Effects of attention deficit hyperactivity disorder signs and socio-economic status on sleep bruxism and tooth wear among schoolchildren: structural equation modelling approach.

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Abstract

BACKGROUND:
The prevalence of both bruxism and attention deficit hyperactivity (ADHD) has increased in recent years.

AIM:
This study evaluated the direct and indirect effects of signs of ADHD, reported by parents/caregivers and teachers, with sleep bruxism. In addition, this study explores the effects of socio-economic status (SES) on sleep bruxism.

DESIGN:
This cross-sectional study was performed in Diamantina, Brazil, with 851 randomly selected schoolchildren aged 6-12 years. The schoolchildren were undergone an oral examination for the evaluation of bruxism. Moreover, parents/caregivers fill out a form for the assessment of sleep bruxism and sociodemographic factors. Parents/caregivers and teachers responded to the Swanson, Nolan and Pelham scale - version IV (SNAP-IV) for the assessment of ADHD signs. The structural equation modelling approach was used, and standardised coefficients to direct, indirect and total effects were calculated.

RESULTS:
ADHD signs had a significant moderate (SC = -0.19, P < 0.01) effect on sleep bruxism. SES had a significant indirect effect on bruxism via sucking habits. Moreover, SES had a significant direct (SC = -0.16, P = 0.01) and total effect on tooth wear (SC = -0.17, P < 0.01).

CONCLUSION:
This study concluded that signs of ADHD and SES have a complex direct and indirect effects on sleep bruxism among schoolchildren.