Institut für Sozialmedizin, Epidemiologie und Gesundheitsökonomie

Effectiveness of App-based relaxation for patients with chronic neck pain (Relaxneck) - a pragmatic randomized trial

Summary:
With a lifetime prevalence of 30-70%, neck pain is associated with high socio-economic costs. The German Society of General Practice and Family Medicine (Degam) recommends relaxation techniques such as progressive muscle relaxation as part of a multi-modal treatment strategy against chronic neck pain. Moreover, relaxation techniques, such as autogenic training, guided imagery, and mindfulness therapies are used for the treatment of chronic pain. At present, the effect of additional self
-practice on chronic neck pain in a usual care setting is unclear.
The aim of this pragmatic randomized study is to evaluate whether additional relaxation techniques in addition to usual care prove more effective in the reduction of chronic neck pain compared to usual care alone. 220 patients aged 18-65 years with chronic (>12 weeks) neck pain and a mean pain score ? 4 on a Numeric Rating Scale (NRS) in the last week before randomization will participate in the study.
Participants will be randomized in two groups (relaxation exercise, usual care alone as waiting list). Participants in the intervention group will apply a 15-minute relaxation exercise guided by a smartphone application ("app". The exercise should be applied daily, (minimally, five days per week) for 6 months. The app contains audios to guide autogenic training, mindfulness based training and guided imagery. On a daily basis, participants can select one of the three exercises which they want to apply. At baseline, all participants will complete a paper-and-pencil outcome measure. After 3 and 6 months, participants will complete an app-based electronic questionnaire regarding outcome measures. Daily, participants will fill-out a weekly diary and also answer a daily question on their neck pain intensity.. Both the neck pain
question and the diary will be provided via the app. The primary outcome is the mean pain intensity after 3 months measured by the daily pain intensity on the NRS.
Secondary outcome parameters are the mean pain intensity measured weekly as the average pain intensity of the last seven days on a NRS, pain acceptance (German version of Chronic Pain Acceptance Questionnaire), stress (NRS), sick leave days, and pain medication intake.

Principal investigator:
Witt, MD, MBA
Project coordinator:
Blödt
Research associate:
Pach, MD
Höfer
Data management:
Icke
Project coordination office:
Eden
Bartsch
Biometrics:
Roll, PhD
Project duration:
2013-2020
Project status:
publication phase
Funding:
Investigator Initiated Trial

Publication:
Blödt S, Pach D, Roll S, Witt CM. Effectiveness of app-based relaxation for patients with chronic low back pain (Relaxback) and chronic neck pain (Relaxneck): study protocol for two randomized pragmatic trials. Trials. 2014;15:490; doi:10.1186/1745-6215-15-490.