composition was assessed using qPCR of 16S rDNA. Depression, anxiety, craving and emotional intelligence were assessed using psychological questionnaires. All patients were tested twice, at the onset and at the end of a 3-week detoxification program.

**Results.** AD subjects showed a decrease in Lactobacillus, Bifidobacterium and Faecalibacterium prausnitzii, compared with healthy controls. A short-term alcohol-abstinence allowed the recovery of Lactobacillus and Bifidobacterium to normal levels. Bifidobacterium and Faecalibacterium prausnitzii were negatively correlated with intestinal permeability. Bifidobacterium were negatively correlated with depression, anxiety, craving and positively correlated with emotional intelligence.

**Conclusion.** These data, obtained in humans, showed that heavy and chronic alcohol consumption modifies the composition of gut microbiota. These changes were associated with intestinal barrier dysfunction and, more interestingly, with psychological disorders, adding further evidence to the important role of “gut-brain axis” in the development of alcohol-dependence and a potent role of bacteria with anti-inflammatory properties in the management of psychological symptoms associated with alcohol-dependence.

**O3.2**

**RAPID IMPACT OF ALCOHOL WITHDRAWAL ON BIOMarkers OF LIVER LesIONS (FIBROTest)**

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**Introduction.** FibroTest® uses the results of six blood serum tests to generate a score correlated to liver damage in various chronic liver diseases. It has been shown to be predictive of liver-related deaths in heavy drinkers. Impact of alcohol withdrawal on FibroTest® has not been reported so far.

**Methods.** We have prospectively studied patients hospitalised for alcohol withdrawal with FibroTest® (Biopredictive®, Paris, France) at D0 and D7. We used Chi-deux test to compare dichotomous data and Wilcoxon test for quantitative data.

**Results.** 70 patients (median age: 52 yrs; male: 77.1%, HCV carriers: 10%). FibroTest® decreased significantly between D0 and D7 (0.35 vs. 0.29, p = 0.0005) resulting in a decrease of the estimated Metavir stage of fibrosis in 12 patients (17.1%). In two patients (2.9%), the decrease was ≥ 1.5 fibrosis point (FP). Fibrosis estimation by liver stiffness measurement (Fibroscan®) was disposable at D0 and D7 for 66 patients. Discrepancies between FibroTest® and FibroScan® decreased between D0 and D7: n = 27 (40.9%) at D0 vs. n = 14 (21.2%) at D7 for difference ≥ 1 FP (p = 0.001); n = 16 (24.2%) à D0 vs. n = 3 (4.2%) at D7 for differences ≥ 1.5 FP (p = 0.001).

**Conclusion.** There is a significant decrease in FibroTest® after 7 days of alcohol withdrawal. Agreement between non-invasive tests improves after withdrawal. (Actualisation of those results with 50 additional patients and comparison with biopsy results for 45 patients are under way.)

**O3.3**

**ELEVATION OF SERUM ENDOcANNBINOID LEVELS IN ALCOHOLIC AND HepATITIS C VIRUS-RELATED LIVER DISEASE DUE TO DECREASED EXPRESSION OF ENDOcANNBINOID DEGRADING ENZYmES**

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**Background.** The endocannabinoid (EC) system is implicated in chronic alcoholic liver disease (ALD), hepatitis C virus (HCV) progression. The study aimed to investigate how and whether the EC system, including the cannabinoid receptors CB1 and 2, AEA and 2-AG and their degradation enzymes fatty acid amid hydrolase (FAAH) and monoacylglycerol lipase (MGLL), relate to disease severity.

**Methods.** AEA and 2-AG serum levels were measured by gas chromatography and mass spectrometry (GC-MS) in serum from healthy and ALD/HCV patients. Gene expression was assessed by TaqMan PCR from liver tissues. Interferon gamma (IFN) release from peripheral blood mononuclear cells (PBMCs) was measured by ELISpot assay.

**Results.** AEA and 2AG levels were 2-fold higher in HCV and ALD patients, whereas FAAH and MGLL mRNA from liver biopsies were significantly downregulated 3- and 10-fold, respectively, compared to controls. Significant correlations of EC levels with liver enzyme levels but not with fibrosis were found. Stimulation with endo- and exocannabinoids (2AG and tetrahydrocannabinol; THC) showed an induction of FAAH and MGLL in PBMCs, whereas acetadyleth (AA) downregulated the expression of both EC degradation enzymes. In addition, AA, 2AG and THC induced CB1 and CB2 in PBMCs. IFNγ release from PBMCs was dose-dependently decreased by the AEA and 2AG. Blockage of CB1 and CB2 by specific antagonists SR141716 (Rimonabant) and SR144528 did not affect FAAH and MGLL expression.

**Conclusion.** Serum EC levels are increased in patients with HCV and ALD, and reveal immunosuppressive effects most probably due to reduced expression and activity of EC degradation enzymes.

**O3.4**

**THE PNPLA3 I148M MUTATION SIGNIFICANTLY INCREASES THE RISK OF DEVELOPING ALCOHOL-RELATED CIRRHOSIS IN ALCOHOL DEPENDENT INDIVIDUALS**

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**Background and Aims.** The common single nucleotide polymorphism, rs738409, in PNPLA3 encodes a non-synonymous (I148M) mutation which has been associated with risk of developing significant liver injury in response to a variety of noxious agents, including alcohol. Why this mutation causes this effect at a functional level is still largely unknown.

**Methods.** The frequency of this allele was studied in a UK sample which included: 1085 control individuals; 706 alcohol dependent individuals who had not been screened for liver disease and 400 patients who had misused alcohol for a minimum of 25 years and had biopsy-proven alcohol-related liver disease of varying severity including: minimal steatosis (n = 70); cirrhosis (n = 212), and intermediate biopsy changes (n = 118). All patients and control subjects were of white Irish, Welsh, Scottish or English ancestry. KASpar genotyping was performed on genomic DNA extracted from all samples.

**Results.** The primary finding was a strong association with cirrhosis when allele frequencies were compared with either the alcohol dependent patients (allelic p = 1.46 x10-9, OR = 2.13 [1.66-2.73]) or the controls (allelic p = 2.05 x10-6, OR = 1.38 [1.38-2.20]). The frequency of the minor allele was lower in the unscreened alcohol dependent population compared with controls suggesting a protective effect; this finding was not, however, significant by conventional measures. There was no increase in allele frequency in the other two liver disease groups.

**Conclusions.** This mutation is strongly associated with an increased risk of developing cirrhosis in alcohol dependent individuals in this UK sample.

**O4**

**FREE ORAL COMMUNICATIONS 4: ALCOHOL INTERVENTIONS IN DIFFERENT SETTINGS**

**O4.1**

**BRIEF MOTIVATIONAL INTERVENTION TO REDUCE ALCOHOL CONSUMPTION IN YOUNG PATIENTS IN A FRENCH EMERGENCY DEPARTMENT**


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**Background.** Alcoholic intoxication (AI) in young people is an important problem in emergency departments (EDs). Aim - To establish the effectiveness of a Brief Motivational Intervention (BMI) in reducing alcohol consumption among young patients admitted in a French ED for AI.

**Methods.** Two-group simple blind randomised controlled trial. From September 2011 to July 2012, patients aged 16 to 24 who tested positive for blood alcohol content of 0.5% or above were randomised, with stratification according to patient’s age (16-17 or 18-24), between intervention (BMI performed by a psychologist in the ED setting followed by a phone booster session at one and two months) and controls (delivery only of an information leaflet and a list of addresses of services for alcohol misuse). 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.
Results. A total of 263 patients (controls 131, intervention group 132, mean age 20, men 72%) were randomized. Attrition accounted for 38% in controls and 43% in intervention group. Data analysis was conducted for a Poisson frequency distribution and showed no significant difference in effectiveness between the two conditions (OR 0.93 [0.64; 1.36]). All secondary outcomes were also not influenced by the intervention (including the number of AIs in the last month).

Conclusions. This study did not detect a significant effect of Brief Motivational Intervention in reducing alcohol consumption after hospitalization for alcoholic intoxication in emergency department in young people.

O4.2 HARMFUL ALCOHOL CONSUMPTION IN HEALTH-WORKERS: RESULTS OF A SCREENING STUDY

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Background. In Italy national alcoholism risk prevention programs to assess number for year of accidents in health workplaces is actually in progress leaded by Health Minister and Regional administration. Particularly, prevention program acts consist in comprehensive informations for health workers and their co-workers, about prevention and identification of alcoholism related risks.

Aims. To assess the rate of harmful alcohol consumption in a population of health workers in Padua.

Materials and methods. Modified CAGE questionnaire was sent to 5590 health-workers in Padua. Anonymous questionnaires were collected in dedicated boxes.

Results. 654/5590 (11.7%) subjects performed the test (M: 150, F: 504, mean age 42.9 yrs, range 28-65). The professional role was nurse in 300/654 (45.9%), physician 83 (12.7%), administrator 80 (12.2%), other 191 (29.2%). 57/654 (8.7%) had positive questionnaire for alcohol abuse or dependence: 33/57 (57.9%) had suspicious, 15 (26.3%) high probability and 9 (15.8%) were certainly alcohol abusers. 37/504 females (7.3%) and 20/150 males (13.3%) showed positive CAGE test. The professional role indicated positive test in 26/300 (8.7%) nurses, 9/83 (10.8%) physicians, 1180 (1.2%) administrator and 21/191 (11%) other professional roles.

Conclusions. The number of tests performed is unsatisfactory, particularly among males and physicians. Our data suggest that harmful alcohol consumption is present in health-workers, more frequently in male sex. Physicians demonstrate an high prevalence of positive test. These data also suggests that the awareness of alcohol related problems doesn’t reduce the probability of harmful consumption. A screening study can be useful to identify harmful alcohol users among the selective population of health-workers.

O4.3 BRIEF INTERVENTION IN PRIMARY HEALTH CARE FOR ALCOHOL USERS: AN EXPERIENCE IN PORTUGAL

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Introduction. The professionals of primary health care have a crucial role in screening individuals with risk consumption and harmful alcohol. The effectiveness of brief interventions in reducing alcohol consumption however, in Portugal its use is not yet widespread in particularly in primary care.

Objective. to evaluate the effect of Brief Interventions in reducing excessive alcohol consumption on users accessing health center services, Coimbra, Portugal.

Methods. A pre-trial, with a single group, and the assessment before the intervention (5 months). The sample included 45 patients (19 females, Mean= 48 age, SD = 15.199), enrolled in the Health Center Ansião. We used a structured interview, using a questionnaire that included the AUDIT (Alcohol Use Disorders Identification Test), to evaluate the level of risk in relation to alcohol consumption. Interventions were made by previous protocol based on the level of risk identified, for data analysis resorting to the Wilcoxon test.

Results. At baseline: 86.7% were at risk level I, 11.1% in the risk level II and 0% in the risk level III. In follow-up five months after the brief interventions, 95.6% were at risk level I, 2.2% in the risk level II and 0% in the risk level III. There was a positive effect on the progress of participants in respect to the levels of risk, with statistical significance (p = 0.046).

Conclusions. Brief Interventions took effect in lowering and stabilizing the risk levels of alcohol consumption, reinforcing the importance of integration of Brief Interventions in Primary Health Care.

O4.4 UNIVERSAL SCHOOL-BASED PREVENTION INTERVENTION AND ALCOHOL USE

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Background. The Unplugged, a prevention intervention based on the Comprehensive Social Influence model, was implemented to reduce the risk of alcohol use in Czech adolescents. We investigated the effect of the Unplugged on the reduction of drunkenness.

Methods. A randomized controlled prevention trial was conducted over 33 months. 1,874 6th-graders (mean age 11.82 years) completed the baseline testing. We compared self-reported drunkenness in control and intervention groups. Using logistic regression we study relationship between drunkenness and other variables such as gender, peer and parents effect, leisure time, ideas of hurting oneself, safe sex and school grades.

Results. We find a significant effect of the Unplugged on the reduction of drunkenness. Male adolescents with unstructured leisure time activities and lower parents control report higher frequency of drunkenness. Idea of hurting oneself and unsafe sex is also associated with higher risk of getting drunk.

Conclusion. We present evidence on the composition of risk profiles in adolescents who are engaged in high-risk alcohol consumption. Besides the intervention a screening tool should be used to identify adolescents who are eligible for complementary selective and/or indicated prevention interventions.

O5 FREE ORAL COMMUNICATIONS 5: ALCOHOL-RELATED SOCIETY AND POLICY CHANGES IN EUROPEAN COUNTRIES

O5.1 THE PROHIBITION OF DISTILLATES IN THE CZECH REPUBLIC IN REACTION ON METHYL-ALCOHOL ON LEGAL AND ILLEGAL MARKETS IN 2012: PRELIMINARY RESULTS WITH FOCUS ON CONSUMPTION AND AVAILABILITY OF SPIRIT DURING THE PROHIBITION

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There were emerged several cases of methyl alcohol poisoning in the Czech Republic during second half of 2012. In August and September the number of cases increased and Ministry of health in collaboration with responsible Governmental institutions reacted through a special measurement: selected prohibition of distillates - exactly all type of alcohol beverages with percentage of alcohol higher than 20% (document of Ministry of health from September 12., September 14. and September 20, 2012). The study is designed as combination of questionnaire survey and qualitative field research project conducted and leaded by Clinic of Addictology with aim to map of availability and patterns of consumption during the period of prohibition and during post prohibition time. Through the internet questionnaire survey (429 respondents in total) and small field subprojects targeted on sellers of alcohol and different specific population of alcohol users like psychiatric patients, clients of social services etc. We collected qualitative data about selling and self-supplying strategies in 15 cities in 6 regions of the Czech Republic. We were not able to identify real significant impact on patterns of consumption. During the prohibition were distillates available on illegal market and all searched target population created and adopted different strategies for obtaining of alcohol. Alcohol was obtained from different sources including home reserve, illegal selling in bars and restaurants etc. We expected more significant impact on low-income brackets but it was not confirmed. Grant support: Supported by research program no. PRVOUK-P03LF19/.

O5.2 MORTALITY AMONG ALCOHOL TREATMENT PATIENTS IN LATVIA

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