The burden of alcohol drinking on co-workers in the Australian workplace

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ABSTRACT

Objective: To estimate the cost of the extra time worked by Australian workers due to their co-workers’ alcohol drinking.

Design, setting and participants: A secondary analysis of data obtained from 1677 Australian workers aged 18 years or older collected as part of a broader national study into the third-party harms of alcohol. Computer-assisted telephone interviews were conducted between October and mid December 2008.

Main outcome measures: Self-reported measures of the time spent covering for other people at work because of their alcohol drinking; measures of other impacts from co-workers’ alcohol drinking; and self-reported income.

Results: Around a third of Australian workers have experienced negative effects from their co-workers’ alcohol drinking, with 3.5% of workers reporting having to work extra hours to cover for others. The total annual cost to the Australian economy of this extra work is estimated to be $453 million.

Conclusions: The results of this study suggest that Australian workers are significantly affected by other people’s alcohol drinking, at considerable cost. This finding highlights the significant cost to the workplace of alcohol consumption, extending previous work which has focused only on alcohol-related absenteeism.

METHODS

Survey data

The Range and Magnitude of Alcohol’s Harm to Others survey is a household-based cross-sectional survey with the broad aim of describing and measuring the adverse effects of alcohol use on people other than the drinker in Australia. Households were selected at random from phone numbers listed in the electronic White Pages residential telephone directory. Minimum sampling quotas were set within geographical strata to ensure national coverage. Interviews were conducted using computer-assisted telephone interviewing (CATI) between October and mid December 2008. The survey and its objectives are described in more detail elsewhere. Ethics approval for the study was granted by the Victorian Department of Human Services Human Research Ethics Committee.

Survey respondents who were currently employed or doing unpaid voluntary work were asked about co-workers whom they "consider[ed] to be a fairly heavy drinker or someone who drinks a lot sometimes" at any time in the past 12 months. Respondents were then asked whether the co-workers’ alcohol drinking had negatively affected them in some way in the past 12 months. Those responding positively were, in turn, asked questions about three specific effects:

- a) Has your ability to do your job been negatively affected?
- b) Were you involved in an accident or close call at work?
- c) Have you had to work extra hours?

Survey weighting

The survey data were weighted according to the inverse of the respondent’s probability of selection into the sample (eg, a respondent in a single-person household has more chance of being selected than someone liv-
The 2006 Australian Census. For this study, the study sample closely approximates the population distribution in employment status, the key variable of interest for this study, the study sample closely approximates the population distribution in the 2006 Australian Census.

Of the 2649 respondents, 1677 were currently employed or doing unpaid voluntary work. Almost a third of the working population reported having a co-worker whom they considered to be a fairly heavy drinker or someone who drinks a lot sometimes (Box). Among these respondents, the mean number of working extra hours because of co-workers’ drinking, and 3.5% (95% CI, 2.6%–4.9%) reported having to work extra hours because of their co-workers’ alcohol drinking.

Among those who had to work extra hours because of co-workers’ alcohol drinking, the burden was considerable. On average, these workers reported having to work extra hours 20.9 times (95% CI, 11.7–30.1 times) in the year, although the modal response was twice. This amounted to an additional 48.1 hours per affected respondent (95% CI, 31.6–64.7 hours) worked in the year; or, to put it another way, a little more than an extra week worked in the year because of co-workers’ alcohol drinking. (One outlier reporting 750 extra hours worked was excluded from the analyses.)

The average hourly pay rate of workers working extra hours because of co-workers’ alcohol drinking was calculated to be $23.80 (95% CI, $22.80–$24.90). Applying the hourly rate for each individual to the number of extra hours he or she worked resulted in an annual mean cost of $1933 (95% CI, $952–$2913) per individual working extra hours. When these costs were weighted up to reflect the Australian working population, the corresponding total annual population cost was $453 million (95% CI, $202–$703 million).

Of the working population in the study, 4.2% (70/1677; 95% CI, 3.2%–5.4%) reported that their ability to do their jobs had been negatively affected by their co-workers’ drinking. On average, respondents reported their work was negatively affected 16.7 times (95% CI, 8.9–24.6 times) in the past 12 months.

The large annual cost we estimated at the population level of $453 million for extra hours worked because of co-workers’ alco-

<table>
<thead>
<tr>
<th>Respondent reported</th>
<th>No.</th>
<th>% (95% CI)</th>
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<tbody>
<tr>
<td>Heavily drinking co-worker(s)</td>
<td>532</td>
<td>31.7% (29.2%–34.4%)</td>
</tr>
<tr>
<td>Negatively affected by co-workers’ drinking</td>
<td>134</td>
<td>8.0% (6.7%–9.6%)</td>
</tr>
<tr>
<td>Worked extra hours because of co-workers’ drinking</td>
<td>59</td>
<td>3.5% (2.6%–4.9%)</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Our findings show that the experience of having a heavily drinking co-worker is common in the Australian workforce, being reported by almost a third of workers in our study, with a smaller proportion reporting that they had been negatively affected by this, including having to work extra hours.

It has been found that, in Australia, young employees and males are more likely to report alcohol-related absenteeism than older workers and females. Perhaps surprisingly then, we found that those working extra hours due to others’ alcohol drinking were significantly more likely to be male and younger (data not shown); however, our numbers were small and the study was not designed for this purpose.

A substantial proportion of respondents who reported being negatively affected by co-workers’ alcohol drinking did not report any of the three specific effects (working extra hours, work performance affected or accidents and close calls). Possibly, this group suffered other effects not measured by the survey (eg, worrying about safety or performance in the workplace because of their heavily drinking co-worker, or experiencing social stresses due to a poor working relationship with their co-worker).

The burden of extra hours worked for heavily drinking colleagues was distributed unequally across the workforce, with less than 5% of the working population working additional hours because of their co-workers’ alcohol drinking, but the cost to affected workers is high. We did not attempt to attribute economic costs to the harms to workers whose work performance was negatively affected by the alcohol drinking of their co-workers or whose health and safety were put at risk through accidents or close calls, although they are likely to be substantial. Therefore, while our estimate of the cost to co-workers of alcohol use by heavily drinking colleagues is large, it may represent the tip of the iceberg.
Our assumption of a standard working week of 37.5 hours for 47 weeks in the year is arbitrary. According to the Australian Bureau of Statistics, the average Australian working week was 33.7 hours in 2009, reflecting the contribution of part-time and shift workers. It is very likely that some of our respondents were also part-time or shift workers, but this was not asked in the survey. We chose to use an approximation to a full working week to render our estimates more conservative.

Income was measured indirectly from the proportion of the household income reported to be contributed by the respondent. Sources other than work may contribute to household income, and this may have inflated our estimate of the hourly wage.

The absolute number of respondents reporting extra hours worked because of a heavily drinking co-worker was low; this is reflected in the wide confidence intervals for our estimates of the population cost.

Finally, the survey used in this study had a slow response rate, raising some doubt as to the generalisability of these findings. However, the response rate is of a similar magnitude to rates for other surveys in Australia — for example, the CATI component of the 2007 National Drug Strategy Household Survey reported a cooperation rate of 39.3%. Moreover, the study is relatively representative of the Australian population across a number of sociodemographic variables (including employment status), and data have been weighted to correct for obvious variations from the population structure.

We feel that, despite its limitations, our study goes some way to accounting for alcohol-related lost productivity in the workplace by taking the new approach of asking co-workers to estimate the amount of extra work they are taking on due to others’ alcohol drinking.

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COMPETING INTERESTS
None identified.

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REFERENCES

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