CAUSE OF DEATH IN URBAN AFRICA: NEW EXPERIMENTS WITH VERBAL AUTOPSY QUESTIONNAIRES IN ACCRA, GHANA

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A variety of methods - direct, indirect and exploitation of facility-based reports – have been used to estimate child and adult mortality rates in Africa. From these studies we learn that under-reporting of deaths in sub-Saharan Africa remains severe, particularly in rural areas. Even when death rates can be estimated from surveys or censuses, only a few clear-cut causes of death, such as maternal and accidental deaths, have been studied in detail. In urban areas, however, there is often some albeit incomplete reporting of causes of death using facility-based or vital registration sources. In a pilot study conducted in Accra, Ghana, we first examine the completeness and coverage of these systems and then report on the use of verbal autopsy questionnaires to establish the probable causes of death based on interviews with next of kin. These causes are compared with the information found on death certificates.

The paper briefly describes the system in place in Accra for the routine medical certification of causes of death, the issuance of burial permits and the registration of deaths with the Births and Deaths Registry. Several features of the system seem to operate against wider formal registration of causes of death. Some particular features of the deaths registered are noted, including the tendency to treat neonatal deaths differently. Comparisons are drawn with procedures in the francophone counties – Mali in particular.

The estimation of the completeness of overall death reporting for cities is complex since the age structures of all urban populations are affected by migration, usually the in-migration of people of young adults. This means that the standard methods for estimation completeness of reporting, the growth-balance methods and derivatives, cannot be applied without adjustment and adaptation. First, we show how removing those not born in the city from the population allows us to adjust the age distribution and make the application of some of the standard indirect estimation methods possible. Completeness estimates are generated for the years surrounding the last census in 2000. Then, knowing what fraction of all deaths are reported either in the health facility records or on the medical certificates, we describe the patterns of causes of death assuming that the proportional distribution of causes is the same as for those without a death certificate. The death rates are compared with estimates from surveys and other studies around the same time period. Finally, using panel data from the Women's Health Study of Accra, Wave 2, we track the deaths of 200 adult females and collect information on the perceived cause of death as obtained using verbal autopsies questionnaire with next of kin. In some case, the death registration system was available for comparison with the interview reports.

The paper concludes with some recommendations on how urban mortality in Africa could be re-examined using a combination of census, survey, facility-based and routine death registration with a view to establishing clear patterns of causes of death in such populations.