

**A systematic review of cognitive function and psychosocial well-being in school-age children  
with narcolepsy**

*Jane Blackwell, Hetaf Alammari, Anna Weighall, Ian Kellar, Hannah Nash*

**School of Psychology, University of Leeds**

**Introduction:** A systematic review was conducted to assess whether cognitive function and psychosocial well-being is impaired in school-age children with narcolepsy and to evaluate the quality of the extant evidence. Narcolepsy is a neurological sleep disorder characterised by excessive daytime sleepiness and attacks of muscle weakness which are often precipitated by strong emotions (cataplexy). This review is timely in the context of a worrying increase in the incidence rate of narcolepsy diagnosis in children and adolescents since 2010.

**Method:** Four databases were searched; the Cochrane CENTRAL, Embase, Ovid MEDLINE, and PsycINFO. Eligible studies were those primarily concerned with narcolepsy, (and/or cataplexy) and cognitive function and/or psychosocial well-being published between 2005 – 2015, in English. The population tested were children between five and seventeen years with a diagnosis of narcolepsy or cataplexy. The primary outcome measures were cognitive function and/or psychosocial function. The papers were double checked independently for inclusion, data extraction and risk of bias. Only eight studies met the inclusion criteria and the findings from these were synthesised.

**Results/Conclusions:** The evidence synthesis suggests that narcolepsy puts children and adolescents at particular risk of cognitive impairment in at least one domain and emotional problems including depression, anxiety and low self-esteem which may consequently lead to poorer quality of life. However, current research is limited by small sample sizes and lack of standardised assessments, appropriate controls and longitudinal data. Further research is urgently needed to gain further evidence about the cognitive and psychological consequences of childhood narcolepsy. Research must address the identified limitations to facilitate development of clear recommendations for any extra support needed to enable children with narcolepsy to achieve their full potential.

**Words:** 299