

Original Research Article

A Study to assess the Effectiveness of Structured Teaching Programme on Knowledge regarding Prevention and First Aid Management for Burns among Mothers of Under Five Children in selected community area at Moradabad

Mr. Madan Mohan Gupta*

Mr. Rohit Gautam †

Abstract

The worldwide incidence of fire-related injuries in 2004 was estimated to be 1.1 per 100,000 populations, with the highest rate in Southeast Asia and the lowest in the Americas. The incidence of burns in low and moderate income countries (LMIC) is 1.3 per 100,000 populations compared with an incidence of 0.14 per 100,000 populations in high income countries. The aim of this study was to assess the knowledge regarding prevention and first aid management of burns and to evaluate the effectiveness of the structured teaching programme (STP) on knowledge regarding prevention and first aid management of burns. The research design for the present study was pre experimental research design. The study sample consists of 60 mothers of under-five children from selected community areas of Moradabad. The samples were selected by non-probability purposive sampling technique. The data was collected by using structured questionnaire by self reporting (MCQ). The study findings revealed that the pre test knowledge score of under-five mothers 9 (15%) mothers having good knowledge score, 51 (85%) mothers are having average knowledge score. In post test 56 (93.33%) mothers having good knowledge score, 4 (6.7%) mothers are having average knowledge score. The study findings also revealed that the mean and standard deviation of knowledge level of mothers were 2.15 and 0.3600 respectively. The mean difference between pre test and post test was computed and it was 0.78 and 't' was found to be 19.946 which was significant at 0.05 level. The final result indicates that there was a significant difference between pre and post tests knowledge score. There is no significant association between knowledge with the selected demographic variables.

Key words: Effectiveness, structured teaching programme, Knowledge, Mothers, First aid

1 Introduction

Children are the future of every country and all societies strive to ensure their health and safety. Since India's independence, continuous efforts have been made to improve the status of children. The large burden of communicable, infectious and nutritional disorders is gradually on the decline due to massive efforts and investments by successive Indian Government, even though it is an unfinished agenda.[1] Parallel to these changes, it is also becoming apparent that children saved from disease of yesterday are becoming victim of injury on road, at home and in public, recreational places.[2]

A burn is defined as an injury to the skin or other organic tissue caused by thermal trauma, it occurs when some or all of the cells in the skin or other tissues are destroyed by hot liquids, hot solids or flames, radiation, radioactivity, elec-

tricity, friction or contact with chemicals are also considered as burns.[3]

Burns in children under the age of 4 year old at higher risk of hospitalization often occur from a mixture of curiosity and awkwardness[4]. In children under the age of four years, the level of motor development does not match the child's cognitive and intellectual development and injuries can thus occur more easily[5]. Infants under the age of 1 year are in a particular category, as their mobility starts to develop and they reach out to touch objects. Scald burns are the most frequent type of burns among children under the age of 6 years on observation that appears to come across geographic and economic groups.

2 Objectives of study

1. To assess the knowledge regarding prevention and first aid management of burns among mothers of under five children in selected community areas of Moradabad, before and after

*Assistant Professor, Rama College of Nursing, Kanpur, UP, India. E-mail: mmgupta143@gmail.com.

†Nursing Officer, UPUMS, Saifai, Etawah, UP, India

implementation of structured teaching programme.

2. To evaluate the effectiveness of the structured teaching programme (STP) on knowledge regarding prevention and first aid management of burns among mothers of under –five children in selected community area

3. To determine the association between knowledge regarding prevention and first aid management for burns among mothers of under-five children with selected socio demographic variables.

3 Hypothesis

H1: There is a significant difference between the pre-test and post-test level knowledge scores among mothers of under-five regarding first aid for burns and its prevention.

H2: There is a significant association between pre test levels of knowledge of mothers with selected socio- demographic variables.

Assumption

- It is assumed that mothers may have less knowledge regarding for burns prevention.
- The STP will help to improve the knowledge of mother regarding first aid for burn and its prevention.

4 Methodology

Research Design The research design adopted for the present study was pre experimental one group pre test- post test research design.

Research Approach: A quantitative research approach was used to evaluate the knowledge of under-five mothers regarding prevention and first aid management of burn.

Setting of the study:The study was undertaken in selected community area at Mangupura, Moradabad due to geographical feasibility and availability of samples

Population: Target population for the study was mothers of under-five children of selected community areas at Moradabad.

Sampling technique: The sampling technique used for selecting the sample was non probability purposive sampling technique.

Sample size: The sample size for the present study is 60.

Inclusion criteria

1. Mothers who are having under-five children (0-5)
2. Mothers who are able to read and write Hindi language.
3. Mothers who are willing to participate in study.

Exclusion criteria

1. Mothers who are not available at the time of data collection.
2. Mothers who are chronically ill and mentally challenged.
3. Mothers who are not residing in community area

Variables

1. Demographic variables: Age, Education, Occupation, Family income, Type of family, Sources of information and number of under-five children in the family.

2. Dependent variables: Knowledge of mother regarding prevention and First Aid management for burn.

3. Independent variables: STP on prevention First Aid management for burn.

Delimitations

1. The study is delimited only to mother of under-five children.
2. The studies delimited to mother of under-five children, available at the time of the study.
3. The study is delimited for first aid for burn and its prevention.
4. The study is limited to 60 samples only.

5 Method of data collection:

The proposed study was conducted after the acceptance of consolation committee of the college and a written permission was obtained from the concerned authorities. Data was collected from 60 samples that fulfilled inclusion and exclusion criteria. The written consent of the participant was obtained before data collection and assurance was given to study participants regarding the confidentiality of data. Pre test was taken before giving interventions and then post test will be done. The data was collected by using structured questionnaire by self reporting (MCQ). The data obtained was planned to be analyzed on the basis of object of the study using descriptive and inferential statistics. The data collection tool has two parts on it, which are as follow A planned questionnaire will be ready in such a way it consist the following parts.

Part-A: Questions on demographic data.

Part-B: It included 23 questions related to assess the knowledge regarding prevention and first aid management of burns among mothers of under-five children and the pattern was 1 score for each correct answer and 0 mark for each wrong answer. The maximum possible score was 23 and minimum score was 0. A self structured questionnaire was used to obtain the data to assess the knowledge regarding prevention and first aid management of burns among mothers of under-five mothers and the score will be interpreted

TABLE 1

Level of Knowledge	Frequency of scoring
Poor	1-7 marks
Average	8- 15 marks
Good	16-23 marks

on their knowledge level as given in Table 1.

6 Results:

Section-A: Description of demographical variables of selected mothers of under-five children

TABLE 2: Description of demographical variables of selected mothers of under-five children
N=60

Demographic Variables		F	%
Age in years	>20 years	7	11.66
	20-30 years	31	51.66
	31-40 years	18	30.00
	41-50 years	4	6.66
Type of family	Nuclear	25	41.66
	Joint	30	50
	Extended	5	8.33
Religion	Hindu	48	41.66
	Christians	5	8.33
	Muslims	7	11.66
	Others	0	0
Educational status	None	2	3.33
	Middle School	25	41.66
	High School	23	38.33
	Higher Secondary	10	16.66
Occupational status	Unemployed	17	28.33
	Govt.	9	15
	Private	28	46.66
	Self employed	6	10
Monthly income	<5000	9	15.0
	5000-10000	23	38.33
	10000-20000	25	41.66
	More than 20000	3	5
Source of information	Mass media	50	83.33
	Parents	7	11.66
	Friends	2	3.33
	Teachers	1	1.66
No. of under-five children	1 years	22	26.66
	2 years	22	36.66
	>2 years	16	26.66

Analysis revealed that majority 31 (51.66%) of mother were from age group of 21 -30. The type of family 30 (50%) of mothers were live in joint family. According to the Religion 48 (80%) was Hindus. The education of mothers 25 (41.66%) mothers were middle school education. Considering the occupation of mothers 28 (46.66%) was involved in private job. The monthly income of mothers 25 (41.66%) comes under 10000-20000 Rs. The source of information 50 (83.33%) mothers are getting information from mass media The number of under-five children in the family 22 (36.66%) mothers were having children under 1 year, (36.66%) and 2 year respectively.

Section B: To compare the pre-test and post-test knowledge score regarding prevention and first aid management of burn among mothers of under-five children.

TABLE 3: Difference between pre test and post test knowledge score regarding prevention and first aid management of burn.

Knowledge level	Range of knowledge score	Pre-test		Post-test	
		f	%	f	%
Good knowledge score	16-23	9	15	56	93.3
Average knowledge score	8-15	51	85	4	6.7
Poor knowledge score	1-7	0	0	0	0

Analysis revealed that the pre test knowledge score of under-five mothers 9 (15%) mothers having good knowledge score, 51 (85%) mothers are having average knowledge score 0 (0%) mothers are having poor knowledge in post test knowledge score 56 (93.33%) mothers having good knowledge score, 4 (6.7%) mothers are having average knowledge score 0 (0%) mothers are having poor knowledge

Section C: Effect on structured teaching programme on knowledge regarding prevention and first aid management of burn among mothers of under-five children

Analysis revealed that the mean score of pre test score is 2.15 and post test mean score is 2.93, Standard deviation of pre test is 0.3600 and post test standard deviation is 0.251 while “t” value was find 19.946 which is significant at 0.05 level at the table value 2.00. This indicates that there is will be a significant difference between pre test and post

TABLE 4: Mean Standard Deviation and paired “t” value of pre test and post test knowledge score of structured teaching programme

Knowledge score	Means	Standard deviation	Mean difference	paired “t” test
Pre-test	2.15	0.3600	0.78	T=19.946
Post-test	2.93	0.251		

test knowledge score, hence H1 is accepted. Therefore it is established that that the STP regarding prevention and first Aid management of burn among mothers of under-five children was effective in enhancing the knowledge score of mothers of under-five mothers

Hence Hypothesis H1 is accepted

SECTION D: Association between pre test knowledge score and post test knowledge score regarding prevention and first Aid management of burn among mothers of under-five children with selected demographical variables:

Analysis revealed that there is no-significant association between the knowledge score and the demographic variables of the mothers of under five children.

Hence Hypothesis H2 is rejected

Implication:

The findings of the study have implication for nursing in nursing practice, nursing education, nursing research and nursing administration.

Nursing Practice:

Nurse should participate actively in various awareness seminars and workshop organized by the government and non government on burn .Nurse should be aware of innovation to prevent the burn .To create awareness, nurse should try to use mass media for giving health talk.

Nursing Education:

In college of nursing, the nurse educator should emphasize and motivate the nursing student to give planned health teaching regarding burn in rural area

Nursing Research:

There is need for extensive and intensive research in the aspects on prevention and first aid management for burn .nursing student should actively conduct research in this so as to become aware with latest issue and thus able to identify needs of the under-five children accurately. Disseminate the finding of study through conference, seminars and publishing in nursing journals, public mass media will promote the utilization of research finding in the prevention and first aid management of burn.

Nursing Administration:

The leaders in nursing are confronted to undertake the health need of the most vulnerable by effective organization

and management .the nurse should take active part in health policy making .developing protocol, procedures and standing order related to client education. The nurse administrator should give attention to proper selection, and effective placement utilization of the nurse in all areas within the available resources, giving importance to the creativity, interest, ability in the educating the public.

7 Recommendations

Based on the uncovering of the study the following advices are:

- The similar study can be under taken in rural areas to assess the knowledge regarding prevention and first aid management of burn.
- A study can be done to find out the difference of knowledge regarding prevention and first aid management of burn in rural areas.
- Studies can be under taken to evaluate the various methods of teaching for imparting education regarding prevention and first aid management of burn.
- A study can be done to assess the knowledge and attitude of mother regarding prevention and first aid management of burn.
- Study can be undertaken to assess the teacher’s knowledge regarding prevention and first aid management of burn.

8 Conclusion:

The Conclusion of the study shows that the pre test knowledge score of under-five mothers 9 (15%) mothers having good knowledge score, 51 (85%) mothers are having average knowledge score 0 (0%) mothers are having poor knowledge in post test knowledge score 56 (93.33%) mothers having good knowledge score, 4 (6.7%) mothers are having average knowledge score 0 (0%) mothers are having poor knowledge. Thus the study reveals that the structured teaching programme was showing effective in gaining the knowledge regarding burn management among mothers of under five children.

References

[1]. Black. M. Joyce, Hawks Hokanson Jane, Keene. M Annabelle. Medical Surgical Nursing. Vol-2. 6th Edition. PP 1331-1338.
 [2]. Lewis. Facts about burns. By World Health Organization.2001;Dec:3 Elsevier Science, North Holland, Amsterdam
 [3]. Washington University School of Medicine, Preventing Burns in young children. Science Daily;2005;10thmarch

- [4]. Kumar P, Chirayil PT, Chittoria R. Ten year's epidemiological study of pediatric burn in manipal. Department of burns and plastic surgery, Kasturba Medical College, Manipal, Karnataka, India, 2000 May: 26(3):261-4.
- [5]. Fredirick.. World Health Report on violence and injury prevention.2002; Nov [6]:2.
- [6]. Gopalan HNB and sumeet saksena domestic environment and health of women and children.published by TERI Page no.166-167
- [7]. Jang Y CKWON OK, Lee J W OL SJ. The optimal management pediatric steam burn from electric rice cooker STSG, Burn care rehabilitation 2001:22:15-20.
- [8]. Margie Peden, Kayede, Ogegbite, Joan Ozanne-Smith, Adnan A Hyder.. (et al), World report on child injury prevention, world health organization 2008, PP 79-93. Available from URL: <http://whqlibdoc.who.int/publications/2008/www>.
- [9]. C.N. Mock, E. Adzotor, D. Denno, www. Pubmedcentral.nih.gov/ Article/1615531.
- [10]. Emergency Medicine Journal. 2006 March; 23(3): e21. Doi: 10.1136/emj.2005.027094.
- [11]. Rimmer RB, Weigands, Foster KN, Wadsworth MM, Jacober K.. (et al), Arizona burn center, USA. Scald burns in young children a review of Arizona burn center pediatric patients. Journal of burn care and research. 2008 Jul-Aug: 29(4): 595-605.