

# Dental trauma associated with Binge Drinking in Brazilian adolescents, a longitudinal study

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## INTRODUCTION

The prevalence of traumatic dental injuries (TDI) is influenced by several factors, among them excessive consumption of alcoholic beverage, the Binge Drinking. This pattern of compulsive alcohol consumption has increased notably across the world in recent years, especially among adolescents, becoming a public health problem.

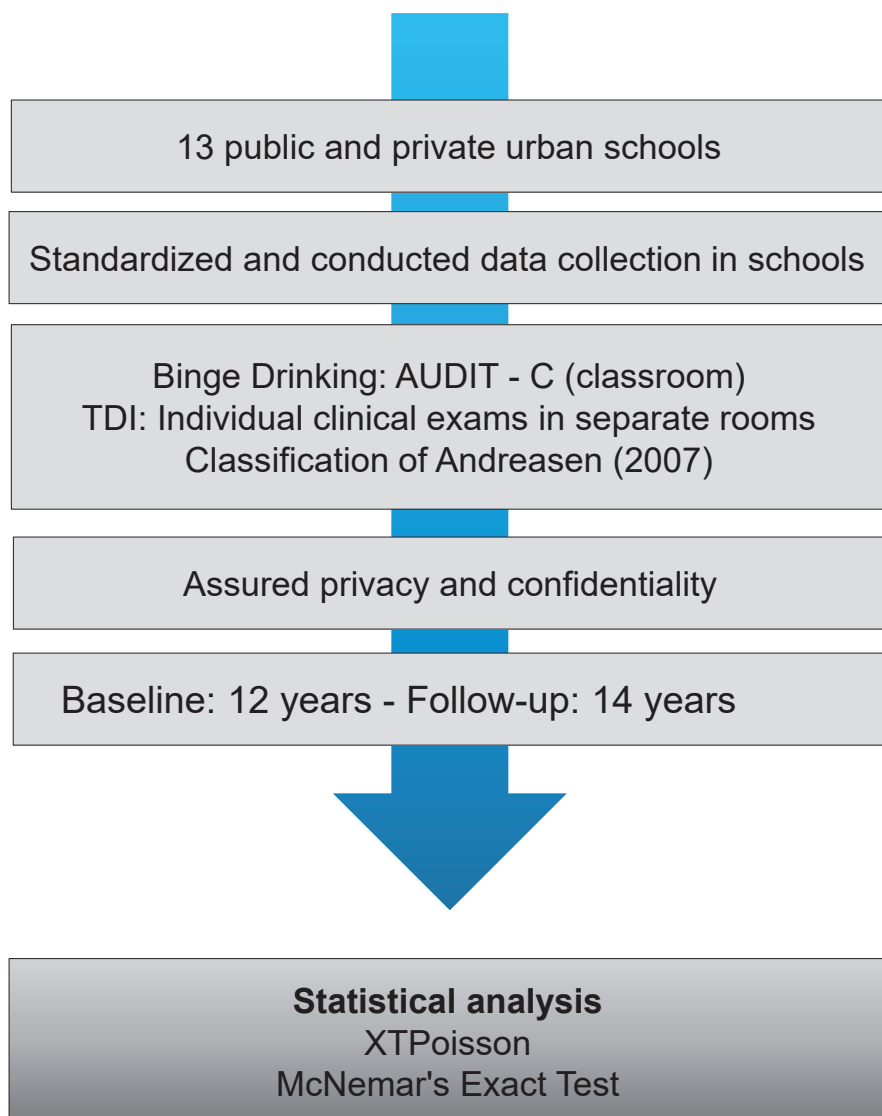
## OBJECTIVE

To longitudinally investigate, in two moments, the association of dental trauma with Binge Drinking among adolescents of public and private schools in Diamantina, Brazil.

## MATERIALS AND METHODS

CEP 1.597.571  
TCLE and Participants Statement of Consent

Initial N of 633 adolescents → **588 students**



### Effects of Binge Drinking



- Damage to the brain, memory loss
- Alcohol poisoning, nausea, vomiting
- Shakness, indisposition
- Anxiety and depression, mood swings
- Accidents and fractures (TDI)

## RESULTS AND DISCUSSION

Female - 51.2% (302)  
Prevalence of TD baseline - 29.3% (173)  
Prevalence of TD follow-up - 33.4% (199)  
Accumulated prevalence - 4% (26)

**Table 1:** Frequency of dental trauma in the two moments of the study (2013-2015).

First moment	N	%	P-valor	OR (IC 95%)
No	415	70,68	0.0981	0,86 (0,82 – 0,91)
Yes	173	29,42		
Second moment	N	%		
No	389	66,16		
Yes	199	33,84		

McNemar exact test

**Table 2:** Poisson regression models, adjusted and not adjusted for the presence of dental trauma and the independent variables in the 2 moments of the study.

Variables	Crude RP (95%IC)	Ajusted RP (95%IC)
<b>Sex</b>		
Male	1.377* (1.1015-1,867)	1.246 (0.954-1.627)
<b>Lip coverage</b>		
Inadequada	3.940*** (2.959-5.246)	3.382*** (2.553-4.481)
<b>Overjet</b>		
> 5mm	2.740*** (1.902-3.946)	1.940*** (1.403-2.684)
<b>Binge drinking</b>		
Sim	1.473* (1.094-1.982)	1.348* (1.031-1.764)

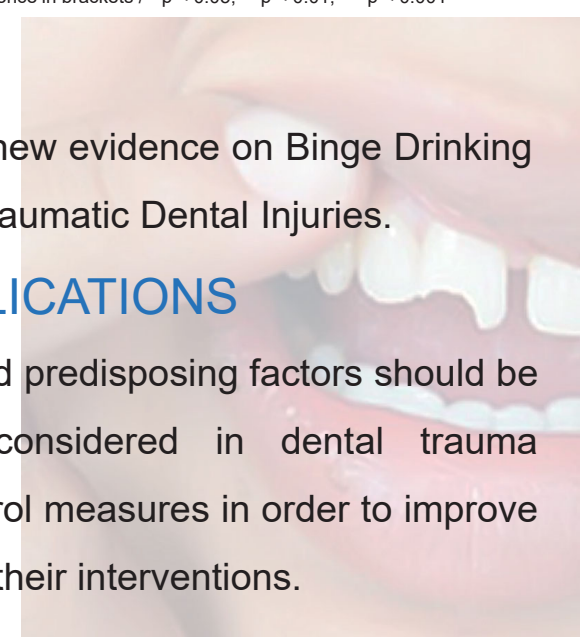
Exponentiated coeficientes; 95% confidence in brackets / \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

## CONCLUSION

The results provide new evidence on Binge Drinking as a risk factor for Traumatic Dental Injuries.

## CLINICAL IMPLICATIONS

New and unexpected predisposing factors should be investigated and considered in dental trauma prevention and control measures in order to improve the effectiveness of their interventions.



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