[ID-P#034] Patterns of snakebite and response of patients during the COVID-19 pandemic and the post-pandemic economic crisis in rural Sri Lanka

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Background: We aimed to describe the patterns of snakebite and victim's response to snakebite during the COVID-19 pandemic and the post-pandemic economic crisis, compared to pre-pandemic snakebite in rural Sri Lanka.

Method: Anuradhapura Snakebite Cohort prospectively records pre-hospital and clinical data on all confirmed snakebites admitted to a tertiary care centre in rural Sri Lanka. We extracted data for three time periods from the cohort: (1) May 2018 to October 2019 (Pre-COVID), (2) May 2020 to October
2021 (COVID), and (3) May 2022 to October 2023 (Post-COVID), and compared.

Results: There were 1141, 1312 and 1375 patients in the Pre-COVID, COVID and Post-COVID groups, with similardemographics. Authenticated Hypnalehypnale bites increased during COVID (454/784,57.9%) and post-COVID (501/849,59.1%) compared to pre-COVID (234/653,35.8%), while authenticated Daboia russelii bites decreased during COVID (210/784,26.8%) and post-COVID (205/848,24.1%)
compared to pre-COVID (259/653,39.7%) (z-test, p<0.0001). Proportion of home garden bites increased during post-COVID (561/1375,40.8%) compared to pre-COVID (378/1141,33.1%) and COVID (416/1312,31.7%) (z-test, p<0.0001). Bite-
to-first hospital admission time, bite-to-first dose of antivenom, and duration of hospitalisation were not different between groups. The proportion of patients who intentionally delayed hospital admission was greater in post-COVID (355/1375,25.8%) compared to groups pre-COVID (200/1141,17.5%) and COVID (207/1312,15.8%). The proportion who sought native treatment before hospital admission was greater post-COVID (212/1375,15.4%) compared to pre-COVID (63/1141,5.5%) and during COVID (94/1312,7.2%) (z-test, p<0.0001), as was the application of tourniquets as first aid post-COVID (420/1375,30.5%) compared to pre-COVID (267/1141,23.4%) and COVID (292/1312,22.3%)
(z-test, p<0.0001). Patients leaving the hospital against medical advice increased during COVID (53/1312,4.0%) and post-COVID (79/1375,5.7%),
compared to pre-COVID (34/1141,3.0%) (z-test, p<0.0001).

Conclusion: H. hypnale bites increased compared to *D. russelii* during COVID and post-COVID. Post- COVID snakebite patients delayed seeking hospital treatment, opting for pre-hospital native treatment and first aid, and leaving hospital against medical advice.