Age, period, and cohort effects on alcohol-related risky behaviours in Australia from 2001 to 2016

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Introduction and Aims: There is mixed evidence regarding whether recent declines in alcohol consumption have led to similar declines in harms. We examine age, period, and birth cohort trends in the prevalence of alcohol-related risky behaviours across Australia and compare these trends between men and women.

Design and Methods: We used cross-sectional survey data from 121,281 people aged 14 years or older who reported consuming alcohol in the past 12 months in the Australian National Drug Strategy Household Survey from 2001 to 2016. We modelled age-period-cohort trends of any risky behaviour undertaken while under the influence of alcohol in the past 12 months using cubic spline models.

Key Findings: Alcohol-related risky behaviours declined during the survey period (2016 vs 2007 Rate Ratio [RR; 95% CI] = 0.78 [0.75-0.83]). Risky behaviours peaked in the 1952 birth cohort (1952 vs 1971 RR = 1.40 [1.28-1.52]), then steadily declined with more recent cohorts (2002 vs 1971 RR = 0.32 [0.26-0.39]). Risky behaviours peaked at age 21 years, followed by steady decline with age. Males were overall twice as likely as females to report risky behaviours (RR = 2.09 [1.87-2.34]), with declining effect size in cohorts born after 1980.

Discussions and Conclusions: Consistent with alcohol consumption trends, alcohol-related risky behaviours have declined generally. Cohort rates had the sharpest decline, but risky behaviours remain most prevalent in young adults. The closing male-female gap suggests the need to develop and integrate alcohol harm minimisation strategies that are as effective for females as they are for males.

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