

Maladaptive Sleep Beliefs and Attitudes Are Associated with Insomnia Among Individuals with Arthritis

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Sleep disturbances, including difficulty initiating sleep, maintaining sleep, and/or early morning awakenings, are all types of insomnia, reported in up to 70% of persons with arthritis.¹ Rigid beliefs and unrealistic expectations about sleep are viewed as important to the maintenance of insomnia.^{2,3} In the general population and in other clinical populations, individuals with insomnia exhibit higher levels of unhelpful sleep beliefs compared to good sleepers.^{4,5} Cognitive behavioural therapy for insomnia (CBT-I) has been shown to reduce dysfunctional beliefs about sleep, and improve insomnia symptoms.⁶

Little is known about the presence and types of maladaptive sleep beliefs among individuals with arthritis. To guide the tailoring of an internet-delivered CBT-I intervention, we examined unhelpful sleep beliefs and their association to insomnia severity among persons with arthritis. A total of 254 individuals with arthritis recruited via social media and arthritis patient organizations (mean age 61.6, SD 13.2, 84.3% women) completed an online survey assessing sociodemographics, disease-related factors, depression, and stress. The Insomnia Severity Index (ISI)⁷ and the 10-item Dysfunctional Beliefs About Sleep Scale (DBAS)⁸ were also administered. DBAS scores were significantly higher for individuals with inflammatory arthritis (IA) with clinical insomnia and subthreshold insomnia compared to those with no insomnia symptoms. The top three most commonly rated dysfunctional sleep beliefs among individuals with arthritis experiencing clinical insomnia were as follows: 1) I am concerned that chronic insomnia may have serious consequences on my physical health; 2) After a poor night's sleep, I know that it will interfere with my daily activities on the next day; and 3) When I feel tired, have no energy or just seem to not function well during the day, it is generally because I did not sleep well the night before.

After adjusting for relevant sociodemographic, disease-related, and psychosocial factors, higher DBAS scores remained independently associated with higher ISI scores, explaining an additional 15% of the variance.



Dysfunctional sleep beliefs are associated with the severity of insomnia in individuals with arthritis. Individuals with arthritis experiencing clinical insomnia report unhelpful beliefs in particular both about the immediate and the long-term negative consequences of insomnia. Given that changes to unhelpful sleep beliefs following CBT-I are associated with improved sleep, it is imperative to address these rigid sleep beliefs in order to improve the effectiveness of behavioural interventions for individuals with arthritis.

References:

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