

Real-World Effectiveness of Physiotherapy Interventions for Musculoskeletal Disorders in Nigeria

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Background: Physiotherapy interventions for musculoskeletal disorders (MSDs) are diverse. Thus, it is necessary to assess the real-world effectiveness of these interventions, outside of randomized controlled trials. This study investigated the effect of physiotherapy interventions on pain in patients with MSDs in a real-world setting.

Methods: A review of medical charts of adult patients attending Physiotherapy Outpatient Clinic at the Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC), Osun State, Nigeria between 2009 and 2018 was carried out. Data on the type of physiotherapy interventions, and pain intensity at baseline and end of the treatment were obtained. Cases of patients with MSDs who presented with other co-morbidities and patients that received private care outside of prescribed home programmes were excluded. Data were analysed using descriptive and parametric inferential statistics to determine the effectiveness of the interventions.

Results: Overall, medical charts of 1,582 (Male = 47.5%, Female = 52.5%) patients with a mean age of 47.8 ± 25.7 were included in this study. Of these patients, 73%, 21.9%, and 5.1% of them received Vertical Oscillatory Pressure (VOP), strengthening exercises, and other forms of physiotherapy interventions, respectively. The mean (SD) effect of VOP on pain intensity at baseline and treatment endpoint were 4.91 (3.10) and 2.21 (1.79), respectively. The effect of strengthening exercise and other interventions on pain intensity at baseline and endpoint were 6.35 (1.47), and 2.70 (1.35); and 6.38 (1.46), and 2.72 (1.35) respectively. There were significant differences between baseline and endpoint data for VOP, strengthening exercise and other physiotherapy interventions (all $p = 0.001$).

Conclusions: Physiotherapy interventions were useful in reducing pain intensity in patients with MSDs in the real-world. These findings may help to improve patient outcomes and alleviate possible disability associated with the condition. Future studies are to examine the real-world cost-effectiveness of physical therapy for MSDs.