

## Cognitive behavioral therapy for chronic insomnia in occupational health services: Analyses of outcomes up to 36 months post-treatment

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**Objectives:** The purpose of this study is to examine effectiveness of CBT-I among daytime and shift workers with insomnia over a 36-month follow-up in occupational health services (OHS). In addition, response patterns of participants over a follow-up period is presented.

**Methods:** The participants were 59 media workers with chronic insomnia, of whom 66 % were reached at 36-month follow-up. Sleep diaries and questionnaires over eight measurement points were used as outcomes. Trained OHS nurses led the CBT-I groups. The study design was a non-randomized group intervention.

**Results:** Self-perceived severity of insomnia, sleep-related dysfunctional cognitions, and psychiatric symptoms in particular showed improvements over a 36-month follow-up among both daytime and shift workers. Based on the Insomnia Severity Index (ISI), 62 % of the participants showed a moderate improvement after CBT-I, whereas the remaining participants showed only a minor improvement.

**Conclusions:** Our results indicate that CBT-I delivered by OHS leads to long-term improvements regardless of working hour arrangements. Two groups were identified according to the degree of improvement of insomnia; one comprising two thirds of the participants with a moderate response and the other comprising one thirds of the participants with a modest response. The results need to be interpreted cautiously as insomnia of participants was on average mild, and the study design was non-randomized.