

P.6.d.021 Impact of co-occurring cannabis and tobacco use in patients with severe mental disorder

S. Berta^{1*}, V. Chavarria¹, A. Toll¹, J. Pagerols², F. Fonseca³, V. Pérez-Solá³ ¹*Institut de neuropsiquiatria i addiccions, Hospital del Mar, Barcelona, Spain;* ²*Institut de neuropsiquiatria i addiccions, Centre Emili Mira – Parc de Salut Mar, Barcelona, Spain;* ³*Institut de neuropsiquiatria i addiccions, Hospital del Mar – IMIM Institut Hospital del Mar d'Investigacions Mèdiques, Barcelona, Spain*

Purpose of the study: Tobacco and cannabis are the most commonly used psychoactive substances worldwide. A growing body of evidence has documented the important prevalence of the co-occurring tobacco and cannabis use in adults and adolescents [1]. This comorbidity is associated with greater cannabis use disorders, psychosocial problems, psychiatric pathology and treatment difficulties [2,3].

The aim of this study is to evaluate whether there are differences in patients characteristics, psychopathology, medical comorbidity, drug use and psychosocial problems, related to the concomitant use of cannabis and nicotine, in a sample of patients recruited in a long-stay psychiatric unit.

Methods: Patients were recruited from a long-stay psychiatric unit in Barcelona (Spain) from June to September 2014. Patients were divided in 3 groups: non-users (nor tobacco, neither cannabis), tobacco users and cannabis-tobacco co-users. Groups were compared in terms of sociodemographic characteristics, psychiatric diagnosis, concomitant drug use, medical comorbidity and type of treatment required (including the use of clozapine).

Results: A total sample of 40 patients (53% male, mean age: 43±12 years) were included: 13 (32%) were non-users, 15 (38%) were tobacco users and 12 (30%) were tobacco and cannabis co-users. The total sample main characteristics were: 80% of patients were compulsory admitted, 72.5% had somatic background (including HIV infection, HBV and HCV infection), 60% had a previous record for suicide attempt. The mean number of previous hospital admissions was 7. The 47.5% was from a middle class and 52.5% of the sample of lower social class. The 72.5% had completed primary education. The majority of the sample (95%) presented psychosocial problems. Main diagnoses were: 85% psychotic disorders, 7.5% mood disorders, 5% personality disorder and 2.5%. Finally, in the area of substance use 37.5% used nicotine; 20% used alcohol; 15% used cannabis; 10% used caffeine and 17.5% did not use psychoactive substances.

When comparing the 3 groups we found statistically significant differences regarding mean age (no-users: 46±12 vs. tobacco users: 47±8 vs. tobacco and cannabis co-users: 34±10; $p=0.002$). Also the co-use is significantly associated with increased use of alcohol (7.7% vs. 40% vs. 92%; $p<0.001$) and cocaine (0% vs. 7% vs. 58%; $p<0.001$). The groups were not significantly different in other characteristics, including main psychiatric diagnosis, medical comorbidity, treatment required (including clozapine treatment) and psychosocial problems.

Conclusions: Cannabis users who also smoke tobacco are prevalent in a long-stay psychiatric unit: 30% of patients admitted. This group of patients required an admission in a long-term facility at younger age than patients with no comorbid tobacco and cannabis use. They also presented a history of increased use of psychoactive substances: alcohol and cocaine. They are patients with more severe and premature illness presentation, requiring and accurate assessment and specific treatment focused in both,

psychiatric and addiction disorders. Sample should be increased in order to find other differences.

References

- [1] Agrawal, A., Lynskey, M.T., 2009. Tobacco and cannabis co-occurrence: Does route of administration matter? *Drug Alcohol Depend* 99, 240–7.
- [2] Peters, E.N., Budney, A.J., Carroll, K.M., 2012. Clinical correlates of co-occurring cannabis and tobacco use: a systematic review. *Addiction* 107, 1404–17.
- [3] Peters, E.N., Schwartz, R.P., Wang, S., O'Grady, K.E., Blanco, C. 2014. Psychiatric, psychosocial, and physical health correlates of co-occurring cannabis use disorders and nicotine dependence. *Drug Alcohol Depend* 134, 228–34.

P.6.d.022 Cognitive and emotional impairments in adults with attention-deficit/hyperactivity disorder and cocaine use: mutual effects of an unholy alliance

M. Wunderli^{1*}, M. Vonmoos¹, K.H. Preller¹, L.M. Hulka¹, M.R. Baumgartner², E. Seifritz¹, D. Eich-Höchli¹, B.B. Quednow¹ ¹*University of Zurich, Department of Psychiatry – Psychotherapy and Psychosomatics, Zürich, Switzerland;* ²*University of Zurich, Center of Forensic Hairanalytics, Zürich, Switzerland*

Background: We have recently shown that the attention-deficit/hyperactivity disorder (ADHD) is an important modulator of basal and social cognitive functioning in cocaine misuse and addiction as recreational and dependent cocaine users with ADHD displayed stronger impairments compared to user groups without ADHD [1,2].

Aims: The purpose of the study was therefore to investigate the interaction between cocaine use and ADHD regarding basal and social cognitive performance more in depth.

Methods: ADHD patients ($n=29$) were recruited from the ADHD outpatient clinic of the Department of Psychiatry, Psychotherapy and Psychosomatics at the Psychiatric Hospital of the University of Zurich, Switzerland. Their cognitive performance was compared with cocaine users with (CU+, $n=24$) and without ADHD (CU-, $n=30$) and healthy controls without ADHD ($n=40$). Cognitive performance was assessed with the Cambridge Neuropsychological Test Automated Battery, the Rey Auditory Verbal Learning Task, and the Letter Number Sequencing Test. Task parameters were integrated into four cognitive domain scores and a global cognitive index (GCI). Theory-of-mind (ToM) and empathy were measured by the Movie for the Assessment of Social Cognition and the Multifaceted Empathy Test. In addition, depressive symptoms were determined through Beck's Depression Inventory.

Results: In all cognitive domains (attention, working memory, declarative memory, and executive functions) and the GCI, CU+ showed the poorest performance followed by CU- and ADHD patients. In working memory, declarative memory, and GCI, CU+ performed significantly worse than CU- [all $p<0.05$] and the ADHD group [$p<0.001$]. Moreover, CU- showed stronger cognitive deficits in both memory domains than the ADHD group [$p<0.05$]. A two-way ANCOVA of the GCI with ADHD and cocaine use as fixed factors revealed no significant interaction [$F(1,116)=0.2$, $p=0.17$] but significant main effects for ADHD [$F(1,116)=7.4$, $p<0.01$] and cocaine use [$F(1,116)=25.5$, $p<0.001$]. Regarding social cognition CU+ showed less cognitive empathy and impaired ToM in comparison to controls and the ADHD group [all $p<0.05$]. Additionally, CU+ showed worse ToM