

## ABSTRACT

**Background:** If a drug is ingested or administered as the quantity greater than recommended or generally practiced, it is known as drug overdose or drug poisoning. Recently, deliberate self poisoning using medicinal drugs is becoming popular in both urban and rural areas of Sri Lanka.

**Objectives:** To describe the epidemiology and clinical manifestations following drug overdoses in adults and children in the region of Ratnapura district.

**Methods:** A prospective clinical study was conducted in Teaching Hospital Ratnapura over one year commencing from September 2018.

**Results:** There were 212 (22%) patients with drug overdose from which adults were 202 (95.3%) and paediatric overdoses were 10 (4.7%). Most were young females (128; 60%). Commonly affected age group was 11-30 years (164;77%). Majority of people were unemployed (148;70%) and next 7% was garment workers (n=15). The commonest overdosing agent was paracetamol (114: 53.8%) and next anti-epileptic drugs (16;7.5%) and psychiatric drugs (14;6.6%). Most patients (102; 48%) were admitted to hospital within 1-4 hour of the ingestion (median 2 hrs and IQR 2-4 hrs) from Ratnapura (62; 29%) then from Kuruvita (21; 10%), next from Gallella (12; 6%). In whole group, smokers were 43 (20.3%) and alcoholics were 42 (19.8%). Most of patients (86; 40.6%) were treated at hospital for 2 days (mean 2.79 days, SD 1.37, IQR 2-3 days). Decontamination was done for 76% (n=161) of patients.

Gastrointestinal symptoms including nausea and vomiting occurred prominently and they were 42% (n=89) and 53 % (n=113) respectively. Epigastric pain was observed in 40 (19%), vertigo in 28 (13%) and confusion in 11 (5%). Serious complications were detected in 15 (7%) cases from which ECG changes 7 (3.3%), respiratory failure 5 (2.4%), acute liver failure 4 (1.9%), acute kidney injury 3 (1.4%) and hypotension 3 (1.4%). Six (2.8%) were treated at intensive care unit from which 5 (2.4%) were intubated. There were 2 (0.9%) deaths and the case fatality rate of drug overdose was 0.9%.

**Conclusions and recommendation:** Drug overdoses are common in adults in intentional type. Young females are mostly affected, and the commonest overdosing agent is paracetamol. In this contest, younger people should be educated and if possible over-the counter usage of paracetamol should be controlled in the country.

**Key words:** overdose; poisoning; drugs; paracetamol; Sri Lanka