

Levels and trends in adult background mortality in sub-Saharan Africa

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Abstract for PAA 2006

Summary:

This paper examines recent levels and trends in adult mortality from all causes of death and without AIDS in sub-Saharan Africa. After a review of the existing literature, it consolidates existing estimates and builds on community studies and biomedical cohort data to infer national levels and trends in background adult mortality (i.e., from other causes than AIDS).

Background: According to UNAIDS, of the 38 countries in sub-Saharan Africa for which HIV prevalence estimates are available, 19 countries experienced HIV prevalence rates greater than 5 per cent in 2003; in 10 of those countries, prevalence rates exceeded 12 per cent (prevalence rates are based on the adult population aged 15-49). HIV/AIDS has become a leading cause of death in these countries with higher prevalence rates, and the demographic and socio-economic impact for individuals, families and communities have reached unprecedented scales.

While the human toll taken by the AIDS pandemic is a major public health issue, the majority of the general population – even in the worst hit countries by the epidemic – remains uninfected and little is known about the recent levels and trends in overall adult mortality from non-AIDS causes.

Most studies focus on the impact of HIV/AIDS on adult mortality and provide valuable insights about the demographic consequences of the epidemic, but no systematic review and comprehensive synthesis is available as of now about this issue.

In the context of national mortality projections and the modeling of the AIDS epidemic throughout sub-Saharan Africa, this lack of up-to-date knowledge about recent trends in background adult mortality (i.e., from all causes – except AIDS) is increasingly becoming an issue of concern to formulate plausible future mortality scenarios – especially for the countries experiencing the most severe HIV/AIDS epidemic.

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Data: This paper relies on three sources of data: adult mortality estimates from community cohort studies with biomarkers identifying HIV+ and HIV- status, as well as direct and indirect adult mortality estimates from all causes derived from DHS sibling histories and INDEPTH demographic surveillance sites.

Analytical strategy: This paper will rely on three analytical approaches. First, it will consolidate existing data available through a review of the literature and a meta-analysis of published estimates. Secondly, it will compare the findings from cohort studies with those from Timaeus-Jasseh (2004) for all causes of death. Thirdly, it will use some multivariate analysis to derive national mortality estimates controlling for the stage of the HIV epidemic and other study covariates.

Expected results: This comparative study and consolidated analysis of adult mortality from all causes in countries with low or very low HIV prevalence as of 2003 is expected to provide insights on recent levels and trends in background mortality for adults in sub-Saharan Africa – including in countries experiencing higher HIV prevalence rates.

For this later group of countries, the use of adult mortality estimates by HIV status (based on biomarker or verbal autopsies) will enable to validate and to potentially develop adjustment factors to revise national adult mortality estimates in the absence of AIDS.