

Prevalence, Factors, and Complications of Knee Osteoarthritis Among Adult Patients, Attending Orthopedic Clinic at Kilimanjaro Christian Medical Centre, Kilimanjaro

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Background: Osteoarthritis (OA) is a significant public health issue characterized by progressive loss of articular cartilage that results in pain, functional impairment, disability, and diminished quality of life. The incidence of knee Osteoarthritis (KOA) is rising by increasing the average age of the general population. Age, weight, joints trauma due to repetitive movements are common risk factors. Objective: To assess the prevalence, characteristics, and complications associated with KOA among adult patients attending an orthopedic clinic in Kilimanjaro Christian Medical Centre (KCMC) between August-September 2020.

Methods: A cross-sectional study involved adult patients attending orthopedic clinics between August-September 2020. Information was collected using the Kobo Collect tool, which included socio-demographic characteristics, history of alcohol, cigarette smoking, comorbidities, and complications. The severity of KOA on radiography was analyzed according to Kellgren- Lawrence scale, and the complications related to KOA were analyzed according to the WOMAC tool on SPSS version 20.

Results: Overall, 205 participants enrolled, mean age 60.76 (SD 10.54) years with predominant female 146 (71.2%). KOA was determined in 97 participants with a prevalence of 47.32%. KOA was significantly higher in females 74 (76.3%) and aged 55-74 years old, 61 (62.9%). Non- Diabetes Mellitus were shown to be protective from having KOA and obese class II increased the chances to develop KOA (OR=0.09; 95% CI 0.01, 0.92; P-value 0.04) and (OR=12; 95% CI 1.27,113.74; P-value 0.030), respectively. Previous history of trauma at the knee joint and drinking alcohol was shown to be positively associated with KOA (OR=1.82 and 95%CI 0.52,6.42) (OR=1.69 and 95%CI 0.86,3.33), respectively. The most major complication was knee pain (51.7%), knee stiffness (39.5%), and movement limitations (43.9%).

Conclusions: Prevalence of KOA was high, with women being more affected. History of trauma, older age, drinking alcohol, and obesity were associated with KOA. Pain, stiffness, and knee movement limitation were common complications. KOA is a common condition; therefore, community awareness and supportive therapy should be highly recommended.

