

# A Pre-Experimental Study To Assess The Effectiveness Of Video Assisted Teaching Programme On Knowledge Regarding Burns' First Aid And Its Prevention Among Care Givers Of Under Five Children In Selected Rural Area Dehradun

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**Abstract- Background :-**The burn is often referred to as one of the hardest traumas in medicine, given that its effects are physical and psychological. Severe burns can cause death. Scars, contractures and keloids are also physical effects of fatal burns. The victims suffer due to disfigurement and disability, often leading to stigma and rejection by society. Among mental consequences of burns are, for example, low self-esteem, fear, depression, or anxiety

**Objectives -**To evaluate the effectiveness of a video assisted teaching programme on knowledge of burns first aid and its prevention among care givers of under five .

**Materials and Methods:** Quantitative Approach with pre-experimental (one group pretest ,posttest) Research design was used in the study.A convenient sampling technique was used to collect data from 60 care givers of under five Mothrawala PHC Dehradun.Video teaching was conducted for 20-25 minutes for one day. Data was collected by using a self-structured questionnaire.

**Results:** A significant effectiveness after video assisted teaching programme with a mean difference of 6.18 . The calculated 't' value as 35.59 greater than the tabulated value (2.02) at  $p < 0.05$  level of significance (p value is less than 0.05) .

**Conclusion :**This study concluded that the video assisted teaching programme was effective and this can enhance the knowledge of care givers of under five regarding burns first aid and its prevention .

**Index Terms-** Assess, knowledge, effectiveness, video assisted teaching, burns first aid , under five care givers.

## I. INTRODUCTION

The nation's most valuable asset is its children. They're the best hope for a country's future. Every country that has developed and progressed links its future with the status of its children. Healthy, protected, educationally advanced children are essential for a nation's future. They can be a potential and useful source of human resources for progress in the country. Failure to take care of children results in wasting the most important national asset and this is a loss for a nation as a whole.

In every family, the birth of a child is significant. It's always a matter of great concern for parents when their child grows up. Under-five children suffer a lot due to environmental hazards like unintentional injuries, like burns, drowning, falls and poisoning. It's time for parents and children to know one another. Under five, children are like a discovery machine because they are curious about nature and, hence, they are most at risk for poisoning.

Burns are often called one of the most devastating types of trauma in medicine because their consequences have physical and mental dimensions. Severe burns can cause death. Physical consequences of nonfatal burns include scars, contractures, and keloids. The victims suffer due to disfigurement and disability, often leading to stigma and rejection by society. Among mental consequences of burns are, for example, low self-esteem, fear, depression, or anxiety.

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Burns are a type of trauma that can be caused by thermal energy, chemical agents, electricity, or radiation. According to the World Health Organization, burn is an injury to the skin or other organic tissues is primarily caused by heat or due to radiation, radioactivity, electricity, friction, or contact with chemicals.

According to Juan P. Barret, trauma can be defined as a bodily injury severe enough to pose a threat to life, limbs, tissues, and organs, but burn injury is different, because, unlike other traumas, it can be quantified as to the exact percentage of the body injured and can be viewed as a paradigm of injury from which many lessons can be learned about critical illness involving multiple organ systems..Burns can affect all parts of the body: head, neck, trunk, upper and lower extremities, perineum, and upper anterior abdominal wall.

The burns according to the cause of the injury can be divided into accidental and non accidental. Most burns on children are caused by accidents. There are several features that can make a health-care provider suspect non-accidental injury.

The triage decision is based on the extent of burn, body surface area involved, type of burn, associated injuries, any complicating medical or social problems, and the availability of ambulatory management .In addition to what has been mentioned above, the criteria that are taken into account to decide if the patient requires hospitalization or referral to the center of burns are the anatomic location of the injury and age of the patient

## II. MATERIAL AND METHODS

A pre-experimental study A convenient sampling technique was used to collect data from 60 samples of care givers of under five Mothrawala PHC Dehradun. The Inclusion Criteria for the study were care givers of the under five year age group in selected areas Dehradun and care givers of the under five year age group who are willing to participate in the study. Who are available at the time period of data collection .Care givers of the under five-year age group who are not willing to participate in studying and care givers who attend any workshop or conference on burn first aid were exclusion criteria. The self administrated questionnaire method was used to assess the effectiveness of the video teaching program on knowledge of burns first aid and prevention among care givers of under five. Pretest was conducted with the help of the Structure teaching questionnaire. After that, administered a video assisted Teaching Programme to the same care-givers for under five. The post-test was done for 7 days using the same questionnaire and the data collection process was terminated by thanking the subjects for their cooperation .It took an average time of about 20-25 minutes for each subject. Data analysis was done by using SPSS version 25. I used both descriptive (mean, percentage. standard deviation) and inferential statistics.

## III. INSTRUMENT /TOOL

The tool consists of a section A and section B, section A consists of socio demographic data such as age, religion, types of family, level of education, occupation, economic status, number of children, previous knowledge. Section B consists of a structural knowledge questionnaire which was prepared consisting of 2 general knowledge questions regarding home accidents , 3 questions regarding burns and the main cause of burn at home, 8 questions regarding prevention and first aid , 17 questions regarding medical management or home management of burns . The total number of questions in the structure questionnaire was 30 .

## IV. STATISTICAL ANALYSIS

Frequency and percentage distribution were used to analyze the demographic variables and the mean and standard deviation were calculated. t' test can be done for comparison of pretest and post test values and also assess the effectiveness of planned video teaching program on knowledge regarding burn first aid and its prevention.

**Table 1: Classification of samples on pre-test knowledge level regarding burn first aid and its prevention among the care givers of under-five .**

Knowledge level	Category	Sample	
		Number	Percentage
Inadequate	(0-10)	28	46.7%

Moderate	(11-20)	30	50 %
Adequate	(21-30)	2	3.4 %

**Table 2 .Classification of samples on post-test knowledge level regarding burn first aid and its prevention regarding burn and its prevention among care givers of under-five .**

Knowledge level	Category	Sample	
		Number	Percentage
Inadequate	(0-10)	1	1.67 %
Moderate	(11-20)	42	70 %
Adequate	(21-30)	17	28.33 %

**Table - 3 Comparison of mean, standard deviation of pre-test and post-test level of knowledge regarding burn first aid and its prevention  
N=60**

S.No	Assessment	Mean	Mean Difference	Standard Deviation
1.	Pretest	11.68	6.18	4.0358
2.	Post test	17.86		3.8376

**Table 4 :- ‘t’ value between the pre-test and post-test score value**

Aspect	Maximum score	Sample knowledge			Paired ‘t’ test	Table value	Level of significant
		Mean	SD	SD %			
Pre test	30	11.68	4.0358	6.726	35.59	2.02	Significant
Post- test	30	17.86	3.8376	6.396			

Paired sample ‘t’ test (calculated t= 35.59, p<0.05)

## V. DISCUSSION

In this study pre test 3.33% of respondents had an adequate knowledge score (21-30), 50% of respondents had a moderate knowledge score (11-20) and 46.7% had an inadequate knowledge score (0-10). In post-test 28.33% of respondents had an adequate knowledge score (21-30), 70% had a moderate knowledge score (11-20). 1.67% of respondents had an inadequate post test knowledge score (0-10) post-test mean level of knowledge score is significantly higher than the pretest mean level of knowledge score. After administering a video assisted teaching programme, the knowledge level pre test score (mean=11.68) in comparison with the post-test score (mean =17.86) was higher. Standard Deviation of pre-test was 4.0358 and Standard Deviation percentage was 6.726. Standard Deviation of post was 3.8376 and the Standard Deviation percentage was 6.396. the statistical paired "t" test for overall level of knowledge score is found to be 35.59 which is greater than the table value (2.02) at p value (0.000) <0.05 level of significance. Therefore, it can be said that the video assisted teaching programme was found to be effective in increasing the level of knowledge among caregivers of under-five .

## VI. ETHICAL CONSIDERATION

The study was accepted and recommended by a research committee and formal permission was obtained from the principal of Shri Guru Ram Rai University, College of Nursing, Patel Nagar, Dehradun. To conduct research studies in Mothrowala , Dehradun, written permission was obtained from the (Nagar Nigam office ) prior to data collection. Confidentiality was assured to all subjects to get their cooperation. Informed consent of each subject was obtained before administering research tools to them and subjects were informed that their participation was voluntary and had the freedom to withdraw from the study.

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