

PRESENTATION 5

Sleep Quality and Duration and Development of Depressive Symptoms in Children and Adolescents: A Systematic Review of Prospective Studies

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Background

Sleep quality and duration play an integral part in brain development, learning, memory and various other cognitive functions whilst also determining overall wellbeing. Recent epidemiological data has found that sleep duration and quality is declining around the world leading to number of serious health consequences, namely depression and anxiety disorders. This trend is particularly rising in children and adolescent populations. Sleep disturbances have been shown to be a risk factor for the development of depression in children and adolescents. However, the directionality of this relationship has not been well studied or synthesised in these populations. Aim: To carry out a systematic review of the literature studying the prospective association between poor sleep quality and short sleep duration and the development of depressive symptoms in childhood and adolescents.

Methods

We performed a systematic search using PubMed, Embase, Web of science and Cochrane up to (October 20, 2019). Included studies were prospective, had a follow-up of ≥ 1 year for incident outcomes, had sleep quality and/or quantity at baseline, and measures of incidence of low mood or anhedonia or anergia or irritability at follow up. Studies needed to include children or adolescents (12-18yrs) in the baseline analysis. Studies that matched this criterion were then included in the final qualitative synthesis.

Results

Fourteen prospective studies were included in the final synthesis. Of these, seven studies primarily investigated sleep quantity/duration as an exposure. Four of these found that a reduction in baseline sleep duration significantly predicted onset of depression or worsening of depressive symptoms on validated sleep questionnaires. Studies which included sleep quality as the primary exposure also reported a significant longitudinal relationship between sleep quality and depression. Interestingly, primary sleep problems also resulted in worsening of depressive symptomatology in patients with existing diagnosed depression.

Key messages

Poor sleep quality and decreased sleep duration may be risk factors in the development of depression in adolescents. However, definitive conclusions cannot be made due to variance between study designs and cohort samples. Therefore, in order to further clarify the directionality of this relationship, further studies that improve on the current designs will be needed.

