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# **BMJ Open**Press Release

# Women catching up with men in alcohol consumption and its associated harms

Trend most evident among young adults, international analysis shows

Women are catching up with men in terms of their alcohol consumption and its impact on their health, finds an analysis of the available international evidence, spanning over a century and published in the online journal **BMJ Open**.

The trend, known as 'sex convergence', is most evident among young adults, the findings show.

Historically, men have been far more likely than women to drink alcohol and to drink it in quantities that damage their health, with some figures suggesting up to a 12-fold difference between the sexes. But now evidence is beginning to emerge that suggests this gap is narrowing.

In a bid to quantify this trend over time, the researchers pooled the data from 68 relevant international studies out of a total of 314, all of which had been published between 1980 and 2014. All the studies included explicit regional or national comparisons of men's and women's drinking patterns across at least two time periods.

The studies included data collected between 1948 and 2014, representing people born as far back as 1891, all the way up to 2000, and including a total sample size of more than 4 million. Sixteen of the studies spanned 20 or more years; five spanned 30 or more.

The researchers used the following criteria to inform their data search: lifetime and/or current alcohol misuse or dependence; alcohol related problems; treatment for alcoholissues; and the timeframe of use and the development of related problems.

And they used 11 key indicators of alcohol use and associated harms for their analysis. These were grouped into three broad categories of: any use, which included quantities and frequency; problematic use, which included binge/heavy drinking; and the prevalence of associated harms.

Births were grouped into cohorts—specific timeframes from 1891 to 2000—all of which spanned 5 years, with the exception of the first (1891-1910) and the last (1991-2000).

The pooled data showed that the gap between the sexes consistently narrowed across all three categories of any use, problematic use, and associated harms over time.

Men born between 1891 and 1910 were twice (2.2) as likely as their female peers to drinkalcohol; but this had almost reached parity among those born between 1991 and 2000 (1.1).

The same patterns were evident for problematic use, where the gender gap fell from 3 to 1.2, and for associated harms, where the gender gap fell from 3.6 to 1.3.

After taking account of potential mathematical bias in the calculations, the gender gap fell by 3.2% with each successive five year period of births, but was steepest among those born from 1966 onwards.

The calculation used was not designed to address whether alcohol use is falling among men or rising among women, the researchers caution.

But among the 42 studies that reported some evidence for sex convergence, most indicated that this was driven by greater use of alcohol among women, and 5% of the sex ratios were less than 1, suggesting that women born after 1981 may actually be drinking more than their male peers, say the researchers.

While they did not set out to explain the reasons behind their observed findings, they emphasise that their results "have implications for the framing and targeting of alcohol use prevention and intervention programmes."

And they conclude: "Alcohol use and alcohol use disorders have historically been viewed as a male phenomenon. The present study calls this assumption into question and suggests that young women in particular should be the target of concerted efforts to reduce the impact of substance use and related harms."

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#### **Notes for editors**

Research: Birth cohort trends in the global epidemiology of alcohol use an alcohol related harms in men and women: systematic review and metaregression <a href="http://bmjopen.bmj.com/lookup/doi/10.1136/bmjopen-2016-011827">http://bmjopen.bmj.com/lookup/doi/10.1136/bmjopen-2016-011827</a>

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