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## Real World Prevalence, Pattern and Cost of Physiotherapy Treatment for Osteoarthritis in Nigeria

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Fatoye F¹, Gebrye T², Fatoye C³, Mbada C⁴, Olaniyi H⁵, Oyeleye O⁵ <sup>1</sup>Manchester Metropolitan University, Manchester, LIN, UK, <sup>2</sup>Manchester Metropolitan University, Manchester, UK, 3Manchester Metropolitan University, Manchester, LAN, UK, 4Obafemi Awolowo University, Ile-Ife,, Nigeria, 5Faculty of Allied Health Sciences, Ondo, Nigeria OBJECTIVES: Osteoarthritis (OA) is a chronic degenerative joint disease affecting 60-70% of elderly population globally. It is associated with significant economic burden to individuals and health systems. This study examined the real world prevalence, pattern and cost of physiotherapy for OA in Nigeria. METHODS: A retrospective study of all cases of OA seen over a 10 year (2009 and 2018) period at the Obafemi Awolowo University Teaching Hospitals Complex, Île Ife, Osun State, Nigeria was conducted. A 10 year (2009 and 2018) record of all cases of OA were assessed. Data were gleaned on socio-demographics, treatments administered and the costs of physiotherapy. Both direct and indirect costs were estimated using the cost of illness approach. Data were summarised using descriptive statistics of mean, standard deviation (SD) and frequency. Inferential statistics of t-test and ANOVA were also used to analyse the data RESULTS: The prevalence of OA was 3.6% of all cases over a 10 year period. The mean (SD) age of patients was 62.1 (9.3) years, and 80.9% of them were women. OA of the knee was the commonest and often presented with pain (100%), swelling (44.1%), crepitus (77.9%), reduced range of motion (77.2%), and deformity (34.6%). The most common physiotherapy interventions used were strengthening exercises (58.8%) and soft tissue massage (98.5%). 24.3% and 13.2% of the patients also received infrared radiation therapy, and other modalities such as ultrasound and transcutaneous electric nerve stimulation, respectively. Physiotherapy interventions had significant effect on pain (p = 0.001). The annual mean (SD) direct and indirect costs of OA were 36.13 ± 7.87 and 144.52 ± 31.49 USA dollars (USD), respectively. CONCLUSIONS: Real-world prevalence of OA was relatively low in Nigeria with the knee joint most frequently affected. Physiotherapy interventions were effective for reducing pain in patients with OA.