

Acceptability of Drugs in Treatment of Attention Deficit Hyperactivity Disorder in Children and Adolescents: Metaanalysis with Focus On Bupropion

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INTRODUCTION: Next to the drug efficacy, the discontinuation rate or acceptability (all-cause withdrawal) is also important for successful treatment.

OBJECTIVES: There is a lack of research among Attention Deficit Hyperactivity Disorder (ADHD) medications in terms of acceptability, where BUP is compared with ATX, lisdexamfetamine (LDX) and methylphenidate (MPH).

AIM: The main aim of this work was to compare the acceptability of these drugs in children and adolescents using a metaanalysis.

METHODS: A literature search was conducted to identify double-blind, placebo-controlled, noncrossover studies of ADHD. A systematic electronic literature search of PubMed (1975–April 2014) and clinicaltrials.gov with full text (1981–April 2014) was conducted. Drug acceptability was calculated based on the odds ratio (OR). We included studies that lasted 2 weeks at least and 3 months at most and only those including children and adolescents under the age of 18.

RESULTS: 28 articles and 27 trials met inclusion criteria and were sufficient for inclusion in the metaanalysis. Treatment discontinuations were smaller than with a placebo, nonsignificant for ATX (OR = 0.91, 95% CI, 0.66, 1.24) and MPH (OR = 0.35, 95% CI, 0.24, 0.52) and significant for LDX (OR = 0.60, 95% CI, 0.22, 1.65) and nonsignificantly higher for BUP (OR = 1.64, 95% CI, 0.50, 5.43).

CONCLUSIONS: It is the first nonsponsored metaanalysis that analyzes and reports on discontinuations of ATX, BUP, LDX and MPH. The results suggest that MPH, ATX and LDX have the best acceptability. More research is needed for a better clinical evaluation of BUP.