



PREVALENCE AND IMPACT OF ANIMAL BITES IN THE COMMUNITY

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ABSTRACT

Animal bites, especially dog bites, are a major public health issue, leading to injuries and rabies transmission. This study assessed 100 cases from CHC and PHC centers in Amalapuram over three months. Most cases involved females (61.8%), with the highest incidence in the 18-29 age group (74.5%). Urban areas had the most cases (45.1%). Statistical analysis showed no significant link between bite severity, neurological symptoms, or vaccine reactions. The study highlights a lack of awareness about proper post-bite care, emphasizing the need for education and preventive measures.

KEYWORDS :**INTRODUCTION**

Animal bites, particularly from dogs, pose a significant public health risk worldwide, leading to injuries, infections, and rabies transmission. In India, approximately 17.4 million dog bites occur annually, contributing to 18,000–20,000 cases of human rabies. Many cases go unreported, especially in rural areas with limited surveillance. Despite available vaccinations, gaps in awareness and preventive measures persist. This study aims to assess the prevalence, severity, and impact of animal bites in the community, with a focus on post-bite care and vaccination adherence.

AIMS AND OBJECTIVES**Aim:**

To assess and investigate the prevalence and impact of animal bites in the community.

Objectives:

1. To describe the severity of animal bites.
2. To assess neurological symptoms in bite victims.
3. To investigate adverse reactions, if any, after rabies vaccination.

Methodology

Study Design: Hospital-based prospective study

Study Setting: Outpatient departments of CHC and PHC centers in Amalapuram

Study Duration: Three months

Participants: Individuals aged 1-80 years attending outpatient departments

Sampling Technique: Convenience sampling

Inclusion Criteria: Patients attending CHC and PHC OPDs

Exclusion Criteria: Patients unwilling to consent or unable to communicate

Data Collection: Face-to-face interviews using a semi-structured questionnaire

Data Analysis: Microsoft Excel 2016 and IBM SPSS software

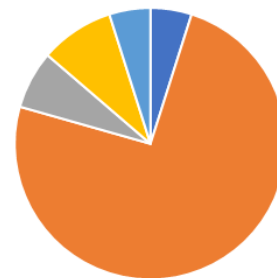
RESULT

- A total of 100 cases were studied, with 61.8% female and 38.2% male participants.
- The highest number of cases were reported in urban areas (45.1%), followed by rural (38.2%) and suburban (16.7%)

regions.

- The majority of cases (74.5%) occurred in the 18-29 age group.
- Statistical analysis showed no significant association between bite severity, neurological symptoms, and adverse vaccine reactions ($p > 0.05$).
- The study revealed low awareness of proper post-bite care and rabies prevention, emphasizing the need for better education and preventive measures.

Sales



■ Under 18 years ■ 18-29 years ■ 30-39 years ■ 40-49 years ■ 50 and above

Figure:1

Chart Title

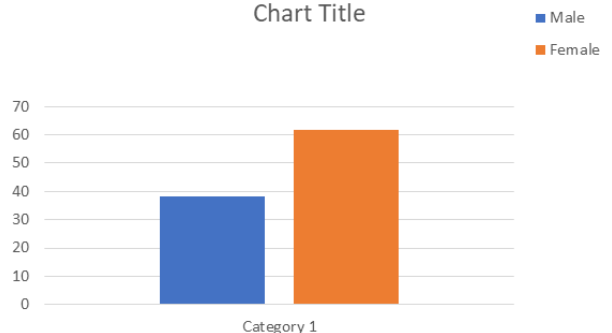


Figure:2

Summary Of Key Findings

- A total of 100 cases were studied, with 61.8% female and 38.2% male participants.
- The highest number of cases were reported in urban areas (45.1%), followed by rural (38.2%) and suburban (16.7%) regions.
- The majority of cases (74.5%) occurred in the 18-29 age group.
- Statistical analysis showed no significant association between bite severity, neurological symptoms, and adverse vaccine reactions ($p > 0.05$).

- The study revealed **low awareness of proper post-bite care and rabies prevention**, emphasizing the need for **better education and preventive measures**.

DISCUSSION

- The article provides estimates on animal bites . Survey is done 100 people with dog bite attended the OPDs of PHC,CHC and nearby areas of Amalapuram areas, India.
- Study consists of 23 questions covering all the possible forms for maximum benefits to study. (9)
- In the study of total 100 people were selected of which 63 females and 39 males under the different age groups in which under 18years – 4.9% (5/100),18-29 74.5%(74/100), 30-39 years-6.9%(7/100), 40-49 years8.8% (9/100), 50 and above 4.9% (5/100).
- Among the three area of study the highest number of cases was from Urban area 45.1% (46/100), followed by Rural 38.2% (38/100), and Suburban 16.7% (16/100) cases are been reported. (10)
- In the above study most of the subjects were females in the age group 18-29 .

CONCLUSION

In conclusion, the study showed that majority of the subjects were not aware of Risk factors of animal bites if not treated. where as some percentage of the patients aware of the knowledge of taking proper care after bite (i.e) washing eunder tap water and seeking for medial help for proper vaccination.

REFERENCES

1. Vigilato MA, Clavijo A, Knobl T, Silva HM, Cosivi O, Schneider MC, Leanes LF, Belotto AJ, Espinal MA. Progress towards eliminating canine rabies: policies and perspectives from Latin America and the Caribbean.
2. Dutta TK. Rabies: an overview. International Journal of Advanced Medical and Health Research. 2014 Jul 1;1(2):39-44.
3. Adediji AO, Okonko IO, Eyarefe OD, Adediji OB, Babalola ET, Ojezele MO, Nwanze JC, Amusan TA. An overview of rabies-History, epidemiology, control and possible elimination. African Journal of Microbiology Research. 2010 Nov 18;4(22):2327-38.
4. Gan H, Hou X, Wang Y, Xu G, Huang Z, Zhang T, Lin R, Xue M, Hu H, Liu M, Cheng ZJ. Global burden of rabies in 204 countries and territories, from 1990 to 2019: results from the Global Burden of Disease Study 2019. International journal of infectious diseases. 2023 Jan 1;126:136-44.
5. Singh R, Singh KP, Cheria S, Saminathan M, Kapoor S, Manjunatha Reddy GB, Panda S, Dhama K. Rabies–epidemiology, pathogenesis, public health concerns and advances in diagnosis and control: a comprehensive review. Veterinary Quarterly. 2017 Jan 1;37(1):21251.
6. Mahendra BJ, Harish BR, Reddy T, Nagaraja GB. Profile of human rabies cases admitted at Epidemic Diseases Hospital, Bangalore, India. Journal of Evolution of Medical and Dental Sciences. 2014 May 26;3(21):5839-44
7. Suraweera W, Morris SK, Kumar R, Warrell DA, Warrell MJ, Jha P. Million Death Study Collaborators. Deaths from symptomatically identifiable furious rabies in India: a nationally representative mortality survey.
8. Banović P, Mijatović D, Simin V, Vranješ N, Meletis E, Kostoulas P, Obregon D, Cabezas-Cruz A. Real-world evidence of rabies post-exposure prophylaxis in Serbia: Nation-wide observational study (2017–2019). Travel Medicine and Infectious Disease. 2024 Feb 17:102697.
9. Lacy M, Phasuk N, Scholand SJ. Human Rabies Treatment—From Palliation to Promise. Viruses. 2024 Jan 22;16(1):160.
10. Gnanadurai CW, Huang CT, Kumar D, Fu ZF. Novel approaches to the prevention and treatment of rabies. International journal of virology studies & research. 2015 Apr;3(1):8.
11. Mami RS, Anand AM, Madhusudana SN. Human rabies in India: an audit from a rabies diagnostic laboratory. Tropical Medicine & International Health. 2016 Apr;21(4):556-63.
12. Menezes R. Rabies in India. Cmaj. 2008 Feb 26;178(5):564-6.
13. Hampson K, Coudeville L, Lembo T, Sambo M, Kieffer A, Attlan M, Barrat J, Blanton JD, Briggs DJ, Cleaveland S, Costa P. Estimating the global burden of endemic canine rabies. PLoS neglected tropical diseases. 2015 Apr 16;9(4):e0003709.