

**Results:** Psychosocial rehabilitation system has been formed and created according to the results of the research. It is built based on a stepwise multimodal principle, including social deprivation, individual and group psychotherapy, craft therapy with an outcome to self-organizing psychotherapeutic groups.

**Conclusions:** Emotional sphere state normalization occurred during the process of participation in the system. According to catamnensis data of 1 to 2 years, the developed system efficiency is: 72.00 % for patients with alcohol addiction, 64.00 % for patients with opioid addiction, 51.00 % for patients with psychostimulant addiction.

**Disclosure:** No significant relationships.

**Keywords:** Psychoactive Substances; Psychosocial rehabilitation; emotional disorders

### EPV0673

#### The predictor role of metacognition and emotion recognition in internet gaming disorder among late adolescents

O. Aydın<sup>1</sup>, P. Ünal-Aydın<sup>1</sup>, Y. Arslan<sup>1\*</sup>, M. Güçlü<sup>1</sup> and S. Çakiroğlu<sup>2</sup>

<sup>1</sup>Psychology, International University of Sarajevo, Faculty of Arts and Social Sciences, Sarajevo, Bosnia and Herzegovina and <sup>2</sup>Child And Adolescent Psychiatry, İstanbul Medeniyet University Göztepe Education and Research Hospital, İstanbul, Turkey

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.2169

**Introduction:** Internet gaming is acknowledged as a common leisure activity among adolescents yet only a little known about the psychodevelopmental roots. Emotion recognition and metacognition which are proved to be determinants in behavioral disorders may be considered salient factors in also internet gaming disorder (IGD).

**Objectives:** The research to date has focused on psychological comorbidities rather than risk factors (e.g. dysfunctional metacognitive beliefs, emotion recognition deficits), whereas, improved early intervention would be more likely if risk factors were well defined, especially before the onset of the illness. The objective of this study was to investigate these areas by analyzing associations between metacognitive beliefs, emotion recognition, and IGD among late adolescents with tendency for pathological gaming behavior.

**Methods:** 806 high school students were recruited and instructed to take Internet Gaming Disorder Scale (IGDT), Meta-Cognitions Questionnaire for Children and Adolescents (MCQ-C) and Reading the Mind in the Eyes Test - Children's Version (RMET).

**Results:** Mean comparisons corresponding to IGD risk potential showed that positive meta-worry and superstitious, punishment, and responsibility beliefs of MCQ-C were significantly higher in the risky group, whereas; RMET neutral subtest was significantly higher in the non-risky group. Additionally, a positive correlation was found in all subtests of MCQ-C, RMET positive emotions and IGD. Regression analysis revealed that RMET positive subtest and positive meta-worry of MCQ-C predict IGD risk.

**Conclusions:** The findings of the study partially corroborated the early results found among early adolescents; however, they also indicated the requirement of distinct therapeutic approach for cognitive interventions of IGD in late adolescence period.

**Disclosure:** No significant relationships.

**Keywords:** internet gaming; metacognition; emotion recognition; adolescence

### EPV0675

#### Modulated in vitro lymphocytes in the treatment of alcoholism: Experimental study

E. Markova\* and I. Savkin

Neuroimmunology Lab, State Research Institute of Fundamental and Clinical Immunology, Novosibirsk, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.2170

**Introduction:** Immune cells are dysfunctional during long-term ethanol consumption and may contribute to the progression from healthy to problem drinking. Lymphocytes from mice with chronic ethanol exposure characterized by impaired functional activity, manifested in the combination of increased spontaneous proliferation against the background of low sensitivity to T- cell mitogens.

**Objectives:** We first demonstrated that original compound meta-chloro-benzhydryl-urea (m-ch-BHU) in vitro restored long-term alcoholized mice lymphocytes activity through GABA(A) receptors. We also revealed the possibility of animal's behavioral regulation by the transplantation of immune cells with definite functional characteristics, also modulated by psychoactive drugs. Based on the previous results we investigated effects of m-ch-BHU modulated lymphocytes transplantation in recipients with experimental alcoholism.

**Methods:** Male (CBAx57Bl/6)F1 mice with 6-month 10% ethanol exposure were undergoing the transplantation of syngeneic long-term alcoholized mice lymphocytes, pretreated in vitro with m-ch-BHU. Recipient's ethanol consumption, nervous and immune systems functional activities were estimated.

**Results:** It was shown that transplantation of lymphocytes with in vitro m-ch-BHU modulated functional activity caused in syngeneic recipients with chronic alcohol exposure essential ethanol consumption decrease and stimulation of motor and exploratory activities in the "open field" against the background of cytokines modulation in brain. The significant stimulation of humoral immune response, estimated by the relative number of antibody-forming spleen cells, and stimulation of DTH reaction were also detected in recipients after lymphocytes transplantation.

**Conclusions:** Results demonstrated that transplantation of m-ch-BHU modulated lymphocytes caused positive psychoneuroimmunomodulating effect in animals with chronic alcohol exposure, so, it may be considered as a promising method in the treatment of alcoholism

**Disclosure:** No significant relationships.

**Keywords:** Cell technologies; modulated lymphocytes; alcoholism

### EPV0676

#### Original compound with anticonvulsant activity in the treatment of alcoholism

E. Markova<sup>1\*</sup>, I. Savkin<sup>1</sup>, M. Knyazheva<sup>1</sup> and T. Shushpanova<sup>2</sup>

<sup>1</sup>Neuroimmunology Lab, State Research Institute of Fundamental and Clinical Immunology, Novosibirsk, Russian Federation and <sup>2</sup>Clinical

Psychoneuroimmunology And Neurobiology Lab, Mental Health Research Institute, Tomsk, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.2171

**Introduction:** Original compound ortho-fluorobenzonal, a barbiturate derivative, is shown to reveal strong anticonvulsant activity by means increasing GABA-mediation. Disturbance of GABA(A)-receptors functions play an essential role in both alcoholism and epilepsy pathogenesis.

**Objectives:** Taking into account the presence of GABA(A)-receptors on the lymphocytes surface and involvement of immune system in alcoholism pathogenesis, we investigated ortho-fluorobenzonal effects on the immune and nervous systems functional activities in mice with chronic alcohol exposure to find new perspective pharmacological substances in the treatment of alcoholism.

**Methods:** (CBAx57Bl/6) F1 male mice with 6-month 10% ethanol exposure were undergoing intragastric administration of original compound ortho-fluorobenzonal for 10 days. Animal's alcohol consumption, behavior and immune parameters were estimated.

**Results:** It was found that ethanol daily consumption decreased sharply starting from 2 days of ortho-fluorobenzonal administration and led to the cessation of ethanol consumption by the 4 day in mice with chronic alcohol exposure. Pronounced changes in motor and exploratory activities in "open field" test was registered in long-term alcoholized mice after 10-day course ortho-fluorobenzonal administration. The above behavioral changes were recorded against the brain cytokines synthesis modulation. We have shown also the modulation by ortho-fluorobenzonal of immune system functional activity, in particular, significant cellular and humoral immune response stimulation, estimated by the relative number of antibody forming cells and reaction of delayed-type hypersensitivity respectively.

**Conclusions:** Original compound ortho-fluorobenzonal has a positive neuroimmunomodulation effect that manifests itself in the correction of immune and behavior disorders caused by the chronic ethanol exposure, therefore, this compound is promising in the therapy of alcoholism

**Disclosure:** No significant relationships.

**Keywords:** Original anticonvulsant; alcoholism

## EPV0677

### Six-month contingency management effects on smoking cessation in individuals with substance use disorders

G. Aonso-Diego\*, A. Krotter, Á. García-Pérez and R. Secades-Villa  
Department Of Psychology, University of Oviedo, Oviedo, Spain

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.2172

**Introduction:** Persons with substance use disorders (SUD) smoke at strikingly high rates and tobacco use cessation rates are notably low in this population. Contingency Management (CM) is effective to promote substance abstinence, including tobacco, in a large range of populations. CM is scarcely implemented in clinical settings mainly due to barriers at the therapist and organizational levels.

**Objectives:** The study sought to examine the additive effectiveness of CM on Cognitive-Behavioral Therapy (CBT) over long-term smoking abstinence in persons undergoing SUD treatment.

**Methods:** A total of 54 smokers (75.9% males,  $M_{age}=46.19$ ,  $SD=9.21$ ) were randomly assigned to CBT ( $n=30$ ) or to CBT+CM ( $n=24$ ). Interventions consisted of eight weeks of group-based therapy. Participants were instructed to gradually reduce their nicotine intake by 20% weekly. The CM arm was voucher-based, and the primary outcome was biochemically verified tobacco abstinence ( $CO \leq 4ppm$ , and urine cotinine  $\leq 80ng/ml$ ).

**Results:** A total of 42/54 (77.78%) participants completed the treatment (73.33% in CBT and 83.33% in CBT+CM;  $p=.380$ ). At the end of treatment, participants in CBT+CM showed higher 24-hour smoking abstinence (50% vs. 20%,  $p=.032$ ); however, both treatment conditions show equal abstinence rates in the remaining follow-ups (CBT<sub>1month</sub>= 13.33% vs. CBT+CM<sub>1month</sub>= 25%; CBT<sub>2months</sub>= 10% vs. CBT+CM<sub>2months</sub>= 16.66%; CBT<sub>3months</sub>= 10% vs. CBT+CM<sub>3months</sub>= 16.66%; CBT<sub>6months</sub>= 10% vs. CBT+CM<sub>6months</sub>= 8.33%; all  $p$ -values  $\geq .244$ ).

**Conclusions:** CM facilitates early abstinence outcomes in smokers with SUD more than CBT only does. However, no additive effects of CM were observed at long-term, suggesting the convenience to intensify CM schedules or using technology platforms for incentives delivery.

**Disclosure:** No significant relationships.

**Keywords:** contingency management; smoking cessation; Substance Use Disorder; effectiveness

## EPV0678

### Electronic cigarettes use among teenagers in Tunisia

R. Maalej<sup>1</sup>, Y. Zgueb<sup>2\*</sup>, A. Aissa<sup>1</sup>, U. Ouali<sup>2</sup> and F. Nacef<sup>2</sup>

<sup>1</sup>Psychiatry A, Razi Hospital, Manouba, Tunisia and <sup>2</sup>Psychiatry A Department, Razi Hospital, Manouba, Tunisia

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.2173

**Introduction:** Electronic cigarettes (e-cigarettes) are battery-powered devices developed with the goal of mimicking the action of smoking. Their use has increased over the past years.

**Objectives:** The aim of this study was to evaluate the prevalence of the use of e-cigarettes among teenagers in high school and to examine the predictor factors.

**Methods:** A survey was conducted with a sample of 234 students in Mohamed Ali high school in Sfax, a town in the south of Tunisia, in February 2020. We estimated e-cigarette prevalence among adolescents and the predictor factors of vaping.

**Results:** Among high school students aged 15 to 20, 58,8% have ever used e-cigarette, 38,3% had done so within the previous 30 days and 20,5 % were regular users of vapes. The mean age of e-cigarette users was 16,59 +/- 0,908 years old, 83,3% of e-cigarettes users were males. Male gender, high socio-economic level, practicing leisure activities, smoking cigarettes and drinking alcohol were associated with regular use of e-cigarettes. Overall, 51, 6% of never smoking students reported ever use of e-cigarettes. The main reason for initiating e-cigarettes use was curiosity (65%).

**Conclusions:** Our findings showed the significant use of e-cigarettes among high school students thus it would be interesting to provide adolescents with information about the use of e-cigarettes and other tobacco products.