Numerator-denominator adjustment ratios - Unlock I

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ABSTRACT

Aim

To determine the extent of the under-reporting of Mäori and Pacific mortality among 0-

74 year olds for the period 1991-94.

Methods

A subset (n=22,578) of highly probable linked 1991 census and 1991-94 mortality

records were selected from the 31,635 census-mortality links in the New Zealand Census

Mortality Study. The numbers of decedents assigned as Mäori, Pacific, and non-Mäori

non-Pacific were compared between mortality and census data.

Results

Compared to the death registration form, 29% more 0-74 year old decedents during 1991-

94 had self-identified as sole-Mäori on the 1991 census (46% for prioritised-Mäori). This

numerator-denominator bias was greater among the young and those living in central and

southern New Zealand. Among 0-14, 15-24, 25-44, 45-64, and 65-74 year old decedents,

respectively, 91%, 50%, 41%, 26% and 15% more decedents had self-identified as sole-

Mäori on the 1991 census. For Northern, Midland, Central and Southern regional health

authority areas, respectively, 14%, 17%, 81% and 102% more decedents had self-

identified as sole-Mäori.

Among Pacific decedents 68% more 0-74 year old decedents had self-identified as sole-Pacific on the 1991 census (78% for prioritised-Pacific group). This bias for Pacific decedents did not notably vary by age and region.

Conclusion

This study confirms substantial underestimation of Mäori and Pacific mortality rates for the period 1991-94, even using the recommended sole-ethnic group denominator. The results from this study should be used to adjust ethnic-specific mortality rates for the early 1990s. Population-based funding formulas that included region-specific Mäori mortality rates would have particularly disadvantaged central and southern regions.