Subnational variation of under five mortality and its determinants in Kenya since 1965

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Introduction

Kenya did not achieve Millennium Development Goal (MDG) 4 despite substantial health funding and significant decline in under five mortality (USM) in the last three decades.

The launch of Sustainable Development Goal (SDG) 3.2 (reduce USM to 25 deaths per 100 live births by 2030) calls for better understanding of USM variation, its determinants and the role of the determinants in USM variation at sub national units of decision making

This will inform what interventions are needed and where needed to accelerate national USM reductions and achieve set targets.

Objectives

We characterized spatio-temporal variation and inequalities in child survival and its determinants at decentralized health planning units (counties) in Kenya since 1965

Under Five mortality

USM declined heterogeneously between 1965 and 2013 (62% average decline) with high level of inequalities between counties; There was suboptimal performance in meting global targets subnationally.

Findings

Malaria prevalence declined by 88% from 1990 to 2015. The decline was heterogenous with high transmission associated with areas surrounding Lake Victoria and the Indian Ocean coastline throughout.

Some Determinants

Malnutrition: Reductions in the number of children who are underweight over time

Improvements in the use of bed nets by children below age 5 to prevent malaria

Results are useful in the decentralized health planning to address inequalities, equity in resource allocation, setting a baseline for tracking SDGs and benchmarking of counties. The modelling framework can be adapted to other countries in LMICs

conclusions

Link to publications

Child mortality

Malaria

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