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ASSESSMENT OF KNOWLEDGE AND DESCRIPTION OF ATTITUDES AND PRACTICES ON CONTROL OF RABIES AMONG G.C.E O/L STUDENTS ON UNIVERSITY COMMUNITY PROJECT AREA.

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Abstract

Introduction: Human health is closely related to animal health. Rabies is a 100% zoonotic and vaccine-preventable viral disease. It is usually transmitted to humans through bites or scratches through the saliva of infected animals. This study was aimed to assess the knowledge and describe the attitudes and practices on control of rabies among G.C.E O/L students in the University Community Project Area (UCPA).

Method: An institutional-based cross-sectional descriptive study was conducted among 45 students of grade-11 classes attached to four schools in the UCPA from August 2020 to August 2021 with complete enumeration. A validated self-administered questionnaire was used as a data collection instrument. Statistical software (SPSS 21.0) was used to analyze the data, and p-value < 0.05 was considered significant for all analyses. Ethical approval was obtained from the Ethical Review Committee, Faculty of Health-Care Sciences (FHCS), Eastern University, Sri Lanka (EUSL).

Results: Most (73.3%) of the respondents were of good knowledge and good attitudes of immediate medical attention following the animal bite (95.6%), registered their own animal (93.3%) vaccination of animals (95.6%), and euthanized stray dogs (93.3%). Regarding practices on rabies control, most respondents (71.1%) were more willing to consult a doctor (Western medicine) after being bitten by an animal than to see a traditional healer (28.9%). After being suspected of being bitten, 97.8% of respondents would wash the wound with soap and water before going to the hospital.

Conclusion: Results of this investigation show that the participants have good knowledge, very good attitudes, and good practices in rabies control.

Keywords: Rabies, Knowledge, Attitude, Practice, Batticaloa, Sri Lanka

Introduction: Human health is highly linked to animal health. More than half of the agents known to infect humans were reported to associate with animals (Dabuma, Kabeta, & Mengist, 2017). Rabies is a zoonotic viral disease that is 100% vaccine-preventable and 100% fatal. It is usually spread to humans by infected animal saliva through bites or scratches. Dogs are the source of the vast majority of human rabies deaths. Rabies virus belongs to the order Mononegaviruses, viruses with a non-segmented, negative-stranded RNA genome. Within this group, viruses with a distinct "bullet" shape are classified in the Rhabdoviridae family, including at least three genera of animal viruses.

The virus has a marked affinity for nervous tissue and salivary glands. The rabies virus infects the central nervous system and subsequently causes disease in the brain, resulting in death. It exists in two major epidemiological settings, such as urban rabies is most frequently transmitted to humans through rabid dogs and cats, and wild rabies is maintained in the wild by a host of animal reservoirs such as foxes, skunks, jackals, mongooses, and bats. The risk of getting rabies is more significant if a person is bitten multiple times or if the bites close to or on the head. Human rabies is almost invariably fatal if post-exposure prophylaxis is not administered before the onset of clinical signs and symptoms (Sor, Higuchi, Abul, Sarker, & Hamajima, 2018).

Interrupting transmission is feasible through vaccination of dogs and prevention of dog bites. An immediate, thorough wound is washing with soap and water after contact with a suspect rabid animal is crucial and can save lives (WHO, 2017) (Guadu, Shite, Chanie, Bogale, & Fentahun, 2014). World Health Organization (WHO) leads the collective "United against Rabies" to drive progress towards "Zero human rabies deaths by 2030."

Although many studies have shown that Sri Lanka lacks awareness of rabies, rabies is still endemic. The purpose of this study is to evaluate the knowledge and describe the attitudes and practices of rabies control among G.C.E O/L students in the university community project area to understand the challenges facing in the quest to eradicate rabies from Sri Lanka.

Method: An institutional-based cross-sectional descriptive study was conducted among 45 students of grade-11 attached to four schools in the

university community project area (UCPA) from August 2020 to August 2021. Complete enumeration was performed to recruit the participants. A validated self-administered questionnaire was used as a data collection instrument.

The validity and reliability of the questionnaire were checked, and five experts gave validation concerning the study topic (A score of more than 7.0 was considered valid). The reliability was checked with the pilot test. This questionnaire included four sections such as Section 1 - Demographic Data (5 questions), Section 2 - Knowledge on control of rabies (11 questions), Section 3 - Attitudes on control of rabies (7 questions), and Section 4 - Practices on control of rabies (5 questions).

The score was given according to the correct answer; one correct answer brought 1 point, while one wrong answer brought zero. Moreover, knowledge, attitude, and practices were classified as follows: Very good (76-100%), good (45-75%), and poor (0-44%). Statistical software (SPSS 21.0) was used to analyze the data, and p-value < 0.05 was considered significant for all analyses. Ethical approval was obtained from the Ethical Review Committee, Faculty of Health - Care Sciences, Eastern University, Sri Lanka.

Results and Discussion: Most of the participants were females (68.9%). Most of the respondents were of good knowledge (73.3%). Around three-quarters of female (74.2%) and male (71.5%) respondents had good knowledge, which mimics the results of a cross-sectional study conducted by the National Hospital, Sri Lanka (NHSL) in the outpatient service which showed that 75% of the subjects had good knowledge about rabies.

Most respondents had good attitudes of immediate medical attention following the animal bite (95.6%), registered their own animal (93.3%), vaccination of animals (95.6%), and euthanized stray dogs (93.3%). In comparison, one-fifth of subjects had a poor attitude towards impending birth control of their animals (20%) and euthanizing of their symptomatic dogs, similar to rabies (37.8%). The findings of a community-based cross-sectional study conducted in the Kandy District of Sri Lanka also revealed more or less the same results of this present study.

Regarding practices on rabies control, most respondents (71.1%) were more willing to consult a doctor (Western medicine) after being bitten by an animal than to see a traditional healer (28.9%). After being suspected of being

bitten, 97.8% of respondents said they would wash the wound with soap and water before going to the hospital. The present study participants, following a very good practice compared to a cross-sectional study conducted in the Indian state of Tamil Nadu, showed that 73.8% felt it is must be washed the bite site with soap and water.

Conclusion: The majority of the participants had good knowledge. Moreover, females had good knowledge of Rabies than males. Most of the participants have received knowledge about Rabies from the health officials. Almost all respondents had very good attitudes on proper vaccination of an animal and impending birth control to stray animals. Most respondents had good practice to seek Western medicine after an animal bite and had vaccinated their pets, especially dogs.

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