

Should Individuals Be Evaluated For ADHD While Using ADHD Medication?

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ADHD medications are primarily stimulants designed to improve attention, focus, and impulse control in individuals with Attention-Deficit/Hyperactivity Disorder.

The two main types are methylphenidate (e.g., Ritalin, Concerta) and amphetamines (e.g., Adderall, Vyvanse). These medications work by increasing dopamine and norepinephrine levels in the brain.

They come in immediate-release and extended-release formulations, allowing for different durations of effect. Non-stimulant medications like atomoxetine (Strattera) are also used, especially when stimulants are ineffective or cause adverse effects.

The goal of ADHD medication is to reduce core symptoms and improve daily functioning in academic, social, and occupational settings.



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Key Points

1. The primary methods of evaluating patients for ADHD while on medication include considering the purpose of the evaluation, preventing undue risk to patient safety, giving due weight to data from outside the evaluation setting, and considering medication status when integrating data.
2. Factors like stimulant effects on cognitive tests, observable behavior during evaluations, and the time course of stimulant effects significantly affect the decision to evaluate patients on or off medication.
3. The research, while enlightening, has certain limitations such as a lack of studies on adult behavior during evaluations and limited direct research on cognitive testing at varying time points after halting stimulant use.
4. The topic of evaluating ADHD patients while on medication is universally relevant due to the prevalence of ADHD diagnoses and the common use of stimulant medications in treatment.

Rationale

The paper addresses the lack of authoritative guidance on whether patients should take their prescribed ADHD medication during psychological evaluations.

This question is crucial as many patients undergoing evaluation are already taking stimulant medication, either as part of an initial trial or ongoing treatment.

The authors note that different clinics and clinicians have varying policies on this issue, highlighting the need for evidence-based recommendations.

The rationale for the study is further supported by the complex nature of stimulant effects on cognitive performance and behavior.

Previous research has shown that stimulants can improve cognitive performance in both ADHD and non-ADHD individuals (Bagot & Kaminer, 2014; Coghill et al., 2014). However, the effects vary depending on the complexity of cognitive tasks and the individual's baseline performance (Fosco et al., 2021; Pievsky & McGrath, 2018).

The next step in addressing this issue is to review relevant research literature and synthesize findings to develop practical recommendations for clinical use.

Method

The study employs a literature review methodology, drawing from a wide range of sources, including clinical handbooks, research studies, and meta-analyses.

The review focuses on studies related to:

- Stimulant effects on cognitive performance and behavior
- ADHD assessment tools and practices
- Pharmacokinetics of stimulant medications
- Long-term effects of stimulant use

Results

Stimulant Effects on Clinical Assessment Data:

- Stimulants have a positive effect on cognitive performance in both children and adults with ADHD.

- The effect varies depending on the complexity of cognitive tasks:
 - Little to no effect on intelligence tests and complex executive functioning tests
 - Substantial effects on less complex tasks like Continuous Performance Tests (CPTs)
- Stimulants have a larger effect on cognitive performance when the individual has significant baseline cognitive weaknesses.
- No evidence of negative effects or “cognitive toxicity” from prescription stimulant medications, even at higher doses.

Stimulants and Observable Behavior During Evaluation Sessions:

- Stimulant effects on observable behavior are likely to be more significant during psychological evaluations than in real-world settings.
- Studies using the Restricted Academic Situation (RAS) found large reductions in ADHD symptoms for children on stimulant medication.
- Clinician observations using RAS were more sensitive to detecting symptom change than parent and teacher ratings.

Time Course of Stimulant Effects:

- Instant-release formulations of amphetamine and methylphenidate take effect within 30-45 minutes and last 4-6 hours.
- Extended-release formulations can last 8-16 hours, depending on the specific medication.

Tolerance and Withdrawal Concerns:

- Long-term use of stimulants may lead to adaptations in the brain, potentially resulting in tolerance and withdrawal effects.
- Some patients may experience withdrawal symptoms upon discontinuation of stimulant medication.
- The duration of withdrawal effects can vary, with some studies suggesting they may last for days or even weeks.

Importance of Test Session Data:

- Behavioral observations during testing sessions add evidence regarding ADHD, but their contribution is not large.

- Cognitive measures, especially CPTs, can provide incremental validity in ADHD diagnosis.

Insight

This study provides a comprehensive review of the complex issues surrounding ADHD evaluation for patients already taking stimulant medication.

The key findings highlight the need for a nuanced approach to medication decisions during evaluations, considering factors such as the purpose of the evaluation, the specific cognitive tasks being used, and the potential for withdrawal effects.

The research extends previous work by synthesizing findings from various areas, including pharmacology, cognitive psychology, and clinical assessment, to develop practical recommendations for clinicians.

It addresses a gap in the literature by providing evidence-based guidance on a common clinical dilemma.

Further research could focus on:

1. Direct studies of cognitive performance at various time points after discontinuing stimulant medication
2. Investigations of adult behavior during ADHD evaluations, both on and off medication
3. Development and validation of standardized protocols for ADHD evaluation that account for medication status

Strengths

| The review had several strengths, including:

1. Comprehensive review of literature from multiple relevant fields
2. Consideration of both short-term and long-term effects of stimulant medication
3. Focus on practical, clinically relevant recommendations
4. Recognition of the complexity of the issue and avoidance of overly simplistic conclusions
5. Integration of findings from both cognitive testing and behavioral observation studies

Limitations

This review also had some limitations, including:

1. Lack of studies on adult behavior during ADHD evaluations, limiting generalizability to adult populations
2. Limited direct research on cognitive testing at varying time points after halting stimulant use
3. Absence of a systematic review methodology, which could have provided a more comprehensive and replicable literature search
4. Potential for publication bias in the studies reviewed, as negative or null findings may be underrepresented in the literature
5. Limited discussion of cultural or socioeconomic factors that might influence medication use or evaluation practices

These limitations suggest that while the review provides valuable insights, further research is needed to fully understand the complexities of ADHD evaluation in medicated patients across diverse populations and age groups.

Implications

The results of this study have significant implications for clinical psychology practice and ADHD assessment:

1. Clinicians should carefully consider the purpose of the evaluation when deciding whether a patient should take medication on the day of assessment. For diagnostic evaluations, assessing the patient off medication may be preferable, while for functional impairment assessments, evaluation on medication may be more appropriate.
2. The study highlights the importance of a comprehensive assessment approach that includes data from multiple sources, not just evaluation-day performance. Clinicians should give due weight to historical data, rating scales, and real-world functioning reports.
3. When interpreting cognitive test results, especially CPTs, clinicians need to consider the patient's medication status, as stimulants can significantly improve performance on these tasks.

4. The potential for withdrawal effects suggests that abrupt discontinuation of medication for evaluation purposes may not provide an accurate baseline. Clinicians may need to consider longer washout periods or alternative assessment strategies.
5. The findings underscore the need for clear communication between prescribing physicians and evaluating psychologists to ensure patient safety and optimal assessment conditions.
6. The study suggests that current practices in ADHD evaluation may need to be reevaluated and standardized to account for medication effects and ensure consistent, evidence-based approaches across clinics and practitioners.

These implications highlight the complex interplay between medication effects, assessment practices, and clinical decision-making in ADHD evaluation. They underscore the need for ongoing research and professional development to ensure best practices in this area of clinical psychology.

References

Primary reference

Lovett, B. J., Nelson, J. M., & Jordan, A. H. (2024). Should patients be evaluated for ADHD while using ADHD medication? *Professional Psychology: Research and Practice*, 55(2), 160–168. <https://doi.org/10.1037/pro0000555>

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Keep Learning

Below are some Socratic questions for a college class to discuss this paper:

1. How might the decision to evaluate a patient on or off medication change based on the specific purpose of the evaluation (e.g., initial diagnosis vs. accommodation planning)?
2. What ethical considerations should clinicians take into account when deciding whether to ask a patient to discontinue medication for an evaluation?
3. How might the potential for withdrawal effects influence the interpretation of evaluation results for patients who typically take medication but abstain for the assessment?
4. In what ways might the findings of this study impact current practices in ADHD assessment and diagnosis?
5. How could future research address the limitations identified in this study, particularly regarding adult populations and long-term medication effects?
6. What are the potential implications of this research for individuals who use stimulant medications without a prescription or only occasionally?
7. How might cultural or socioeconomic factors influence the application of these findings in diverse clinical settings?
8. What are the potential risks and benefits of standardizing ADHD evaluation protocols to account for medication status?
9. How might the findings of this study inform discussions about the long-term use of stimulant medications for ADHD treatment?
10. In what ways could the insights from this research be applied to the assessment and treatment of other mental health conditions that commonly involve medication?