

Time trends in life expectancy of people with severe mental illness in Scotland, 2000–2019: population-based study

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Introduction

Life expectancy (LE) is reported to be 10–20 years shorter in people with severe mental illness (SMI) than in the general population. Estimates of the gap in LE vary between studies and the gap is reported to be widening in some settings. There is little information on the SMI LE gap in the UK.

Aim

To evaluate the LE gap for people with an SMI in Scotland between 2000 and 2019.

Methods

- Population-based study, 2000–2019
- Compared life expectancy for adults with SMI (schizophrenia, bipolar disorder, and major depression) to the general Scottish population
- SMI ascertained from psychiatric hospital admission ICD-10 codes. Deaths identified through linkage to National Records of Scotland and ICD-10 codes used to identify natural and unnatural causes of death
- Estimated years of life lost between the ages of 18 and 94 years by SMI and sex, using the Life Years Lost (LYL) method and calculated excess LYL relative to the general Scottish population. Assessed time trends by calculating LYL and excess LYL for three-year rolling averages

Results

- Our cohort included 28,797 people with schizophrenia, 16,657 with bipolar disorder and 72,504 with major depression. One third died during the study period
- People with schizophrenia lost more life years than those with bipolar disorder or major depression. For all SMIs more life years were lost due to natural than unnatural causes (Fig 1)

Between 2000 and 2019:

- For schizophrenia, there was no evidence of a change in LE. For men, LYL due to natural causes decreased and LYL due to unnatural causes increased, whilst there was no clear change due to either cause in women (Fig 1)
- LE increased in those with depression (due to reductions in LYL due to natural causes) but there was no clear change in LE for those with bipolar disorder (Fig 1)
- LE increased in the general population
- The LE gap for people with schizophrenia increased; however there was no evidence of a change for people with bipolar disorder or major depression

At the end of the study period (2017–2019)

- LE was about 11 years lower in people with schizophrenia and 7 years lower in people with bipolar disorder or major depression, compared to the general population (Fig 2)

Figure 1: Life years lost by cause

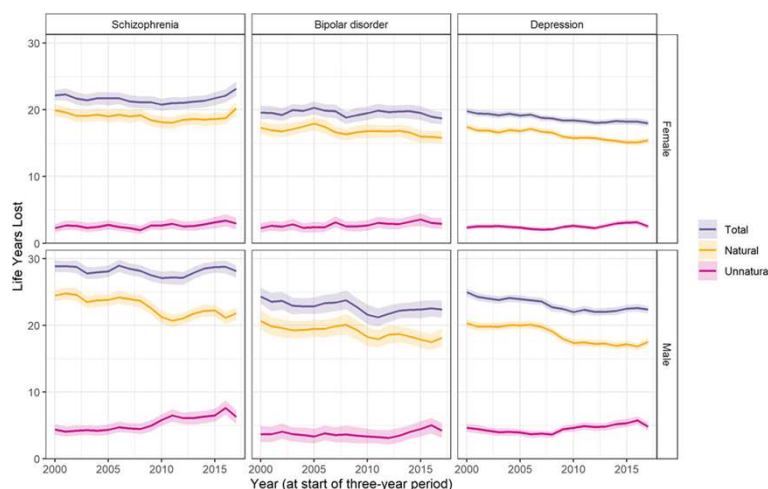
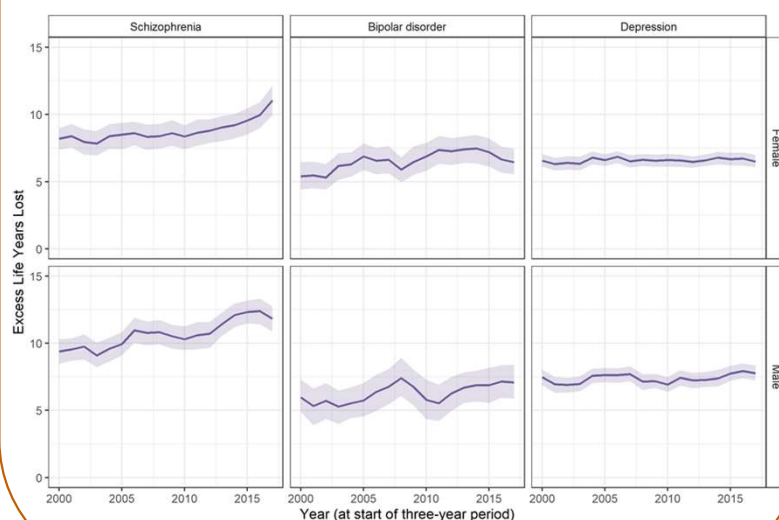


Figure 2: Excess life years lost in comparison to the Scottish population



Conclusions

In Scotland from 2000–2019, the gap in LE widened for people with schizophrenia and persisted for people with bipolar disorder and major depression.

At the end of this period, LE was about 11 years lower in people with schizophrenia and 7 years lower in those with bipolar disorder and major depression.

Our findings highlight the entrenched lower LE in this vulnerable subgroup of the population and the urgent need for renewed efforts to address these persistent disparities.

Acknowledgements

This work was supported by a Wellcome Trust–University of Edinburgh Institutional Strategic Support Fund grant awarded to CAJ.

Further information

Published in BJPsych Open
DOI: 10.1192/bjo.2025.49



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