

Why are death rates higher in rural areas?

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Death rates in Australia are higher in rural than urban areas. Our objective is to examine causes of death of urban and rural women to gain insight into potential explanations for differences in mortality.

Methods: Participants were a community-based random sample of women (n=12,400) aged 70-75 years when recruited in 1996 to the Australian Longitudinal Study on Women's Health. The main variables used were: area of residence classified according to the Australian Standard Geographic Classification (ASGC), survival to 31st October 2006, cause of death, selected risk factors.

Results: The total number of deaths at 31st October 2006 was 2,803 and total number of women still alive was 9,597. Mortality was higher for women in rural areas overall (hazard ratio, HR=1.09; 95% confidence interval (CI): 1.01-1.18) and for most major causes of death compared to urban women. In particular, death rates were substantially higher for lung cancer (HR=1.52; 95% CI: 1.03-2.25) and chronic obstructive pulmonary disease (COPD) (HR=1.83; 95% CI: 1.25-2.69). Nevertheless there were almost no differences among the groups for current smoking or smoking history. Prevalence of overweight and obesity was slightly higher and levels of physical activity lower among women in remote areas.

Conclusion: There is little evidence that differences in mortality are due to the risk factors considered. Alternative explanations such as inequities in health services and environmental hazards should be considered. People in rural areas may suffer from a double disadvantage of poorer health services and exposure to health hazards that are less common in urban areas.