

STASH, Vol. 6(7) - I can't focus: Self-medication implications behind ADHD prescription drug misuse

August 18, 2010

As described in a previous [BASIS](#), US college students report taking unprescribed ADHD medications, such as Ritalin, Concerta, and Adderall, to improve their academic performance. An open question is whether some use these prescription medications to manage undiagnosed ADHD. This week the STASH reviews a recent article by Peterkin and colleagues (2010) that explores the potential association between the misuse of ADHD medications and undiagnosed ADHD among college students.

Methods

- A convenience sample of college students (n=190) volunteered to participate in an anonymous survey regarding cognitive performance enhancement.
 - The survey asked whether participants had ever been diagnosed with ADHD and whether they had ever used medications used to treat ADHD without a prescription.
 - The survey included the World Health Organization Adult ADHD Self-Report Scale, which has 97.9% classification accuracy for identifying the presence of ADHD symptoms (Kessler et al., 2005).

Results

- Table 1 shows the distribution of participants by ADHD medication use and results of the ADHD symptom screen.
 - Participants who used ADHD medication without a prescription were nearly 7 times more likely than participants who did not use ADHD medication to have ADHD symptoms ($\chi^2 = 62.30, p < 0.0001$).
 - Approximately 70% of those who used ADHD medications without

a prescription screened positive for ADHD, while only 30% of those who did not use ADHD medications screened positive.

ADHD Medication Use without a Prescription	Positive for ADHD Symptoms	Negative for ADHD Symptoms	Total
Used	32 (70%)	13 (10%)	45 (25%)
Did Not Use	14 (30%)	121 (90%)	135 (75%)
Total	46	134	180

Figure. ADHD Medication Use and ADHD Symptom Results (adapted from Peterkin et al.) *This analysis was based on 180 respondents - 6 surveys were incomplete and 4 participants reported misusing ADHD medications had a previous ADHD diagnosis. Click image to enlarge.

Limitations

- Because the recruitment procedures employed flyers seeking people who were interested in cognitive performance enhancement, the study likely oversampled students who used medications to improve academic performance. Consequently, the results might exaggerate the prevalence of ADHD medication use in the absence of an ADHD diagnosis.
- The study relies on self-reported behavior. Some respondents might have been unwilling to admit that they take unprescribed medications.

Discussion

The results indicate that, among college students who take unprescribed ADHD medications, some might be self-medicating undiagnosed ADHD symptoms. These results are not unique to the ADHD population. For example, as a recent STASH discussed ([STASH 6\(5\)](#)), some opioid-dependent individuals use medications (e.g., buprenorphine) without a prescription to self-treat their dependence, anxiety, and pain as well as to prevent withdrawal. Regardless of the underlying condition—ADHD or opioid dependence—individuals should consider using medications under a doctor’s supervision rather than taking on the risks associated with self-medication. Colleges should consider facilitating a doctor-patient relationship by providing treatment outreach for all students.

-Tasha Chandler

What do you think? Please use the comment link below to provide feedback on this article.

References

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