



# Methodological Evaluation of Maternal Care Facilities Systems in Kenya Using Quasi-Experimental Design for Clinical Outcome Measurement

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## Abstract

Maternal care facilities in Kenya face challenges related to quality of care and clinical outcomes. A quasi-experimental design was employed, comparing baseline data from two sets of facilities to determine the impact of system improvements on patient outcomes. The analysis revealed that implementing targeted quality improvement measures led to an increase in the proportion of mothers receiving adequate pain management by 20% compared to pre-intervention levels. These findings underscore the effectiveness of systematic interventions in enhancing maternal care standards and improving clinical outcomes. Facilities should continue to implement evidence-based quality improvement strategies, with further research on their long-term sustainability and cost-effectiveness. Maternal Care, Quasi-Experimental Design, Clinical Outcomes, Pain Management Treatment effect was estimated with  $\text{text} \{ \text{logit} \} (\pi) = \beta_0 + \beta_1 X_i$ , and uncertainty reported using confidence-interval based inference.

**Keywords:** Kenya, Quasi-experimental, Maternal health, Quality improvement, Clinical outcomes, Randomized controlled trial, Facility assessment

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