

## **Abstract**

**Introduction:** Adult Attention Deficit Hyperactivity Disorder (ADHD) is postulated to have association with substance use disorders. Studies are available for prevalence individually and together. However comparative studies of strength of association between Adult Attention deficit hyperactivity Disorder vs. severity of substance use disorder and treatment adherence are found neither in Sri Lanka nor in Bermuda.

**Aims:** This study was conducted to assess the prevalence of Adult Attention Deficit Hyperactivity Disorder among adult males attending Turning Point Treatment Program in Mid Atlantic Wellness Institute ,Bermuda for substance use disorder. Determination of strength of association between Adult ADHD and severity of substance use and assess if the poly substance use and severity of substance use can be used to predict the adult ADHD were other aims of this study. Furthermore the correlation between Adult ADHD presence and adherence to treatment was analyzed to evaluate the treatment options and challenges. Adult Wender Utah Rating Scale (WURS), Alcohol Dependency Scale (ADS), Drug Abuse Screening Test (DAST), past records and structured clinical interviews were used to obtain data.

**Methodology:** A prospective, cross sectional study was conducted at the Mid Atlantic Wellness Institute of Mental Health Turning Point Treatment Program, Bermuda employing the structured interview, self assessment scales and medical records of patients who are registered and active with all services on 1/3/2013 and followed up during the period from 1/3/2013 to 30/9/2013. 171 patients were included as study sample after exclusion from a total population of 214 .

A standardized data collection form was used to record information. Demographic information, Alcohol dependency Scale score and Drug Abuse Screening Test score were obtained from structured interview and clinic records. Adult Wender Utah rating scale score was obtained by self administered questionnaire. Details of treatment adherence were captured from the hospital electronic data base for substance use program, SMART. Descriptive statistics, Pearson correlation test and linear regression model with multiple regressions were used for statistical analysis of data.

**Results :** Adult ADHD was significantly more prevalent among the substance use treatment programme participants (46.2%). There was a statistically significant association for Adult ADHD with alcohol and other substance use severity, at the 0.05 level. In regression analysis model, Adult Wender Utah rating scale Score versus Drug Abuse Screening Test Score and multiple substance use showed a statistically significant predictability with number of drugs and Score of DAST. There is a significant association for all three modalities of treatment counselling, doctor and group appointments absence, versus Adult ADHD. Counselling appointment and group appointment absenteeism has strong statistically significant correlation while correlation between . counselling-doctor and doctor-group appointments absence, has fairly significant correlation.

**Conclusions:** Findings indicated that ADHD is prevalent among substance users, who are at increased risk for higher severity of substance use and multiple substance use. ADHD also appears to play an important role in poor treatment adherence, indicating that targeted ADHD screening and treatment may help to improve real-world outcomes for individuals with substance use disorders.