

## **ORAL PRESENTATIONS**

## [ID-O#055] Epidemiology and risk factors of snake bites in the paediatric age group: A multi-provincial study in Sri Lanka.

 $Kavinda\, Dayasiri^a, Dihen\, Caldera^a, Nayani\, Suraweera^b, V\ \, Thadchanamoorthy^c, Maduwanthi\, Hettiarachchi^d, Thanura\, Denipitiya^c\, and\, Sudarshana\, Bandara^f$ 

"Faculty of Medicine, University of Kelaniya; "Rajarata University of Sri Lanka; "Faculty of Healthcare Sciences, Eastern University of Sri Lanka; "Peradeniya Teaching Hospital, Sri Lanka; "District General Hospital Hambanthota Sri Lanka; "Base Hospital Medirigiriya Sri Lanka

**Background**: Snake bites in children are a potentially serious yet preventable environmental hazard in most parts of Sri Lanka. This study aimed to assess the patterns of paediatric snake bites across six provinces of Sri Lanka.

**Methods**: This study included all children who presented with snake bites over past 3 years (2021–2024) across seven referral hospitals in six provinces of Sri Lanka (North Central, Central, Eastern, Western, Southern, Northern). Case-control study for risk factors was conducted in the two referral hospitals of North Central province. Data were collected by trained medical graduates.

**Results**: The study recruited 710 children with snake bites and mean age was 12 years (range 0.5–18 years). Male children (419, 59.1%) outnumbered female children (p>0.05). The snake was confirmed in 398 children (56.1%); highly venomous (178,

44.7%), moderately venomous (104, 26.1%), mildly

venomous (7, 1.8%) and non-venomous (109, 27.4%). Transfer rate was 26.3%. The majority of venomous snake bites were due to Sri Lankan hump- nosed pit viper (96, 54.5%), Russel's viper (32, 17.9%)

followed by Krait (25, 14.1%), cobra (11, 6.3%), and sea snake bites (2, 1.1%). Harmful first-aids included applying a tight tourniquet (33.3%), and lime over bite-site (14.8%). Twenty children were transferred to intensive care units. Potential risk factors for snake bites were not wearing protective foot wear outdoors (p<0.05), farming (p<0.05), not carrying a torchlight in the dark (p<0.05) and detection of snakes in home garden (p<0.001).

**Conclusion**: Interventions to enhance snake identification and avoid harmful first-aids should be evaluated in the light of observations of this study. Community based educational interventions to encourage snake-bite prevention practices and ensure home environmental safety should be studied as cost-effective measures of reducing snake-bite burden in children.