

ORAL PRESENTATIONS

[ID-O#039] Exposure to repeated snakebites in a cohort of snakebite patients in rural Sri Lanka

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Background: Although repeated exposure to snakebites is possible in areas with a high snakebite burden, it is unreported.

Objective: We aimed to describe the prevalence and factors associated with repeat snakebite in a cohort of snakebite patients in rural Sri Lanka.

Methods: The Anuradhapura Snakebite Cohort prospectively records all confirmed snakebites admitted to a tertiary hospital in rural Sri Lanka. In addition to the present snakebite, details of previous snakebites, if any, were recorded. We extracted all snakebites in the cohort from May 2017 to April 2024. Those with a previous snakebite were compared to those with no past snakebite. Univariate analysis, estimation of odd ratios (OR) with 95% confidence intervals (CI) and Multivariate Logistic Regression (MLR) were done in SPSS (version 25).

Results: Of the 5,355 patients recruited to the cohort [males, 3,428 (64%); farmers, 2,991 (56%)], 621(12%) had repeated snakebites [males, 468 (75%);farmers, 470 (76%)]. There were 566 patients bitten once, 49 bitten twice and nine bitten three or more times previously, accounting for 698 repeat snakebite events. Those with a higher risk of repeat snakebites were males (OR: 1.8; 95% CI, 1.5-2.2), farmers (OR:2.5; 95% CI, 2.1-3.1), aged >50 years (OR: 2.5; 3.1-3.0) and educated up to grade 10 or less in school (OR:1.6; 95% CI, 1.4-1.9) compared to females, non- farmers, those aged 50 or less and those educated above grade 10, respectively. MLR showed that being male, a farmer, and aged >50 years independently associated with repeated snakebites. The median time between the present and immediate previous snakebite was 10 years (Interquartile range, 4-20 y). There were no individuals who regularly handled or rescued snakes among repeat snakebite patients.

Conclusion: Repeat exposure to snakebites is common and frequent in rural Sri Lanka, with males, farmers, and individuals aged >50 years at higher risk.