INCREASED SELF-POISONING IN YOUNG AUSTRALIANS: WHY, 2KS?

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Objectives: Self-harm is a major public health problem, with adolescents particularly at high risk of self-harm behaviours. Non-fatal self-harm puts individuals at higher risk of completed suicide later in life. Self-poisoning is a common method of self-harm, accounting for 80% of self-harm hospitalisations in Australia[1]. This study aims to characterise Australian trends in fatal and non-fatal self-poisonings in children and adolescents 5-19 years old.

Methods: The New South Wales Poisons Information Centre (NSWPIC) is Australia’s largest poisons centre, taking approximately 50% of the nation’s calls. The NSWPIC database was retrospectively reviewed for cases of intentional poisoning in the ‘Child’ (5-14 years) and ‘Adolescent’ (15-19 years) age categories, 2004-2015. To examine fatal self-poisonings, the National Coronial Information System (NCIS, containing record of all reportable deaths in Australia) was queried for poisoning deaths in people aged 5-19, 2000-2015. Cases were manually reviewed to exclude accidental poisonings, assaults, and deaths where the primary cause was non-toxicological.

Results: In the 12 year study period the NSWPIC database recorded 6419 intentional poisonings in the Child age category, and 22,153 intentional poisonings in the Adolescent category. There has been a 60% increase in child/adolescent self-poisoning cases since 2011. The steepest increase was in 12-15 year olds (63% increase). Females outnumbered males 2.8:1. There appears to be a cohort effect, with increased self-poisoning by those born between 1997 and 2001. Substances most commonly used were paracetamol, ibuprofen, fluoxetine, quetiapine and sertraline. Poisonings with non-narcotic analgesics and psychotropics have increased by 41% and 75%, respectively, 2004-2015. There were 420 cases of fatal self-poisoning in people aged 5-19 (66% male), 2000-2015. There was a decline in deaths over this period. The most common agents involved in fatalities were benzodiazepines, carbon monoxide, heroin, morphine and methadone.

Conclusion: There has been a worrying increase in child/adolescent self-poisoning calls to NSWPIC, particularly over the past 4 years in people aged 12-15. Possible reasons for this increase include increasing prescribing of psychotropics to young people, increased internet and social media use and earlier pubertal onset. This has not corresponded with an increase in fatal self-poisoning, perhaps due to the low toxicity of agents most commonly involved. Statistically, these people are at increased risk of suicide later in life. Therefore, this could identify a generation with increasing mental health problems, and foretell future increases in Australian suicide rates.