

Females' quality of life twice impacted: shame is the over-cost of gender inequality over students binge drinking

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Abstract

Aim: The aim of this study was to explore the role of gender in the impact of alcohol on the health-related quality of life (HRQOL) among student binge drinkers.

Methods: This cross-sectional online survey included 16930 students. We collected sociodemographics, environmental data, and drinking behaviors. We assessed HRQOL using the Alcohol Quality-of-Life scale, which explicitly explores the subjective negative impacts on quality of life one attributes to one's relationship to alcohol. We selected and analyzed the binge drinker population (n=8238) among the survey. Relations between HRQOL and gender were analyzed in bivariate analyses and then in a multivariate regression.

Results: This large cross-sectional study revealed that quality-of-life subjectively attributed to one's relation to alcohol among binge drinkers was more impacted for women than men after adjustments for potential confounding factors (estimate = 0.80; p = 2.91 e-07). Areas impacted among male and females were different. In particular, shame was more reported as an impacted area among women students (mean: 0.44 vs. 0.36, p=2.47 e-07).

Conclusion: Being a female is an independent factor of higher impact of alcohol on HRQOL among binge drinkers. Higher level of shame related to alcohol consumption in this population could impede women from seeking help. Gender specific actions of prevention should be led in student populations.

BACKGROUND

Binge drinking is an alcohol consumption pattern characterized by speed of drinking and large amount of alcohol intake on one occasion. Binge drinking is highly prevalent in the college student population, involving up to 75% of university students. Gender specificities exist in binge drinking, regarding risk factors as well as consequences.

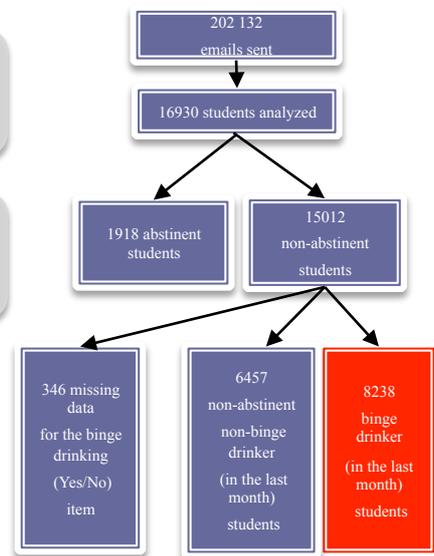
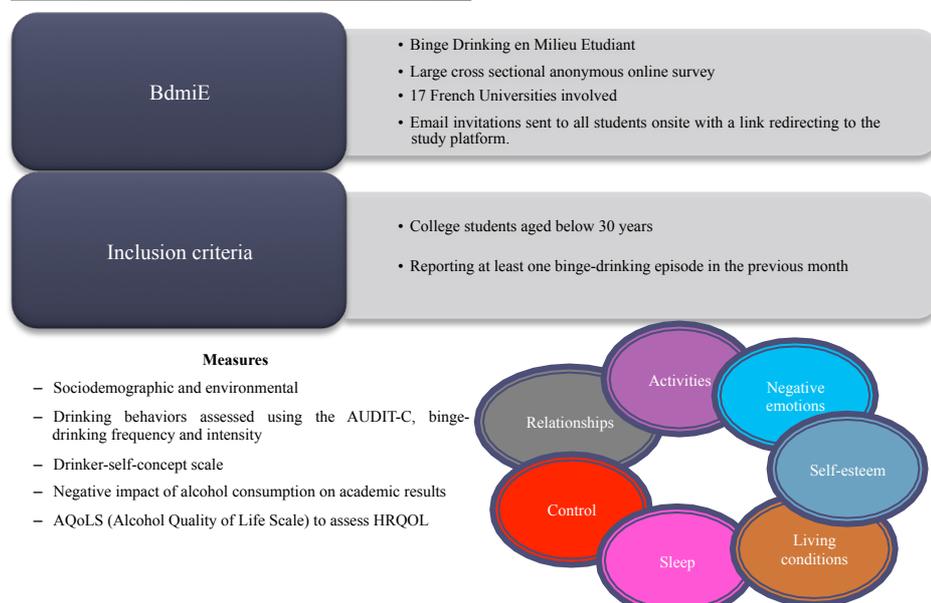
Acute and long-term consequences of binge drinking are extensively documented and also differ according to gender. In a review of the literature about college students and problematic drinking, Ham et al. (2003) found that college men were more likely to experience higher levels of alcohol-related consequences than college women but women were more impacted relating to their private life. These apparently contradictory results underline the need of subjective measures. Eventually, these alcohol-related consequences may differently impact the health-related quality of life according to gender.

Health-related quality-of-life (HRQOL) is a broader concept than alcohol-related consequences and reflects people's feelings and functioning in relation to their health status. Findings on the relationship between binge drinking and quality of life are less documented and few studies had explored the role of gender in HRQOL among binge drinkers and in particular among student ones.

AIM

To explore further the role of gender on health-related quality of life among student binge drinkers

METHODS



RESULTS

	Male (n=4368)	Female (n=3752)	p
Age (mean, sd)	21.26 (2.1)	20.82 (2.1)	< 2.2 e-16*
AUDIT-C (mean, sd)	6.27 (2.2)	5.03 (1.9)	< 2.2 e-16*
Binge drinking frequency (last month)			< 2.2e-16*
Once	1204 (29%)	1549 (43%)	
10 or more times	268 (6%)	90 (2%)	
Maximum alcohol consumed// occasion (mean, sd)	11.07 (5.8)	7.97 (4.3)	< 2.2e-16*

Table 1. Student characteristics according to gender

Figure 1 : AQoLS Dimensions



Item	Men	Women	p
19- Shame	0.36 (0.61)	0.44 (0.66)	2.47 e-07

Figure 3: Association between AQoLS items and gender

Figure 2: Flow Chart

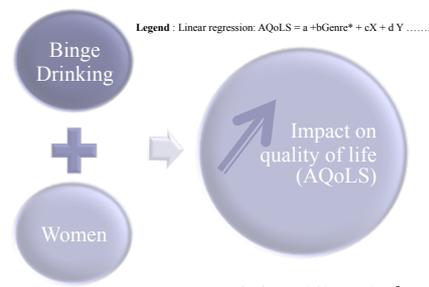


Figure 4: Adjusted association between AQoLS items and gender

DISCUSSION & CONCLUSION

This study shows that women could be impacted twice: by the consequences of drinking in itself and by stigmatization linked to alcohol use among women. Indeed, women who binge drank had a poorer quality of life than men while controlling for potentially confounding variables and reported feeling more ashamed of themselves than men. Higher level of shame related to alcohol consumption in this population could impede women from seeking help. Gender specific actions of prevention should be led in student populations.

References

Wechsler H, Lee JE, Kuo M, Seibring M, Nelson TF, Lee H. Trends in college binge drinking during a period of increased prevention efforts. Findings from 4 Harvard School of Public Health College Alcohol Study surveys: 1993-2001. *J Am Coll Health J ACH*. 2002;50: 203-217. doi:10.1080/0744840209595713
Lannoy S, Billieux J, Maurage P. Beyond inhibition: a dual-process perspective to renew the exploration of binge drinking. *Front Hum Neurosci*. 2014;8: 405. doi:10.3389/fnhum.2014.00405
Ham LS, Hope DA. College students and problematic drinking: a review of the literature. *Clin Psychol Rev*. 2003;23: 719-759.
Luquiens A, Whalley D, Laramée P, Falissard B, Kostogann N, Rehm J, et al. Validation of a new patient-reported outcome instrument of health-related quality of life specific to patients with alcohol use disorder: the Alcohol Quality of Life Scale (AQoLS). *Qual Life Res Int J Qual Life Asp Treat Care Rehabil*. 2016;25: 1549-1560. doi:10.1007/s11136-015-1190-9.

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