

The Frequency of Comorbidities on Pain in Patients with Knee Osteoarthritis

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Abstract

Introduction: knee osteoarthritis (koa) co-occurs with long-term conditions like respiratory, cardiovascular diseases (cvd), neuromuscular disease (nmd), depression, type 2 diabetes, hypertension and obesity.

Methods: the study is a cross sectional observational study; the subjects were recruited from physiotherapy opd. 111 patients with koa of both genders, an age between 40 to 60 years of age, were selected based on the inclusion and exclusion criteria among koa patients with & without comorbidity. numerical pain rating scale (nprs) has been used as outcome to measure the pain in koa patients.

Result: out of 111 subjects with oa knee, 50 were male (45%) and 61 were female (54%) with age of 40 to 50 years (26%) and 51 to 60 years (73%). in subjects the frequency of comorbidities in hypertension occurred (34%), type 2 diabetes occurred (37%), obesity in (37%), chronic obstructive pulmonary disease (17%) and coronary artery disease occurred (21%). it has been found that statistically significant correlation with comorbidity and pain levels (r^2 0.1901) and with significant difference (p value < 0.00001). when comparing within comorbidities individually, chronic obstructive pulmonary disease and coronary artery disease showed higher nprs scores, with statistically significant difference ($p = 0.00328$) were observed. therefore, increase in comorbidities were associated with the higher levels of pain in nprs scale respectively.

Conclusion: these findings demonstrated the need to investigate and treat these comorbid conditions in patients with koa and emphasized the importance of examining and addressing the coexisting conditions in individuals with koa.