

Mapping 123 million neonatal, infant and child deaths between 2000 and 2017

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Abstract

Since 2000, many countries have achieved considerable success in improving child survival, but localized progress remains unclear. To inform efforts towards United Nations Sustainable Development Goal 3.2-to end preventable child deaths by 2030-we need consistently estimated data at the subnational level regarding child mortality rates and trends. Here we quantified, for the period 2000-2017, the subnational variation in mortality rates and number of deaths of neonates, infants and children under 5 years of age within 99 low- and middle-income countries using a geostatistical survival model. We estimated that 32% of children under 5 in these countries lived in districts that had attained rates of 25 or fewer child deaths per 1,000 live births by 2017, and that 58% of child deaths between 2000 and 2017 in these countries could have been averted in the absence of geographical inequality. This study enables the identification of high-mortality clusters, patterns of progress and geographical inequalities to inform appropriate investments and implementations that will help to improve the health of all populations.

Keywords

KeyWords Plus: UNDER-5 MORTALITY; SYSTEMATIC ANALYSIS; CIVIL REGISTRATION; AFRICA; HEALTH; INTERVENTIONS; VACCINATION; POPULATION; PREVENTION; SUCCESS