

THE INCREASING BURDEN AND COMPLEXITY OF MULTIMORBIDITY (PUBLICATION)



ANNA J KONE PEFOYO, SUSAN E BRONSKILL, ANDREA GRUNEIR, ANDREW CALZAVARA, KEDNAPA THAVORN, YELENA PETROSYAN, COLLEEN J MAXWELL, YUQING BAI, WALTER P. WODCHIS

CONTEXT

Multimorbidity, the co-occurrence of two or more chronic conditions, is common among older adults. In Canada, 74% of individuals aged 65+ reported having one or more of 11 chronic conditions in 2008. Multimorbidity has been associated with lower health related quality of life, higher utilization of health care services and prescribed medications, increased disability, and mortality. However, population-based estimates of multimorbidity are not readily available, which makes future planning a challenge. In order to better inform approaches to care management, there remains a need to explore multimorbidity, at a population-level.

OBJECTIVES

This study aims to estimate the population-based prevalence and trends of multimorbidity across all age groups, assess the co-occurrence of chronic conditions and describe the most common clusters across multimorbidity groupings.

METHODS

The retrospective cohort study used linked provincial health administrative databases to identify all Ontarians (aged 0 to 105 years) with at least one of 16 common chronic conditions. Descriptive statistics were used to examine and compare the prevalence of multimorbidity by age, number of conditions, and groups of co-occurring conditions in 2003 and 2009.

FINDINGS

The prevalence of individuals with 2 or more conditions among Ontarians rose from 17.4% in 2003 to 24.3% in 2009, a 40% increase. Within individual chronic conditions, multimorbidity rates ranged from 44% to 99%, and there were no dominant patterns of co-occurring conditions. Among individuals with four conditions, the largest cluster of conditions represents only 5% of that population, while no distinct cluster has a prevalence higher than 1.5% among individuals with 5 or more conditions.

CONCLUSIONS

The study found that multimorbidity was highly prevalent in Ontario and increased significantly between 2003 and 2009. As expected, age was strongly associated with multimorbidity. The high prevalence of multimorbidity and numerous combinations of conditions suggests that single, disease-oriented management programs may be less effective or efficient tools for high quality care compared to person-centered approaches. In order to inform the management of individuals with multimorbidity, it is crucial to identify the combinations of conditions among those with multimorbidity and to explore the common issues (e.g. pain management, functional decline) associated with multimorbidity. This study also highlighted the usefulness of administrative databases to measure and conduct epidemiological research on multimorbidity.

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