The gap in life expectancy from preventable physical illness in psychiatric patients in Western Australia: retrospective analysis of population based registers

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STUDY QUESTION What is the life expectancy of people with mental illness in Western Australia compared with the general population, and how has this changed over time?

SUMMARY ANSWER The life expectancy gap between people with mental illness and the general population in Western Australia, 1985-2005, increased for males from 13.5 to 15.9 years and for females from 10.4 to 12.0 years.

WHAT IS KNOWN AND WHAT THIS PAPER ADDS People with mental illness have a shorter life expectancy than the general population, and the majority of excess mortality in people with mental illness was attributed to common physical health conditions such as heart disease, respiratory illness, and cancer.

Participants and setting
Our study was based on administrative registers describing psychiatric patients and the general population of Western Australia, 1985-2005.

Design
We used a population based register of contacts with mental health services, including inpatient, outpatient, and community mental health clinics contacts. Using record linkage we calculated mortality rates of psychiatric patients and from these we calculated life expectancies.

Primary outcomes
The study outcomes were life expectancy of people with mental illness, by diagnosis, from 1985 to 2005 compared with life expectancy of the general population, and the proportion of excess deaths attributed to each major cause of death.

Main results and the role of chance
In the general population, life expectancy in males increased from 73.1 years in 1985 to 79.1 years in 2005, and in females from 79.3 years to 83.8 years. In psychiatric patients, life expectancy in males increased from 59.6 years (95% confidence interval 58.8 to 60.3) to 63.2 years (62.6 to 63.7) and in females from 68.9 years (68.1 to 69.6) to 71.8 years (71.2 to 72.4). The life expectancy gap between the general population and psychiatric patients widened from 13.5 years (12.7 to 14.3) to 15.9 years (15.3 to 16.5) for males and from 10.4 years (9.6 to 11.2) to 12.0 years (11.3 to 12.6) for females between 1985 and 2005. Additionally, 77.7% of excess deaths were attributed to physical health conditions, including cardiovascular disease (29.9%) and cancer (13.5%). Suicide was the cause of only 13.9% of excess deaths.

Bias, confounding, and other reasons for caution
The study was based on administrative data relating to people in contact with mental health services. People with undiagnosed or untreated mental health problems or people only treated by general practitioners were not covered. People with mental disorders who were not in contact with services may have had different, and possibly worse, mortality outcomes. Changes in life expectancy over time could be influenced by changes in service delivery and diagnostic practices. However, as the prevalence of contact with mental health services has increased over time this would be expected to reduce, not increase, the observed gap in life expectancy.

Generalisability to other populations
Western Australia has a similar mental healthcare system to other parts of Australia, many European countries, New Zealand, and Canada. Although the generalisability of the increasing gap in life expectancy is unknown, the size of the gap and main contributing causes are likely to be similar in other locations.

Study funding/potential competing interests
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The life expectancy of people with mental illness compared with the general population of Western Australia, by year and sex.