

Brief Motivational Intervention to Reduce Alcohol Consumption in Young Patients in an Emergency Department: the AURAI Research Study.

CRISTINA DIAZ GOMEZ¹, MARCUS NGANTCHA¹, NATHALIE LEGARJEAN², NADINE BROUARD³, MURIEL LASBLIEZ³, MATHIEU PERENNES⁴, FRANÇOIS JÉROME KERDILES⁴, CAROLINE LE LAN⁵, ROMAIN MOIRAN⁵, DAVID TRAVERS⁶, ABDELOUAHAB BELLOU^{7,8}

¹ Observatoire Français des Drogues et des Toxicomanies, Observatoire Français des Drogues et des Toxicomanies, Saint Denis, France

² Centre d'information régional sur les drogues et les dépendances, Centre d'information régional sur les drogues et les dépendances, Rennes, France

³ Emergency Department, University Hospital, Rennes, France

⁴ Emergency Department, University Hospital, Faculty of Medicine, Rennes, France

⁵ Liver Diseases Department, University Hospital, Faculty of Medicine, Rennes, France

⁶ Adult Psychiatric Department, University Hospital, Faculty of Medicine, Rennes, France

⁷ Emergency Department, University Hospital, Faculty of Medicine, Rennes, France

⁸ Harvard Medical School, Beth Israel Medical Center, Boston, USA

Background: Sixty-two percent of the young people between 16 to 24 years-old living in the catchment area of the study take 5 glasses and more in one occasion as compared to 45.8% in the entire France. Previous studies showed that if the alcohol consumption starts earlier, the risk for alcohol dependence increases at the adult age. In some countries, the motivational intervention has been already proposed for adult and can be used in emergency department (ED) setting for young patients. This study was conducted to establish the effectiveness of a Brief Motivational Intervention (BMI) in reducing alcohol consumption among young patients with hazardous or harmful drinking admitted to an urban French ED compared to the delivery of an information leaflet and a list of addresses of relevant care and treatment services for alcohol misuse.

Methods: A two-group simple blind randomized controlled trial was done with a follow-up self-report at 3 months. Patients aged 16 to 24 who were positive for blood alcohol content (BAC) of 0.5g/L or above were enrolled. Randomization was stratified according to patients' age (16-17 or 18-24). Brief interventions were performed by a psychologist in the ED setting from September 2011 to July 2012. A phone booster session was delivered at one and two months for participants assigned randomly to the treatment group. The principal criteria used to assess the reduction of alcohol use at 3 months follow-up was the number of alcoholic drinks in the last week. Data analysis was conducted for a poison frequency distribution and analysis of variance was done.

Results: A total of 263 patients were randomized of which 132 patients were allocated to the treatment group and 131 to the control group. Attrition accounted for 40.7%. Analysis with intention to treat showed an odds ratio at 0.93 (0.64-1.36), motivational intervention is not associated with alcohol consumption at 3 months (adjusted to the consumption before the visit to ED, T_0 = one week before the ED visit). The quantity of glasses

drunk at T_0 was associated with high risk. To drink one glass more at T_0 increased by 3% the consumption at 3 months. Sex was significantly associated with alcohol consumption with an OR at 0.62 (0.41-0.95). We observed a decrease of alcohol consumption in women as compared to men at 3 months. The poison regression model and analysis of variance did not show association between intervention and evolution of alcohol consumption.

Conclusion: This study did not detect a difference in effectiveness between the two conditions (OR 0.93 [0.64; 1.36]). Further studies to test the effectiveness of BMI in the ED are needed.

Keywords: Alcoholism; Psychotherapy; Emergency Medical Services