



PROFILE OF ANIMAL BITE CASES ATTENDING RURAL HEALTH CENTRE IN KANCEEPURAM DISTRICT, TAMILNADU.

DR. P. MOHANKUMAR, DR. C. SIVAGURUNATHAN AND DR.R. UMADEVI

Department of Community Medicine Sree Balaji Medical College And Hospital Chrompet Chennai Bharat university

ABSTRACT

Introduction: Rabies is an acute and fatal viral encephalitis transmitted from infected animal to humans. It is 100% fatal disease, but with timely, appropriate treatment, it is 100% preventable. There is a lot of misconceptions regarding rabies, due to inadequate knowledge regarding rabies, some of the animal bite victims ignores timely management. It is important to know about the practice in the community, and factors influencing post exposure treatment and to initiate measures against the wrong practices . **Aims & objectives:** To study the practices followed by the animal bite victims following exposure and to find out the misconception regarding animal bite among victims. **Statistical analysis:** Proportions. **Result:** Out of total 140 cases of animal bite, 47.2% were below 25 years of age. Majority of the animal bite victims was in the age group of 5 to 15 years. Majority of bites were due to stray dogs (92.8%). Only 15% of animal bite victims washed their wound with soap and water after the bite. Majority of the animal bite victims did not do appropriate wound management warrants a great deal of information through health education with the community.

KEY WORDS: Animal bite, Rabies, Primary Health Care centre



DR. P. MOHANKUMAR

Department of Community Medicine Sree Balaji Medical College And
Hospital Chrompet Chennai Bharat university

*Corresponding author

INTRODUCTION

Rabies is an acute and fatal viral encephalitis transmitted from infected animal to humans. It is 100% fatal disease, but with timely appropriate treatment, it is 100% preventable. Dogs are the most common animal which transmits rabies to humans. It is estimated that the South East Asia Region accounts for 60% of human rabies deaths in the world. Within Asia, India is reported to have highest number of rabies cases. About 17 million animal bites and 20,000 human rabies deaths are estimated to occur in India.¹ There is lot of misconceptions regarding rabies, due to inadequate knowledge regarding rabies, some of the animal bite victims ignores timely management. It is important to know about the practice in the community, and factors influencing post exposure treatment and to initiate measures against the wrong practices. Objective: To study the practices followed by the animal bite victims following exposure and to find out the misconception regarding animal bite among victims.

MATERIALS AND METHODS

This study was conducted among the animal bite cases attended rural health centre, (sreepuram) of Sree Balaji Medical College and Hospital, Chrompet. Permission to carry out the study was obtained from the institutional ethical committee prior to collect data. All the animal bite cases attended PHC from 1st April 2014 to 30th August 2014 (5 months) were interviewed. Total number of cases was 140. The study was explained the patients and to the guardians in case of children and a written consent was obtained. Pre-designed and pre-tested questionnaire was used for collection of data. Data was analyzed using SPSS 16. The results were expressed in proportions.

RESULTS

Out of total 140 cases of animal bite, 47.2% were below 25 years of age. Majority of the animal bite victims were in the age group of 5 to 15 years (Table 1). About 69% were males and 31% were females. Majority of the animal bite victims was leather workers (41.4%) followed by students (32.1%) (Table 2)

Table 1
Age-wise Distribution

Age in years	Number	Percentage
<5	15	10.8
5-14	22	20.7
15-24	29	15.7
25-34	21	15
35-44	15	10.7
45-54	13	9.3
55-64	18	12.8
>65	7	5
Total	140	100

Table 2
Type of occupations

Type of occupation	Number	Percentage
Students	45	32.1
Leather workers	58	41.4
Tanneries workers	28	20
Dependent	4	2.8
Professionals	5	3.7
Total	140	100

Majority of bites were due to stray dogs (92.8%) and 5.8% of bites were due to pet dog (table 3). Majority of bites involved the lower limbs (67.3%).(Table 4).

Table 3
Type of animal

Type of animal	Frequency	Percentage
Stray dog	130	92.8
Pet dog	8	5.8
Cat	2	1.4
Total	140	100

Table 4
Site of bite

Site of bite	Number	Percentage
Lower limb	94	67.3
Upper limb	36	25.7
Face	6	4.2
Trunk	4	2.8

About 58.5% of animal bite victims had attended PHC within 24 hours of bite. (Table 5).

Table 5
Time between animal bite and attending the PHC

Time period	Frequency	Percentage
Within 24 hrs	82	58.5
1-2days	16	11.4
2-3days	12	8.5
3-4 days	10	7.4
>4days	20	14.2
Total	140	100

Only 15% of animal bite victims washed their wound with soap and water after the bite. About 57.1% of animal bite victims cases had applied indigenous materials like turmeric, herbal extracts etc over the wound. (Table 6).

Table 6
First aid following animal bite

First aid following animal bite	Number	Percentage
Wash with water	29	20.8
Washed with soap and water	21	15
Apply indigenous product	80	57.1
No first aid taken	6	4.3
Apply antiseptic cream	4	2.8
Total	140	100

DISCUSSION

In this study, children Majority of the animal bite victims were in the age group of 5 to 15 years, similar findings were reported in studies done by Shah V et al² and Behra R et al.³ Majority

(98.6%) of bites were due to dogs similar findings were reported in studies done by Roseline F et al⁴ (94.3%) and Kakrani A et al⁵ (94.17%). Majority (57.1%) of the animal bite

victims applied indigenous materials, similar finding was reported by Shah V et al⁵ (52.6%), Sudarsan M et al⁶ (60%). About 58.5% of the animal bite victims visited PHC within 24 hours of bite, similar findings were reported by Shah V et al and . Only 15% of the animal bite victims washed their wound with soap and water, which low compared to the finding reported by Bedi R et al⁷ (36.4%) and Umrigar P et al⁸ (46.6%). This indicates low knowledge level in the study subjects.

CONCLUSION

Children and young adults were 20 years of age were the commonest victims of animal bite. Dogs were the main biting animal. Majority of the animal bite victims did not do appropriate wound management. Most importantly about 85% of victims did not follow appropriate first aid measure (wasing with soap and water), and about 41.5% of the animal bite victims did not seek medical attention within 24 hours of bite. This shows there is lack of knowledge related rabies warrants great deal of information through health education by the community.

REFERENCES

1. Who. Strategic framework for elimination of human rabies transmitted by dogs in the South-East Asia Region Accessed on http://www.searo.who.int/entity/emerging_diseases/links/Zoonoses_SFEHRTD-SEAR.pdf, "20 September 2014.
2. Shah V, Bala D, Thakker J, Dalal A, Shah U, Chauhan S, et al,. Epidemiological determinants of animal bite cases attending the antirabies clinic at V S General Hospital, Ahmedabad. *Healthline*; 3(1):66-68, 2012.
3. Behera R, Satapathy M, Tripathy M, Sahu A. Profile of animal bite cases attending the anti rabies clinic of M.K.C.G. Medical College, Berhampur (Orissa). *APCRI Journal*. 2008;9(2). Roseline F W, M Logaraj. A community based study on dog care, dog bite and antirabies treatment in a selected rural block in Tamil Nadu. *J Rural Health.*;1(2):147-50, 2012.
4. Kakrani A, Jethani S, Bhawalkar J, Dhone A, Ratwani K. Awareness about dog bite management in rural population. *Indian Journal of Community Health.*;25(3): 304-8, 2013.
5. Sudarshan M, Madhusudana S, Mahendra B, Rao N, Ashwath Narayana D, Abdul Rahman S et al,. Assessing the burden of human rabies in India: results of a national multi-center epidemiological survey. *International Journal of Infectious Diseases*;11(1):29-35, 2007.
6. Bedi R, Bedi DK, Tankha A, Choudhary V, Matoria RS. Profile of animal bite cases attending Anti Rabies Clinic of JLN Medical College & Hospital, Ajmer. *APCRI Journal*;8(1):28-30, 2006.
7. Umrigar P, Parmar G, Patel P, Bansal R. Epidemiology of Animal Bite Cases attending Municipal Tertiary Care Centres in Surat City: A Cross Sectional Study. *Natl J Community Med*; 4(1):153-57, 2013.