Conflict of Interest Statement

I have no conflict of interest to declare.

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Outline

- **Background**
- Objective
- Methods
- Results
- Conclusions
- Significance
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Background

- ✓ Alcohol Hazard.

- ✓ Alcohol-control strategies and policies.

- ✓ Population beliefs about alcohol harm and the perception of the best strategies that should be used by the government to control alcohol-related problems???

	Alberta, Canada	**Queensland, Australia**
Population (2014)	4,722,450	4,120,900
Geographic size-Land	640,081 km^2	1,730,620 km^2
Gross state product (2014-2015) ($m)	C$375,756	AU$300,270
Industry	Oil and Gas Ag and forestry	Mining Ag and forestry
Liters alcohol per capita (2015-WHO)	Can 10.3	Au 12.6

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Objective

This study aimed to compare alcohol use and relative alcohol risk between the populations of Alberta and Queensland, and to explore perceptions about alcohol harm.

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Methods

This study used data from the 2013 Alberta Survey and the 2013 Queensland Social Survey.

The surveys were administrated through Computer-Assisted Telephone Interviewing which is a PC-based system (Sawtooth Technologies, Illinois) installed on a local network.

A random selection approach was used to ensure that all responders from the households had an equal chance to be contacted.

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Results

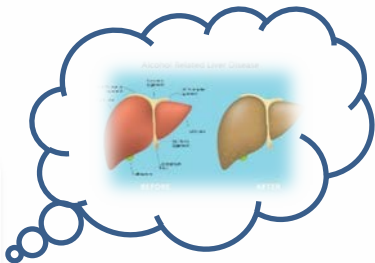| Table 1. Description of the population included in the study					
		All n=2500	**Alberta** n=1207	**Queensland** n=1293	**p-values**
Sex	Male,%	50.6	49.3	51.9	0.19
Age	Average, years	54.5	52.4	56.4	<0.001
	SD	16.1	16.4	15.7	
	Range	18-101	18-94	18-101	
Marital Status	Never Married (Single),%	13.1	14.6	11.7	0.001
	Married,%	63.7	59.4	67.7	
	Common-Law Relationship/Live-In Partner,%	5.9	6.4	5.4	
	Divorced,%	7.3	8.8	6.0	
	Separated,%	2.0	2.2	1.9	
	Widowed%	8.0	8.6	7.4	
Education Levels	0-7 years, %	1.0	0.4	1.5	<0.001
	8-13 years, %	39.4	28.2	50.0	
	14-16 years, %	32.1	37.9	26.7	
	17+ years, %	27.4	33.5	21.8	
Religion	Protestant, %	38.4	29.1	47.0	<0.001
	Catholic, %	19.6	20.3	18.9	
	Other, %	9.4	18.3	1.2	
	No religion, %	32.6	32.2	32.9	
Employment Status	Employed, %	52.6	56.7	48.8	<0.001
	Not Employed, %	12.2	9.0	15.1	
	Student, %	2.1	3.3	1.0	
	Retired, %	25.3	26.1	24.6	
	Disabled, %	7.1	3.7	10.3	
	Not Specified, %	0.7	1.2	0.2	
Income	Under $25,000, %	13.1	8.4	18.5	<0.001
	$25,000 to $49,999, %	15.5	12.5	18.9	
	$50,000 to $74,999, %	14.7	16.2	13.1	
	$75,000 to $99,000, %	12.3	13.3	11.1	
	$100,000 to $124,999, %	14.6	15.7	13.5	
	$125,000 and greater, %	29.8	33.9	24.9	
Children living in household	Children at home, yes %	31.1	29.1	33.0	0.04
Number of adults living in household (including the participant)	1 (lives alone)	2.17	22.0	16.1	<0.001
	2	1.02	56.0	62.7	
	≥3	1-10	22.0	21.2	
Born in Canada / Australia	Yes, %	79.0	80.1	78.0	0.21

Alcohol consumption and alcohol risk

Alcohol consumption and Alcohol Risk			All n=2500	Alberta n=1207	Queensland n=1293	p-values
Had at least one drink of any alcoholic beverage during the past 30 days? yes %			66.5	64.7	68.3	0.052
If yes for "has at least 1 drink of any alcoholic beverage during the past 30 days"						
1. Number of DAYS had at least one drink of any alcoholic beverage during the past 30 days?	Mean		10.3	7.7	12.6	<0.001
	SD		9.8	8.0	10.7	
	Range		1-30	1-30	1-30	
2. On the days when you drank, number of DRINKS on average during the past 30 days?	Mean		2.4	2.1	2.6	<0.001
	SD		2.3	2.1	2.5	
	Range		1-32	1-24	1-32	
3. Considering all types of alcoholic beverages, number of TIMES during the past 30 days you had 6 or more drinks on an occasion?	Never, %		78.7	81.9	75.9	<0.001
	Once, %		8.1	8.4	7.8	
	2-4 times, %		8.2	6.9	9.4	
	≥5 times, %		5.0	2.8	6.9	
Alcohol Risk*, yes %			36.5	28.9	42.8	<0.001

Days   0=none; 1=1; 2=2 to 4; 3= 5 to 15; 4=16 to 30

Drinks   0=1 to 2; 1=3 to 4; 2=5 to 6; 3= 7 to 9; 4=≥10

Times   0=none; 2=1 to 7; 3=8 to 12; 4= ≥13

Positive if added score = ♀ ≥3 and ♂ ≥4
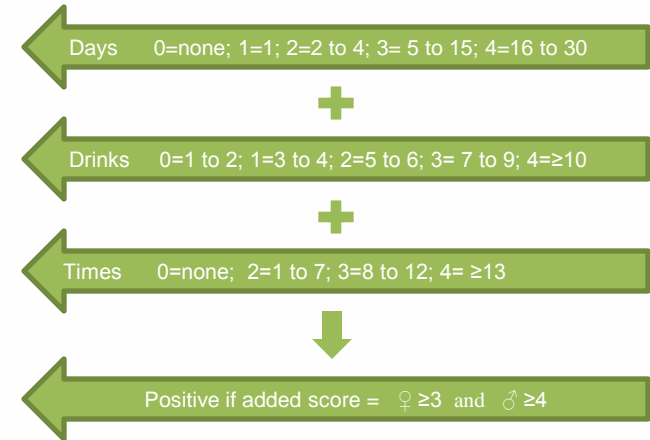
Fabor T., Higgins-Biddle J., Saunders J., & Monteiro M. (2001). **AUDIT**. The **Alcohol Use Disorders Identification Test**. Second Edition. Geneva, World Health Organization. Guidelines for Use in Primary Care.

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Alcohol perceptions in people with Alcohol Risk			
	Alcohol risk n=913	Alberta n=355	Queensland n=558	p-values
Do you believe that alcohol use contributes to health problems? yes %	95.3	92.7	96.9	**0.003**
Do you believe alcohol use contributes to injuries? %				**<0.001**
No or I don't know	6.0	3.2	7.9	
Yes, <30%	43.9	40.2	46.2	
Yes, between 30 and 50%	29.7	33.8	27.1	
Yes, >50%	20.4	22.8	18.8	
Which do you think is the best way for the government to reduce alcohol problems? %				**<0.001**
Highly effective/cost-effective strategies	**28.8**	**19.8**	**34.3**	
Bylaws to limit operation hours of liquor outlets	18.8	6.2	26.5	
Tax alcohol beverages based on percentage of alcohol content	4.9	6.2	4.2	
Bylaws to reduce number of liquor outlets per sq.km	5.0	7.4	3.6	
Unremarkably effective/cost-effective strategies	**71.2**	**80.2**	**65.7**	
Education programs	32.5	40.4	27.7	
Increase enforcement of alcohol sales to minors	16.1	12.0	18.6	
Media campaigns to educate about prevention and misuse of alcohol	14.7	21.9	10.2	
Ban alcohol advertisement on TV and other media	8.0	5.9	9.3	

Osterberg E. (2004). *What are the most **effective and cost-effective** interventions in alcohol control?* Copenhagen: WHO Regional Office for Europe.

Alcohol Risk (Yes/No) and Alcohol perceptions									
	Alcohol perceptions	All			Albertans			Queenslanders		
		OR	CI 95%	p-values	OR	CI 95%	p-values	OR	CI 95%	p-values
Crude model	Alcohol contributes to Health problems	0.49	0.31-0.76	<0.01	0.45	0.26-0.78	<0.01	0.35	0.15-0.82	0.02
¥Adjusted model	Alcohol contributes to Health problems	0.46*	0.27-0.78	<0.01	0.48	0.26-0.92	0.03	0.34	0.11-0.09	0.07
Alcohol Contributes to Injuries										
Crude model	No /Don't know	Ref			Ref			Ref		
	Yes, <30%	1.09	0.76-1.58	0.63	1.98	0.99-3.96	0.05	0.87	0.54-1.38	0.55
	Yes, between 30-50%	0.85	0.59-1.24	0.4	1.82	0.90-3.66	0.09	0.62	0.38-0.99	0.05
	Yes, >50%	0.58	0.39-0.84	<0.01	1.11	0.54-2.24	0.78	0.48	0.29-0.77	<0.01
¥Adjusted model	No /Don't know	Ref			Ref			Ref		
	Low, <30%	0.82*	0.51-1.33	0.42	1.31	0.55-3.10	0.54	0.62	0.33-1.18	0.15
	Moderated, 30-50%	0.73*	0.45-1.20	0.21	1.44	0.61-3.44	0.41	0.45	0.24-0.87	0.02
	High, >50%	0.54*	0.33-0.90	0.02	0.96	0.40-2.30	0.93	0.39	0.20-0.77	<0.01
Crude model	Highly Effective/cost-effective strategies	0.89	0.74-1.06	0.19	0.60	0.44-0.82	<0.01	1.02	0.80-1.29	0.88
¥Adjusted model	Highly Effective/cost-effective strategies	086*	0.68-1.08	0.18	0.63	0.43-0.91	0.01	1.06	0.77-1.44	0.73

Logistic regression analyses using alcohol risk as outcome variable. ¥Adjusted for sex, age, marital status, education, religion, employment status, income, living situation and being native or not of the country of study. *Also adjusted for country of study.

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Conclusions

- People with alcohol risk tend to attribute less negative effects to the use of alcohol compared with their counterparts without alcohol risk.

- Albertans with alcohol risk were less likely: a) to express that alcohol contributes to health problems, b) to choose highly effective/cost-effective strategies.

- Queenslanders with alcohol risk were less likely to attribute a high risk of injury to the use of alcohol.

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Significance

Results from this study suggest that alcohol perceptions varies among people with and without alcohol risk and between societies. Furthermore, the population's perspective presented in this study can be potentially helpful to tackle alcohol-related problems in Alberta and Queensland.

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THANK YOU

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