Sleep quality as mediator between drinking and depressive symptoms

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Background

Previous researches indicated that drinking related to poor sleep quality and depressive symptoms, and poor sleep quality also was associated with depressive symptoms. However, the mechanisms between these relationships have not yet been determined. In this study, we aimed to investigate whether sleep quality mediate the relationship between drinking and depressive symptoms.

Methods

A self-administered questionnaire was used to collect data from 34,283 high school students selected in Guangdong province in China. The Pittsburgh Sleep Quality index (PSQI) was used to assess the occurrence of sleep disturbance, and the Center for Epidemiology Scale for Depression (CES-D) was used to identify whether individuals had depressive symptoms. A path model was produced by using AMOS 17.0.

Results

The mean PSQI global score was 5.6 (± 2.8) points, and the mean CES-D score of students was 14.5 (± 8.6) points, and 5.9% of the students had depressive symptoms. The results of the path model suggested that with adjustment for age, gender, family economic status, and study pressure, the standardized direct effect between drinking and poor sleep quality was 0.077, and between drinking and depressive symptoms was 0.007. Our results also showed that the standardized indirect effect between drinking and depressive symptoms was 0.031, which represents 81.6% of the total effect of drinking on depressive symptoms.

Conclusions

These results suggest that sleep quality mediated the association between drinking and depressive symptoms. We should focus on the high-risk population who was involved in both drinking and poor sleep quality.
Key messages

- These results suggest that sleep quality mediated the association between drinking and depressive symptoms.
- The mean PSQI global score was 5.6 (± 2.8) points, and the mean CES-D score of students was 14.5 (± 8.6) points, and 5.9% of the students had depressive symptoms.