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RESEARCH PAPER

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Assess the Effectiveness of Structured Teaching Programme on Knowledge Among Mothers of School Age Children Regarding First Aid Management of Dog Bites in Selected Area of Raichur, Karnataka

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ABSTRACT

Worldwide, roughly 97%of rabies cases come from dog bites. Health educational programs are needed to create awareness of dog bites. The importance of First Aid and post exposure vaccination should be stressed. To assess the knowledge among mothers of school age children regarding first aid management of dog bite by pretest. To develop and implement structured teaching programme to mothers of school age children regarding first aid management of dog bite. To determine the effectiveness of structured teaching programme among mothers of school age children by post test. It was apilot study carried outby department of child Health nursing at Navodaya nursing college.Data was collected by using structured interview schedule. Sample size was 30. Evaluative approach with one group pre test and post test pre-experimental design was selected to achieve the objectives of the study. Mothers of school age children responded inadequately. Majority of mothers of school age children got adequate knowledge after structured teaching programme.

Significant difference was found in pre test and post test scores of the mothers of school age children. In pre test it wasobserved that there was not even single mother with Highknowledge. Where as in post test mothers had high knowledge regarding firstaid management.

Key words: First Aid, Structured Teaching, Dog Bite and Knowledge.

INTRODUCTION

Rabies is one of the oldest recognized diseases affecting humans and one of the most important zoonotic diseases in India. Since 1985, India has reported estimated 25000–30000 human deaths from rabies annually. The majority of people who die of rabies are people of poor or low-income socioeconomic status and school age children (Rozario, 2008). World Rabies Day was officially launched in 2007, and aims to raise awareness about the public health impact of human and animal rabies (www.avma.org). First aiders can be anyone who has an understanding capacity to learn first aid. During the late 1970's and 1980's educators and health workers recognized that children can be an effective agents of change in areas of health and hygiene. Children being the single greatest readily available resource for achieving a brighter healthy world can be used for educating parents, siblings and the community at large regarding knowledge of first aid and preventive measures of dog bite (Devi, 2006).

MATERIALS AND METHODS

This is was pilot study conducted in Raichur part of Hyderabad Karnataka region one of the districts situated in northern Karnataka. Ward No. 21 is Harijan Wada. It is urban slum selected for conducting present study as part of M.Sc nursing course. The target population of the present study was mothers of school age children. In the present study, sample consists of 30 mothers of school age children. In the present study the area was selected by convenient sampling. Simple random sampling method was used to select sample.

INCLUSION CRITERIA

The study included mothers, **whowere,**

- Having school age children.
- Willing to participate in the study.
- Available at the time of data collection.

EXCLUSION CRITERIA

The study excluded mothers, who were not,

- Having school age children.
- Willing to participate in the study.
- Available at the time of data collection.

LIMITATIONS

The study was limited to the mothers of school age children & mothers ofHarijan wada, Raichur

DESCRIPTION OF TOOL FOR STUDY

The instrument of structured interview schedule was divided into 2 parts, namely Part-A and Part-B

Part-A

It had 6 items regarding the demographic information of the subjects such as age, basic educational qualification, occupation, place of treatment and sources of information.

Part-B

It consists of 40 knowledge items related to first aid management of dog bite.

1. General information.
2. First aid management
3. Medical management and complication
4. Prevention

SCORING

These items were close ended, multiple choice questions. Each correct response had been scored with one mark and wrong answer as zero. Total score was 40.

The knowledge level of the respondents was classified into 3 categories (Table1).

DEVELOPMENT OF STRUCTURED TEACHING PROGRAMME

A Structured Teaching Programme was prepared by the researchers based on the study objectives and with the help of the reference books, journals, e-journals, guidance of experts, and knowledge level of mothers of school age children.

Visual aids were prepared which include charts, pamphlets, transparencies, flash cards and flip chart.

VALIDITY OF TOOL

The tool was validated by 7 experts, of which 5 were nursing experts and 2 were pediatricians. The tool was modified according to the suggestions of the experts. The tool was translated from English to Kannada and retranslated into English to conform the appropriateness of the languages used in framing the items. A pre test was conducted by using structured interview schedule to the participant. Then structured teaching programme was given to mothers. The structured teaching programme was conducted on the same day at the end of pre-test for about 45 minutes by using; LCD, blackboard and charts.A post test was conducted one week after the implementation of structured teaching programme by using same structured interview schedule to the participant to assess the effectiveness of structured teaching Programme.

STATISTICAL METHODS USED

- Frequency charting
- Mean, Standard Deviation and paired 't' test was used to find the difference between pre test and post test assessment scores of mothers of school age regarding first aid management of dog bite.
- Inferential statistics like Chi-square test was used to find the relationship between the selected variables of mothers of school age children and post test assessment scores.

RESULTS

1. In pretest None of the mothers had higher knowledge regarding First Aid management & Medical management(Table 1).
2. In pre test18 mothers had low knowledge on prevention (Table 1).
3. In post test 8 mothers had higher knowledge regarding First Aid management &20 had higher knowledge regarding Medical management (Table 1).
4. In post test 26 mothershad highknowledge on prevention (Table 1).
5. Overall mean score in post test were higher than pre test in all the specific areas of dog bite.(Table 2).

Regarding knowledge about first aid management of dog bite, in pre test, majority (26) mothers had low knowledge. No mother had high knowledge.

Knowledge related to medical management & complications of dog bite. In pretest 30 mothers had low knowledge. In post test, 20 mothers had high knowledge.

Knowledge related to prevention of dog bite, in pre test, 18 mothers had low knowledge, In post test, 26 had high knowledge

The findings with regard to knowledge among mothers of school age children in specific areas of first aid management of dog bite proved that the structured teaching programme regarding first aid management of dog bite was effective.

Table 1. Frequency and percentage distribution of level of knowledge among mothers of school age children in specific areas related to first aid management of dog bite. (n= 30).

Knowledge In specific areas	Pre test						Post test					
	Low < 50-50 %		Average 51– 75%		High > 75%		Low <50- 50 %		Average 51 – 75%		High > 75%	
	F	%	F	%	F	%	F	%	F	%	F	%
General information	18	60	12	40	0	--	1	3.33	15	50	14	46.67
First aid management	26	86.67	4	13.33	0	--	7	23.33	15	50	8	26.67
Medical Management & complications	30	100	0	--	0	--	1	3.33	9	30	20	66.67
Prevention	18	60	8	26.67	4	13.33	2	6.67	2	6.67	26	86.67

Table 2. Mean and standard deviation of pre test and post test knowledge scores of mothers of school age children in specific areas related to first aid management of dog bite. (n = 30)

Specific areas	Pre test		Post test	
	Mean	Standard deviation	Mean	Standard deviation
Overall knowledge	17.03	2.79	31.33	4.00
General information	7.40	1.52	11.36	1.71
First aid management	1.47	0.94	3.00	0.79
Medical Management & complications	5.93	1.34	12.67	1.63
Prevention	2.23	1.10	4.30	0.99

On the whole, post test mean scores were higher than pre test mean scores in all the specific areas of first aid management of dog bite indicating the effectiveness of structured teaching programme.

DISCUSSION

We choose mothers of school going children as the commonest age group reported byserieson thestudy for dogbites is less than 15 years (Khokhar et al., 2003-2012). Severe dog bites in children occur most frequently in those younger than 5 years old and involve the head and neck (Brogan et al., 1995). Children who are younger than 10 years represent the high-risk group for dog attacks (Schalamon, 2006). Most frequent injuries were superficial lacerations and only 2% of children required major surgery (Dwyer, 2007). The study concluded that management of animal bite cases among rural population needs health education regarding dog bite management in home

(Sharma et al., 2007). Our study did include knowledge of first Aid management of dog bite.Dog bites continue to be a public health problem in India. They affect 1.5% of the US population annually (Gilchrist et al., 2008). Dog bites continue to be a source of injury for those living in lower income neighborhoods (Shuler et al., 2008). We included knowledge of preventive measures for dog bite. A study done concluded that with awareness of these risk patterns, specific preventive measures could be proposed to avoid dog attack and rabies infection (Ichhpujani et al., 2006) in their study concluded that there is a need to create awareness amongst the masses regarding epidemiology of the disease and merits of prompt and appropriate post exposure prophylaxis through enhanced IEC (Information and electronic communication) activities (Ichhpujani et al., 2006). Study done by U. S. Singh &S.K. Choudhary revealed that there is definitely a gap in people's knowledge, attitude and practices about dog bite and its management (Singh and Choudhary, 2005). Similar to our study another study conducted at Geneva, Switzerland showed an increase in knowledge and caution after an information programme (Duperrex et al., 2009). There is a wide gap between the caretaker's knowledge and the correct knowledge regarding dog bite and its first aid measures (Sreelatha et al.,). The lack of first aid management practice and failure to receive PEP was the major factor in the increase number of Rabies cases (Guo, 2008). Pediatric dog bites are preventable injuries, yet they persist as a prevalent public health problem.We included nursing staff as educators. A studydone concluded that health practitioners should actively contribute to responsible dog ownership and provide evidence based dog bite preventions (Van, 2004).

CONCLUSION

- In pre test 30 mothers of school age children there was not even a single mother with high knowledge. In post test,19 mothers had high knowledge,
- There was a significant difference between the pre test and post test knowledge scores of the mothers of school age children's related to first aid management of dog bite.

a. Implications of the present study in nursing Education:

- The nurse educator can teach the nursing students to acquire adequate knowledge and skills in prevention and first aid management of dog bite.
- Nurse educator can teach in community to adopt appropriate preventive measure against dog bite in school children.
- Nurse as aeducatorcan prepare health education module to mothers on first aid of management of dog bite in children.
- Nurse can educate and motivate the mothers for anti rabies vaccination.

RECOMMENDATIONS

- A descriptive study can be taken up using large sample for assessing the knowledge regarding management of dog bite.
- A similar study can be replicated with experimental and control group.
- Nurses should participate in public awareness.

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