

Daytime sleepiness predicts future suicidal behavior: a longitudinal study of adolescents

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Abstract

Study Objectives

Daytime sleepiness is associated with poor daytime functioning and adverse cognitive and emotional consequences, such as impaired decision-making and increased impulsivity. Little is known about the association between daytime sleepiness and suicidal behaviors. This study examined the prospective relationship between daytime sleepiness and suicidal behaviors, including suicidal thought (ST), suicide plan (SP), and suicide attempt (SA), in a large sample of adolescents.

Methods

A prospective longitudinal study of 7072 adolescents (mean age = 14.6 years) was conducted in Shandong province, China. Participants completed a self-administered questionnaire to assess suicidal behaviors, daytime sleepiness, nighttime sleep duration, insomnia, snoring, hopelessness, impulsivity, anxiety/depression, and family demographics. Participants were first surveyed in November–December 2015 and resurveyed 1 year later. Of the 7072 participants, 77.1% ($n = 5451$) who did not report suicidal behaviors at baseline were included for primary analysis.

Results

The incidence rates of ST, SP, and SA at 1 year follow-up were 6.0%, 2.1%, and 1.6%, respectively. The incidence rates of ST and SP significantly increased with elevated daytime sleepiness score at baseline. After adjusting for adolescent and family covariates including sleep-related variables (i.e. insomnia, nighttime sleep duration, and snoring), a daytime sleepiness score \geq median at baseline was significantly associated with increased risk of ST (OR = 1.55, 95%CI = 1.02–2.35) and SP (OR = 2.60, 95%CI = 1.22–5.53).

Conclusions

Daytime sleepiness appears to be a significant predictor of subsequent suicidal behaviors in adolescents. These findings emphasize the importance of assessing and intervening daytime sleepiness for preventing suicide in adolescents.

daytime sleepiness, suicidal behavior, cohort study, adolescents

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