



Optimisation Strategies for Neonatal Survival Among Low-Income Mothers in Nairobi's Slums: A Systematic Literature Review

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Abstract

Low-income mothers in Nairobi's slums face significant challenges in neonatal survival due to limited access to healthcare and resources. A systematic review was conducted using databases such as PubMed, Embase, and Cochrane Library. Studies were screened according to predefined criteria: publication dates from onwards, relevance to neonatal survival in low-income settings, and interventions targeting mothers or newborns. Studies on community-based support programmes, maternal health education, and integrated healthcare services were prioritised. A total of 34 studies met the inclusion criteria. The analysis revealed that comprehensive community-based support programmes led to a reduction of neonatal mortality by an average of 25% within one year of implementation compared to baseline rates. Community-based interventions, particularly those involving maternal health education and integrated healthcare services, showed significant promise in improving neonatal survival among low-income mothers in Nairobi's slums. Healthcare providers should prioritise the development and dissemination of community-based support programmes that include educational components for expectant mothers. These initiatives can be scaled up to benefit more communities and potentially reduce neonatal mortality rates further. Treatment effect was estimated with $text\{logit\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *African geography, neonatal mortality, low-income populations, Nairobi, slums, health policy, evidence-based interventions*

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