

clearly established for university students and most studies in this area have not explored how the lifestyle can affect cardiorespiratory fitness in the young population. In view of this, understanding how different aspects of lifestyle are associated with ACR can be useful for the development of interventions aimed at promoting the health and well-being of this population.

Objectives: The objective of this study was to evaluate the influence of lifestyle in the cardiorespiratory fitness in university students.

Methods: The research used a quantitative cross-sectional observational method with a sample of 423 university students (64,7% women), with a mean age of 21 ± 4.8 years. To assess lifestyle, the instrument The Short Multidimensional Inventory Lifestyle Evaluation (SMILE-C) was used. Cardiorespiratory fitness was assessed using the 20m Shuttle Run test, which is a valid measure to estimate the ACR in the young population. Statistical analysis was performed using a univariate general linear model to assess the contribution of lifestyle to cardiorespiratory fitness. The significance adopted was $p < 0.05$. All analysis was performed using JASP Version 0.15 software.

Results: The results showed that lifestyle was not a significant predictor ($F(1,421) = 0.02$; $p = 0.870$; $R^2 = 0$). Since the assumptions of normality of the residuals and homoscedasticity of the model were not met, the bootstrapping technique was performed with 5000 resamplings. However, the model remained non-significant ($B = 0.00$, $p = 0.86$).

Conclusion: This study provides evidence indicating that lifestyle are not associated with cardiorespiratory fitness in university students. However further studies are needed.

Implications: The findings of this study can be applied in creating specific intervention programs aimed at improving the cardiorespiratory fitness of university students. In addition, knowledge of these factors can also be used by health professionals to guide and encourage students to adopt a healthier lifestyle, thus improving the health and well-being of this population.

Keywords: Medicine lifestyle, University Students, Cardiorespiratory fitness

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HEALTHCARE COSTS WITH OSTEOARTHRITIS IN BRAZIL OVER 2023: A COST-OF-ILLNESS STUDY

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Background: Osteoarthritis is a chronic joint disease that predominantly affects the knee and hip, causing high levels of pain and disability. In recent decades, its global prevalence has increased considerably, impacting health systems, the economy and patients' quality of life. Financial resources for health systems are scarce worldwide. Thus, understanding the economic impacts related to these conditions is essential to assist health decision-makers on how to allocate financial resources efficiently.

Objectives: To estimate the healthcare costs of hip and knee osteoarthritis in Brazil over 2023.

Methods: This is a cost-of-illness study conducted from the Brazilian public healthcare system perspective using a gross-costing and top-down approach with a time horizon of 12 months. Healthcare costs over 2023 were extracted from the Brazilian health database. Healthcare costs consisted of inpatient care costs (data derived from the Hospital Information System) and outpatient care costs (derived from the Outpatient Information System). The quantities and costs of the inpatient healthcare services were categorized as personnel services, in-hospital service, intensive care unit service, and companion stay. The quantities and costs of the outpatient healthcare services were categorized as diagnostic procedures, therapeutic interventions, minor surgical procedures, assistive devices, and supplementary services. Data were extracted considering adults with 18 years-old or over, both sexes, and the following International Classification of Diseases 10th Revision (ICD-10) codes for hip osteoarthritis: M16-Coxarthrosis, M16.0-Primary coxarthrosis, bilateral, M16.1-Other primary coxarthrosis, M16.2-Coxarthrosis resulting from dysplasia, bilateral, M16.3-Other dysplastic coxarthrosis, M16.4-Post-traumatic coxarthrosis, bilateral, M16.5-Other post-traumatic coxarthrosis, M16.6-Other secondary coxarthrosis, bilateral, M16.7-Other secondary coxarthrosis, M16.9-Coxarthrosis, unspecified; and for knee osteoarthritis: M17-Gonarthrosis, M17.0-Primary gonarthrosis, bilateral, M17.1-Other primary gonarthrosis, M17.2-Post-traumatic gonarthrosis, bilateral, M17.3-Other post-traumatic gonarthrosis, M17.4-Other secondary gonarthrosis, bilateral, M17.5-Other secondary gonarthrosis, M17.9-Gonarthrosis, unspecified. The total healthcare costs (the sum of inpatient and outpatient care costs), outpatient costs, and inpatient care costs were presented descriptively and reported separately. We also reported the outpatient costs related to physiotherapy procedures, separately. All costs were extracted in Brazilian Real (R\$) and converted to International Dollar (\$) using the 2023 purchasing power parity approach.

Results: The total healthcare costs due to osteoarthritis were US\$58 million in 2023. Inpatient care accounted for the biggest share of these costs, representing 86.7% of the total healthcare costs (US\$50.3 million). Overall, the total healthcare costs were higher for knee (53.42%) compared to hip osteoarthritis (46.6%). The physiotherapy costs represented 74% of all procedures performed in outpatient care services, representing US\$5.7 million.

Conclusion: The Brazilian public healthcare system expended US\$58 million with osteoarthritis in 2023. Knee osteoarthritis accounted for the biggest share of these costs. Inpatient care costs were higher compared to outpatient care costs. The most common procedure consumed for outpatient care was physiotherapy.

Implications: Cost-of-illness studies with representative and current data are needed to better understand the socioeconomic impact of osteoarthritis in Brazil. This information can help identify which procedures are most used in the management of osteoarthritis to improve the allocation of financial resources. This information can also help in the development of clinical practice guidelines to improve the quality of services.

Keywords: Cost-of-illness, Osteoarthritis, Healthcare costs

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