

### **Knowledge on dog ownership and rabies prevention among Grade 10 students in the Jaffna Educational Zone**

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**Background and objective:** Rabies is a fatal zoonotic disease. The main reservoirs for rabies in Sri Lanka are dogs, cats, cattle, rats, and mongoose but our research focuses solely on dogs due to their high population density in Jaffna. This study aims to assess the knowledge on dog ownership, practices followed in rearing dogs, and the socio-demographic and economic factors influencing dog ownership and knowledge on rabies prevention among Grade 10 students in Jaffna Educational Division.

**Methods:** A school-based descriptive cross-sectional study was conducted among 796 Grade 10 students from 23 schools in the Jaffna Educational Division using cluster sampling. A self-administered questionnaire was used to collect data and chi square test was used to assess the influencing factors. Ethics approval was obtained from the Ethics Review Committee, Faculty of Medicine, Jaffna.

**Results:** Among 796 participants, 586 were dog owners. In the sample, most (45.4%) had average knowledge. Good and poor knowledge category were 14.4% and 40.2%, respectively. Male students (60.9%), type 1AB school students (92.2%) and those whose mothers (72.2%) or fathers (71.3%) had studied beyond O/L were more likely to have good knowledge than others. There was a significant association between gender, school type, mother's and father's educational status, occupation of the parents and the knowledge level at a p value of less than 0.05. Knowledge was not significantly associated with religion ( $p=0.213$ ) or dog ownership.

**Conclusion and recommendations:** According to the results of this study, awareness programmes should be targeted to type 2 schools. Proper health education on post-exposure immunization, registration of dogs and routine vaccination should be highlighted as some of the students were unaware of the importance of these practices.

**Keywords:** Rabies, School students, Dog ownership, Jaffna