Mortality records: the silent witness

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In Australia, as in most developed countries in the world, mortality data represent the most comprehensive and complete set of national health statistics available. In Australia, mortality data have been available since the middle of the nineteenth century with statistics disaggregated by age, sex and cause of death available from 1907. In 1967, the Twentieth World Health Assembly defined the causes of death to be entered on the source document, the medical certificate of cause of death, as ‘all those diseases, morbid conditions or injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced any such injuries.’

Australian mortality statistics are collated and published annually by the Australian Bureau of Statistics. Until 1997, mortality data in Australia was tabulated only according to the reported Underlying Cause of Death, as defined by the World Health Organization. The intention in selection of the underlying cause is to consider the standpoint of prevention and therefore the disease or condition thought to be the precipitating cause of death, either directly or through initiation of a sequence of events leading to the death, is selected. For this purpose, the underlying cause has been defined as ‘(a) the disease or injury which initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury.’

From 1998, the ABS has coded not only the underlying cause but all other diseases and conditions reported on the death certificate, thus providing a far richer source of data relating to health problems for researchers and policy makers.

Mortality data are used for a variety of public health purposes. These include pinpointing emerging health problems for further research, informing the development health policies and programs, monitoring the effectiveness of public health initiatives and understanding changes in disease incidence over time in the Australian population. The long time series charts the changing patterns of disease in the Australian population and data are also available for various population subgroups within the Australian community. Reliable mortality data on Aboriginal and Torres Strait Islander peoples have only emerged in the 1990s, although regrettably, reliable data are still not available for NSW, Victoria, Tasmania and the ACT. The data that are available highlight the massive health disadvantages faced by indigenous people in Australia.

As noted by Wood (2007), Daking and Dodds (2007), and Pearse and Daking (2007), Australian mortality statistics are collated and published by the Australian Bureau of Statistics, but are the result of committed effort by many people and organisations:

- Relatives of the deceased provide data to a funeral director, which is then submitted to the State or Territory Registrar of Births, Deaths and Marriages (RBDM).
- A medical certificate of cause of death is completed by the doctor who attended the patient prior to death, and is lodged with the death registration forms for all deaths except those notified to a coroner.
- Registrars pass information from death registrations and medical certificates to the Australian Bureau of Statistics (ABS) which codes causes of death and publishes annual statistics on Deaths and Causes of Death occurring in Australia.
- Registrars also pass data to the Australian
Institute of Health and Welfare (AIHW) which compiles the National Death Index, to provide data on deaths for statistical and research purposes, as well as collating a national list of deaths for the Registrars.

- In cases of sudden unexpected deaths (often due to external causes), death information is provided to a coroner who is responsible for investigating the circumstances and establishing specific details about the nature and cause of the death. In turn, this cause of death data is recorded on the National Coroners’ Information System (NCIS) and provided to the ABS when available.

- The National Centre for Classification in Health (NCCH) is the Australian expert body on the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10) published by the World Health Organization (WHO). NCCH advises on the use of the ICD-10 in Australia, in particular working with the ABS on Causes of Death coding. NCCH interacts with WHO and other countries on ICD updating and revision.

In addition to the data collectors listed above, death information is collected by other bodies for specialist purposes. State and Territory committees collect data on maternal and child deaths. State and Territory cancer registries collect data on deaths due to cancer. There are separate national collections on homicides, road deaths and work deaths.

This large combination of players generally cooperates well to produce Australian mortality statistics. We are fortunate in Australia to have such a comprehensive statistical system.

As noted in the report by Lene Mikkelsen (2007), a new international initiative – the Health Metrics Network (HMN, http://www.who.int/healthmetrics) - is working with countries that are not so privileged. Many small and developing countries have only rudimentary mortality statistics, and some have none at all. Without this most basic of health indicator data, it is difficult to determine needs and priorities for action to improve the health of populations in these countries. Synergistic to these efforts are the programmes undertaken by the World Health Organization Family of International Health Classifications Network (WHO-FIC, http://www.who.int/classifications). The WHO-FIC Network has a vital role in standardising the collection of health information internationally through encouraging use of members of the WHO Family of International Classifications. The Family encompasses the International Statistical Classification of Diseases and Related Health Problems (ICD) and the International Classification of Functioning Disability and Health (ICF) and other related and derived classifications. Use of the classifications enables comparability in the data across time and between populations and countries.

Some countries, such as Fiji, have long recognised also the need to improve their mortality data and have implemented initiatives that are not reliant on, but will be complemented by, the HMN Network. Hufanga and Bennett report on work undertaken to enhance mortality data over the past ten years and the resultant improvements in capture and specificity of Fiji’s mortality data.

We hope that you will find the perspectives offered in this edition of the Journal of interest.

References