



A Descriptive Study to Assess the Knowledge Regarding Rabies Prevention and Post Exposure Care Among Adults an a Selected Area of Kannur District

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Abstract

The present study was undertaken to assess the level of knowledge regarding rabies prevention and post exposure care among adults in a selected area. The main objectives of the study were to assess the level of knowledge regarding rabies prevention and post exposure care among Adults and to find out the association between the level of knowledge and their selected demographic variables. A quantitative descriptive research approach was adopted for the study. The study was conducted in selected areas of Kannur district. Purposive sampling technique was used to select a sample of 50 adults who met the inclusion criteria. Data were collected using a structured knowledge questionnaire to assess the level of knowledge regarding rabies prevention and post exposure care. The collected data were analysed using descriptive and Inferential statistics. Descriptive statistics such as frequency, percentage, mean, median, and Standard deviation were used to describe selected variables and knowledge levels. Inferential statistics using the chi-square test were applied to determine the association between knowledge levels and selected variables. The finding revealed that the majority 52% of adults had adequate knowledge, 48% of adults had moderate knowledge and none had inadequate knowledge regarding rabies prevention and post exposure care. There is a significant association between the level of knowledge and selected variables such as educational status and occupation. However, there is no significant association was found between the level of knowledge and other selected variables including age, gender, religion, type of family, pet ownership, history of dog bite, previous anti-rabies vaccination and prior knowledge regarding rabies vaccine. The findings of the study highlight the existing level of knowledge among Adults and emphasize the need for health education programs to improve awareness regarding rabies prevention and timely post exposure care, thereby reducing the risk of rabies-related morbidity and mortality.

Keywords: Knowledge, Rabies prevention, post exposure care, Adults

INTRODUCTION

Rabies is a highly fatal zoonotic disease that brings a serious public health challenges, especially in developing countries such as India. It is caused by a neurotropic virus that is transmitted primarily through the bite, scratch, or saliva of infected animals, most commonly dogs. Although rabies is almost 100% preventable through timely and appropriate preventive measures, it still results in a significant number of deaths every year. Adults are frequently exposed to animal bites due to occupational activities, outdoor work, and daily interactions with domestic and stray animals, placing them at increased risk of rabies infection.

Considering the severity of rabies and its preventable nature, assessing the knowledge of adults regarding rabies prevention and post exposure care is crucial. Identifying existing knowledge levels and gaps among adults will help healthcare professionals, especially nurses, to plan and implement appropriate health education and community-based interventions. These measures can promote timely treatment-seeking behaviour, correct misconceptions, and strengthen rabies prevention strategies. Hence, the present study aims to assess the knowledge regarding rabies prevention and post exposure care among adults in a selected area.

STATEMENT OF THE PROBLEM

A descriptive study to assess the knowledge regarding rabies prevention and post exposure care among adults in a selected area of Kannur District.

OBJECTIVES OF THE STUDY

- 1.To assess the level of knowledge regarding rabies prevention and post exposure care among adults in a selected area of Kannur District.
- 2.To find out the association between the level of knowledge regarding rabies prevention and post exposure care among adults and their selected variables. (age, gender, religion, educational status, occupation, area of residence, type of family, pet ownership, type of pet, vaccination status of pets, history of animal bite, history of anti-rabies vaccination, and previous knowledge regarding rabies)

HYPOTHESIS

H₁: There will be a significant association between the level of knowledge regarding rabies prevention and post exposure care among adults and their selected variables.

METHODOLOGY

A descriptive research design was used to assess the knowledge regarding rabies prevention and post exposure care among adults in selected area of Kannur District. The study was conducted among 50 adults in selected area of Kannur District by using purposive sampling technique. The tool used for this study was self-structured questionnaire consisting of selected variables and 40 multiple choice questions to assess the level of knowledge regarding rabies prevention and post exposure care among adults. Data was collected between 20/01/26 to 24/01/26 through printed form and analysed by using descriptive and inferential statistics.

ANALYSIS AND INTERPRETATION

The analysis was carried out systematically to assess the level of knowledge regarding rabies prevention and post exposure care and to determine whether there was any significant association between the knowledge level and selected variables of the adults.

The data are organized and presented under the following sections:

SECTION I: Baseline data on selected variables of adults.

SECTION II: Level of knowledge regarding rabies prevention and post exposure care among adults.

SECTION III: Association between the level of knowledge regarding rabies prevention and post exposure care and selected variables.

SECTION I: BASELINE DATA ON SELECTED VARIABLES

This section deals with the description of baseline data of adults based on selected variables. The data have been summarized in terms of frequency and percentage. The selected variables include age, gender, religion, educational status, occupation, area of residence, type of family, pet ownership, type of pet, vaccination status of pets, history of animal bite, history of anti-rabies vaccination, and previous knowledge regarding rabies.

N=50

Sl.NO	SELECTED VARIABLES	FREQUENCY	PERCENTAGE
1.	AGE		
	•30-40	19	38%
	•41-50	8	16%
	•51-60	23	46%
2.	GENDER		
	•Male	13	26%
	•Female	37	74%
3.	RELIGION		
	•Hindu	35	70%
	•Muslim	14	28%
	•Christian	1	2%
4.	EDUCATIONAL STATUS		
	•Primary	4	8%
	•High school	21	42%
	•Higher secondary	14	28%

	•Graduate	11	22%
5.	OCCUPATION		
	•Homemaker	32	64%
	•Private	9	18%
	•government	0	0%
	•No job	5	10%
	•Business	4	8%
6.	AREA OF RESIDENCE		
	•Rural	50	100%
	•Urban	0	0%
	•Semi urban	0	0%
7.	TYPE OF FAMILY		
	•Nuclear	41	82%
	•Joint	9	18%
	•Extended	0	0%
8.	PET OWNERSHIP		
	•Yes	6	12%
	• No	44	88%
9.	TYPE OF PET ANIMAL		
	•Dog	3	6%
	•Cat	3	6%
	•other	1	2%
	•No Pet	43	86%
10.	VACCINATION STATUS OF PET ANIMAL		
	•Yes	3	6%
	•No	47	94%
11.	HISTORY OF ANIMAL BITE		
	•Yes	3	6%
	•No	47	94%

12.	HISTORY OF ANTI RABIES VACCINATION		
	•Yes	3	6%
	•No	47	94%
13.	PREVIOUS KNOWLEDGE REGARDING RABIES		
	•YES	28	56%
	•NO	22	44%

Table 1: frequency and percentage distribution of selected variables.

SECTION II: LEVEL OF KNOWLEDGE REGARDING RABIES PREVENTION AND POST EXPOSURE CARE AMONG ADULTS

N=50

Sl no	LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE
1	Adequate knowledge	27	54%
2	Moderate knowledge	23	46%
3	Inadequate knowledge	0	0

Table 2: Frequency and percentage distribution of level of knowledge regarding rabies prevention and post exposure care among adults.

DISTRIBUTION OF ADULTS ACCORDING TO LEVEL OF KNOWLEDGE ON RABIES PREVENTION AND POST EXPOSURE CARE

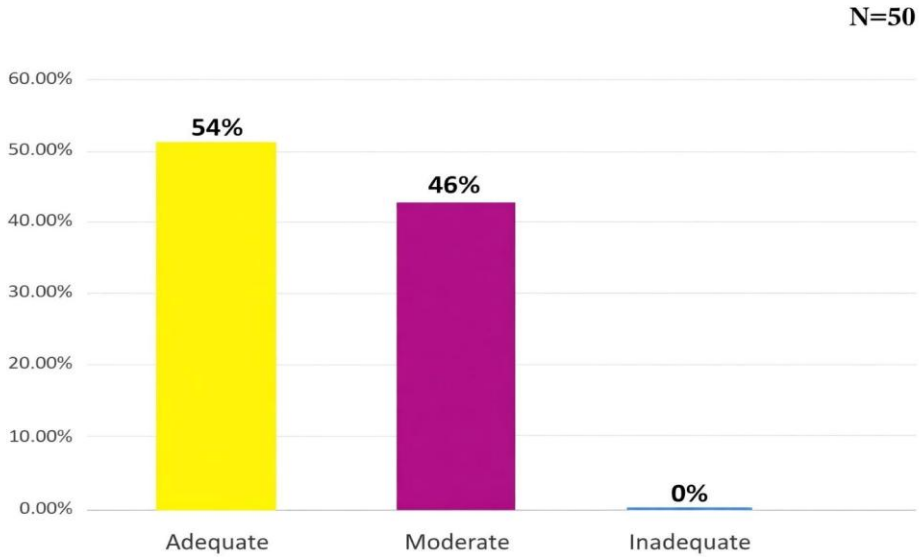


Fig 1:-Bar diagram showing the level of knowledge regarding rabies prevention and post exposure care among adults

The findings show that among 50 adults, majority 26 adults (52%) have adequate knowledge ,24 adults (48%) have moderate knowledge and no inadequate knowledge.

SECTION III: ASSOCIATION BETWEEN THE LEVEL OF KNOWLEDGE REGARDING RABIES PREVENTION AND POST EXPOSURE CARE AND SELECTED DEMOGRAPHIC VARIABLES.

N=50

Selected variables	Level of knowledge		df	Chi square value	Table value	Inference
	High	Moderate				
1.AGE						
30-40	11	8	4	2.765	9.49	NS
41-50	2	6				
51-60	15	10				
2.GENDER						

Male	4	9	2	3.15	5.99	NS
Female	22	15				
3.RELIGION						
Hindu	20	15	2	2.65	5.99	NS
Muslim	5	9				
Christian	1	0				
4.EDUCATIONAL STATUS						
Primary	0	4	3	8.41	7.815	S
High school	10	11				
Higher secondary	7	7				
Graduate	9	2				
5.OCCUPATION						
Home maker	19	13	3	8.03	7.815	S
Private	6	3				
Retired	0	5				
Business	1	3				
6.TYPE OF FAMILY						
Nuclear	22	19	1	0.23	3.8	NS
Joint	4	5				
7.OWNERSHIP OF PET						
Yes	3	3	1	0.0102	3.84	NS
No	23	21				
8.TYPE OF PET ANIMAL						
Dog	2	1	2	0.79	5.99	NS
Cat	1	2				
No pet	23	21				
9.VACCINATION OF PET ANIMAL						
Yes	2	1	1	0.265	3.84	NS
No	24	23				

10.EXPERIENCE OF ANIMAL BITE						
Yes	2	1	1	0.265	3.84	NS
No	24	23				
11.HISTORY OF ANTI RABIES VACCINATION						
Yes	2	1	1	0.265	3.84	NS
No	24	23				
12.PREVIOUS KNOWLEDGE ABOUT RABIES						
Yes	16	12	1	0.66	3.84	NS
No	10	12				

S= Significant at P>0.05 level, NS= No Significant at P<0.05 level

Table3: association between the level of knowledge regarding rabies prevention and post exposure care and selected demographic variables.

RESULTS AND DISCUSSION

1. Assess the knowledge regarding rabies prevention and post exposure care among adults in a selected area of Kannur District.

This section presents the distribution of level of knowledge regarding rabies prevention and post exposure care among adults in a selected area of Kannur District.

In this study Among the 50 adults, the test results showed that none had inadequate knowledge, 26 Adults (52%) had adequate knowledge and 24 adults (48%) had moderate knowledge.

2. To find out the association between the level of knowledge regarding rabies prevention and post exposure care among adults and their selected variables.

This section presents the association between the level of knowledge regarding rabies prevention and post exposure care among adults and their selected variables H₁: There will be a significant association between the level of knowledge regarding rabies prevention and post exposure care among adults and their selected variables

The association between the level of knowledge regarding rabies prevention and the post exposure care among adults and their selected variables were found out using chi square test. From the data, the association with educational status and occupation, the calculated chi square value was 8.41 and 8.03 respectively at p<0.05 level and reveals that there is a significant association existing between

them. Hence, the hypothesis (H_1) was accepted, indicating that there is a significant association between the level of knowledge regarding rabies prevention and post exposure care among adults with respect to their educational status and occupation.

DISTRIBUTION OF ADULTS ACCORDING TO THEIR EDUCATIONAL STATUS

N=50

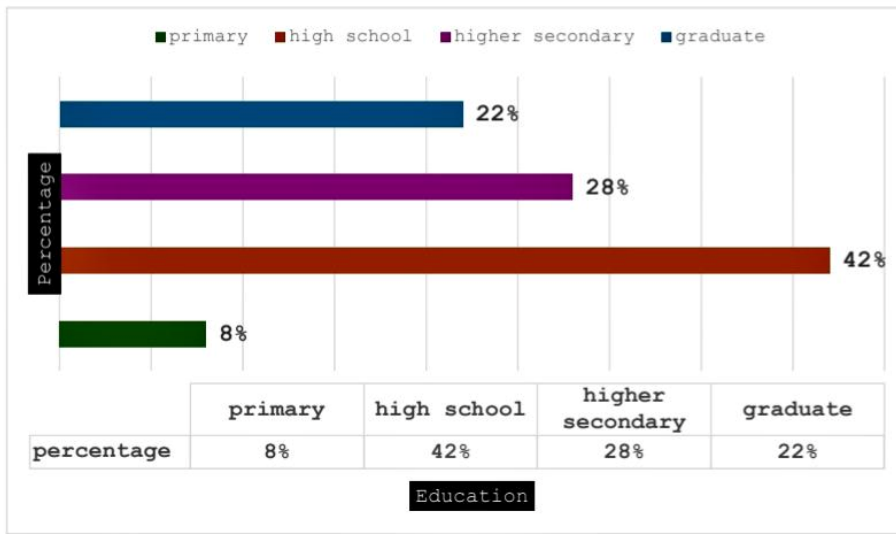


Figure 2:- Bar diagram showing educational status of adults

Figure 2 shows that majority 21 adults (42%) are having high school education, 14 adults (28%) have higher secondary education, 11 adults (22%) are graduated and 4 adults (8%) have primary education.

DISTRIBUTION OF ADULTS ACCORDING TO OCCUPATION

N=50

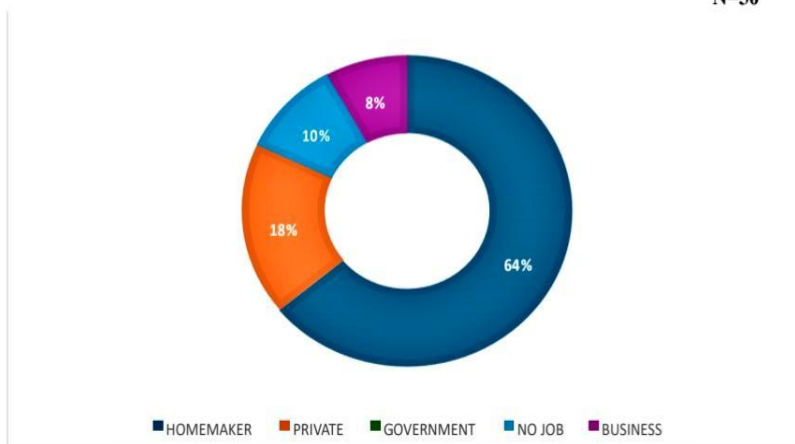


Figure 3:- Pie diagram showing occupation of adult

Figure 3 shows that 32 adults (64%) are home makers, 9 adults (18%) are having private job, 5 adults (10%) are retired and 4 adults (8%) are doing business.

On the other hand, the calculated χ^2 values for selected variables such as age (2.765), gender (3.15), religion (2.65), type of family (0.23), ownership of pet animal (0.0102), type of pet animal (0.79), vaccination status of pet animal (0.265), previous history of dog bite (0.265), previous history of Anti-rabies vaccination (0.265), previous knowledge regarding Rabies vaccine (0.66) are less than the tabular values. Therefore, these selected variables are not statistically significant.

CONCLUSION

The purpose of the study was to assess the knowledge regarding rabies prevention and post exposure care among adults in a selected area of Kannur District. On the basis of study following conclusions are made. Most of the adults have adequate knowledge. There exist a significant association between educational status and occupation.

NURSING IMPLICATIONS

The findings of the study have important implications for nursing practice, nursing education, nursing administration, and nursing research.

Nursing Practice

Community health nurses play a key role in educating the public regarding rabies prevention and the importance of timely post exposure care. Nurses should provide health education on immediate wound washing, vaccination schedules, and the importance of completing the full course of antirabies vaccination. Regular community outreach programs can be conducted to improve awareness among individuals with moderate knowledge levels.

Nursing Education

Nursing curriculum should emphasize zoonotic diseases such as rabies and their prevention. Nursing students should be encouraged to participate in community awareness campaigns and health education programs. Continuous education programs can be organized to update nurses on current rabies prevention guidelines.

Nursing Administration

Nursing administrators should facilitate the organization of community-based health education and vaccination awareness programs. Policies should be developed to strengthen collaboration between health care institutions and public health departments for rabies control. Adequate resources should be allocated for training nurses in community health education activities.

Nursing Research

This study can serve as a baseline for future research related to rabies prevention and post exposure care.

Nurse researchers can plan interventional studies to evaluate the effectiveness of health education programs on rabies prevention. Nurse researchers can develop new educational tools and strategies to improve awareness regarding rabies and post exposure management among community adults. The study helps nurses identify knowledge gaps and plan appropriate community-based preventive measures.

LIMITATION

- ❖ Small sample size, which limits the generalizability of the findings.
- ❖ The study was confined to a single community.
- ❖ Inadequate responses from some participants.
- ❖ Time constraints during data collection.

RECOMMENDATION

- ❖ Regular community-based health education programs on rabies prevention and post exposure care should be conducted.
- ❖ Similar studies can be replicated on a larger sample for better generalization.
- ❖ Comparative studies can be conducted between rural and urban populations.
- ❖ Government and public health authorities should strengthen rabies awareness and vaccination programs.
- ❖ Future research should focus on developing and evaluating structured educational interventions for community members

Declaration of Conflicting Interests

The authors declare no potential conflicts of interest with respect to the research, authorship and publication of this article.

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