

The effectiveness of methylphenidate in the management of Attention Deficit Hyperactivity Disorder (ADHD) in people with intellectual disabilities: A systematic review

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Abstract

BACKGROUND:

The effectiveness of psychostimulants, primarily methylphenidate (MPH), in the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in the general population of typically growing children and adolescents is well established through many Randomised Controlled Trials (RCTs).

AIMS AND METHODS:

We carried out a systematic review of all the RCTs in people with intellectual disabilities (ID) that assessed effectiveness of MPH on the core ADHD symptoms.

OUTCOMES AND RESULTS:

We included 15 papers from 13 studies that were all on children and adolescents with ID (315 participants were on MPH and placebo respectively), 12 of which used a cross over design, and one used a parallel design. On average around 40-50% responded to MPH in the ID group whereas around 70-80% response rate is reported among the non-ID children. Because of the heterogeneity of the outcome data it was not possible to carry out a meta-analysis. Significant adverse events included sleep difficulties and poor appetite along with weight loss and also irritability, social withdrawal and increased motor activities including tic.

CONCLUSIONS AND IMPLEMENTATION:

On the basis of the poor quality evidence that is available, it seems that MPH may be effective in some but not all children and adolescents with ID and ADHD.