Conclusions

These analyses highlight the underestimation of the contribution of chronic diseases to mortality when cause of death is described using only the underlying cause, particularly for:

- chronic and unspecified kidney failure
- diabetes
- asthma
- dementia and Alzheimer disease
- chronic obstructive pulmonary disease.

The use of multiple cause data gives a more complete picture of all diseases contributing to deaths, which can also:

- support targeted prevention, treatment and service planning
- inform surveillance
- guide research investments
- enhance health measures that rely on cause of death information, such as estimates of burden of disease.

Aim

To explore multiple causes of death in Australia.

Background

Mortality statistics are usually compiled using the underlying cause only. However, in most cases, more than one disease contributes to death. Multiple causes refers to the underlying cause and all other causes contributing to the death.

Methods

Multiple causes were examined for all ‘natural’ and selected chronic disease deaths using the Australian Institute of Health and Welfare’s National Mortality Database for 1997–2007.

The rates of selected chronic diseases were calculated by underlying cause of death and all causes of death.

The most common contributing causes of death were identified for deaths involving selected chronic diseases.

Results

Some chronic diseases were more likely than others to be reported as associated causes of death, for example, chronic and unspecified kidney failure, diabetes, asthma, dementia and Alzheimer disease, and chronic obstructive pulmonary disease (see Figure 1).

Other chronic diseases were more likely to be reported as the underlying cause, for example, prostate, breast, colorectal, liver and lung cancers (see Figure 1).

Coronary heart disease, hypertensive diseases and diabetes often featured as leading contributory causes for deaths involving the selected chronic diseases (see Figure 2).

Nearly one-quarter (24%) of deaths involving dementia and Alzheimer disease also involved influenza and pneumonia (see Figure 2).

For more details see the full report at www.aihw.gov.au


Notes

1. For each chronic disease recorded as either an underlying or associated cause of death, the figure shows the commonly reported contributing causes.
2. Deaths for 2006 and 2007 are based on preliminary data and are subject to revision.