

Ergonomic and Non-pharmacologic Chronic Pain Relief for Massage Therapists

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Introduction. Chronic pain, especially chronic low back pain (LBP) is a common musculoskeletal disorder (MSDs) in general population (Hoy et al., 2014). Most massage therapists complain about chronic LBP, caused by workloads, physical demands that are associated with MSDs, such as working in awkward postures, repetitive motions, which are known as ergonomics risk factors. One of the treatments for the relief of chronic pain in massage therapists is autogenic training (AT) with mind-body relaxation, and team learning (TL) with ergonomic education of massage therapists about their stereotypical negative work conditions and how to conduct best practice scanning, with improvement of workplace relations and organizational culture (Lee et al., 2014; Vince, 2011).

Aim, Materials and Methods. The aim of this study is to evaluate effectiveness of using AT and TL for massage therapists who suffer from chronic LBP.

17 massage therapists (males = 13, females = 4) in their given age took part in the study in 2016, mean duration of pain was $5.1 \pm SD 1.5$ months and mean duration of professional experience was $8.2 \pm SD 3.0$. The intensity of LBP before and after AT session was determined by using a Numerical Rating Scale (NRS; McCaffery, Beebe, 1993). Life quality assessment with Quality Of Life Scale (QLS; Cowan and Kelly, 2003) was realized before and after AT and TL course. During the testing for AT and TL course with follow-up assessment at 3 and 6 months 10 massage therapists (males = 7, females = 3) were selected, who were under one month AT and TL course evaluation.

Results. During the testing for AT and TL course, six males and one female manifested paroxysmal state reactions, and for these patients AT and TL was not started. The treatment course resulted in significant ($p < 0.05$) improvement of NRS scores with decrease in pain intensity from 5.57 at the beginning of AT and TL course to 1.14 at the end of course in 6 males (85.7%; $n = 7$), accordingly - from 6.33 to 1.0 in 2 females (66.6%; $n = 3$). Analysis of QLS data showed improvement of work-life well-being for 71.4% males, for 33.3% females. Follow-up assessment indicated lasting reduction in pain intensity for males and females, which can be explained by benefits of positive self-influence during AT practice at home by the app. During TL course massage, therapists acquired self-management with improvement of workplace relations and organizational culture, self-help strategies.

Conclusions. AT and TL one-month course by reducing musculoskeletal discomfort and increasing work-life quality is an effective ergonomic and non-pharmacologic chronic pain relief for massage therapists in their given age suffering from chronic LBP induced by work stress.