

## NOVEL PSYCHOACTIVE SUBSTANCES AND MENTAL HEALTH: CHANGES IN DRUG RELATED PSYCHIATRIC ADMISSIONS ASSOCIATED WITH THE ARRIVAL AND DEPARTURE OF HEADSHOPS

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**Introduction:** Novel psychoactive substance (NPS) use can cause psychiatric symptoms, with possible hospitalisation. Headshops constituted the dominant source of NPS in Ireland. Headshops increased greatly in number from late 2009. Legislation was introduced in May and August 2010 which resulted in cessation of NPS selling by headshops. We examined the impact of headshops on drug related psychiatric admissions.

**Design and Methods:** We examined a national database of psychiatric admissions, identifying drug related admissions (ICD-10, F11 to F19 codes) among people aged 18-34 years from 2008 to 2012, also exploring subgroups by age and gender. JoinPoint regression was used to identify changes in the crude monthly admission rate.

**Results:** There were 30,647 psychiatric admissions, of which 12.0% were drug related. Examination of the monthly rate of all drug related admissions indicated a single joinpoint at July 2010. The monthly per cent change (MPC) prior to this was 1.0 (95% CI 0.4 to 1.6). After July 2010 the MPC was -0.5 (95% CI -1.1 to 0.2). The slopes pre and post July 2010 were significantly different ( $p=0.002$ ). Among males aged 18-24 years, two joinpoints were identified. The slope increased in January 2010 and then became negative in May 2010. Psychiatric admission rates for other diagnoses were stable.

**Discussions and Conclusions:** The expansion of headshops was associated with increasing drug related psychiatric admissions. The introduction of legislation targeting NPS sales in headshops coincided with a reduction in admissions, changes being most evident among young males, these being the heaviest NPS users.

**Implications for Policy:** The legislation targeting headshops was introduced in the hope that it would reduce the harm generated by NPS. While causality cannot be confirmed, our findings indicate that the trend of increasing drug related psychiatric admissions arrested and reversed following these legislative changes.

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