

# Knowledge Regarding Rabies Prophylaxis among People Attending Selected Tertiary Care Hospital

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**Abstract:** *The present study investigated the knowledge regarding rabies prophylaxis among people attending preventive clinic and medicine outpatient department at Medical College Hospital Kottayam. A quantitative nonexperimental approach with descriptive research design was used for the study. The study was theoretically supported by Rosenstock's Health Belief Model. The study was conducted among 400 people 200 each in control and case group, attended outpatient department in selected tertiary care hospital at Kottayam district were selected for the study using non probability purposive sampling technique. The data was collected using socio personal and clinical data sheet, structured knowledge questionnaire to assess the knowledge regarding rabies prophylaxis. An information booklet regarding prevention and control of rabies prophylaxis distributed to people who participated in the study. The study concluded that there was a gap in knowledge regarding rabies prophylaxis among people in both case and control group. The enhanced knowledge regarding this aspect would obviously decrease the risk factors of rabies infection which would in turn improve the health status of the community.*

**Keywords:** Knowledge, Rabies prophylaxis, People

## 1. Introduction

True burden of rabies in India is not fully known. As per available information, it causes 18000 - 20 000 deaths every year. About 30 - 60% of reported rabies cases and deaths in India occur in children under the age of 15 years. The bites that occur in children often go unrecognized and unreported. Rabies deaths in human are 100% preventable through prompt and appropriate medical care<sup>1</sup>. Vaccinating dogs is the most cost - effective strategy for preventing rabies in people. About 31, 000 human deaths due to rabies occur annually in Asia with the majority - approximately 20, 000 concentrated in India<sup>2</sup>. In Kerala there were 21 deaths occur in 2022 which is almost two times greater than that of the year 2021. To conduct a clinical - epidemiological investigation of rabies mortalities in 2022, a central team of officials from National Centre for Disease Control (NCDC) was deputed to Kerala. The report said that the majority of the deaths were preventable<sup>3</sup>. They could be attributed due to low awareness in the general community about the do's and don'ts in the event of animal bite. There has been delay in seeking medical care and lack of appropriate wound management. This enhances strategic planning for formulation of State Action Plan for Dog Mediated Rabies Elimination by 2030<sup>4</sup>. Community awareness about rabies is very crucial in rabies prevention and control. For efficiently increasing awareness, the knowledge gap among the community should be identified and targeted<sup>5</sup>.

### Objective

- 1) To assess the knowledge regarding rabies prophylaxis among the case and control.
- 2) To compare knowledge and attitude towards rabies prophylaxis between case and control.

- 3) To determine the association of knowledge and attitude towards rabies prophylaxis among case and control with selected variables.

## 2. Materials and method

Quantitative research approach was selected for the study. The study design used non experimental descriptive design. Non probability purposive sampling technique was used. Four hundred samples were selected based on the inclusion criteria (two hundred in each control and experimental group). Explained the purpose of the study and maintain a good rapport with the study participants and an informed consent was obtained from the participant in the prescribed format prior to data collection after assuring the confidentiality of the response. The data were collected from 400 people attending preventive clinic and medical outpatient department at medical college hospital Kottayam. Basic information was collected using socio personal data sheet and clinical data sheet which takes 10 minutes to complete and knowledge was assessed by knowledge questionnaire which took 20 minutes to complete, followed by a rating scale to assess the attitude which took 10 minutes to answer. All data collection procedure took 40 minutes. At the end of the data collection process, provide an information booklet regarding rabies prophylaxis. The analysis of data was done using descriptive and inferential statistics based on the objectives of the study.

## 3. Result

### 3.1 Findings related to sample characteristics

Among the people 57% of the participants were men and 43% were female in the case group whereas 48.5% were male and 51.5% females are in the control group. Regarding the

educational status 31% of participants in case group and 29% of control group had higher secondary education. Only 12.5 % of cases and 10 % of control group participants had professional and technical education. With regards to the marital status 52 % of both case and control participants were married. 41.5 % of case participants and 39.5% control participants were single and 2 % case participants and 3% control participants were divorced. Regarding religion 43% of case participants belongs to Hindu religion and 45% of control group belongs to Christian. Only 14.5% of cases and 18% of control participants belongs to Muslim. All the participants that is 100% of cases had previous history of animal bite and taken rabies vaccination and 100% of control group have no any history of animal bite and rabies vaccination history.

**3.2 Findings related to knowledge regarding rabies prophylaxis**

**Table 1:** Frequency distribution and percentage of case and control based on knowledge regarding rabies prophylaxis (n=400)

Level of knowledge	Case (n=200)		Control (n=200)	
	F	%	f	%
Good (16 - 21)	101	50.5	47	23.5
Poor (0 - 15)	99	49.5	153	76.5

Table 6 depicts that the 50% of case group and 23.5% of control group had good knowledge and 49.55 % of cases and 76.5 % of control group had poor knowledge regarding rabies prophylaxis.

**Table 2:** Frequency distribution and Odds ratio of case and control group regarding knowledge (n=400)

Knowledge	Case group (n=200)	Control group (n=200)	Odds Ratio	(95% C I)	p
Good (16 - 21)	101	47	2.14	(1.61 - 2.85)	0.00
Poor (0 - 15)	99	153			

Table 2 shows that odds of good knowledge regarding rabies prophylaxis is 2.15 times more among those exposed to animal bites compared to those unexposed to animal bite. (Confidence interval 1.61 - 2.85).

**Table 3:** Frequency distribution and percentage of case and control based on domains of knowledge regarding rabies prophylaxis (n=400)

Domain	Case (n=200)		Control (n=200)	
	F	%	f	%
<b>General awareness</b>				
Good (3 - 5)	132	66	107	53.5
Poor (0 - 2)	68	34	93	46.5
<b>Rabies vaccination</b>				
Good (4 - 7)	122	61	102	51
Poor (0 - 3)	78	39	98	49
<b>Rabies prevention</b>				
Good (5 - 9)	141	70.5	103	51.5
Poor (0 - 4)	59	29.5	97	48.5

Table 3 depicts that 66% of cases and 53.5% control participants have good general awareness and 70.5% of cases

and 51.5% of control have good knowledge regarding rabies prevention.

**4. Conclusion**

The study concluded that there was a gap in Knowledge regarding rabies prophylaxis among people in both case and control group. There was significant association between knowledge of people attending tertiary care hospital towards rabies prophylaxis was significantly associated with previous history of animal bite and previous history of rabies. The findings of the present study suggested throw light to the need for a teaching program and a mass campaign on improving the knowledge regarding rabies prophylaxis among people. The enhanced knowledge regarding this aspect would obviously decrease the risk factors of rabies infection which would in turn improve the health status of the community.

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