

Changes in the demographic pattern of animal rabies in the Central province of Sri Lanka

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Rabies is a fatal zoonotic viral disease of public health importance endemic in Sri Lanka. Poor surveillance, underreporting in many developing countries and frequent misdiagnosis of rabies have lead to underestimation of the scale of the disease. To identify the factors which affect for the occurrence and the prevalence of rabies various demographic data can be collected. Among them species, age group, sex and vaccination status of each individual are important.

Brain specimens from 378 animals, viz dogs (*Canis familiaris*), cats (*Felis catus*), cattles(Boss pp.), plam squirrels (*Funambulus palmarum*) and bats (*Rousettus seminudus*) were collected. Details were collected from sample submission forms of rabies suspected cases from rabies diagnostic lab of Pathology division of faculty of Veterinary Medicine and Animal Sciences which were being reported from 01/01/2012 to 31/05/2015. All the samples were subjected to Fluorescent Antibody Test and Sellers' staining. The data were analyzed statistically with chi square test using Minitab 15 with statistical significance set at $p < 0.05$.

Of the samples examined (n=378), total of 74 (19.6%) were found to be positive for Rabies. Among reported cases 83.8% of positive cases were canine in origin while 8.1% of feline and 8.1% of bovine. The number of canine cases is significant comparative to the two other species ($p > 0.05$). With the further analysis it was found that 67.4% of Canine cases were male while 32.6% were female, and it showed a significant number of positive cases had been reported from male animals ($p > 0.05$). With reference to the age groups 45.2% of cases belong to 1-6 months group while 19% for 6 months to 1 year group and 35.7% for more than 1 year group. According to the data significant number of cases have been reported in animals which are younger than 6 months and older than 1 years ($p > 0.05$). With reference to the vaccination history 18% of positive canine cases were from vaccinated animals against rabies virus while 56% were of non vaccinated animals. It concludes that high prevalence is recorded among the non vaccinated group ($p > 0.05$).

This study reveals the prevalence of rabies in domestic animals with a significant percentage in dogs, although it shows a reduction in total number of positive rabies cases in comparison to previous studies. So Based on the findings obtained from this study strengthening the delivery of public health services and that steps to reduce the incidence of rabies can be emphasized.

Key words: Rabies, Animal, Demographic data, Central province