African Biomechanics in Sport (Social/Health/Applied)

Cost-Effectiveness Analysis of District Hospital Systems in Ethiopia: A Multilevel Regression Study

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Abstract

District hospitals in Ethiopia play a critical role in healthcare delivery but face challenges in cost-effectiveness. A longitudinal study using multilevel regression models to analyse data from Ethiopian district hospitals, incorporating both healthcare costs and outcomes. District hospital spending per patient ranged between 50−¿ 200 with a significant variance in service quality and cost-efficiency indicators. The analysis identified key areas for improvement within the district hospital systems to enhance their financial sustainability and effectiveness. Implement targeted interventions focusing on resource allocation, training programmes for healthcare providers, and patient referral strategies. District Hospitals, Multilevel Regression, Cost-Effectiveness, Healthcare Systems, Ethiopia

Keywords: *Geographic, multilevel, regression, cost-effectiveness, health systems, Ethiopia, data analysis*