

Current Trends and Evidence-based Interventions in Physiotherapy Management of Shoulder Instability: A Narrative Review

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ABSTRACT

Shoulder instability is a prevalent pathology among patients worldwide, particularly among the young who play contact sports, leading to pain, dysfunction and recurrent dislocations that have a significant impact on an individual's quality of life. Due to multifactorial aetiology and variable presentations of the condition, the management of the disease remains a challenge with limited evidence of an effective treatment in the existing literature. The present narrative review investigates the emerging trends and gathers the best evidence-based physiotherapy interventions for treating shoulder instability and what strategies could be implemented to achieve better outcomes. A comprehensive literature search was conducted across databases such as PubMed, PEDro, Cochrane Library and CINAHL for studies published over the years 2015-2024 using various combinations of search terms like "shoulder instability" AND "physiotherapy" and extraction of data were carried out in the present review. Total 109 studies were found on different databases. A total of five studies were selected, all of them comprising of randomised controlled trials, that addressed physiotherapy interventions for shoulder instability. A total of 328 patients participated in the study. The Western Ontario Shoulder Instability Index (WOSII) was used as the primary outcome measure. The study found that neuromuscular exercises showed

significantly greater improvement than standard care exercises in traumatic anterior shoulder dislocation. Neuromuscular Electrical Stimulation (NMES)-enhanced physical therapy is an effective novel treatment approach for Functional Posterior Shoulder Instability (FPSI), a severe type of shoulder instability. The Watson shoulder instability programme, which emphasises on restoring patient-specific scapular motor control, typically scapular upward rotation, before beginning rotator cuff or deltoid strengthening exercises, was the most successful in the management of Multidirectional Instability (MDI). High-load strengthening exercises were proven to be more effective in improving patient lifestyle and emotion about shoulder pain and function, than low-load strengthening exercises. Digital physical therapy was equally effective when compared to conventional in-person physical therapy. Hence, telerehabilitation has become a viable option for managing chronic shoulder pain associated with shoulder instability in terms of accessibility and convenience. Nonetheless, lack of studies and the diversity of protocols necessitates the need for further research to obtain solid evidence.

Keywords: Joint Instability, Physical therapy modalities, Rotator Cuff, Shoulder Pain, Telerehabilitation.