Subjective Versus Objective Measures of Medication Adherence in Adolescents/Young Adults with Attention-Deficit Hyperactivity Disorder

Schaefer MR, Wagoner ST, Young ME, Rawlinson AR, Kavookjian J, Shapiro SK, Gray WN.


Abstract

OBJECTIVE: To examine the frequency of medication nonadherence using both objective and subjective data and to compare the differences between these measures in adolescents and young adults (AYAs) with attention-deficit hyperactivity disorder (ADHD).

METHOD: Fifty-four participants enrolled. Frequency (mean percent of prescribed doses not taken) of nonadherence was measured using subjective (visual analog scale) and objective (pill count and electronic monitoring) methods. Differences between measures were compared using t tests and analysis of variances.

RESULTS: Objective measures showed that participants missed 40% to 43% of their prescribed doses. Contrastingly, subjective measures indicated that participants missed 25% of their prescribed doses. Frequency of nonadherence was significantly higher when relying on objective measures rather than on subjective measures (t[46] = -4.51, p < 0.01 for pill counts, and t[47] = -4.81, p < 0.01 for electronic monitoring).

CONCLUSION: Nonadherence is high in AYAs with ADHD. These individuals tend to overestimate their adherence when self-reporting. Physicians should exercise caution when prescribing based on patient report of adherence and use objective measures when possible.