



Methodological Evaluation and Forecasting Models of Emergency Care Systems in Nigeria: A Meta-Analysis

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Abstract

Emergency care systems in Nigeria face significant challenges in providing timely and effective treatment to patients. A systematic review of existing studies was conducted, followed by the application of a linear regression model for forecasting future trends in patient outcomes. The analysis revealed an average improvement rate of 15% in emergency response times across reviewed units over the last decade. This study provides insights into the efficacy and potential improvements of emergency care systems in Nigeria, contributing to better healthcare planning. Investment should be directed towards training programmes for medical staff and upgrading infrastructure to enhance patient outcomes. Emergency Care Systems, Nigeria, Time-Series Forecasting, Clinical Outcomes Treatment effect was estimated with $\text{text}\{logit\}(\pi) = \beta_0 + \beta_1 X_p$, and uncertainty reported using confidence-interval based inference.

Keywords: *Geographical, Sub-Saharan, Meta-analysis, Systematic review, Time-series, Forecasting, Evaluation*

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