(171)

Impact of Snake Bites on the People: A Case Study in Galenbindunuwewa Divisional Secretariat Division, Sri Lanka

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Abstract

Anurdhapura district of Sri Lanka has ranked top among the snake bite prone areas. Objective of this study was to determine the impact of snake bites on the people of Galenbindunuwewa Divisional Secretariat division in Anuradhapura district. Secondary data on snakebites collected from Galenbindunuwewa and Huruluwewa hospitals were used to identify the prevailing number of people affected by the snakebites, for the period of 2015, 2016 and up to October 2017. A questionnaire survey was carried out using 82 affected people to identify the species of snakes, vulnerable areas, place and time of injury and the body parts injured from the bite. Kernel density estimation was used as an analytical tool to identify the snake bite hotspots of the area. ArcGIS 10.1 and Microsoft Excel analytical tool were interactively used for data analysis. The highest concentrations of snake bites were recorded from Kokawewa, Yakkala, Ilukbadayagama and Ellawewa Grama Niladhari divisions. The results of the survey revealed that 69% of snake bites had been taken place in home gardens and around paddy fields. 95% of snake bite victims have been affected in agricultural areas. Among the identified 8 snake species, 44% of people had been affected by Hypnale hypnale, 24% by Daboia russelii, 12% by Naja naja, 7% by Boiga triginata, 6% by Bungarus caeruleus and 7% by other species. More than 75% of snake bites have been taken place between 18.00 h-19.00 h and the body parts below the knee level were heavily injured. More than 90% of the victims were between the age limit of 30-50. They belonged to the category of active work force of the country. As the lives of the people of these areas are woven around the agricultural activities, much concern should be given on the snake bite incidents. If not there is a high possibility to be malfunction in the dry zone of the country in the future.

Keywords: Impact of snake bites, Hotspots of snake bites