

Selected topic: Self-management/lifestyle interventions

The effect of self-management interventions on musculoskeletal disorders in musicians: a scoping review.

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Introduction: Musicians are chronically exposed to repeated physical movements, making them susceptible to developing musculoskeletal disorders (MSDs). The lower back, neck, and shoulders are the most affected areas. Recent research suggests that offering high-quality self-management interventions (SMIs) can be effective in assisting people with MSDs in occupational settings. However, there is limited information about the effect of SMIs on MSDs in musicians.

Purpose/Aim: This review aimed to 1) explore the effect of SMIs on MSDs in musicians and their ability to perform and 2) explore intervention characteristics/features that may be associated with beneficial outcomes. This includes characteristics/features such as the frequency, duration, mode of delivery and methods that promote adherence and/or compliance with the intervention.

Materials and Methods: The scoping review methodology was guided by the Johanna Briggs Institute framework. A 3-step systematic search was conducted in Embase, CINAHL, AMED, Music Index, RILM Abstracts of Music Literature, and ProQuest. Studies in English, both published and unpublished grey literature, that included SMIs for instrumental musicians aged 18 years and older were eligible for inclusion. Interventions had to promote active involvement of individuals in managing their condition with the aim of preventing long-term disability and restoring the ability to perform. Relevant information from the included studies were extracted and summarised by two reviewers.

Results: Of the 147 full-text articles identified, 36 met the inclusion criteria. Most of the studies used a quantitative design with 28 being interventional studies and 5 observational studies. Strength and endurance exercises targeting the lower back, neck and shoulders had similar positive effects on playing-related pain (PRP). There were fewer reports on musical performance (7 out of 30 studies), with some (5 out of 7 studies) showing improvements in self-perceived levels of physical exertion during performance. The frequency and duration of the interventions varied, with the shortest lasting 15 minutes and the longest lasting 1 year. The frequency ranged from one to three times weekly, with sessions/classes lasting 45 minutes to 2 hours. Most of the interventions were delivered in supervised group sessions. Six studies used digital health interventions (DHIs), either as a standalone method of intervention delivery or to promote independent application after exercises had been demonstrated. The studies that used DHIs achieved consistent improvements in PRP and reported high adherence rates. Only one study used an evidence-based theoretical framework to inform intervention development.

Conclusion(s): Although exercise-based SMIs maybe beneficial, successful rehabilitation for musicians involves restoring at least a basic level of professional performance. This should be considered in both clinical practise and in future research. Further research is needed to develop and evaluate appropriate theoretical frameworks for intervention development and to explore the use of DHIs. Finally, this review is limited by the exclusion of studies not in English.

Keywords: musicians, musculoskeletal disorders, self-management interventions