# SOCIODEMOGRAPHIC CORRELATES OF ALCOHOL CONSUMPTION AMONG YOUNG ADOLESCENTS FROM TWO DIFFERENT SOCIO-CULTURAL CONTEXTS IN BELGIUM

Camille Pedroni<sup>1,2</sup>, Maud Dujeu<sup>1,2,3</sup>, Thérésa Lebacq<sup>1,2</sup>, Nathalie Moreau<sup>1,2</sup>, Estelle Méroc<sup>1,2</sup>, Isabelle Godin<sup>3</sup>, Katia Castetbon<sup>1,2</sup>

- Service d'information, Promotion, Éducation Santé (SIPES), École de Santé Publique, Université libre de Bruxelles, Brussels, Belgium
- 2 Centre de Recherche Épidémiologie, Biostatistique et Recherche clinique, École de Santé Publique, Université libre de Bruxelles, Brussels, Belgium
- 3 Centre de recherche en Approches Sociales de la Santé, École de Santé Publique, Université libre de Bruxelles, Brussels, Belgium

Camille Pedroni [camille.pedroni@ulb.ac.be]

#### INTRODUCTION

At young age, while the body is still in development, alcohol consumption can cause irreversible brain damages and may affect negatively the cognitive, emotional and social development of children [1]. Moreover, people who started to drink regularly before the age of 14 are more likely to develop alcohol addiction in adulthood [2]. Previous research have reported sociodemographic inequalities in health-related behaviours among young people but patterns seemed not always clear [3].

#### **OBJECTIVE**

The aim of this study was to estimate the associations between sociodemographic characteristics and alcohol consumption among 10-14-year-old adolescents in French-speaking Belgium.

Such characteristics were investigated separately in the Walloon Region (WR) and in the French part of the Brussels-Capital Region (BCR); indeed, these two regions are characterized by distinct socio-cultural and economic contexts, which could lead to differences in determinants of consumption.

### **METHODS**

- > "Health Behaviour in School-aged Children" (HBSC) cross-sectional survey conducted in 2014 in the French-speaking part of Belgium [4].
- > Self-administered questionnaires.
- > Two-stage random sample, stratified proportionally on the distribution of the school population by province and education network.
- > Sample: 4,983 10-14-year-old adolescents (4,093 in the WR and 890 in the BCR).
- > Alcohol consumption: having drunk at least one day during the last 30 days before the survey.
- > Sociodemographic characteristics: sex, age, socioeconomic status measured through the "Family Affluence Scale" (FAS) [5], family structure, and migration background.
- ➤ Multivariable logistic regressions models, separately for the WR and the BCR.

#### RESULTS

Main differences between the two regions (Table 1):

- In the WR, 73.2% were native versus only 23.4% in the BCR.
- > In the WR, almost twice as many adolescents from stepfamilies and half from low FAS families compared to the BCR.

	WR (n=4,093)		BCR (n=890	
	n	%	n	9
Gender				
Boys	2,001	48.9	432	48.
Girls	2,092	51.1	458	51.
Age				
10-12 years	1,818	44.4	353	39.
13-14 years	2,275	55.6	537	60.
Family structure				
Two-parent families	2,720	66.4	631	70.
Stepfamilies	642	15.7	73	8.
Single-parent families	731	17.9	186	20.
Family affluence scale (FAS)				
High	1,579	38.6	268	30.
Medium	1,874	45.8	366	41.
Low	640	15.6	256	28.
Migration background				
Natives	2,998	73.2	211	23
Adolescents with foreign origins <sup>1</sup>	1,095	26.8	679	76.

The proportion of 10-14-year-old adolescents who have drunk at least once in the last 30 days before the survey was almost 2.5 times higher in the WR compared to the BCR (WR: 21.7%;

#### SOCIODEMOGRAPHIC CORRELATES IN THE WALLOON REGION (WR)

Were more likely to consume alcohol (Figure 1):

- boys versus girls;
- adolescents aged 13-14 years versus 10-12 years;
- adolescents from "medium" or "high" FAS versus "low" FAS;
- adolescents living in a single-parent family or a stepfamily versus those living with their two parents;
- natives versus adolescents with foreign origins.

#### **SOCIODEMOGRAPHIC CORRELATES IN THE BRUSSELS-CAPITAL REGION (BCR)**

Large wealth and regional inequities persist in mother and child care utilization

➤ Like in the WR, boys, 13-14 year olds, adolescents from stepfamilies, those from "high" socioeconomic status and natives were more likely to consume alcohol (Figure 2).

SIGNIFICANT EFFECT MODIFICATIONS WITH

Alcohol consumption was not socially marked

➤ among young girls, those aged 13-14 years,

from stepfamilies or single-parent families, from

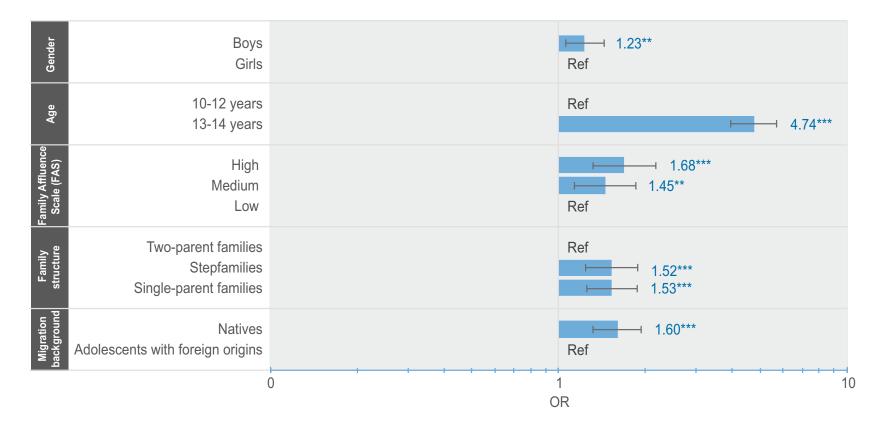
"high" or "medium" FAS and natives were more

**GENDER WERE IDENTIFIED (FIGURE 3)** 

among boys (all associations NS);

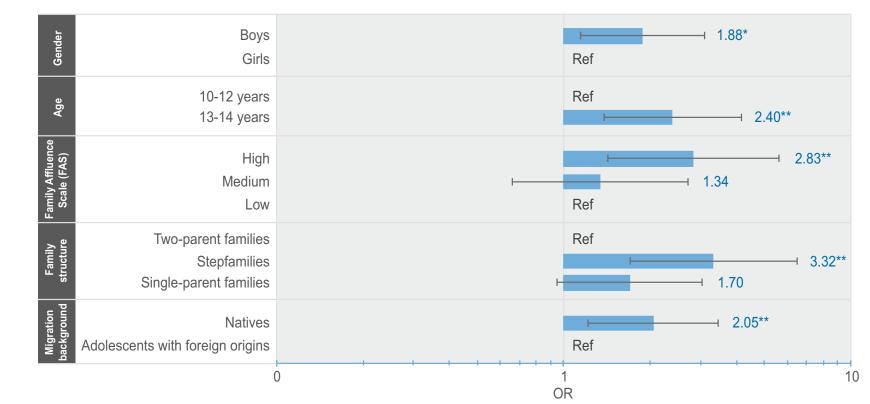
likely to consume alcohol.

## Sociodemographic factors associated with alcohol consumption among 10-14 year-old adolescents in the Walloon Region (n=4,093)

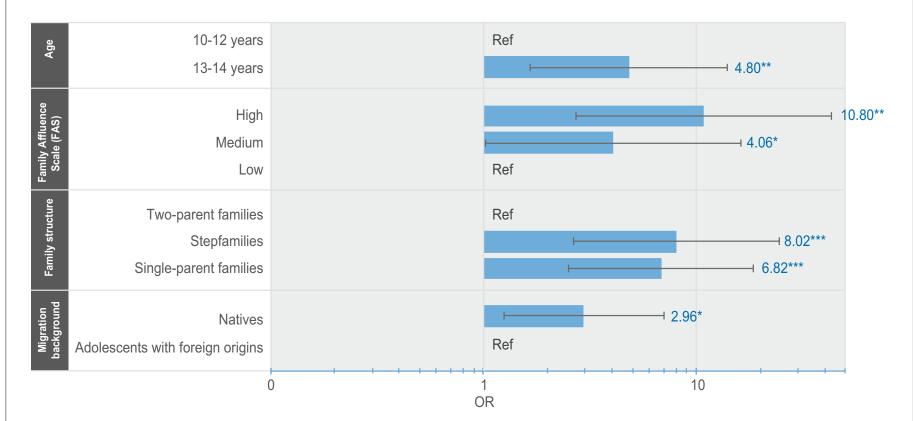


\*p<0.05; \*\*p<0.01; \*\*\*p<0.001. Multivariable logistic regression.

Sociodemographic factors associated with alcohol consumption among 10-14 year-old adolescents in the Brussels-Capital Region (n=890) Boys







\*p<0.05; \*\*p<0.01; \*\*\*p<0.001. Multivariable logistic regression.

# LIMITATIONS

both parents born abroad.

BCR: 8.9%).

- > Data are collected using selfadministered questionnaires: rates of alcohol use might be misreported.
- > Sub-groups analyses (analysis of effect modification with gender in RBC) are limited by small sample size.

# CONCLUSION

Despite very different prevalence, alcohol consumption in young adolescence was associated with the same sociodemographic characteristics in both regions but with variable strengths. Living with both parents played a protective role. In contrast, other rather favourable living conditions such as having a high socio-economic status and being born in Belgium had, here, a negative influence by making young adolescents more likely to consume alcohol. In addition, effect modification due to gender was only observed in the BCR. These results highlight the socio-demographic profile of adolescents to be targeted in the awareness-raising measures to the danger of early alcohol consumption.

#### REFERENCES

- 1. Crews F, He J, Hodge C. Adolescent cortical development: a critical period of vulnerability for addiction. Pharmacol Biochem Behav. 2007;86:189-99.
- 2. Pitkänen T, Lyyra A-L, Pulkkinen L. Age of onset of drinking and the use of alcohol in adulthood: a follow-up study from age 8-42 for females and males. Addiction. 2005;100:652-61.
- 3. Donovan JE. Adolescent alcohol initiation: a review of psychosocial risk factors. J Adolesc Health. 2004;35:529.E7-18.
- 4. Moreau N., Lebacq T., Dujeu M., et al. Comportements, bien-être et santé des élèves. Enquête en 5e-6e primaire et dans le secondaire en Fédération Wallonie-Bruxelles. Service d'Information Promotion Éducation Santé, École de Santé Publique, Université libre de Bruxelles. 2017. 320 pages.
- 5. Torsheim T, Cavallo F, Levin KA, et al. Psychometric validation of the revised family affluence scale: a latent variable approach. Child Indic Res. 2016;9:771-84.













