

Burden of Metabolic Syndrome on Pain Severity in Knee Oa Patients

Mullai Vendhan P¹, Angeline R²

¹Post Graduate Student, ²Associate Professor, Faculty of Physiotherapy SRIHER, Chennai, India.

Email Id: mullaivendhankpm789@gmail.com

Abstract

Background: Knee Osteoarthritis (KOA) and metabolic syndrome (MetS) often co-exist. Metabolic syndrome (MetS) is frequently associated with central obesity and is characterized by elevated waist circumference, raised blood sugar level, raised triglycerides, reduced high-density lipoproteins, and hypertension, which is implicated in the pathogenesis of OA. This study aims to investigate the prevalence of metabolic syndrome in patients with primary KOA and assess if the severity of metabolic syndrome and its components correlate with osteoarthritis symptoms of pain.

Methods: The observational study was conducted at the outpatient Physiotherapy department, Sri Ramachandra Hospital, Chennai. They were divided into 2 groups based on whether or not they had the MetS. All participants were subjected to medical history taking and complete clinical evaluation. MetS was diagnosed according to the International Diabetes Federation (IDF2009). Also, participants' pain severity was evaluated using NPRS. The collected data was taken up for analysis.

Results: The study showed a significant difference (p- p-value <0.0001) between pain severity in MetS KOA groups and non-MetS KOA groups, stating a substantial burden in the MetS KOA population. Therefore, clinical practitioners should consider metabolic syndrome during the assessment of KOA. Interventions should be directed towards preventing and managing metabolic syndrome, and physiotherapy's role needs to be further explored.

Conclusion: Based on the findings, the study concluded that the Individuals with MetS OA have higher pain scores than those in the Non-MetS KOA group. Hence, the study proves a significant difference between the groups regarding pain severity.