ADHD and related aspects in a standardised investigation in Austrian prisons – incarcerated patients with substance use disorders

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Aim
The burden of psychiatric and somatic comorbidities is higher in people who inject drugs, especially in prison [1]. As stated in previous work symptoms of attention deficit-hyperactivity disorder (ADHD) are correlated to delinquent behaviour and ADHD is knowingly increased in persons who suffer from substance-use disorders (SUD) [2,3]. Prisoners enrolled in opioid maintenance therapy (OMT) have an outlasting history of opioid abuse and potentially represent a high-risk group for ADHD. Evidence concerning prevalence of ADHD and pharmacological treatment in custodial settings is limited.

Methods
Standardized and structured psychiatric assessment was administered to incarcerated persons in Austrian prisons enrolled in OMT. The study was approved by IRB & Ministry of Justice.

Applied instruments
For the evaluation of childhood and adulthood ADHD the Wender Utah Rating Scale – germane short form (WURS-k) was applied, as well as the Adult ADHD self-report scale (ASRS-v1.1). Psychiatric comorbidities were assessed using the Mini International Neuropsychiatric Interview (MINI). Assessment of sociodemographic data, medical status, substance use and delinquency were conducted using the Europe ASI and ASI crime module.

Results
Of N = 132 inmates in OMT 50.0% screened positive in the WURS-k for childhood ADHD. Participants with positive results in both ADHD screenings (17.2%) were those, likely suffering from adult ADHD. Four participants received medication for ADHD.

Statistical characteristics of participants with and without ADHD were assessed using Mann-Whitney-U test. Analysis showed a significant higher prevalence in subjects with adult ADHD for the following psychiatric comorbidities: Hypomanic episode (p<0.001), episode of major depression (p=0.006), generalized anxiety disorder (p=0.007), panic disorder (p=0.015), post-traumatic stress disorder (p=0.029), obsessive-compulsive disorder (p=0.036) and antisocial personality disorder (p=0.007). In comparison to those without childhood ADHD, inmates with childhood ADHD were significant younger at onset of regular abuse of almost all substance categories including injecting drug use. Small to moderate effects according to Pearson’s r were observed.

Conclusions
Although a significant proportion of inmates in OMT suffer from ADHD, pharmacological treatment of the disease is underrepresented. The implementation of a consistent diagnostic and treatment strategy for ADHD in prisoners should be conducted and attention should be paid to those with a history of substance abuse. Early and effective treatment in addition to OMT could yield to reduced concomitant consumption and higher treatment retention; next to increase the individual’s quality of life. Further, our investigation showed a significant earlier onset of substance abuse for almost all substance categories in participants with childhood ADHD. This emphasizes the need of ADHD assessment in adolescents with substance abuse.