

Is Attention Deficit/Hyperactivity Disorder Associated with Initiation or Escalation of Substance Use at 36-Month Follow-Up? A Longitudinal Study Involving Young Swiss Men

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Young adults with Attention Deficit/Hyperactivity Disorder (ADHD) show higher substance use disorder (SUD) prevalence relative to non-ADHD controls; although few longitudinal studies have examined the course of substance use with reference to conduct disorder (CD). In a first study, we compared initiation and escalation of substance use at 15-month follow up in men screened positive or negative for ADHD (ADHD+ vs. ADHD-), controlling for CD presence in early adolescence.

Participants (N= 5,103 male Swiss Army conscripts; age 20 (SD=1.21) at baseline) were recruited from the census of all young men who have to pass mandatory army conscription from three out of six Swiss Army recruitment centres. A two-wave data collection was performed via questionnaires at baseline and 15-month follow up as a part of the longitudinal Cohort Study on Substance Use Risk Factors. ADHD and CD were assessed using the adult ADHD Self-Report Scale and the MINI International Neuropsychiatric Interview Plus questionnaire, respectively, at baseline, and substance use was measured via self-administered substance use questionnaires at baseline and follow up.

As compared to the ADHD- group, the ADHD+ group (n = 215, 4.2%) showed heavier baseline substance use and more likely alcohol, tobacco, and cannabis use disorders. The extent of alcohol, tobacco, and cannabis use in the two groups remained stable from baseline to follow-up (no escalation). The ADHD+ group was more likely to initiate substance use as compared to the ADHD- group (higher initiation rates), particularly with amphetamines and non-medical use of ADHD medication. CD was associated with initiation of substance use but did not mediate the associations between ADHD and substance use, revealing that the impact of ADHD on substance use was independent of CD.

For men in their early twenties, Attention Deficit/Hyperactivity Disorder is a risk factor for continued heavier but not escalating use of alcohol, tobacco, and cannabis when already consuming these substances. It is also a risk factor for initiating the use of cannabis, stimulants, hallucinogens, and sedatives, independent of conduct disorder in early adolescence.

In the present second study, we aim to investigate whether young Swiss with ADHD still have a higher risk of initiating to use addictive substances after 36 months post baseline. Furthermore, we will examine whether substance use among those who had already started using addictive substances at wave one (baseline) or two (15 months) has been further escalated.

Vogel, T., Dom, G., van de Glind, G., Studer, J., Gmel, G., Strik, W., & Moggi, F. (2016). Is attention deficit/hyperactivity disorder among men associated with initiation or escalation of substance use at 15-month follow up? A longitudinal study involving young Swiss men. *Addiction*, 111, 1867-1878.