## Do university students drink more hazardously than their non-student peers?

Kyp Kypri, PhD\*<sup>1</sup> Matthew Cronin, MPhil<sup>2</sup> Craig S. Wright, BSc<sup>2</sup>

<sup>1</sup>School of Medical Practice and Population Health University of Newcastle, Australia and Injury Prevention Research Unit Department of Preventive and Social Medicine University of Otago, New Zealand

> <sup>2</sup>Public Health Intelligence Ministry of Health, New Zealand

\* Author to whom correspondence should be addressed
Dr Kyp Kypri, Senior Lecturer in Population Health, University of Newcastle, Locked
Bag 10, Wallsend NSW 2287, Australia

E-mail:kypri@tpg.com.au

Phone: +61 2 4927 5957

Fax: +61 2 4924 6208

## To the Editor:

University students suffer and inflict high levels of alcohol-related harm.<sup>1 2</sup> Folklore depicts drunkenness as integral to the student experience, and the "drunken student rampage" is staple fare for the news media. Students are perceived to be among the heaviest young drinkers, however, to date there is no empirical data from outside North America to support that perception. We sought to compare university student drinking with that of the same age group in the general population in New Zealand.

We compared scores on the Alcohol Use Disorders Identification Test (AUDIT)<sup>3</sup> attained by 17-24 year-olds in two surveys: an Internet-based survey of University of Otago students in 2002 (n=1,424, 82% response),<sup>4</sup> and the 2002/3 New Zealand Health Survey (NZHS; n=1,406, 72% response), based on a stratified random sample of households and conducted by face-to-face interview.<sup>5</sup> The University of Otago is the third largest (approximately 17,000 students) of eight universities in New Zealand. National aggregate consumption is approximately 9 litres of pure alcohol per person aged 15 years and older, a level similar to that in other English-speaking countries, including the USA.<sup>6</sup>

The differences, particularly among 18-23 year-olds, are startling: students' scores were, on average, 50-60% higher than those of their peers (see figure). Furthermore, the scale is not linear, i.e., the risk indicated by a score of 12 is more than 50% higher than that for a score of 8. The prevalence of hazardous drinking (AUDIT score  $\geq$ 8), was almost twice as high among students (65% versus 36%; 95% CI for the difference: 28%, 35%), while harmful drinking (AUDIT score  $\geq$ 15) was three times as prevalent (31% versus 9%; 95% CI for the difference: 18%, 24%).

## <Figure>

Limitations of the comparison include the fact that some university students would be included in the NZHS figures. Around 15% of 17-24 year-olds in New Zealand were full-time university students in 2002,<sup>7 8</sup> however, it should be noted that the NZHS sampling frame excluded university halls of residence,<sup>5</sup> which house a fair proportion of students in the age group of interest. This feature of the comparison would tend to understate differences in drinking between students and non-students, although probably to a small extent. A second limitation was the difference in survey modality: computerised for the students and face-to-face for the NZHS. This might overstate differences in the estimates, on account of the higher reporting of health risk behaviours in computerised methods versus traditional survey technologies.<sup>9</sup> The net effect of these two factors would be difficult to estimate but is probably small.

Strengths of the comparison include the reliance on a common measure, the similar timing of the surveys, and high response rates. It may be tempting to dismiss this as a problem unique to the University of Otago, an old institution in a part of the country with a heavy drinking tradition. However, at the University of Waikato, a newer institution in a demographically distinct region of the country, researchers arrived at similar estimates of AUDIT scores as recently as 2000.<sup>10</sup>

A recent US study comparing 18-29 year-olds in the general population with college students, showed that monthly heavy drinking (5+ drinks per occasion for men, 4+ for women) was significantly more common in college students than in the general

population sample (24% versus 20%). A diagnosis of alcohol dependence was also significantly more common among college students than among their non-student peers (15% versus 12%).<sup>11</sup>

Is student hazardous drinking a cause for concern? It is, after all, a centuries-old tradition.<sup>12</sup> Anecdote suggests that students moderate their drinking after leaving university, but evidence shows that a sizeable portion does not,<sup>13</sup> and the significantly increased likelihood of acute harms caused by a few years' regular exposure to the intoxicating effects of alcohol should not be dismissed lightly. It behoves health authorities and the education sector to consider the implications of exposing a large proportion of our young to environments that facilitate or encourage hazardous drinking.

These 'alcogenic' environments consist of high concentrations of licensed premises, events that have a primary focus on drinking, intense advertising, promotion, and aggressive pricing by the liquor industry, institutional policies that do not adequately discourage drunkenness, and inadequate enforcement of the intoxication provisions of liquor legislation.

International evidence supports a reduction in liquor outlet densities around campuses, increased prices via taxation, better enforcement of liquor laws, restrictions on advertising and promotion, a minimum purchase age of 20 or 21, stricter controls over the service of alcohol at student events, and screening and brief intervention in student health services.<sup>14 15</sup>

## References

- 1. McGee R, Kypri K. Alcohol-related problems experienced by university students in New Zealand. *Australian and New Zealand Journal of Public Health* 2004;28(4):321-323.
- 2. Langley JD, Kypri K, Stephenson S. Secondhand effects of alcohol use among university students: Computerised survey. *British Medical Journal* 2003;327:1023-4.
- Saunders JB, Aasland OG, Babor TF, de la Fuente JR, Grant M. Development of the Alcohol Use Disorders Identification Test (AUDIT): World Health Organisation Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption--II. Addiction 1993;88(6):791-804.
- Kypri K, Gallagher SJ, Cashell-Smith ML. An Internet survey method for college student drinking research. *Drug and Alcohol Dependence* 2004;76(1):45-53.
- 5. Ministry of Health. A Portrait of Health: Key results of the 2002/03 New Zealand Health Survey. Wellington: Ministry of Health, 2004.
- 6. World Health Organisation. Adult per capita alcohol consumption in litres of pure alcohol per adult (15 years+), 2003.
- 7. Ministry of Education. Tertiary Education Statistics 2002, <u>http://www.minedu.govt.nz</u>, 2004.
- 8. Statistics New Zealand. Demographic Trends. Wellington: Statistics New Zealand, 2004.
- 9. Turner CF, Ku L, Rogers SM, Lindberg LD, Pleck JH, Sonenstein FL. Adolescent sexual behaviour, drug use, and violence: Increased reporting with computer survey technology. *Science* 1998;280(May 8):867-873.
- 10. Adam D, Welch N, Pendlebury C, Merritt K. A Culture of consumption: An investigation into alcohol drinking patterns amongst university students. Hamilton: University of Waikato, 2001:123.
- 11. Dawson DA, Grant BF, Stinson FS, Chou PS. Another look at heavy episodic drinking and alcohol use disorders among college and noncollege youth. *Journal of Studies on Alcohol* 2004;65(4):477-489.
- 12. Pelagius A. De planctu ecclesiae libri duo, 1332.
- 13. Casswell S, Pledger M, Pratap S. Trajectories of drinking from 18 to 26 years: identification and prediction. *Addiction* 2002;97(11):1427-37.
- 14. Babor T, Caetano R., Casswell S., Edwards G, Giesbrecht G., Graham K., et al. *Alcohol: No Ordinary Commodity Research and Public Policy*. Oxford: Oxford University Press, 2003.
- 15. Kypri K, Saunders JB, Williams SM, McGee RO, Langley JD, Cashell-Smith ML, et al. Web-based screening and brief intervention for hazardous drinking: A double-blind randomised controlled trial. *Addiction* 2004;99(11):1410-7.



Mean scores on the Alcohol Use Disorders Identification Test: University of Otago students (2002) versus general population peers (New Zealand Health Survey 2002/3)