Effects of an acceptance-based behavioral intervention for insomnia in adults with longstanding pain

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Background and aim

Insomnia is common among patients with longstanding pain and it is correlated with a number of adverse outcomes, e.g. greater pain, anxiety and depression and greater disability. Previous studies have suggested that insomnia is an important link between pain and disability.

However, few studies evaluating behavioral interventions for insomnia among longstanding pain patients exist. CBT-I faces challenges concerning engagement, compliance and response. The aim is to investigate the utility of a behavioral intervention for insomnia and to track changes over time in willingness to experience short-term discomfort associated with both insomnia and the sleep interventions.

Method

This pilot study was conducted as an open trial with prepost design (N=13). Patients that already have completed the behavioral medicine treatment for longstanding, debilitating pain conducted at the Behavioral Medicine Pain Treatment Service, Karolinska University Hospital, were recruited

The intervention consisted of six weekly group sessions based on CBT/ACT – psychoeducation on sleep, sleep restriction, value-driven behavior and acceptance towards unwanted experiences such as pain or daytime fatigue. Outcome measures included: Insomnia Severity Index (ISI), sleep diary, values and goal assessment. Process measures included Chronic Pain Acceptance Questionnaire-8, modified for insomnia (CPAQ-8_I). Additional outcome measures included quality of life, pain disability and actigraphy.

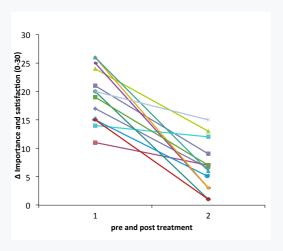


Fig 1. Values assessment

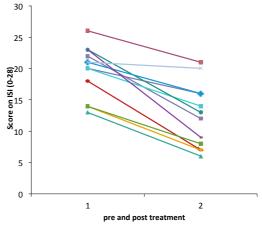


Fig 2. Severity of insomnia symptoms

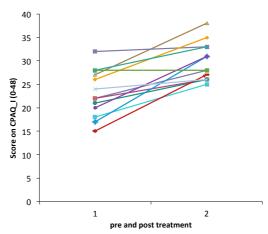


Fig 3. Acceptance of insomnia symptoms

Results

Fifteen patients were included, thirteen completed treatment. Age ranged between 24 - 64 (mean age: 36 \pm 13), 85 % female. Patients described difficulties falling asleep, difficulties maintaining sleep and problems with waking up early pre-treatment.

Preliminary findings indicate an increase in acceptance towards sleepiness and not being able to fall asleep. Pre-treatment ten of 13 patients had clinically significant insomnia, compared to four of 13 post-treatment (based on ISI).

Discussion

These results indicate a preliminary positive effect of the treatment. However, more research including controlled clinical trials with larger samples evaluating CBT/ACT interventions for insomnia and pain patients is much needed. Development of instruments measuring psychological flexibility specifically around insomnia is also needed.

