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Original Research Article

Knowledge, attitude and practice of people regarding rabies in rural area of Jammu: a cross sectional study

Kamna Singh*, Anuj Kapoor, Nidhi Gupta

Department of Community Medicine, Government Medical College, Kathua, Jammu and Kashmir, India

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***Correspondence:**
Dr. Kamna Singh,
E-mail: kamnasingh4407@gmail.com

ABSTRACT

Background: Rabies although a fatal disease, remains a disease of low public health priority. India, about 18,000 to 20,000 cases is reported every year. Awareness about rabies is very poor among Indian population particularly in rural areas, due to which India and Bangladesh belongs to a high incident countries
Methods: Present study was descriptive and cross sectional in nature conducted in village Sai of block R.S. Pura. Data was collected by face to face interview of 200 participants using a pre structured questionnaire.
Results: Knowledge about rabies was intermediate as majority of the people (78.5%) have heard about the diseases. About 144 persons enumerated hydrophobia as the most common symptom. Only 48.5% of the study participants knew that it is important to wash the wound with soap and running water and 53.5% respondents were in favor of consulting a doctor. 123 (61.5%) persons understood that rabies can be prevented by proper treatment of animal bite.
Conclusions: Our study found that most of the respondents knew that dogs were mainly responsible for transmitting rabies. The recommended first aid for rabies is immediate flushing and washing of the wound with soap and water for a minimum of 15 minutes. This study revealed that most people placed the responsibility for controlling the dog population on the government.

Keywords: Rabies, Knowledge, Practice, Awareness

INTRODUCTION

Rabies is a viral zoonotic disease responsible for an estimated 59,000 human deaths and over 3.7 million disability-adjusted life years (DALYs) lost every year.[1] Although a fatal disease, it remains a diseases of low public health priority in India.[2] There is no comprehensive treatment possible after clinical occurrence of rabies, which can result in mortality. It is estimated that the number of deaths due to rabies may be 10 times more than that reported.[3] Rabies occurs mainly in underserved populations, both rural and urban, and has been documented for more than 4000 years.[4] Transmission to people occurs predominantly via infected animal bite or scratch as well as via their saliva through mucosa or broken skin. In India, about 18,000 to 20,000 cases of rabies are reported every year which accounts for 36% of the world's death from the diseases.[5] Also, India and Bangladesh belongs to a high incident category.[6] The lack of community awareness about the disease is a major hurdle in fighting rabies.[7] Awareness of simple preventive measures, such as washing bite wounds with soap and water, can be a decisive factor in preventing rabies deaths in at-risk human populations.[8] Therefore, it is vital to know the level of knowledge, attitude and the practices of the community concerning the diseases and it's prevention.

METHODS

The present study was descriptive and cross sectional in nature, conducted in November 2018. The study participants belonged to village Sai of block R.S. Pura which is a field practice area of the Department of the

Community Medical Jammu. Total population of Sai is 3,860 with 910 households. The data was collected by face to face interview of the respondents who agreed to participate in the study. Questionnaire consisted of formalized set of questions on knowledge, attitude and practice regarding rabies and its prevention. The questionnaire was divided into three sections; the first section concerned with knowledge comprised 6 questions, the second part related to practice with 3 questions and the third part concerned with attitude comprised of 5 questions. The data was collected from 200 respondents.

Data was entered and analyzed using Windows 7 Microsoft Excel. Each question was analyzed individually.

RESULTS

A total of 200 individuals were interviewed. Nearly 108 respondents belonged to the age group of 31-50. There were 111 male and 89 females (Table 1).

Table 1: Age distribution of respondents.

Age in years	Male	Female	Total
20-30	19	15	34
31-40	29	22	51
41-50	31	26	57
51-60	21	17	38
61-70	11	9	20
Total	111	89	200

Table 2: Knowledge of respondents regarding rabies.

Variable	Frequency	%
Ever heard about rabies?		
Yes	157	78.5
No	43	21.5
Which all animals can transmit rabies?		
Dogs	135	67.5
Dogs+cat	24	12
Dogs+monkey	14	7
Cow/horse	7	3.5
Don't know	20	10
Modes of transmission		
Bites only	155	77.5
Bite+scratch/licks	39	19.5
Don't know	6	3
Symptoms of human rabies		
Hydrophobia	144	72
Convulsion/fever	22	11
Others (dementia)	16	8
Don't know	18	9
Is rabies a communicable disease?		
Yes	124	62
No	57	28.5
Don't know	19	9.5

Regarding occupation, majority were involved in farming or some small local business.

Knowledge about rabies was intermediate as majority of the people (78.5%) have heard about the diseases rabies. 144 respondents enumerated hydrophobia as the most common symptom. 77.5% of the respondents reported bite only as the mode of transmission of diseases whereas 19.5% reported bites along with the scratch and licks (Table 2).

Table 3: Practice of respondents regarding rabies.

Variable	Frequency	%
First aid after animal bite		
Wash the wound with soap and water	97	48.5
Tie a cloth around the wound	47	23.5
Apply turmeric or other or other powders	24	12
Don't know	32	16
Practice after an animal bite?		
Consult a doctor	107	53.5
Consult some religious place/quack	57	28.5
Self-medication of wound	24	12
No response	10	5
Do you observe the animal for some time?		
Yes	154	77
No	46	23

Table 4: Attitude of respondents regarding rabies.

Variable	Frequency	%
Do you think rabies is a dangerous disease?		
Yes	187	93.5
No	13	6.5
Can proper treatment of dog bite prevent rabies?		
Yes	123	61.5
No	77	38.5
Are stray dogs a problem?		
Yes	157	78.5
No	43	21.5
Choice of health facility for treatment of animal bite		
Government	137	68.5
Private	63	31.5
Who do you think is responsible for preventing rabies by control of stray dog?		
People of community/NGOs	54	27
Government	109	54.5
Both	37	18.5

Of all the study subjects, 48.5% respondents knew that it is important to wash the wound with soap and running water and about 24 respondents were in favour of applying turmeric powder around the wound as the first

aid measure. Good number of people was in favour of consulting a doctor after an animal bite whereas 57 respondents preferred going to religious place or quacks (Table 3).

Majority of the respondents (68.5%) preferred to seek treatment from government health facility. 187 respondents considered rabies as dangerous diseases. Maximum people think that government is responsible for preventing rabies by controlling stray dog population. 61.5% of the respondents understood that rabies can be prevented by proper treatment of animal bite (Table 4).

DISCUSSION

The results of our study show that 78.5% of the study participants were aware of rabies. A study by Sudarshan et al conducted in India reported that 68.7% of the participants were aware of rabies.[9] Our study found that most of the respondents (67.5%) knew that dogs were mainly responsible for transmitting rabies and 77.5 reported animal bite as the main source of transmission. Additionally, a study by Kabeta et al indicated that significant proportion of the interviewed households (97.2%) suggested rabies is transmitted to humans when they are bitten, scratched or licked by rabid dogs, cats and other animals.[10] The recommended first aid for rabies is immediate flushing and washing of the wound with soap and water for a minimum of 15 minutes.[11] This process helps to remove the rabies virus from the wound. Our study found that almost half of the participants were aware of this important first aid measure. This observation correlates with the practices observed by Sudarshan et al in their multi-center study conducted in India.[12] Our study also reported that the practice of applying powders and other topical treatments to the wound still exists, although only among a minority of the participants. Previous studies have also confirmed that these practices persist in India and other countries.[13-15] Attitude of respondents regarding rabies was better as compared to knowledge. Majority of persons (93.5%) thought that dengue is a dangerous disease. A study by Choudhary in Anand, India, reported that 30.2% of study participants were certain that rabies can be cured with treatment.[16] In contrast, our study found that 61.5% understood that rabies can be prevented by proper treatment of dog bite. This study revealed that most people (54.5.8%) placed the responsibility for controlling the dog population on the government. This result contrasts with a study conducted in Sri Lanka by Matibag et al in which most participants felt accountable for the increase in the stray dog population.[17]

CONCLUSION

There is an apparent lack of awareness among people regarding appropriate animal wound management and its treatment. Gaps were seen in their knowledge and attitudes regarding rabies prevention. Thus, periodic education of the general public is needed to generate public awareness and also the political commitment for rabies control.

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