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## Real-World Economic Burden of Musculoskeletal Disorders in Nigeria

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**Abstract :** Musculoskeletal disorders (MSDs) such as low back pain (LBP), cervical spondylosis (CSPD), sprain, osteoarthritis (OA), and post immobilization stiffness (PIS) have a major impact on individuals, health systems and society in terms of morbidity, long-term disability, and economics. This study estimated the direct and indirect costs of common MSDs in Osun State, Nigeria. A review of medical charts for adult patients attending Physiotherapy Outpatient Clinic at the Obafemi Awolowo University Teaching Hospitals Complex, Osun State, Nigeria between 2009 and 2018 was carried out. The occupational class of the patients was determined using the International Labour Classification (ILO). The direct and indirect costs were estimated using a cost-of-illness approach. Physiotherapy related health resource use, and costs of the common MSDs, including consultation fee, total fee charge per session, costs of consumables were estimated. Data were summarised using descriptive statistics mean and standard deviation (SD). Overall, 1582 (Male = 47.5%, Female = 52.5%) patients with MSDs population with a mean age of  $47.8 \pm 25.7$  years participated in this study. The mean (SD) direct costs estimate for LBP, CSPD, PIS, sprain, OA, and other conditions were \$18.35 (\$17.33), \$34.76 (\$17.33), \$32.13 (\$28.37), \$35.14 (\$44.16), \$37.19 (\$41.68), and \$15.74 (\$13.96), respectively. The mean (SD) indirect costs estimate of LBP, CSPD, PIS, sprain, OA, and other MSD conditions were \$73.42 (\$43.54), \$140.57 (\$69.31), \$128.52 (\$113.46), sprain \$140.57 (\$69.31), \$148.77 (\$166.71), and \$62.98 (\$55.84), respectively. Musculoskeletal disorders contribute a substantial economic burden to individuals with the condition and society. The unacceptable economic loss of MSDs should be reduced using appropriate strategies. Further research is required to determine the clinical and cost effectiveness of strategies to improve health outcomes of patients with MSDs. The findings of the present study may assist health policy and decision makers to understand the economic burden of MSDs and facilitate efficient allocation of healthcare resources to alleviate the burden associated with these conditions in Nigeria.

**Keywords :** economic burden, low back pain, musculoskeletal disorders, real-world

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