



A QUASI-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE AND ATTITUDE REGARDING FIRST AID MANAGEMENT AND PREVENTION OF RABIES AMONG SECOND YEAR GNM STUDENTS OF SELECTED SCHOOL OF NURSING MANASSERY, ,KOZHIKODE

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ABSTRACT

Rabies is a fatal viral zoonotic disease caused by the Rabies virus (RABV) that remains a major public health problem especially in developing countries like India. First aid management and prevention of Rabies . It becomes necessary to assess the level of knowledge and Attitude regarding first aid management and prevention of rabies among undergraduates. A Quasi experimental one group pre- test ,post- test research design is considered as suitable to asses the effectiveness of planned reaching programme on knowledge and attitude regarding first aid management and prevention of rabies among second year GNM students using closed-ended self-structured questionnaire and Likert scale.60 second year General Nursing & Midwifery students of KMCT school of nursing were selected as sample by using non probability convenient sampling method. Baseline Performa consisting of demographic data, close ended self-administered questionnaire and Likert scale. There is only 13.3% sample has excellent knowledge during pre- test whereas the post results shows 88.34% has excellent knowledge and there is only 5% of the sample has low awareness on the topic during pre -test whereas the post test results shows 78.33% has high awareness regarding rabies. So, There is a significant association

between the pre -test level of knowledge regarding first aid management and prevention of rabies and selected demographic variables like previous knowledge on rabies and attended programmes on rabies.

KEY WORDS : Knowledge, Attitude, Assess, First aid management, Rabies, Prevention, GNM Students

INTRODUCTION

“Education is the most powerful weapon which you can use to change the world”

-Nelson Mandela

Animals are useful and friendly to humans but sometimes they can also be dangerous when they transmit diseases. One of the most serious diseases transmitted by animals is Rabies. Rabies is a fatal viral disease that affects the central nervous system of humans and animals. It is mainly spread through the bite or scratch of infected animals, especially dogs. According to the World Health Organization, rabies causes thousands of deaths every year worldwide, particularly in developing countries like India. Despite being 100% preventable through timely first aid and post-exposure prophylaxis (PEP), rabies continues to cause thousands of deaths worldwide each year. India accounts for a significant proportion of global rabies deaths. Immediate and appropriate first aid measures, such as thorough wound washing with soap and water, application of antiseptics, and prompt medical consultation for vaccination, are crucial in preventing the onset of rabies. Nurses play a vital role in educating the community about first aid management and preventive strategies. Therefore, adequate knowledge, positive attitude, and among nursing students are essential. Annual human deaths worldwide: ~59,000 to 70,000 people die from rabies each year. 18,000-20,000 deaths per year WHO, based on broader burden estimates, with India accounting for about 36% of global rabies deaths. ~3.16 lakh (316,793) dog-bite cases in 2024 reported by the Kerala Health Department a significant rise from ~1.60 lakh in 2020. This shows more than a 100% increase over about 7 years.

PROBLEM STATEMENT

A quasi experimental study to assess the effectiveness of planned teaching programme on knowledge and attitude regarding first aid management and prevention of rabies among second year GNM students of KMCT School of nursing Manassery, Kozhikode.

OBJECTIVES

- To assess the pre-test and post -test level of knowledge regarding first aid management and prevention of rabies among second year GNM students.
- To evaluate the effectiveness of level of attitude of planned teaching programme on attitude regarding first aid management and prevention of rabies among second year GNM students.
- To find out the association between pre-test knowledge and selected demographic variables (Age, Gender, Religion, Year of study).

HYPOTHESIS

H1: There is no significant difference between pre test and post test knowledge attitude scale.

H2: There is a significant association between the pre-test level of knowledge regarding first aid management and prevention of Rabies and selected demographic variables among second year GNM students..

CONCEPTUAL FRAMEWORK-General System Model

This framework views GNM students as a system that processes information to produce a specific health behavior.

1. Input (The Participants): This represents the baseline status of the second year GNM students before any intervention or assessment.

Socio-demographic Variables: Age, Gender, Religion, Year of study, Previous experience, Source of information, Attended programme.

Environmental Factors: Source of information (media, health workers, friends or relatives, internet) and previous experiences.

2. Throughput (The Process) : This is the "internal" state of the Undergraduates that the study aims to measure.

Knowledge: The understanding and awareness of college students about first aid management of rabies, its sources, importance, symptoms and prevention strategies, measured through a knowledge score.

Attitude: The perception, opinion, or feelings of college students towards first aid management of rabies, and its importance related to prevention and management of rabies.

3. Output (The Goal) : The result of the interaction between knowledge and attitude.

Enhanced Awareness: Identification of gaps where Undergraduates might need more education. Behavioural

Intent: The decision to provide appropriate measures during rabies Occurrence.

METHODOLOGY

- RESEARCH APPROACH : Quantitative research approach
- RESEARCH DESIGN : Quasi Experimental research design
- POPULATION : Population of the study includes nursing students.
- SAMPLE : Second year General Nursing and Midwifery students of KMCT school of nursing.
- SAMPLE SIZE : 60
- SAMPLING TECHNIQUE : Non-probability convenient sampling technique
- SETTING OF STUDY : KMCT School of Nursing, Manaserry, Kerala
- DEMOGRAPHIC VARIABLES : Age, Gender, Religion, Year of study, Previous experience, Source of information, Attended programme.

TOOL

Part 1 : Baseline proforma

It consists of 8 questions to collect age, gender, religion, year of study, previous knowledge regarding rabies, source of knowledge regarding rabies and attended any programme on rabies.

Part 2 : Self structured questionnaire

It consists of 15 questions to assess the knowledge of second year GNM students regarding first aid management and prevention of rabies.

Part 3 : Likert Scale

It consists of 15 questions to assess the attitude of second year GNM students regarding the first aid management and prevention of rabies.

DATA COLLECTION

Prior to data collection, formal permission was obtained from the Principal, Vice Principal. The data collection process was conducted in the following steps:

Pre-test: A structured tool was administered to participants to assess their baseline knowledge and attitude regarding first aid management and prevention of rabies.

Intervention: A planned teaching programme on first aid management and prevention of rabies was delivered to the same group for 45 minutes using PPT.

Post-test: After five days, the same tool was administered again to evaluate the effectiveness of the intervention.

ETHICAL CONSIDERATION

The research proposal was presented in front of the research committee of KMCT College of Nursing and approval was obtained. Ethical clearance for the study was obtained. Informed consent was obtained from the subjects.

RESULT**SECTION 1: Sample Characteristics**

Following were the major findings of the study:

Majority of the sample (70.8%) were in the age group of above 19-20 years. Whereas (23.7%) were at the age group 21-22 years and only (5.5%) in the age group of above 22 years. Majority (81.7%) are female and (18.3%) are male. Majority (54.8%) were in the religion Islam, (36.7%) were Hindu and (7.3%) belongs to Christians and (1.2%) were in others. With respect to academic year majority (100%) are from second year. Regarding previous knowledge on first aid management and prevention of rabies, among 60 sample, (68.2%) had previous knowledge and (31.8%) had no previous knowledge on first aid management and prevention of rabies. Distribution of sample according to source of knowledge regarding first aid management and prevention of rabies among 60 sample, media (21.7%), internet (16.7%), friends or relatives (13.2%), classroom teaching (10.0%) and health professionals (6.6%). Distribution of sample according to attended any programme on rabies among 60 samples, 33.8% sample had attended programme on rabies and 66.2% had not attended any programme on rabies.

Table 1 : Frequency and percentage distribution of sample characteristics. N=60

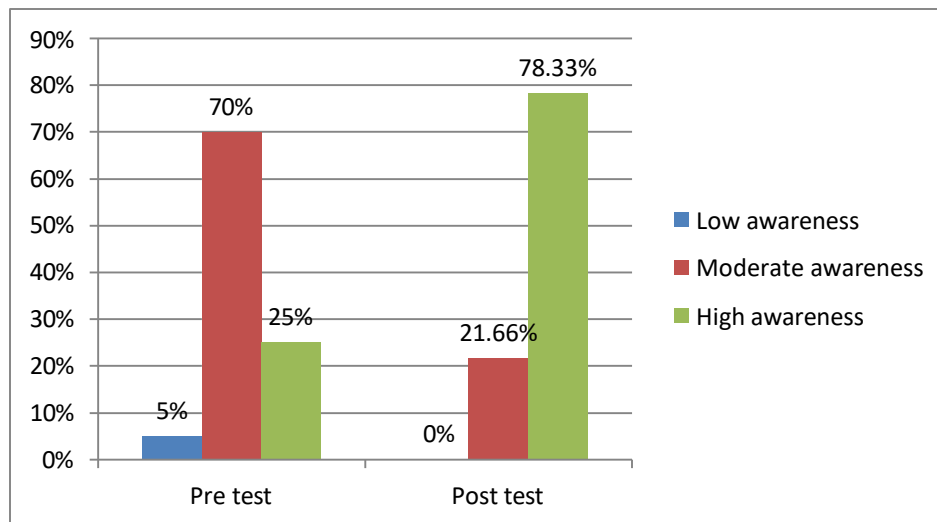
SI NO	DEMOGRAPHIC VARIABLES	FREQUENCY(f)	PERCENTAGE (%)
1	Age		
	• 17-18 years	70.8%	43
	• 19-20 years		
	• 21-22 years		
	• Above 22 years	23.7%	14
		5.5%	3
2	Gender		
	• Male	18.3%	11
	• Female	81.7%	49
	• Other		
3	Religion		
	• Hindu	36.7%	22
	• Islam	54.8%	33
	• Christian	7.3%	4
	• Other	1.2%	1
4	Year of study		
	• First year		
	• Second year	100%	60
	• Third year		
5	Previous knowledge regarding rabies		
	• Yes		

	No	68.2%	41
		31.8%	19
6	Source of knowledge regarding rabies		
	Classroom teaching	10.0%	6
	Internet		
	Health professional	16.7%	10
	Friends or relatives	6.6%	4
	Media		
		13.2%	8
		21.7%	13
7	Have you ever attended any programme on rabies		
	Yes	33.8%	20
	No	66.2%	40

SECTION 2: Assessment of knowledge regarding first aid management and prevention of rabies among second year GNM students.

The study shows that 20.1% subjects had low knowledge, 36.6% subjects had moderate knowledge, 30% had good knowledge and remaining 13.3% had excellent knowledge on the topic before the specific education intervention. There is only 13.3% of the sample has excellent knowledge on the topic during the pre test whereas the post test results shows 88.34% has excellent knowledge.

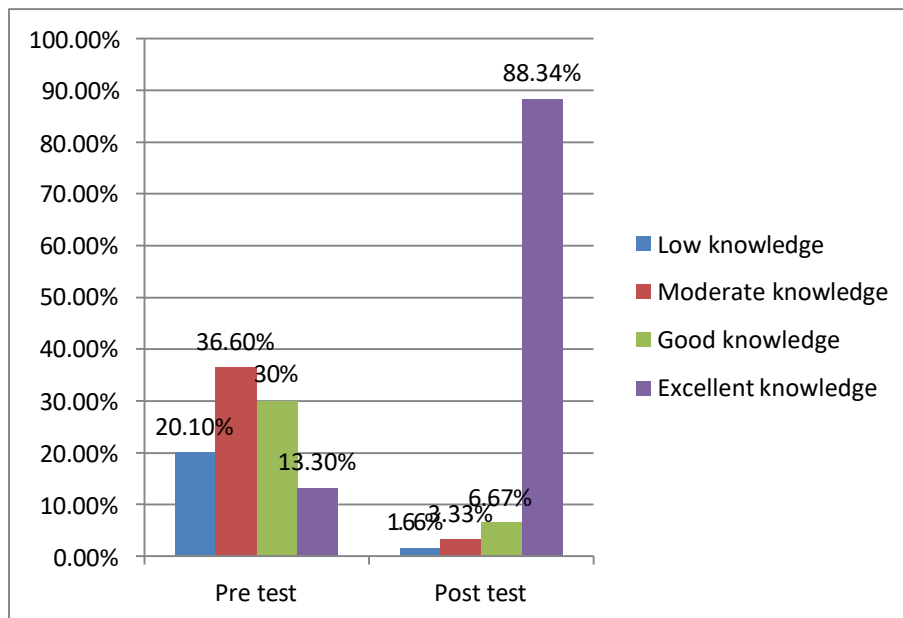
Fig 1: Bar diagram showing level of knowledge on first aid management and prevention of rabies among second year GNM students before and after the specific education intervention



Section 3: Assessment of attitude regarding first aid management and prevention of rabies among second year GNM students.

The study shows that 5% subjects had low awareness, 70% subjects had moderate awareness and remaining 25% had high awareness on the topic before the specific education intervention. There is only 25% of the sample has high awareness on the topic during pre test whereas the post test results shows 78.33% has high awareness.

Fig 2: Bar diagram showing level of attitude of first aid management and prevention of rabies among second year GNM students before and after specific education interventions.



Section 4: Association between pre test level of knowledge and selected demographic variables.

There is a significant association between the pre test knowledge regarding the first aid management and prevention of rabies and selected demographic variable such as previous knowledge and attended any Programme on rabies. There is no association between the pre test level of knowledge and selected demographic variables such as age, gender, religion, year of study and source of knowledge regarding rabies.

Table 2: Association between pre test level of knowledge and selected demographic variables regarding first aid management and prevention of rabies among second year GNM students.

Demographic variables	Chi square value	Degree of freedom (d f)	Critical value	Significance
Age	1.67	6	0.947	Not significant
Gender	2.60	3	7.815	Not significant
Religion	0.75	6	12.592	Not significant
Previous knowledge	27.5	3	7.815	Significant
Source of previous knowledge	6.52	12	21.026	Not significant
Attended any programme	14.6	3	7.815	Significant

DISCUSSION

A quasi experimental study was conducted to assess the effectiveness of planned teaching programme on knowledge and Attitude regarding the first aid management and prevention of rabies among second year GNM students, 60 sample was taken and the study revealed that planned teaching programme regarding the rabies is an effective method in improving knowledge and attitude of second year GNM students.

A total of 60 sample was selected using convenient sampling technique. Pretest was conducted in group, and a structured teaching programme was given to the whole group as intervention and provided a post test to the group. The study result shows that the specific education intervention was effective and there is a significant increase in the knowledge score of the sample. In pretest the study shows that 20.1% subjects had low knowledge, 36.6% subject had moderate knowledge, 30% had good knowledge and remaining 13.3% had excellent knowledge. In post test the results shows that 1.66% subjects had low knowledge, 3.33% subjects had moderate knowledge, 6.67% subjects had good knowledge and remaining 88.34% subjects had excellent knowledge. The paired 't' test shows that value (9.29) is greater than the critical value of the test (2.00), so that intervention is effective in improving the level of knowledge. In pre test result of attitude shows that 5% subjects had low awareness, 70% subject had moderate awareness and remaining 25% had high awareness. In post test the results shows that 21.66% subjects had moderate awareness, and remaining 78.33% subjects had high awareness. The paired 't' test and 't' value (5.88) is greater than that of the critical 't' value (2), so that the intervention is effective in improving the attitude.

- The present study result was supported by similar study done by Tharundeep Singh, Suchi Mahanjan and Neha Dahiva in 2020 to assess current knowledge, attitudes, and practices in relation to animal bites in the rural area of north India.

House to house survey to collect data on animal bites was conducted among 300 households from the rural area of Punjab, north India. A pretested semi-structured questionnaire comprising of items that explored sociodemographic details (age, educational qualification, occupation, socioeconomic status (assessed through Udai Pareek scale), and awareness regarding rabies, knowledge about first aid, attitude, and practices regarding anti-rabies vaccination (ARV) was used. Detailed questions were asked to those who owned pets. Result: A total of 300 households were included in the analysis. Among all respondents, 30.4% (117) had an episode of animal bite in their family giving a bite incidence rate of 78/1000 population. Bites were more frequent in males. (65.8%, n = 77). The commonest site of the bite was lower limb (65%) followed by upper limb (21.4%), and head and neck (5.1%). The participants said that bites by pet animals (47%) are more common than those by stray animals (35.9%), followed by wild animals (12.8%). Only 17.5% knew the appropriate wound care. Inappropriate practices like applying chilly (48.8%), lime (13.1%), tying the limb above the wound (5.1%), and others were common. Only 15.5% washed their wound with soap and water.

RECOMMENDATIONS

Based on the findings of the study the following recommendations have been made:

- Similar study can be replicated on a large sample to validate and generalize the study findings.
- An experimental study can be undertaken with comparison group for effective comparison.

CONCLUSION

According to study's findings:

The knowledge regarding first aid management and prevention of rabies was excellent among second year GNM students. The attitude regarding the first aid management and prevention of rabies was high awareness among

second year GNM students. Specific education intervention was effective in improving knowledge and attitude among second year GNM students. The previous knowledge and attended programme on rabies has association with knowledge regarding first aid management and prevention of rabies.

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