

# A Profile of Animal Bite Victims Attending Anti-Rabies Clinic at Jodhpur



## Medical Science

KEYWORDS :

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### ABSTRACT

*Background: Worldwide, more than 55,000 people die of rabies every year. 40% of people who are bitten by suspect rabid animals are children under 15 years of age. Dogs are the source of 99% of human rabies deaths.*

*Rabies cases are not rare in Jodhpur. Jodhpur is situated in the North-Western part of Rajasthan. Jodhpur has an overall population of about 3.685 Million (Census-2011) and a literacy Rate of 67 %. Objectives: The present study was undertaken:- To determine the age and sex wise distribution of animal bite cases and to find out the distribution of victims on the basis of type of animal exposure and site of bite wounds. Study Period: The present study was conducted from 1st January 2012 to 31st December 2012. Study Subjects: The animal bite patients attending the Anti Rabies Clinic, M. G. Hospital, Jodhpur. Study Design: The present study is a Hospital based retrospective study, carried out on the basis of records of the animal bite victims from anti rabies clinic. Material and Methods: The present study was carried out by detailed examination of the records of animal bite patients who had attended the ARC, M. G. Hospital, Jodhpur. Results: During the study period 6337 patients had attended the anti rabies clinic. Out of which 3282 (51.79%) were males, 880 (13.89%) were females, 1595 (25.17%) were male Children and 580 (9.15%) were female children. In the study category I, II and category III bites cases were 19 (0.29%), 1877 (29.62%) and 4441 (70%) respectively. In the study majority of the victims 5957 (94.0%) were bitten by dogs, followed by cats 118 (1.86%). Conclusion: In the study majority of the animal bite victims were adult males. The most common biting animal was dog.*

### Introduction

Worldwide, more than 55,000 people<sup>[1]</sup> die of rabies every year. 40% of people who are bitten by suspect rabid animals are children under 15 years of age. Dogs are the source of 99% of human rabies deaths<sup>[1,2,3]</sup>. Rabies cases are not rare in Jodhpur. Jodhpur is situated in the North-Western part of Rajasthan. Jodhpur has an overall population of about 3.685 Million (Census-2011) and a literacy Rate of 67 %.

### Objectives:

#### The present study was undertaken:-

1. To determine the age and sex wise distribution of animal bite cases.
2. To find out the distribution of victims on the basis of type of animal exposure and site of bite wounds

### Study Period:

The present study was conducted from 1<sup>st</sup> January 2012 to 31<sup>st</sup> December 2012.

### Study Subjects:

The animal bite patients attending the Anti Rabies Clinic at M. G. Hospital, Jodhpur.

### Study Design:

The present study is a Hospital based retrospective study, carried out on the basis of records of the animal bite victims from anti rabies clinic.

### Materials and Method:

The present study was carried out by detailed examination of the records of animal bite patients who had attended the ARC, M. G. Hospital, Jodhpur.

### Results:

During the study period 6337 patients had attended the anti rabies clinic. Out of which 3282 (51.79%) were males, 880 (13.89%) were females, 1595 (25.17%) were male Children and 580 (9.15%) were female children. In the study category I, II and category III bites cases were 19 (0.29%), 1877 (29.62%) and 4441 (70%) respectively. In the study majority of the victims 5957 (94.0%) were bitten by dogs, followed by cats 118 (1.86%).

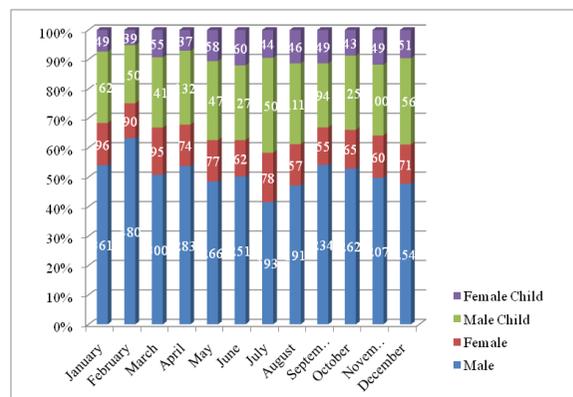
**Table No. 1**

**Sex wise distribution of animal bite victims**

Month	Male	Female	Male Child	Female Child	Total
January	361	96	162	49	668
February	480	90	150	39	759
March	300	95	141	55	591
April	283	74	132	37	526
May	266	77	147	58	548
June	251	62	127	60	500
July	193	78	150	44	465
August	191	57	111	46	405
September	234	55	94	49	432
October	262	65	125	43	495
November	207	60	100	49	416
December	254	71	156	51	532
Total	3282	880	1595	580	6337

**Figure 1**

**Sex wise distribution of animal bite victims**



**Table No. 2**  
**Sex wise distribution of animal bite victims (%)**

Month	Male %	Female %	Male Children %	Female Children %
January	54.04	14.37	24.25	7.33
February	63.24	11.85	19.76	5.13
March	50.76	16.07	23.85	9.30
April	53.80	14.06	25.09	7.03
May	48.54	14.05	26.82	10.58
June	50.2	12.4	25.4	12
July	41.50	16.77	32.25	9.46
August	47.16	14.07	27.40	11.35
September	54.16	12.73	21.75	11.34
October	52.92	13.13	25.25	8.68
November	49.75	14.42	24.03	11.77
December	47.74	13.34	29.32	9.58
Total	51.79	13.88	25.17	9.15

Table 2 shows that out of the total patients the highest (51.79%) number of the patients were adult males which were followed by the male children (25.17%). Percentage of the female children was the lowest (9.15%)

**Table No. 3**  
**Category wise distribution of animal bite Victims in %**

Month	Cat I %	Cat II%	Cat III%
January	0	12.87	87.12
February	0.26	34.12	65.61
March	0	17.59	82.40
April	0.57	27.18	72.24
May	0.54	26.64	72.81
June	0.8	46.2	53
July	0.43	36.12	63.44
August	0	24.69	75.30
September	0.46	29.16	70.37
October	0	42.02	57.98
November	0.24	40.62	59.13
December	0.37	25.75	73.87
Total	0.29	29.62	70.08

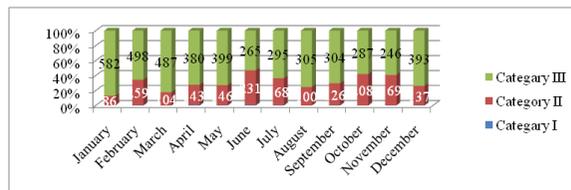
Table No. 3 shows that the maximum number (70.08%) of patients were of category III bites followed by category II bites (29.62%) and category I patients were only 0.29% of the total patients.

**Table No. 4**  
**Category wise distribution of animal bite Victims**

Month	Category I	Category II	Category III	Total
January	0	86	582	668
February	2	259	498	759
March	0	104	487	591
April	3	143	380	526
May	3	146	399	548
June	4	231	265	500
July	2	168	295	465
August	0	100	305	405
September	2	126	304	432

Month	Category I	Category II	Category III	Total
October	0	208	287	495
November	1	169	246	416
December	2	137	393	532
Total	19	1877	4441	6337

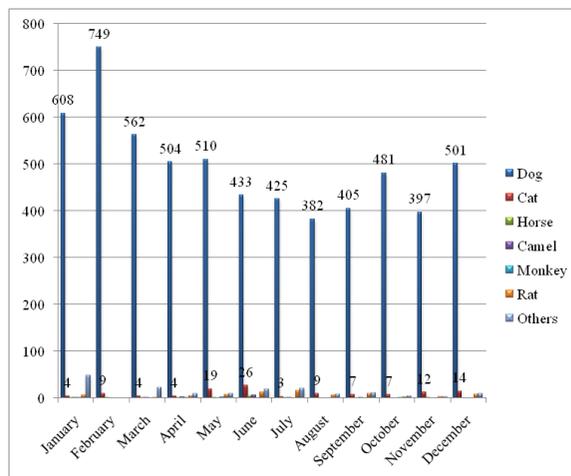
**Figure 2**  
**Category wise distribution of animal bite Victims**



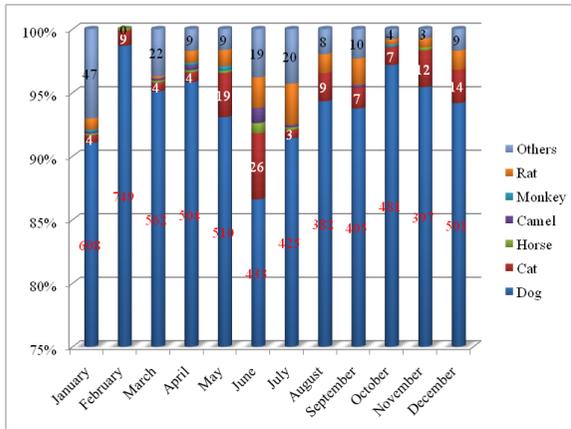
**Table No. 5**  
**Distribution of animal bite victims on the basis of biting animal**

Month	Dog	Cat	Horse	Camel	Monkey	Rat	Others	Total
Jan.	608	4	1	1	1	6	47	668
Feb.	749	9	1	0	0	0	0	759
March	562	4	1	1	0	1	22	591
April	504	4	1	2	1	5	9	526
May	510	19	1	0	2	7	9	548
June	433	26	4	6	0	12	19	500
July	425	3	1	1	0	15	20	465
August	382	9	0	0	0	6	8	405
Sept.	405	7	0	1	0	9	10	432
Oct.	481	7	0	0	1	2	4	495
Nov.	397	12	1	0	0	3	3	416
Dec.	501	14	0	0	0	8	9	532
Total	5957	118	11	12	5	74	160	6337

**Figure 3**  
**Distribution of animal bite victims on the basis of biting animal:**



**Figure 4**  
Distribution of animal bite victims on the basis of biting animal



The figure 4 shows that the most common biting animal is dog followed by the cats.

#### Discussion:

The study shows that maximum number of animal bite cases 3282 (51.79%) were in the adult males. This higher number of animal bite cases in males may be due to the more outdoor activity of males. Similar findings were observed by Dr. Indu D et al<sup>[7]</sup> they showed that 57.7% of the study subjects were males. In a study conducted by T. R. Behera, D. M. Sathapathy et al<sup>[8]</sup> the maximum number (69.9 %) of the cases were in males.

The study shows that Category III bite (exposure) was more common 4441 (70.08%) cases than the Category II bite cases, 1877 (29.61%). Similar findings were observed by Dr. Indu D et al<sup>[7]</sup>, they observed that 57.1% of the cases were Category III bites. Similar observations were also observed by Khokhar et al<sup>[9]</sup>.

The study shows that the most common biting animal is dog 4062 (94.00%) followed by the cat 118(1.86%). Similar findings were observed by Dr. Indu D et al<sup>[7]</sup>, they observed that majority (74.1%) of the cases were bitten by the dogs and that was followed by the cat bites. A study by Renu Bedi et al<sup>[10]</sup> in Ajmer found that dog bites contributed to 90.7% of the animal bits. A similar finding of 84.5% was obtained by T. R. Behera, D. M. Sathapathy et al<sup>[8]</sup>.

#### Conclusion:

In the study majority of the animal bite victims were adult males. The most common biting animal was dog.

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