

A meta-analysis of behavioural interventions for sleep problems in children with neuro-developmental disorders.

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A systematic review was conducted to synthesise the evidence for effectiveness of behavioural interventions in managing sleep problems in children who have been diagnosed with neuro-developmental disorders; resulting in clear recommendations for professionals seeking to improve sleep problems in this population.

Method: Four databases were searched; the Cochrane CENTRAL, Embase, Ovid MEDLINE, and PsycINFO. Eligible studies were RCTs published 2004 - 2015 in English. The population tested were children between two and fourteen years with any neuro-developmental disorders, such as ADHD and autism. The interventions were behavioural interventions. The primary outcome was sleep problems. The papers were double checked independently for inclusion, data extraction and risk of bias. Only four studies met the inclusion criteria and the findings from these were synthesised and included in the meta-analysis.

Results

A meta-analysis revealed a significant medium effect size in post-intervention measures for sleep problems, favouring the intervention groups (-0.74, 95% CI 0.99 - 0.49). In contrast, no significant difference was found between intervention and comparator groups in reducing disorder symptoms (SMD = -2.19; 95% CI -4.70 – 0.31).

Discussion: These findings suggest behavioural interventions for sleep can be effective in reducing sleep problems in children with neuro-developmental disorders but do not support a corresponding role for in the reduction of disorder symptoms in this context.