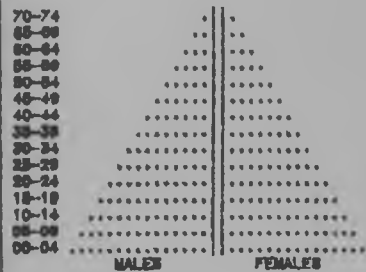


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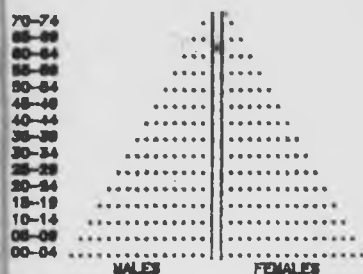
PRELIMINARY MORTALITY ESTIMATES FOR LESOTHO BASED ON DATA FROM THE NATIONAL HEALTH AND NUTRITION SURVEY

by
M. Morojele
and
Israel Sembajwe

Working Paper No. 17
July
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DEMOGRAPHY UNIT
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Foreword

Most of the indicators for mortality in the country available up to date are from old data sets of 1976 and 1977 (of over ten years ago). This is largely due to the fact that relatively recent data sets, such as the 1986 population census, have experienced some technical problems related to data processing. It is not yet possible, therefore, to get current indicators for mortality from those sources.

It is with great relief that some limited information has been acquired from the Health and Nutrition Survey (1988/89). Since the data set is still being processed, the results presented in this paper which deals with the analysis of the information should be regarded as preliminary.

We invite analytical reports of data on population, however, small they may be, as well as research papers and reports dealing with issues related to population from any member of training institutions or Government departments for consideration for publication under this series of Working Papers in Demography. The papers are published under the auspices of UNFFA Project No. LES/88/P01: Demographic

Training at the National University of Lesotho. The views expressed in the papers are, however, entirely those of the authors and not those of the United Nations.

I. Sembajwe

Chief Technical Advisor

Project LES/88/P01

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1. Introduction

Technical problems related to the processing of the 1986 population census of Lesotho have prevented the release of most of the detailed information from that census up to now. Consequently, there are no current estimates of demographic parameters. When questions are raised regarding the magnitude of infant or child mortality, or the general level of mortality in the country, the nearest point of reference for such measures, is the 1976 population census which is over fourteen years old now or the 1977 Lesotho fertility survey which is thirteen years old (Kingdom of Lesotho 1981a and 1981b; Sembajwe, 1984). Therefore, we all feel somewhat unhappy when, whenever infant or child mortality or general mortality indicators for Lesotho are referred to, we refer to the 1976 or 1977 results of between 110 to 130 deaths per thousand for infant mortality. Results which do not reflect the current situation.

It is, therefore, not surprising that both analysts and users were very happy when they were assured by the Bureau of Statistics late last year that the detailed results of the 1986 population census would be released in early 1990 since most of the technical problems were nearly overcome. But, as it has already been stated, some of the detailed data are still not available.

Consequently, out of eagerness to have some current estimates of at least one of the demographic parameters, an attempt is made in this brief paper to estimate a relatively recent level of mortality for Lesotho. The analysis in this paper, utilizes information collected during the fourth round of the 1988/89 National Health and Nutrition Survey (NHNS). As stated by one observer, this survey "is an impressive investigation which will give important results not only for Lesotho but also from an international perspective" (Taube, 1989). The data from the survey are still being processed and not yet ready for final presentation. Our estimates are therefore preliminary.

2. Mortality Estimation

The information used to estimate the mortality parameters was collected during the fourth round of the NHNS when the following questions were added to section D of the questionnaire:-

Have you had a live birth in the past 12 months (in other words after March 1988) ?

What was the date of birth of the most recent child (even if that child died) ?

Have you had a previous live birth ?

Is this previous child now alive ?

(see Annex 1: Form D of the questionnaire).

By incorporating these simple questions into the questionnaire especially "Is this previous child now alive?", some information which can be analysed using a recently developed estimation method was acquired.

Although this type of question was originally adopted for use during the completion of registration or notification

forms at various branches of the national health facilities and services by health personnel, it was deemed useful for incorporation into an ordinary survey by assuming that all mothers who had had a live birth in the 12 months preceding the survey would constitute a group of women at maternity during the notification period. What follows is the analysis and interpretation of data yielded by this questionnaire. It should be reiterated that the analysis is preliminary since the data utilized has not been fully edited and processed.

The method for analysing this type of information, was developed at the Centre for Population Studies, London

Preceding Births	Preceding Births Surviving	Proportion Surviving at Age 2 years
368	336	.913

School of Hygiene and Tropical Medicine (Brass and Macrae, 1985). It is proved that the proportion surviving out of the preceding births reported approximates the probability of surviving from birth to age two (conversely, the

proportion dead approximates the probability of dying between birth and age 2). It is thus a simple straight forward method. This method is recommended both for collecting and analysing data for monitoring trends and evaluating intervention programmes. For further discussion of the method and applications, see Aguirre and Hill (1987) and Hill and Macrae (1885).

The proportion surviving to age 2 of 913 per thousand yielded an infant mortality rate for Lesotho within the range of 70 to 75 per 1000 births and an expectation of life at birth within the range 59 to 60 years. Given the problems still prevailing in the data (further editing is necessary before final estimates can be made), these estimates should be regarded as (i) lower limits, of the infant mortality rate that may have prevailed in Lesotho in 1989, and (ii) upper limits of the expectation of life at birth that may have represented the average length of life in the country during the same period.

These estimates are, however, more plausible than those acquired from other investigations but which are localized in nature. For example, the Mohale's Hoek Demographic study of four selected villages yielded an infant mortality rate of 51 per thousand (Sembajwe and Makatjane, 1990) and a small investigation of the problems facing the civil

registration system in Lesotho carried out in Mantsebo, a village on the way from Maseru to Mafeteng (about 25 kms from Maseru Urban centre), in 1989, yielded an infant mortality rate of 32 per thousand (Sembajwe, forthcoming). As already stated, these studies were extremely localized. They do not reflect the national situation.

Assuming a Gross Reproduction Rate (GRR) for Lesotho of 2.5 to 3.0 children, the level of mortality reflected by the above estimates suggests a Death Rate for Lesotho of 10 to 11 per 1000, and a Birth Rate of 36 to 43 per 1000. Therefore, the rate of natural increase for the country falls within a possible range of 2.6 to 3.3 per 1000. Hence the likelihood of a growth rate for Lesotho in excess of 2.6 per cent as reflected by the 1986 population census is very high.

Among the implications of even a faster population growth rate for the country, are increased population pressure on available meagre resources and limited ability for the government to provide the basic needs to its people.

3. Conclusion

A relatively recent and simple method of estimating mortality in childhood has been utilized in this brief paper. Data from the NHNS has facilitated the application of this method.

The estimates indicate a mortality level with an expectation of life at birth falling within the range 59 to 60 years. But given the nature of the data that have been used, these results should be regarded as preliminary. Indeed, the need for a current more reliable national indicator for mortality in Lesotho is still very prevalent.

Nevertheless, the prospect of a gradual but steady decline in mortality in the country and the likelihood of a constant and high fertility level portends a high population growth rate. The implications of this high growth rate are unfavourable to improved welfare of Lesotho's population and this calls for sharpened and concerted government effort to curb the high rate of population growth.

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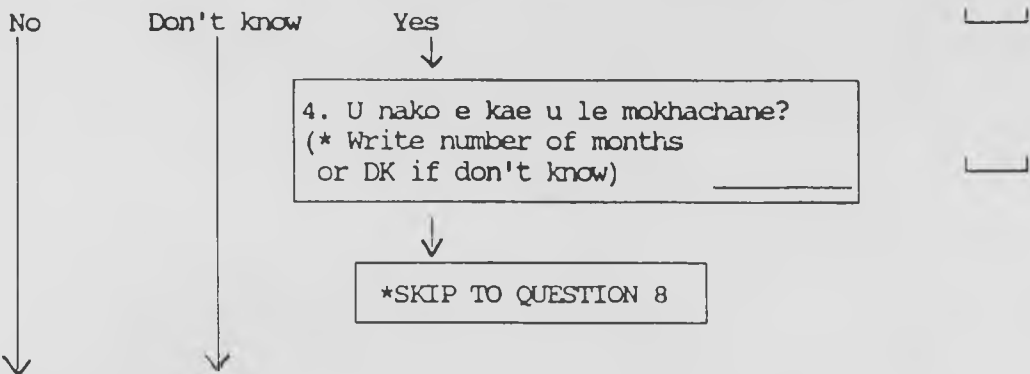
Annex 1: Form D of the Questionnaire

* TO BE ASKED OF ALL WOMEN BETWEEN 15 AND 49 YEARS OF AGE

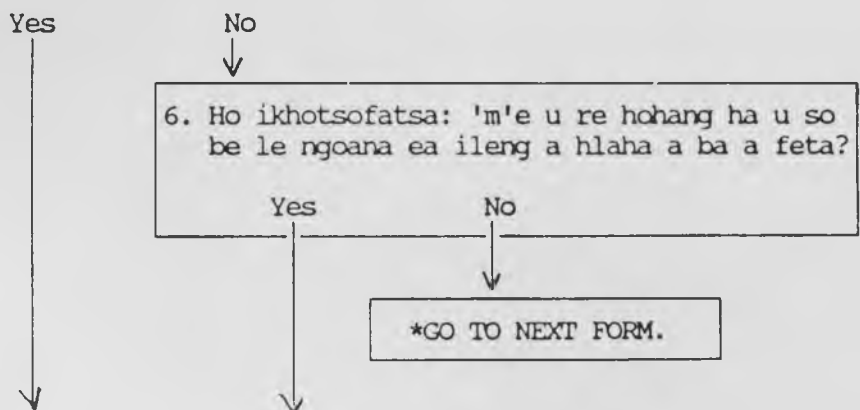
1. Name _____

2. * LINE NUMBER (from form A) _____

3. Na u lebeletse ngoa? (* circle one answer)



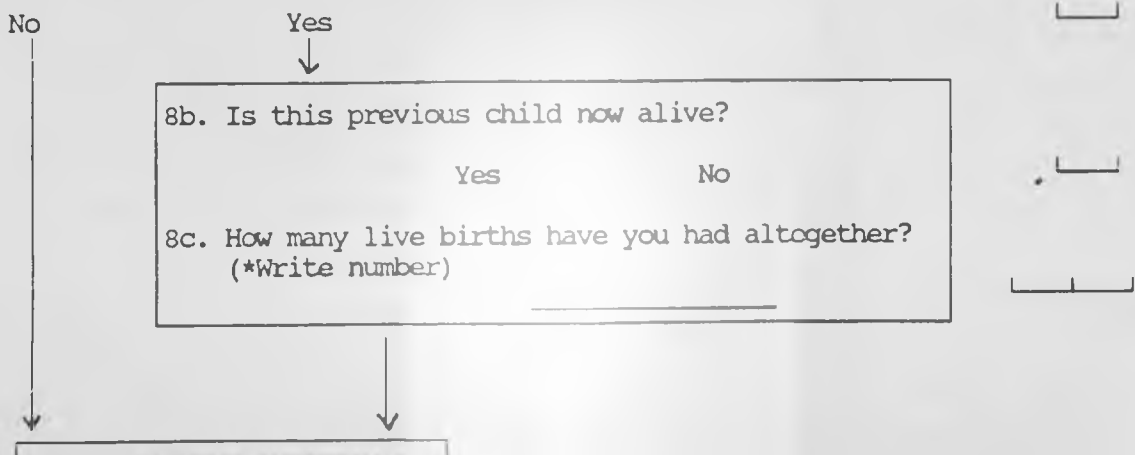
5. Na u kile oa ba le ngoana ea hlahileng a phela likhoeli tse leshome le metso e 'meli tse fetileng? Ka mantsoe a mang kamor'a hlakubele selemong sa 1988. (*Circle one answer)



7. What was the date of birth of the most recent child (even if that child died)?

Day _____ Month _____ Year _____

8a. Have you had a previous live birth?



9. During the most recent pregnancy, (* i.e. the present pregnancy if pregnant, the most recent live birth if not pregnant), did you receive any special care for the pregnancy (ante-natal care or ANC)?

No Yes

10. Where did you receive this care? (* circle one no. only)

- 1 Clinic (health centre, dispensary) or hospital
- 2 Private doctor, private nurse.
- 3 Traditional (Mopostola, ngaka ea Sesotho, Mopepisi
- 4 Trained VHW, trained traditional birth attendant i.e. Mopepisi who has been trained at the clinic
- 5 Self care, family
- 6 Other (specify)....

11. There are many reasons why people do not go to a clinic during pregnancy. Why did you not go? (*Maximum 2 answers)

- a. Clinic too far
- b. No money to go to clinic
- c. Sickness needs ngaka ea sesotho
- d. Other (specify):

12. How many times did you go for ANC?

13. IF PREGNANT → Where do you intend to have the baby delivered?
 IF NOT PREGNANT → Where was the child delivered?
 (* circle one no. only)

- 1 Hospital
- 2 Clinic (health centre, dispensary)
- 3 Private doctor's/nurse's surgery
- 4 Home
- 5 Other (specify).....

14. Who assisted (will assist) in the delivery? (*circle one no.)

- 1 Mopepisi who has trained at the clinic (Trained TBA) or VHW
- 2 Relative
- 3 Friend
- 4 Other (specify).....

15. There are many reasons why women do not deliver in a health facility? Why did/will you not? (*Circle maximum 3 answers)

- a. Lack of money
- b. Facilities too far
- c. The birth came unexpectedly
- d. Clinic was closed
- e. Prefer to deliver at home
- f. Do not find it necessary to deliver at clinic
- g. Attitude of clinic/hospital staff
- h. Tradition is to deliver at home to learn how to deliver others
- i. Delivered at home so that could bury placenta
- j. Other (specify):

16. Did/will you and the child visit any clinic or hospital during the 2 months after the child's birth?

Yes No Don't Know

17. There are many reasons why women do not go to the clinic during the period after the baby is born? Why did/will you not visit the clinic? (*Max. 3 answers)

- a. Did not feel sick/ mother & baby were fine
- b. No money
- c. Child passed away
- d. Child had already received first immunisation
- e. Too young to visit clinic
- f. Mother was ill
- g. No reason
- h. Other (specify):

* NEXT FORM



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