

Cognitive behavioral therapy for insomnia among different types of shift workers

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Objectives: Because of irregular sleep-wake pattern shift work is a challenge in the screening and treatment of chronic insomnia. However, our earlier results showed that cognitive behavioral treatment for insomnia (CBT-I) delivered by trained nurses of occupational health services (OHS) may be effective treatment also among workers with irregular work hours. The aim of the present study is to compare the implementation and effectiveness of OHS delivered group and self-help based CBT-I in a randomized and controlled design (RCT) among different types of shift work.

Methods: Participants (n=90-120) are shift workers with insomnia disorder that has lasted at least three months. The participants are randomized to a) group-based CBT-I (6 group sessions); or b) mainly computerized self-help CBT-I (an individual session before and after the intervention) delivered by a trained OHS nurse or psychologist; or c) control group given a sleep hygiene intervention (1 individual session). Outcomes are assessed using a sleep diary, questionnaires, actigraphy and cognitive performance tests. To study the effect of CBT-I program at molecular level, blood samples of participants will be collected at baseline and at the end of the program for genetic analyses. The measurements are conducted at five time points for a period of two years.

Results: We expect to find that both group and self-help based CBT-I among different types of shift workers are effective low-intensity treatments of chronic insomnia compared to control intervention.

Conclusions: Through the training of OHS or general medical practitioners and by computerised self-help interventions we may have better chance to make CBT-I more accessible to a larger number of insomniacs also with different types of working hours. Additionally, it may be possible to decrease chronic insomnia and unfavourably consequences of insomnia to the health and performance capacity in shift workers.