International trends over time in the prevalence of cannabis and alcohol use: what is the evidence for the closing of the gender gap?

Tim Slade, Cath Chapman, Wendy Swift, Zoe Tonks, Maree Teesson
NHMRC Centre of Research Excellence in Mental Health and Substance Use, National Drug and Alcohol Research Centre, UNSW Australia

Cannabis and Alcohol Use

Traditionally men report higher rates of alcohol, cannabis and other substance use than women. This extends to other measures like rates of substance use disorders in the population. This finding has been reported over many years in many countries.

Are population patterns changing?

There is emerging evidence to suggest that this pattern is changing. Women may be ‘catching up’ to their male counterparts in terms of alcohol and cannabis use and related harms. If patterns of substance use have changed we may need to reframe our approach to research, prevention and treatment.

The aim of this study

The present study aimed to systematically summarise the published literature on sex differences in key indicators of alcohol and cannabis epidemiology.

How did we locate studies?

We used three search strategies in Medline, Embase and PsycINFO to find nationally representative population studies that:

1. Explicitly examined cohort effects
2. Explicitly examined gender effects
3. Reported key indicators by sex and age (as a proxy for birth cohort)

Where did estimates come from?

We ranked studies according to levels of evidence, coded all reported outcomes in all age groups and mapped estimates onto five year birth cohorts from 1895 to 1995. We computed a common metric – a male to female ratio in each cohort.

What are key messages?

- Rates of cannabis use remain higher among males than females in many countries
- However, preliminary findings point to a convergence in male to female rates of cannabis use among more recent birth cohorts
- Analyses of the full range of indicators of alcohol related harm are underway, however we found similar trends for rates of alcohol use and heavy episodic (binge) drinking, where male to female ratios are close to one in the most recent birth cohorts
- Further analysis with the present dataset may highlight the way country specific changes in social norms have influenced changes in gender differences in substance use over the last century

Large population studies like this allow us to take a long term, big picture view. In doing so they help to frame our understanding of the changing landscape of substance use and related harms in the population.

The Centre of Research Excellence in Mental Health and Substance Use is funded by the National Health and Medical Research Council. The National Drug and Alcohol Research Centre is supported by funding from the Australian Government under the Substance Misuse Prevention and Service Improvements Grants Fund.