

Sleep disturbance as a risk factor for non suicidal self injury and suicidal behaviour in youth

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Introduction: Converging evidence identifies sleep disturbance as an evidence-based risk factor for suicidal behaviour. This relationship has not yet been systematically evaluated in association with a history of non-suicidal self-injury (NSSI). Research is warranted among adolescents given increased vulnerability to sleep disturbances and high risk of suicide attempts. The current investigation sought to examine sleep disturbances among youth with 1) no history of self-directed violence (SDV) (controls), 2) history of NSSI, or 3) history of a suicide attempt (SA).

Methods: N=1046 high school students (aged 15–17; 53% female) completed self-report surveys of SDV (with and without suicidal intent), depression, and a range of sleep parameters using: The Sleep Condition Indicator (SCI; Insomnia symptoms), Disturbing Dreams and Nightmare Severity Index (DDNSI), Munch Chronotype Questionnaire (MCQ; sleep efficiency (SE), total sleep time (TST), chronotype), and Hospital Anxiety and Depression Scale. Consistent with suicidal ideation findings, sleep disturbance were hypothesized to be greater among both SDV groups relative to those without such a history. ANCOVA analyses (including HADS as a planned covariate) were employed to examine differences between groups.

Results: Youth in groups endorsing past SDV (NSSI=12.2%, SA=5.6%) scored Significantly lower on the SCI ($p<0.001$), indicating greater insomnia severity than controls (82.2%). SE was poorer (school ($p=0.005$) and weekend nights ($p=0.004$)), with shorter school night TST ($p=0.003$) and greater eveningness observed among those reporting NSSI and SA history ($p=0.020$). DDNSI-assessed nightmare severity differed significantly between all three groups ($p<0.001$), with the highest scores observed among those with an SA history. All effects remained when controlling for depression, with the exception of chronotype.

Conclusion: Findings revealed significant differences in sleep disturbance between youth with no history of SDV and those reporting NSSI or SA histories. These findings may inform empirically-driven approaches to risk assessment and interventions to enhance suicide prevention and NSSI.

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