still are times when fireworks are guaranteed sights. China is the largest manufacturer and exporter of fireworks in the world.

Modern colored fireworks were invented in Europe in the 1830s.<sup>[1]</sup> Modern skyrocket fireworks have been made since the early 20th century.

# Materials and discussion

A present study was conducted by using a quantitative experimental research approach with A Pre-experimental, one group pre-test and pos-test design. The reliability was done by using split half method 'r' was calculated by using Karl Pearson's formula coefficient 'r' of the questionnaire was 0.81, which is more than 0.70. Validity was done from 25 experts. Proposal with tool presented in front of ethical committee for permission. Total 75 samples were selected by Non probability convenient sampling technique. Pilot study was conducted with 10 samples and the study was found feasible. Final study conducted with same data collection tool. Data collection tool had the questionnaires on exposure to the crackers bursting.

#### Result

Before giving planned teaching mothers of children were unaware of the knowledge regarding ill effects of exposure to the crackers bursting. It was found maximum mothers of children had good knowledge regarding ill effects of exposure to the crackers bursting The pre test average score was 6.07 with standard deviation of 1.83 . The post test average score was 13.63 with standard deviation of 1.62 . The test statistics value of the paired 't' test was 36.17 with p value 0.00 Shows that calculated value is more than table value there was significant difference in the average knowledge score , at 5% level of significance .

# **Findings**

**Section I:** shows that sample most of mothers belongs to age group of 31-35, And most of mothers education is secondary. The health problem occur due to crackers 68% mothers are said yes and 32% mothers said no . The samples have instruction from school table shows 72% yes and 28% no . The 45.33% samples have information of crackers . The most of samples received information to the newspapers table shows 35.29%

# **SECTION I**

Table :1

Frequency and percentage distribution of selected demographic variables

Sr. no	Demographic Variables	Group	Frequency	Percentage
1	Age	25-30	15	20.00
		31-35	37	49.33
		36-40	19	25.33

		41-above	4	5.33
2	Education	Primary	12	16.00
		Secondary	35	46.67
		Higher secondary	18	24.00
		Graduate	9	12.00
		Post graduate	1	1.33
3	History of health problem	Yes	51	68.00
		No	24	32.00
4	Instruction from school	Yes	54	72.00
		No	21	28.00
5	Received information	Yes	34	45.33
		No	41	54.67
6	Sources of information	Book	8	23.53
		Newspaper	12	35.29
		Social media	7	20.59
		Television	7	20.59

Table No: 1 shows that sample most of mothers belongs to age group of 31-35, And most of mothers education is secondary. The health problem occur due to crackers 68% mothers are said yes and 32% mothers said no. The samples have instruction from school table shows 72% yes and 28% no. The 45.33% samples have information of crackers. The most of samples received information to the newspapers table shows 35.29%

# **SECTION II**

TABLE -2FREQUENCY AND PERCENTAGE DISTRIBUTATION OF PRE-TEST AND POST-TEST KNOWLEDGE

Knowledge greading	Pre test		Post test	
	Frequency	Percentage	Frequency	Percentage
Poor 0-5	34	45.33	0	0
Average 6-9	38	50.67	1	1.33
.Good 10-13	3	4.00	34	45.33
V. good 14-17	0	0	40	53.33

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Table no : 2 at the time of pre test 45.33% of subjects had poor knowledge ,50.67% had average knowledge ,4% in good knowledge category .

At the time of post test, 1.33% of subjects had average knowledge, 45.33% in good knowledge category, 53.33% subjects were having very good knowledge and no one in poor knowledge.

# **SECTION III**

TABLE:3 COMPARISON OF THE PRE AND POST TEST KNOWLEDGE SCORE

Group	Frequency	Mean	S.D	t value	P value
PRE TEST	75	6.07	1.83	36.17	0.00
POST TEST	75	13.63	1.62		

The comparison of the knowledge score of pre and post test was done by paired t test . The pre test average score was 6.07 with standard deviation of 1.83. The post test average score was 13.63 with standard deviation of 1.62. The test statistics value of the paired 't' test was 36.17 with p value 0.00 Showes that calculated value is more than table value there was significant difference in the average knowledge score , at 5% level of significance .

#### **Discussion**

The findings of the present study have been discussed as per the objectives of the study. The findings of the study shows that after conducting the planned teaching programme there was increase in the knowledge regarding ill effect of crackers among the mothers. And statistically it was found that there is highly significant difference in pre—test and post-test score

In the present study knowledge score regarding ill effects of crackers brusting was collected by self – structured questionnaire. The total score was 17 and divided 0-5(poor),6-9(average),10-13(good),14-17(very good)

The demographic variables of mothers of childrens like age, education, history of health problems, instruction from school, previous knowledge.

The mean knowledge of pre-test and post test scores were evaluated and it showed significant increases in knowledge of mothers who were selected for the research study and the hypothesis H1 was accepted.

# Conclusion

The present study concludes with the purpose of finding the effectiveness of planned teaching program on knowledge regarding the ill effects of exposure to the crackers bursting among

mother of children at selected area of Sangli, Miraj, Kupwad Corporation. Findings of the study clearly indicated that there are changes in pre-test and post-test knowledge score. The design used for the study was a one group pre-test and post-test design was used. The study was conducted at selected area of Sangli, Miraj, Kupwad Corporation. The Sample size of the study was 75 mothers of children The reliability of the tool was determined Split Half Method of Reliability, the tool was administered to 10 samples. Reliability of the knowledge tool was found to be 0.81. The pilot study was conducted, to assess the feasibility of the study and to decide the statistical analysis and practicability of research. It was found feasible.

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