"To see with the eyes of another, to hear with the ear of another,
to feel with the heart of another. For the time being, this seems
to me an admissible definition of what we call social feeling."
—Dr. Alfred Adler, Austrian Psychotherapist (1870 – 1937)

Frequent cannabis users go through withdrawal period

by **Brad Hopkins,** *Correspondent,* **The Chronicle**

A STUDY PUBLISHED ONLINE ahead of print in the journal *Drug and Alcohol Dependence* found that 12% of frequent marijuana smokers experience Cannabis Withdrawal Syndrome (CWS), which includes emotional, behavioral and physical symptoms after quitting (Oct. 16, 2018 pii: S0376-8716(18)30714-2). CWS was first included in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders that was published in 2013. This is the first large-scale analysis on the link between CWS and DSM-5 psychiatric disorders among frequent U.S. adult cannabis users.

Study participants were interviewed as part of the 2012-2013 National Epidemiologic Survey on Alcohol and Related Conditions-III (NESARC-III), the only nationally representative survey in the U.S. that measures clinically diagnosed CWS. Interviews were conducted with 36,309 participants. The final analysis was based on 1,527 participants who were frequent cannabis users, who used the drug three or more times per week during the year prior to the interview.

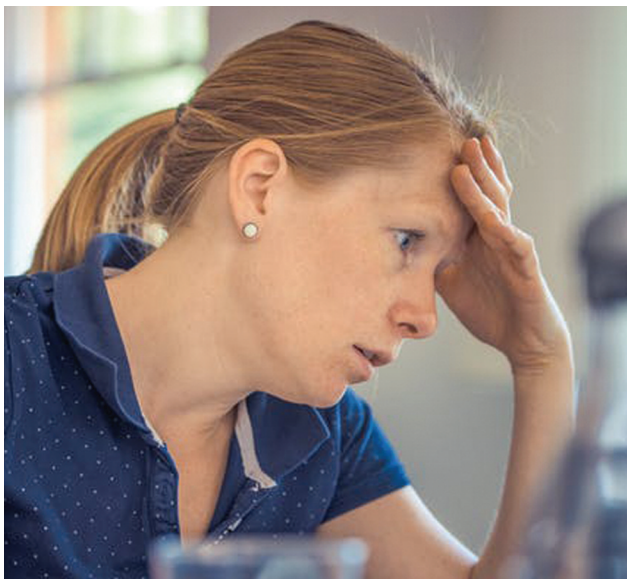
"Cannabis withdrawal syndrome is a highly disabling condition," said study author Dr. Deborah Hasin, PhD, professor of Epidemiology and Psychiatry at Columbia University Mailman School of Public Health in New York, in a press release. "The syndrome's shared symptoms with depressive and anxiety disorders call for clinician awareness of cannabis withdrawal symptoms and the factors associated with it to promote more effective treatment among frequent cannabis users."

Among withdrawal symptoms, the most commonly reported were nervousness/anxiety (76%), hostility (72%), sleep difficulty (68%), and depressed mood (59%). It was also common for patients with WS to experience headaches, tremors, and sweating. Notably, physical symptoms were reported less frequently than behavioural and emotional symptoms.

Stress may cause compromised cognitive performance in middle-aged adults

■ High cortisol levels also associated with reduced brain volumes

ADULTS IN THEIR 40s and 50s with high levels of cortisol—a hormone linked to stress—experienced worsened performance on memory and cognitive tasks compared with peers of the same age who had normal cortisol levels, according to a study published online ahead of print in *Neurology* (Oct. 24, 2018). Higher levels of cortisol were also linked to smaller brain volumes.



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Results were based on data from 2,231 participants in the Framingham Heart Study—a longitudinal and ongoing cardiovascular cohort study on residents of the city of Framingham, Massachusetts.

CORTISOL LEVELS FLUCTUATE

Researchers analyzed blood serum cortisol, which varies in level throughout the day. Levels were measured in early morning (between 7:30 and 9 a.m.) in each fasting participant.

"In our quest to understand cognitive aging, one of the factors attracting significant interest and concern is the increasing stress of modern life," said study senior author Dr. Sudha Seshadri, professor of neurology at UT Health San Antonio and founding director of the university's Glenn Biggs Institute for Alzheimer's and Neurodegenerative Diseases, in a press release. "One of the things we know in animals is that stress can lead to cognitive decline. In this study, higher morning cortisol levels in a large sample of people were associated with worse brain structure and cognition."

Among the study's middle aged-participants, memory loss and brain shrinkage were detected before any other symptoms. The cohort featured a relatively young sample of male and female participants—the mean age of the male and female participants was 48.5 years.

COMMUNITY-BASED FINDINGS

"Cortisol affects many different functions, so it is important to fully investigate how high levels of the hormone may affect the brain," said study lead author Dr. Justin B. Echouffo-Tcheugui, assistant professor at Johns Hopkins University in Maryland. "While other studies have examined cortisol and memory, we believe our large, community-based study is the first to explore, in middle-aged people, fasting blood cortisol levels and brain volume, as well as memory and thinking skills."

IMPACT OF MODERN LIFE

Investigators highlight that findings were adjusted for factors including age, sex, smoking, and body mass index. The team also explored whether having APOE4, a genetic risk factor for cardiovascular disease and Alzheimer's disease, might be associated with higher cortisol level. This did not prove to be the case.

"The faster pace of life today probably means more stress, and when we are stressed, cortisol levels increase because that is our fight-or-flight response," Dr. Seshadri said. "When we are afraid, when we are threatened in any way, our cortisol levels go up. This study adds to the prevailing wisdom that it's never too early to be mindful of reducing stress."

Dr. Seshadri and her colleagues said that these findings illustrate the importance of counselling people with higher cortisol levels on ways to reduce stress, such as getting enough sleep and engaging in moderate exercise.

—More information at
https://goo.gl/GkQord

In the news . . .

■ An artificial intelligence system is being developed to diagnose Parkinson's Disease. The Chinese company Tencent and the London-based company Medopad are creating AI software that will be able to recognize Parkinson's by scanning video footage of known Parkinson's patients in order to reduce assessment times for doctors and patients, according to a report by *Forbes* (Oct. 8, 2018).

—Find more information at
https://bit.ly/2AFNijv

■ Language used in Facebook status updates and comments may suggest whether or not a user is depressed. According to researchers at the University of Pennsylvania, users who used more "I language" were more likely to be depressed, *USA Today* reports (Oct. 17, 2018) "I language" refers to first-person, singular pronouns, which the researchers say suggests "a preoccupation with the self."

—Read this article at
goo.gl/AHg1zc

■ Mental illness is among the major issues, including poverty, poor nutrition, and child abuse, that face school-aged children as they return to class this fall, reports the *Vancouver Sun* (Sept. 6, 2018). Researchers in British Columbia have found that 70% of children with mental disorders in B.C. are not receiving the mental health services they require.

—Read more at
goo.gl/gBqLyr

■ Apple will donate 1,000 apple watches to researchers at the University of North Carolina School of Medicine, who plan to use the devices to study the genetic factors linked to eating disorders, according to *PC Magazine* (Oct. 15, 2018). Participants with eating disorders will use an app to track their mood, food intake, and health goals for one month.

—More information at
goo.gl/XAPcGM