Cannabis Use and Attention-Deficit/Hyperactivity Disorder in Community Mental Health:

Considering Comorbidity and Accurate Documentation

Fawaz Stipho; Kai Glahn, MA; Erica A. Rodriguez, BS; and Jordan F. Karp, MD

The inattention of attention-deficit/hyperactivity disorder (ADHD) "manifests behaviorally in ADHD as wandering off task, lacking persistence, having difficulty sustaining focus, and being disorganized."[1(p62)] Frequent cannabis use and the other cannabis-related disorders may affect cognition, in particular memory and executive function, which may contribute to performance difficulties in school and work.[2] During clinical work at our departmental Medicaid-licensed Behavioral Health Home,[3] we anecdotally observed (1) frequent cannabis use among young adult patients diagnosed with ADHD, (2) prescribed stimulants among young adult patients using cannabis, and (3) inaccurate coding of cannabis use, even when cannabis was described in the narrative of the encounter. To explore the scope of comorbidity, accuracy of documentation, and potentially inappropriate prescribing of stimulants, we retrospectively (using de-identified data) surveyed the medical record to describe the accuracy of diagnosing and overlap of ADHD, cannabis use, and prescribed treatments for ADHD in a largely Medicaid group of young adult patients.[4]

Methods

We surveyed the electronic medical record for patients aged 18–30 with at least one clinic visit between January and December 2023. We then abstracted and tabulated both *International Statistical Classification of Diseases, Tenth Revision (ICD-10),* codes for ADHD, cannabis use, and mention of either condition in the encounter narrative. Descriptions of use frequency and quantity were inconsistently recorded in the clinical notes and therefore excluded from our analysis. To be sure, we conducted a sensitivity analysis on 12 out of the 33 charts with documented cannabis use and found only 1 case where cannabis abuse was noted in the clinical records. However, the documentation lacked details on the frequency or quantity of use. We also abstracted from the medication list both stimulant and nonstimulant drugs that were prescribed for ADHD.

Results

Among the 300 patients identified, 87 had an *ICD-10* diagnosis of ADHD included in the problem list, and 94 patients had ADHD described in the narrative of the encounter. This reflects a 93% concordance between the *ICD-10* codes and narrative.

Of the 94 patients with ADHD described in the text of the encounter, 33 (35%) had descriptions of current marijuana use included in their clinical notes. Despite this, only 3 (3%) of these 94 patient notes included a coded diagnosis of marijuana use.

In our prescription survey, we observed that 26 (13%) patients of the 206 who did not have a coded diagnosis or description of ADHD in the narrative were prescribed stimulant medications for inconsistently documented reasons. Among the 94 patients diagnosed with ADHD, 68 (72%) were prescribed stimulant medications, while 20 (21%) received nonstimulant medications. Among the 33 patients with both ADHD and marijuana use documented in the text of the clinical encounter, 24 (73%) were prescribed stimulants.

Discussion

The high concordance between clinical note descriptions and coded diagnoses of ADHD indicates robust documentation practices for ADHD. However, this clinical improvement initiative reveals a gap in the accurate coding of cannabis use among these patients with ADHD, with cannabis use substantially underreported as coded diagnoses. The finding that 73% of patients with both ADHD and cannabis use described in the encounter were prescribed stimulant medications necessitates enhanced training

and education for clinicians on appropriate prescription of stimulants. Such education may include best-practice management of ADHD in patients using cannabis to minimize inaccurate prescribing and iatrogenic consequences of stimulant exposure and the potential for community diversion. Some patients with comorbid cannabis use and attention problems (diagnosed as ADHD) may experience cognitive benefit from decreasing or stopping cannabis use instead of taking a stimulant. This harm-reduction or abstinence approach may reduce the cardiovascular and diversion risks associated with stimulant medications. In summary, these observations are a reminder of (1) the importance of accuracy in diagnosis and documentation—if in the text of the note, consider including as a coded diagnosis to support communication among treatment teams and to support medical complexity and treatment planning,[5] (2) cannabis use reduction among young adults who describe problems with attention, and (3) cautionary prescription of stimulants for a young patient whose complaints of cognitive impairment may not be secondary to ADHD but may be compromised by cannabis.

We acknowledge as a limitation that our focus was on documenting cannabis use, not limited to misuse/disorder. This may affect the interpretation of our findings regarding coding practices for cannabis use.

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Author Affiliations: Department of Psychiatry, College of Medicine, University of Arizona, Tucson, Arizona (Stipho, Glahn, Rodriguez, Karp); Banner University Medical Center and Group, Tucson, Arizona (Rodriguez, Karp).

Corresponding Author: Jordan F. Karp, MD, Banner University Medical Center and Group, 2800 E Ajo Way, Behavioral Health Pavilion, Ste P3016, Tucson, AZ 85713 (karpjf@arizona.edu).

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