



A study to assess the knowledge regarding prevention and management of dog bite among adults residing at selected areas of Pallithottam, Kollam with a view to develop an information booklet.

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ABSTRACT

The research project undertook was “a study to assess the knowledge regarding prevention and management of dog bite among adults residing at selected areas of Pallithottam, Kollam with a view to develop an information booklet”. The objectives of the study were to assess the level of knowledge regarding dog bite prevention and management among adults, to find the association between knowledge on dog bite prevention and management among adults and selected socio-demographic variables, and to develop an information booklet for adults regarding prevention and management of dog bite. The study was conducted among 200 adults who were residing at, Pallithottam coastal community area, Kollam. In order to assess the knowledge of adults regarding prevention and management of dog bite, the study sample was selected by non-probability convenient sampling technique. The tool used for data collection consisted of a demographic proforma and a structured knowledge questionnaire, basic introduction of the study was given to the subjects. The analysis of the data was based on the objectives of the study using descriptive and inferential statistics. The finding of the present study revealed that 15.5% have good knowledge, 65.5% have average knowledge and 19% have poor knowledge and there was significant association between knowledge and selected socio demographic variable like history of dog bite and there is no significant association between age, sex, religion, marital status, education, occupation, monthly income. Based on the findings the investigators has drawn implications which were of vital concerns in the field of nursing practice, nursing administration, nursing education for future development.

Keywords : Dog bite, management of dog bite, prevention of dog bite, prevention of rabies, rabies

INTRODUCTION

In India, rabies represents a significant zoonotic threat. Dog bite injuries to humans have received a lot of attention recently as the consequences of these injuries are finally being recognized¹. A dog bite is a person or other animal bitten by a dog, even a rabid one. It can be scary if left untreated which can lead to serious complications such as infections, nerve and muscle damage, broken bones, rabies, tetanus and even death. Indian cities witnessed a sharp increase in the number of stray dogs, which stood at 1.5 million according to the Official Livestock Census of 2019². Inadequate waste disposal facilities and poor solid waste management often cause the accumulation of stray dogs in landfills where food is collected. The population growth in the cities of India has caused a sharp increase in the number of stray dogs. The irony is that the majority of deaths are due to ignorance of the urgency of “first aid” for dog bite injuries and the lack of affordable and effective services in the health sector³. There are many myths and misunderstandings about injuries. To take care of these include applying oils, herbs and red chilies to wounds caused by rabid animals. More trust in original medicines that have not been proven effective and do not wash wounds properly for fear of infection.⁴

NEED AND SIGNIFICANCE OF THIS STUDY

Animal bites are a major public health issue for children and adults around the world. Rabies is the tenth leading cause of death from infectious diseases in the world⁵. Rabies is a fatal disease with no cure, but preventive measures to reduce its burden exist, although they are not well implemented in India⁶. As a result, India accounts for most of global rabies mortality. In Asia, the annual cost of rabies is estimated at 563 million USD⁷. About 15 million people in India are bitten by animals, mainly dogs, every year and require post-exposure prophylaxis⁶. During and after the COVID era, rabies cases and deaths increased. It is believed that the number of animal bites may be many times higher than reported. Concerns has been increased about the mismanagement of street dogs in terms of disruption in vaccination and birth control activities during the lockdown. In India an increase in aggregation among dogs has been observed pandemic. In India, the sudden spike in the number of cases of rabies is a major public health concern. The Union Government has announced a national action plan to eradicate dog rabies in India by 2030⁸. In Kerala, the number of infected dogs is doubled in the last five years. The state has reported more than 200,000 dog bite cases and 21 deaths which is almost double the deaths reported during 2022. Six of the victims including a 12 year old child died despite of receiving anti rabies immunoglobulin and vaccine⁹. Estimated incidence of animal or dog bites in Kerala in 2020 was nearly 2,993 people per million population and in 2022, Kerala had 95,352 dog bites in the first half of the year. Kerala is the most literate state in the country with a literacy rate of 96.2 population reporting 14 rabies deaths this year.

OBJECTIVES

1. To assess the level of knowledge regarding dog bite prevention and management among adults .
2. To find the association between knowledge on dog bite prevention and management among adults and selected socio-demographic variables.
3. To develop an information booklet.

ASSUMPTION

Adults may possess some knowledge regarding prevention and management of dog bite.

RESEARCH VARIABLES

Demographic variables was considered in this study.

DEMOGRAPHIC VARIABLES

In this study the demographic variables were age, sex, religion, marital status, education status, occupation, monthly income, history of dog bite, vaccination history.

SETTING OF THE STUDY

The setting of the study was at Pallithottam coastal community area, Kollam.

RESEARCH DESIGN

The research design selected for the present study is, a non-experimental descriptive research design.

SAMPLE SIZE

The sample size of this study was 200 adults in Pallithottam coastal community area, Kollam.

Section 1 : Description of the demographic data of adults in Pallithottam coastal community area, Kollam

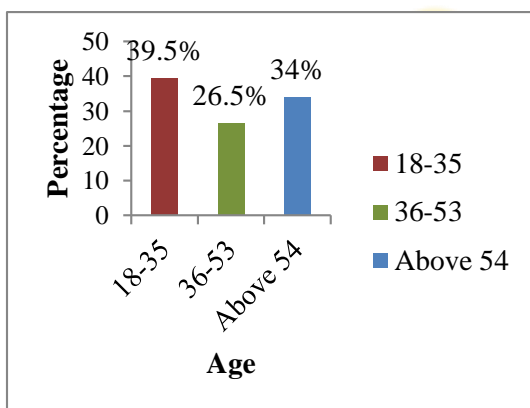


Figure 1

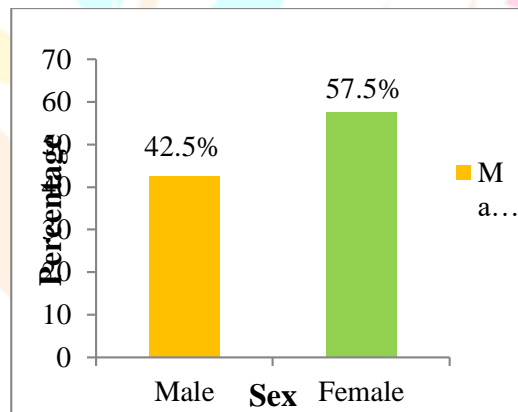


Figure 2

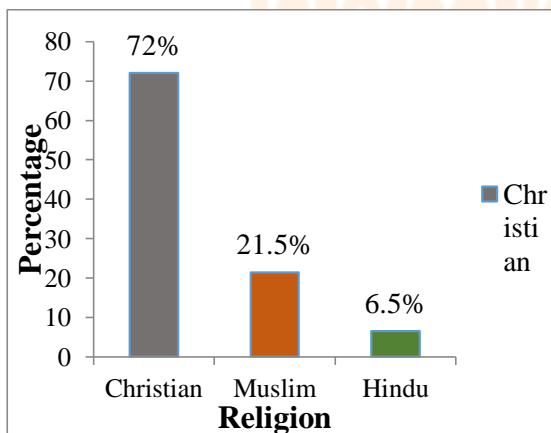


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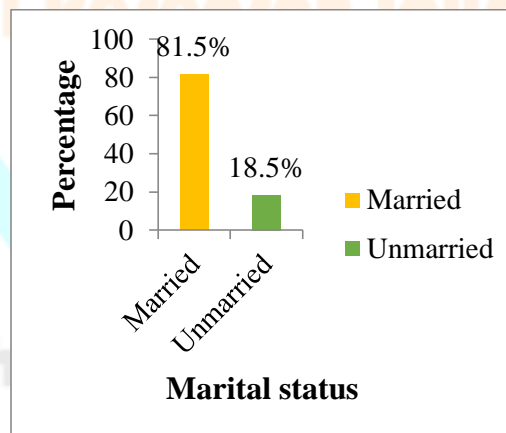


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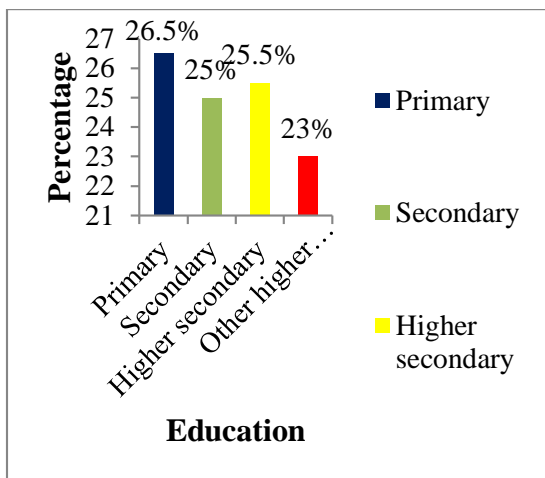


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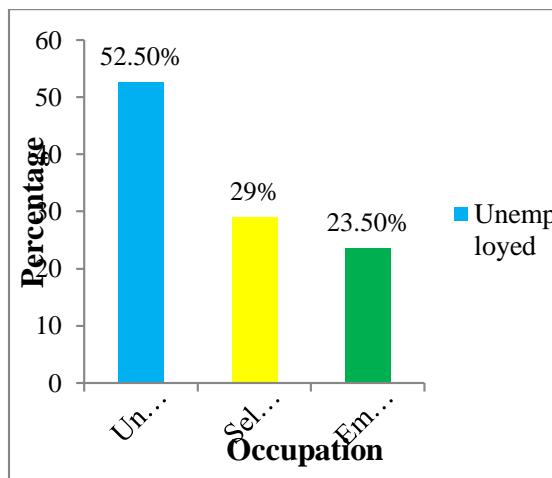


Figure 6

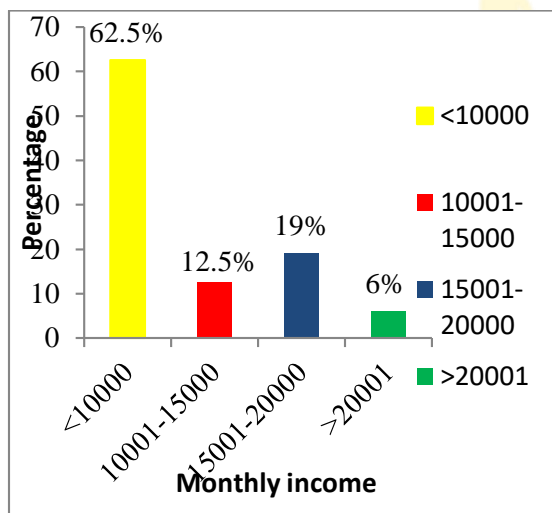


Figure 7

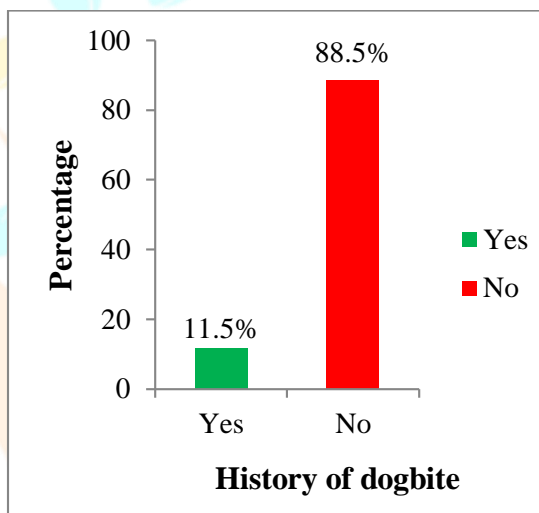


Figure 8

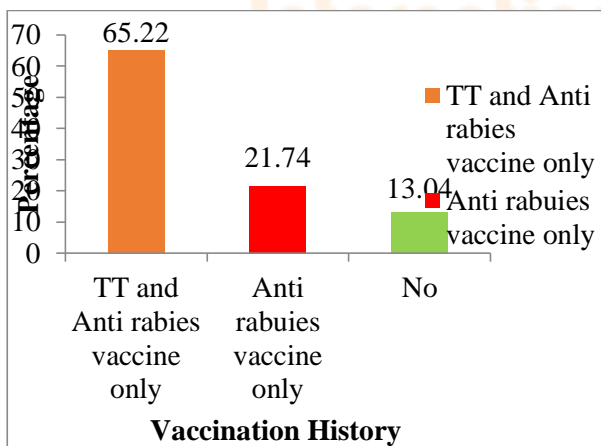


Figure 9

Objective:-1. To assess the level of knowledge regarding dog bite prevention and management among adults.

Section 2: Assessing the knowledge among adults regarding prevention and management of dogbite in Pallihottam coastal community area, Kollam.

Table 1 : Frequency and percentage distribution of knowledge score regarding prevention and management of dogbite.

| Score | Score Range | Frequency | Percentage |
|-------|-------------|-----------|------------|
| 19-25 | Good | 31 | 15.5% |
| 12-18 | Average | 131 | 65.5% |
| <11 | Poor | 38 | 19% |

Table 1 shows that 15.5% adults had good knowledge, 65.5% had average knowledge and 19% had poor knowledge.

Objective:-2. To find the association between knowledge on dog bite prevention and management among adults and selected socio-demographic variables.

Section 3: Association between knowledge among adults regarding prevention and management of dog bite and selected socio demographic variables.

Table 2: Association between knowledge and selected demographic variables.

| Sl. No | Variables | Knowledge | | | Df | Chi Square Value | Table value | Level of significance |
|--------|-----------------------|-----------|---------|------|----|------------------|-------------|-----------------------|
| | | Good | Average | Poor | | | | |
| 1 | Age (in years) | | | | | | | |
| | 18-35 | 18 | 46 | 15 | 4 | 9.22 | 9.49 | NS |
| | 36-53 | 7 | 40 | 6 | | | | |
| | Above 54 | 6 | 45 | 17 | | | | |
| 2 | Sex | | | | | | | |
| | Male | 14 | 53 | 18 | 2 | 0.68 | 5.99 | NS |
| | Female | 17 | 78 | 20 | | | | |
| 3 | Religion | | | | | | | |
| | Christian | 24 | 100 | 20 | | | | |
| | Muslim | 7 | 22 | 14 | 6 | 10.98 | 12.59 | NS |
| | Hindu | 0 | 9 | 4 | | | | |
| | Others | 0 | 0 | 0 | | | | |

| | | | | | | | |
|------------------------------|----|-----|----|---|-------|-------|----|
| 4 Marital status | | | | | | | |
| Married | 25 | 106 | 32 | | | | |
| Unmarried | 6 | 25 | 6 | 6 | 0.228 | 12.59 | NS |
| Divorced | 0 | 0 | 0 | | | | |
| Separated | 0 | 0 | 0 | | | | |
| 5 Education | | | | | | | |
| Primary | 9 | 36 | 8 | | | | |
| Secondary | 7 | 35 | 8 | | | | |
| Higher secondary | 3 | 32 | 16 | 6 | 12.52 | 12.59 | NS |
| Other higher education | 12 | 28 | 6 | | | | |
| 6 Occupation | | | | | | | |
| Unemployed | 16 | 67 | 22 | | | | |
| Self employed | 7 | 35 | 6 | 4 | 4.143 | 9.49 | NS |
| Employed | 8 | 29 | 10 | | | | |
| 7 Monthly Income | | | | | | | |
| <10,000 | 21 | 85 | 19 | | | | |
| 10,001-15,000 | 3 | 12 | 10 | 6 | 8.607 | 12.59 | NS |
| 15,001-20,000 | 5 | 26 | 7 | | | | |
| >20,000 | 2 | 8 | 2 | | | | |
| 8 H/O Dog bite | | | | | | | |
| Yes | 0 | 14 | 9 | 2 | 9.67 | 5.99 | S |
| No | 31 | 117 | 29 | | | | |
| 9 Vaccination history | | | | | | | |
| Yes, TT only | 0 | 0 | 0 | | | | |
| Yes, TT and ARV | 0 | 9 | 6 | 4 | 1.749 | 12.59 | NS |
| Yes, ARV only | 0 | 4 | 1 | | | | |
| No | 0 | 1 | 2 | | | | |

S – Significant

NS – Non significant

CONCLUSION

The present study was conducted to assess the knowledge regarding prevention and management of dog bite among adults residing at selected areas of Pallithottam, Kollam. Nursing implication of the study included in the area of nursing practice, nursing education, nursing administration and nursing research are given below.

NURSING PRACTICE

- The study finding revealed the importance in providing knowledge regarding prevention and management of dog bite to adults.

NURSING EDUCATION

- In nursing education, it is very essential and appropriate to plan active participation in, educational programme, hospital based education programme and community health education programme.
- Periodic health education classes must be conducted for adults regarding prevention and management of dog bite.
- Educate the people about proper waste management to minimize the incidence of dog bite.
- Encourage the coastal area people for the participation in community health education programmes.
- Encourage the students for effective utilization of research based practice.

RECOMMENDATIONS

Based on the findings of the study it is recommended that;

- A similar kind of study can be conducted for large groups.
- A study to assess the effectiveness of video assisted teaching on knowledge regarding prevention and management of dog bite among adults can be conducted.
- A similar kind of study can be conducted to assess the practices followed among adults after a dog bite.

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