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Tracking the Development of Multimorbidity In the Australian Longitudinal Study on Women's Health

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Introduction

With population ageing the prevalence of multi-morbidity (the co-occurrence of two or more chronic medical conditions) is increasing.

Objectives and Approach

Our goal was to use data linkage to obtain clinically validated data on the incidence of a range of common chronic conditions developed by participants in the Australian Longitudinal Study on Women's Health (57,000 women) and hence to track the cumulative incidence of multi-morbidity over time.

Results

The major data sources differed for different conditions, e.g. the Pharmaceutical Benefits Scheme was important for identifying musculoskeletal conditions, whereas hospital admission data was crucial for identifying stroke. The most common combinations of conditions differed for women at different ages, e.g., mental health, musculoskeletal and respiratory conditions were most common for women born in 1989-95, whereas heart disease was a prominent part of multi-morbidity for women born in 1921-26. Among these older women about 50% had 3 or more chronic conditions in 2002 (when they were aged 76-81) and this increased to over 80% by 2015 (when they were 89-93). For comparison, among women born in 1973-78 fewer than 5% had 2 or more chronic conditions in 2002 (when they were aged 24-29) and this increased to about 15% in 2016 (when they were 38-43).

Conclusion / Implications

Record linkage from multiple data sources, repeated over a long time span, is a powerful method for studying the development of multi-morbidity patterns in cohorts.

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