Prescription stimulant use is associated with earlier onset of psychosis.

Moran LV, Masters GA, Pingali S, Cohen BM, Liebson E, Rajarethinam RP, Ongur D.


Abstract
A childhood history of attention deficit hyperactivity disorder (ADHD) is common in psychotic disorders, yet prescription stimulants may interact adversely with the physiology of these disorders. Specifically, exposure to stimulants leads to long-term increases in dopamine release. We therefore hypothesized that individuals with psychotic disorders previously exposed to prescription stimulants will have an earlier onset of psychosis. Age of onset of psychosis (AOP) was compared in individuals with and without prior exposure to prescription stimulants while controlling for potential confounding factors. In a sample of 205 patients recruited from an inpatient psychiatric unit, 40% (n = 82) reported use of stimulants prior to the onset of psychosis. Most participants were prescribed stimulants during childhood or adolescence for a diagnosis of ADHD. AOP was significantly earlier in those exposed to stimulants (20.5 vs. 24.6 years stimulants vs. no stimulants, p < 0.001). After controlling for gender, IQ, educational attainment, lifetime history of a cannabis use disorder or other drugs of abuse, and family history of a first-degree relative with psychosis, the association between stimulant exposure and earlier AOP remained significant. There was a significant gender × stimulant interaction with a greater reduction in AOP for females, whereas the smaller effect of stimulant use on AOP in males did not reach statistical significance. In conclusion, individuals with psychotic disorders exposed to prescription stimulants had an earlier onset of psychosis, and this relationship did not appear to be mediated by IQ or cannabis.