



Methodological Evaluation of Community Health Centre Systems in Senegal: A Randomized Field Trial for Efficiency Gains

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Abstract

Community health centres in Senegal are crucial for delivering healthcare services to underserved populations. However, their efficiency and effectiveness remain under-researched. A randomized controlled trial was conducted in Senegal's community health centres. A sample size of 50 centres was randomly assigned either to receive enhanced training and resources or to continue with standard operations as the control group. Among the participating centres, those receiving additional support demonstrated a statistically significant *text* { *Improvement Rate* } = 12% (95% CI: [6%, 18%]) in service delivery efficiency compared to the control group. The randomized field trial revealed that targeted interventions can lead to substantial improvements in operational efficiency of community health centres, highlighting a novel method for enhancing healthcare delivery systems. Based on these findings, it is recommended that Senegalese policymakers implement structured training and resource allocation programmes within community health centres to achieve greater efficiency gains.

Keywords: *African geography, community health systems, randomized trials, efficacy measures, outcome evaluation, geographical distribution, health service delivery*

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