Methodological Evaluation of District Hospitals Systems in Senegal: A Randomized Field Trial for Adoption Rates

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Abstract

The healthcare landscape in Senegal is characterized by a diverse array of district hospitals with varying levels of adoption for modern medical systems. The methodology employed includes a comprehensive search strategy using databases such as PubMed and Scopus. Studies were included if they utilised randomized field trials to measure adoption rates in district hospitals. Methodological rigor was assessed through thematic analysis. A significant proportion (70%) of the reviewed studies used a two-arm randomized controlled trial design, indicating its effectiveness in measuring adoption rates among hospital staff and patients. Randomized field trials are recognised as robust methods for evaluating the adoption rates of modern medical systems within district hospitals in Senegal. The findings suggest that this approach can be reliably applied across different healthcare settings. Further research should explore the long-term impacts of these randomized trials and consider scalability to other regions with similar healthcare infrastructures. Treatment effect was estimated with $text\{logit\}(\pi) = beta\,0 + \beta^{-}\,p\,X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan, randomized controlled trial, health system reform, community-based intervention, outcome evaluation, primary healthcare, service delivery models*

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