
153 *AREA DISADVANTAGE, SOCIO-ECONOMIC POSITION AND CANCER MORTALITY IN AUSTRALIA, 1998-2000*

Inequalities in mortality (at both individual and area levels), particularly cardio-vascular disease, have been well described however there has not been much attention paid to inequalities in cancer mortality. This is despite the fact that cancer is a leading cause of mortality and is set to increase.

In this paper of working Australian men aged 25-64 in 1998 to 2000, we describe: the associations between occupation and area-level socio-economic disadvantage and cancer mortality for males before and after adjusting for each other and the extent to which there are geographic variations in cancer mortality using a multilevel, binomial logit-link model. We used four primary spatial units comprising the Australian Standard Geographical Classification (ASGC) - States and Territories (S&T) (n=9), Statistical Divisions (SD) (n=59), Statistical Subdivisions (SSD) (n=187) and Statistical Local Areas (SLA) (n=1,3170). Data was organized into cells according to socio-economic position (based on the occupational categories of professionals, white collar employees or blue collar workers) and five-year age group. Socio-economic characteristics of areas were measured using the Australian Bureau of Statistics' Index of Relative Socio-economic Disadvantage (IRSD) categorised into quintiles.

Results indicated cancer mortality was strongly associated with socio-economic position. Mortality was higher for blue-collar workers (RR 1.51, 95%CI 1.36-1.69) and lower for white-collar workers (RR 0.77, 95%CI 0.65-0.92) compared with professionals. A gradient of increasing relative risk of cancer mortality was observed as area-level socio-economic disadvantage increased (after adjustment for within area variation in occupation and age) such that the relative risk of death from cancer increased with each quintile of disadvantage. Consequently, the relative risk was highest for males residing in the most disadvantaged compared the least disadvantaged SLAs (RR 1.46 95%CI 1.33-1.61). The most geographic variation in cancer mortality for males was observed at the State and Territory level. Significant area variation at the SLA and State and Territory level remained after age, socio-economic position and area disadvantage were included in the models.

This study suggests there are significant differences between areas in cancer mortality in working Australian men and that area and individual socio-economic disadvantage explains some of these differences. Therefore, inequalities in cancer mortality should be considered in health inequalities research and policy agendas.