



OP22

Clinical profile and prevalence of poisoning patients presenting to the emergency department of a teaching hospital in Kerala: A retrospective comparative study before and during Covid-19 pandemic.

LINU SEKHAR¹, ROOPASREE SIVAM²

¹*Department of Emergency Medicine, Sree Gokulam Medical College & Research Foundation, Trivandrum, India*

²*Department of Emergency Medicine, G G Hospital, Trivandrum, India*

Aims & Objectives: Limited data exist on the incidence and characteristics of patients presenting with poisoning in Indian Emergency Departments (ED) during the covid-19 pandemic. Hence, we aim to explore the impact of the Covid-19 pandemic on poisoning cases presented to the ED.

Methodology: This cross-sectional retrospective study was conducted on poisoning patients presenting to ED during the pandemic period [(April 1, 2020 – October 30, 2020) (Period 2)], and a matching period before the pandemic [(September 1, 2019 – March 31, 2020) (Period 1)]. The rate prevalence and clinical profile were compared between periods 1&2 using appropriate statistical tests.

Results: A total of 111(period 1 = 57, period 2 = 54) cases were analyzed. Poisoning prevalence rates had slightly decreased by 2.7% during the pandemic [48.6%] in comparison to before the pandemic [51.3%] ($p=0.3$). Females were predominant in both periods, and the mean age was 32.5 years. We observed that, among the patients below 24 years there was an increase in the incidence of poisoning during the pandemic. The male-to-female ratio increased from 0.76 in period 1 to 0.86 in period 2. The predominant patient age group (57%) was 15-34 years. 36.9% ($n=41$) patients consumed multiple poisons, 19.8% ($n=22$) consumed paracetamol, and 14.4% ($n=16$) patients consumed psychiatric medications. Before the pandemic, 27.02% ($n=30$) patients presented within 3 hours of ingestion, and 21.6% ($n=24$) presented after 3 hours of ingestion ($p=0.12$). A significant delay in the arrival of poisoning cases during the pandemic with increased hospital admission ($p=0.03$) was observed. The majority of the cases were admitted to the Intensive Care Unit and one death was recorded. The most common co-morbidities observed among the patients were psychiatric illness (36%) followed by thyroid dysfunction (11%).

Conclusions: This is the first Indian study that describes the incidence of poisoning cases and their pattern during the covid-19 pandemic period. A change in the incidence pattern was observed but not statistically significant. The covid-19 pandemic reformed the usual intoxication pattern of the cases presenting to ED with a higher incidence of multiple drugs and antipsychotic toxicity. A higher incidence of poisoning events was observed below the age group of 24 years during the pandemic.