

ABSENCE OF A SOCIOECONOMIC GRADIENT IN OLDER ADULTS' SURVIVAL WITH MULTIPLE CHRONIC CONDITIONS (PUBLICATION)



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CONTEXT

The burden of multiple chronic conditions is felt disproportionately among people living in low-socioeconomic status (SES) neighborhoods. This health-wealth gap is partly attributable to disease-promoting features of poorer neighborhoods (e.g. low grocery store availability) and more unhealthy behaviors (e.g. smoking) among the lower income individuals who populate them. Many disease-promoting characteristics of low-income neighborhoods could also worsen survival with chronic disease, however this relationship has not been tested in the context of a universal health care system.

OBJECTIVES

This study aims to examine whether low neighborhood SES exacerbates the effect of increasing chronic condition burden on survival in older adults relative to those in high-SES neighbourhoods.

METHODS

The retrospective cohort study used health administrative data from all residents of Ontario, Canada aged 65 to 105, with at least one of 16 chronic conditions on April 1, 2009 (n = 1,518,939). The 16 conditions were selected based on previous literature, which identified their population burden in terms of cost and prevalence. Chronic condition burden, health care utilization and unadjusted mortality were compared across neighborhood income quintiles. Multivariable Cox proportional hazards models were used to examine the effect of number of chronic conditions on two-year survival across income quintiles.

FINDINGS

Prevalence of five or more chronic conditions was significantly higher among older adults in the poorest neighborhoods (18.2%) than the wealthiest (14.3%). There was also a socioeconomic gradient in unadjusted mortality over two years: 10.1% of people in the poorest neighborhoods died compared with 7.6% of people in the wealthiest neighborhoods. In adjusted analyses, having more chronic conditions was associated with a statistically significant increase in hazard of death over two years, however the magnitude of this effect was comparable across income quintiles. Individuals in the poorest neighborhoods with four chronic conditions had 2.07 times higher hazard of death than those with one chronic condition, but this was comparable to the hazard associated with four chronic conditions in the wealthiest neighborhoods. In sum, among older adults with universal access to health care, the deleterious effect of increasing chronic condition burden on two-year hazard of death was consistent across neighborhood income quintiles once baseline differences in condition burden were accounted for. This may be partly attributable to equal access to, and utilization of, health care.

CONCLUSION

In Ontario and other regions with comparable health and social systems, reducing socioeconomic disparities in older adults' survival may be achieved by minimizing inequalities in who develops chronic conditions in the first place. Internationally, introduction of universal health care for people of all ages and primary prevention of large disparities in chronic condition burden should be prioritized to achieve similar socioeconomic equality in survival with multiple chronic conditions.

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