The annual number of cases of paracetamol poisoning in Australia has increased by 44.3% since 2007-08, and the number of cases of toxic liver disease due to those overdoses ballooned by 108% over the same period, according to the authors of research published today in the Medical Journal of Australia.

The researchers, led by Dr Rose Cairns, Director of Research at the NSW Poisons Information Centre and the University of Sydney, wrote that public health measures that restrict the availability of paracetamol, such as reducing non-prescription pack sizes, are needed to stem the increasing number of paracetamol overdoses.

After analysing data on paracetamol-related exposures, hospital admissions, and deaths from the Australian Institute of Health and Welfare National Hospital Morbidity Database (NHMD; 2007–08 to 2016–17), the NSW Poisons Information Centre (NSWPIC; 2004–2017), and the National Coronial Information System (NCIS; 2007–08 to 2016–17), Cairns and colleagues found that:

- there were 95,668 admissions with paracetamol poisoning diagnoses (2007–08 to 2016–17);
- the annual number of cases increased by 44.3% during the study period (3.8% per year; 95% CI, 3.2–4.6%);
- toxic liver disease was documented for 1,816 of these patients; the annual number increased by 108% during the study period (7.7% per year; 95% CI, 6.0–9.5%);
- most paracetamol overdoses involved women (about 70%);
- the NSWPIC database included 22,997 reports of intentional overdose with paracetamol (2004–2017);
- the annual number of intentional overdoses increased by 77.0% during the study period (3.3% per year; 95% CI, 2.5–4.2%);
- the median number of tablets taken increased from 15 in 2004 to 20 in 2017;
- modified release paracetamol ingestion report numbers increased 38% per year between 2004 and 2017 (95% CI, 30–47%);
- 126 in-hospital deaths were recorded in the NHMD, and 205 deaths (in-hospital and out of hospital) in the NCIS, with no temporal trends;
- the median age of patients in the NSWPIC database was 18 years. The median age in cases of fatal overdoses recorded in the NCIS was higher (53 years), perhaps reflecting greater suicidal intent in overdoses by older people or the presence of comorbid conditions that increase the risk of liver injury.

“Access restrictions, including reduced pack sizes, could reduce the harm caused by paracetamol overdoses in Australia, and should be considered, together with other policy changes, to curb this growing problem,” Cairns and colleagues concluded.

NSW Poisons Information Hotline: 13 11 26

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