

## **Identification of adult attention deficit-/hyperactivity disorder (ADHD) among patients with alcohol dependence attending residential treatment**

### **Summary**

**Background:** Attention Deficit/Hyperactivity Disorder (ADHD) is increasingly recognized as an invalidating and highly prevalent disorder in children and, recently, in adults. Patients with ADHD suffer from inattention, restlessness and impulsivity throughout their life. Psychiatric disorders, such as personality disorders, mood and anxiety disorders, and in particular substance use disorders (SUD) are common among adults with ADHD. Prevalence rates of comorbid SUD and ADHD are estimated between 15 and 30%. ADHD is an important risk factor in the development and persistence of addiction. As the adult ADHD is a relatively new diagnosis, however, evidence based knowledge is scarce, which is necessary for screening, diagnosing and eventually treating effectively SUD patients with ADHD. ADHD symptoms are mostly concealed by the symptoms that occur from alcohol consumption, alcohol craving or withdrawal, thus turning identification of ADHD among patients with alcohol use disorders (AUD) into an even greater challenge. Consequently, most of these patients are not diagnosed in both psychiatric and addiction treatment services leaving them their ADHD not treated. Nevertheless, clinical suggests that treatment of ADHD promotes AUD treatment outcome even in patients who have suffered from an AUD for many years.

**Specific aims:** To discriminate patients with AUD-only from patients with co-morbid ADHD by screening and diagnosis instruments and assess alcohol craving, severity of withdrawal symptoms, and course of alcohol use disorders as potential indicators of ADHD among AUD patients.

**Working hypotheses:**

1. Patients with co-morbid ADHD and AUD have a higher craving for alcohol than AUD-only patients. Thus, alcohol craving represents an adequate measure to differentiate co-morbid patients from AUD-only patients.
2. Co-morbid patients suffer from worse alcohol withdrawal than AUD-only patients, need higher doses of medication during withdrawal and are prone to develop more complications (e.g., epileptic seizures, delirium).
3. Co-morbid ADHD-AUD patients can be differentiated from AUD-only patients by their more severe SUD, including earlier onset of substance abuse, more rapid transition into severe substance abuse, poorer treatment response, and lower remission rates compared to patients with SUD-only.

**Design and methods:** The study will be conducted in the residential AUD treatment programs of the University Hospital of Psychiatry Berne and specialty hospitals of Südhang and Forel with a total case-load of 500 patients a year. Questionnaires and interviews will be used to collect data at admission. An extended examination of ADHD will be carried out if the screening is positive to confirm the ADHD diagnosis. AUD patients with and without ADHD will be assessed on SUD, craving, and withdrawal symptoms.

**Expected value of the project:** This study contributes to the detection of the ADHD diagnosis in AUD patients. A better understanding of ADHD characteristics in AUD patients is crucial as co-morbid patients tend have a worse treatment outcome and prognosis for their SUD. Furthermore, understanding of ADHD in AUD patients is a prerequisite to carry out controlled studies of efficacy and effectiveness of ADHD treatment in SUD programs.