# PATTERNS AND OUTCOMES OF ACUTE POISONING IN THE SPECIALIZED TOXICOLOGY UNIT IN SRI LANKA

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**Objective:** This study was performed to investigate the pattern of presentation of cases of acute poisoning cases following an establishment of the specialized toxicology unit in Sri Lanka after eight years.

**Method:** A prospective cohort study was established in the dedicated toxicology unit with intensive care facility in Sri Lanka, Teaching hospital Peradeniya from November 2006. Demographic and clinical data were collected from all self-poisoning patients presenting to this until discharge or death from November 2006 until December 2014.

**Results:** A total of 6938 patients with acute self-poisoning were presented over 8 years of study period (direct admissions, n=3470 (50%) and transfers, n=3468 (50%). This cohort consist of young economically active adults [median age =24 years (IQR=35 -19)]. Females were younger than males [median age 21 years (IQR =30-18) vs. 28 (IQR=42-21)]. Equal proportions of male (49.8%) and female (50.2%) were admitted. Deliberate self-poisoning was common among young patients with highest number of cases presenting among 15-29 year age band. Medications were the most common poisons ingested (49.2%), particularly by females (males 16.6%, females 33.1 %) while organophosphorus compounds (OPs) accounted for the second most cause of poisoning (12.5%). A total of 285 patients died, giving a case fatality of 4.1%, which was higher among males (74%) than in females (26%). Most of these deaths occurred within the period of 2006 to 2011 due to paraquat (36.8 %) and OPs (26.7%). The choice of agent for poisoning varied with age and gender. Overall 6.8% of patients treated in the dedicated toxicology ICU unit during the study period and 343 patients were intubated; most were admitted following OP poisonings (52.8%). From 2011 onwards paraquat admissions declined but the total poisoning admissions increased significantly (Figure 1) due to increase in transfers by approximately 10% which remained constant from 2011 onward. However, no significant different (p=0.18) in proportion of poison types by each year (for example 48.8% and 52.3% medicine admissions in 2011 and 2012).

**Conclusion:** Significant increase in poisoning admissions from 2011 may be due to popularization of this specialized ward following the research publications and good patient management after five years of the initiation of the facility. However, the total fatality was low as poisoning with medicines has much lower fatality than pesticide poisoning. Dedicated ward for managing self-poisoning and availability of ICU facility might have reduced the overall mortality together reduction in number of admission following lethal pesticide bans.