INTRODUCTION

- Disruption of daily routines (employment, social interaction, health behaviors) during the COVID-19 pandemic has contributed to psychological distress (worry, rumination), likely impacting sleep-related behaviors.
- These changes have potentially serious consequences for mental and physical health, such as anxiety, social isolation, decreased opportunities for physical activity, which may increase biological susceptibility to illness.1-3

METHODS

- This study examined the relationships between psychological adjustment and insomnia symptoms during the COVID-19 pandemic.
- From April 2020 through February 2021, 204 adults from Utah completed three data collection cycles across 11-consecutive months to examine effects of participant self-reported depressive and anxiety symptoms over time on insomnia severity.
- Anxiety and depressive symptoms were assessed via the Generalized Anxiety Disorder scale (GAD-7) and Patient Health Questionnaire depression scale (PHQ-8).
- Insomnia was measured by the Insomnia Severity Index (ISI).
- Data were analyzed using mixed-effect modeling and adjusted for anxiety and depression to determine their independent effects on insomnia symptoms. Spaghetti plots examined mean changes over time and significance was set at p<0.05. Average anxiety, depression, and insomnia severity scores were aggregated for each month.

RESULTS

- Nearly half of participants (45.6%) reported clinically significant ISI scores (≥15).
- As participants’ symptoms of anxiety and depression increased in severity, insomnia symptoms increased similarly.
- In both the random intercept and random slope models, there were significant independent effects of anxiety on insomnia severity ($F=23.09; p<0.0001$) and significant effects of depression on insomnia severity ($F=107.12; p<0.0001$).
- While in change in insomnia severity over time was marginally significant ($F=3.98; p=0.0475$), dropping from 15.17 (April, 2020) to 10.88 (January, 2021), longitudinal analyses revealed no significant difference for the effect of anxiety or depression in predicting insomnia severity over time.
- When we examined mean levels of insomnia and psychological distress (anxiety and depression) across participants for each month (Table 3), averages varied but decreased overall. However, mean scores for insomnia remained elevated throughout the 11 months of data collection.

CONCLUSIONS

- These results demonstrate the high levels of insomnia and psychological distress during the pandemic.
- Results underscore the importance of examining the role of mental health functioning and severity level and psychological resiliency on sleep to positively impact public health behaviors and outcomes through prevention efforts in response to a significant and global stressor.

REFERENCES


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