The economic burden of alcohol in Belgium: Incremental healthcare costs and lost productivity

Pieter Vynckier^a, Masja Schmidt^b, Sarah Nayani^b, Leonor Guariguata^b, Brecht Devleesschauwer^{a,b}, Nick Verhaeghe^a ^aGhent University, Interuniversity Centre for Health Economics Research (i-CHER) Belgium, ^bSciensano, Belgium

BACKGROUND

In Belgium, 77% of the population over the age of 15 regularly consume alcohol. Alcohol is known to be associated with a high disease burden, resulting in economic consequences.

AIM

To provide a contemporary overview of the direct medical and indirect costs attributable to alcohol in Belgium.

METHODS

EE308

Data from the Belgian Health Interview Survey (2018) was combined with health insurance data. Healthcare costs were calculated on individuals' alcohol use patterns while cost of absenteeism was calculated by multiplying the number of absence days by the national average wage cost per day in Belgium. Univariate and multivariable regression analysis with negative binomial distribution and log link were performed to evaluate the average healthcare costs and indirect costs in relation to alcohol use.

	Abstain	iner Current –hazardous°		Current – non-hazardous°		Former
Total, (N)	N= 1,28	36 N= 341		N= 5,059		N= 516
Age, mean (SD)*	49.5 (20	.7) 52.1 (16.6	6)	50.4 (18.2)		57.0 (17.9)
Gender, % (n)*						
Men	32.3% (4	46.6% (15	59)	51.3% (2596)		45.9% (237)
Women	67.7% (8	53.4% (18	32)	48.7% (2463)		54.1% (279)
Education level, % (n)*						
No diploma	13.3% (1	/	4.40% (15)		3.89% (197)	
Lower secondary	19.9% (2	<i>,</i> , , , , , , , , , , , , , , , , , ,	7.33% (25)		10.2% (517)	
Higher secondary	34.7% (4	/	25.5% (87)		29.1% (1472)	
Higher education	29.9% (3	85) 61.3% (20	61.3% (209)		55.2% (2795)	
Preferential						
Reimbursement*						
No	63.6% (8	/	,	88.5% (4476)		65.7% (339) 34.3% (177)
Yes	36.1% (4		13.8% (47)		11.4% (575)	
*P<0.05, based on t-test or chi-square test, °20g/day ethanol for women and >40g/day ethanol for men						
Direct costs	RR	Standard error	P-value	95% CI	Incremental cost°	
No alcohol (reference)	1	—		—	—	
Current - hazardous	0.81	0.12	0.06	0.64-1.01	-511.28	
Current – non-hazardous	0.81	0.07	0.002	0.71-0.93	-467.75	
Former drinkers	1.25	0.09	0.02	1.04-1.49	888.46	
°Per individual, per year						
Indirect costs	RR	Standard error	P-value	95% CI	Incremental cost°	
No alcohol (reference)	o alcohol (reference)			_		
Current - hazardous	1.01	0.33	0.97	0.53-1.94	-4.68	
Current – non hazardous	0.80	0.20	0.24	0.54-1.17	-876.57	
Former drinkers	1.55	0.29	0.13	0.88-2.74	2723.10	

°Per individual, per year



Ghent University, Department of Public Health and Primary Care Interuniversity Centre for Health Economics Research (i-CHER) Pieter.Vynckier@ugent.be

