Mortality Analysis of China’s 2000 Population Census Data: A Preliminary Examination*

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Abstract

Mortality analysis is an important part of the demographic analysis of census data. Using the tabulated census data released by census authority, this paper examines the quality of census data, calculates the mortality indicators of the 2000 population census, and analyses the levels and patterns of reported mortality in the last decade in China. The paper finds no obvious age preference and age heaping. However, underreporting in

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age and death counts is found to be serious, especially among young
children and young adults, resulting in a lower reported mortality than the
actual figure. Due to the more hazardous occupations of male migrant
labourers in urban areas, females have experienced a more rapid decline
in mortality, especially among young adults in urban areas. However,
excess female infant mortality is increasing, especially in rural areas. The
direction of further thorough analysis of mortality data from the 2000
census is also discussed.

Introduction

China conducted its fifth population census in 2000, setting 1 November as
the standard reference date. Compared with the four previous censuses, this
census made several innovations, such as a new definition of the usual
residence, new definitions of shi (city), zhen (town) and xian (county), and
an improved design of the census questionnaire with its many new census
questions, as well as changes in data entry techniques. \(^1\) By international
standards, the census has been officially claimed as a success. \(^2\) However,
the 2000 census is the first one implemented in the transitional market
economy in China, and many unprecedented challenges strongly influ-
enced the census implementation and quality. In fact, the quality of the
2000 census is not regarded as comparable with that of the previous four
censuses. This is evidenced in an underreporting rate of 1.81% in the post-
enumeration survey for the total population in the 2000 census, while the
corresponding underreporting rate in the 1990 census was only 0.06%. \(^3\)
Several studies have examined the implementation and quality of the 2000
census, and found that many changes and factors contributed to the in-
crease in underreporting, for example, a huge increase in the floating
population, separation of people from their household registrations in
urban areas, changes in people’s attitudes towards cooperation, and
possibly, in some areas, the intervention of local officials. \(^4\)

Enumeration of deaths is an important part of a population census.
Analysis of reported death data is also an important component of demo-
graphic studies to indicate the level and pattern of mortality, as well as
to reflect socioeconomic change and improvement in people’s living
standards. However, given the relative complexity of the 2000 census
implementation and the relatively poor quality of the 2000 census data, this
paper does not attempt to conduct a thorough mortality study of it. Instead,
as a first step in the mortality analysis of the 2000 census data, it aims to