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Age Misreporting and its Impact on Adult Mortality Estimates in South Asia*

ESTIMATES of adult mortality in developing countries usually depend upon intercensal analyses of cohort survival or upon civil registration data converted into life tables. Both types of analyses rely heavily upon one of the most suspect pieces of data, an individual's age. In much of South Asia, Africa and Latin America, a large fraction of people do not know their true age, and what gets reported in a census or a survey is an educated guess made by either the enumerator or the informant. Any systematic biases in reported ages are transmitted to estimates based on them. For example, death rates at older ages are widely suspected of being biased downwards in many developing countries by age exaggeration.[1]

In this paper we will focus on patterns of age misstatements in South Asia, where age errors are particularly pronounced, and their effect on estimates of adult mortality derived from intercensal analyses. In contrast to earlier studies on this issue, which relied upon model life tables or on assumed age-patterns of mortality, we attempt to use demographic identities to infer patterns of age misreporting and demonstrate through simulation typical biases in mortality estimates these may give rise to. Discussion below makes extensive use of Indian data, but conclusions of the study could easily be generalized to whole of South Asia.

Age Misreporting Patterns in India

Among the developing countries India has the distinction of conducting an uninterrupted series of decennial censuses from 1871. Until recently, age distributions of the population recorded in them were the sole basis of estimating levels of adult mortality. Unfortunately

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1. See for example, R. Retherford and G. M. Mirza, Evidence of Age Exaggeration in Demographic estimates of Pakistan, *Population Studies*, 36 (1982): 257-70; S. Horiuchi and A. J. Coale, A Simple Equation for Estimating the Expectation of Life at older Ages, *Population Studies.* 36 (1982): 317-26; and A. J. Coale and E. E. Kisker, Mortality Crossovers: Reality or Bad Data?, *Population Studies.* 40 (1986): 389-402.