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Cause-specific life-years lost in people with mental disorders: a nationwide, register-based cohort study

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Summary

Background

People with mental disorders have higher mortality rates than the general population and more detailed estimates of mortality differences are needed to address this public health issue. We aimed to assess whether differences in cause-specific mortality between people with and without mental disorders have changed between 1995 and 2014 by quantifying life-years lost and assessing differences over time.

Methods

Using a cohort design, we linked nationwide population data from the Danish Civil Registration System to information about hospital contacts from the Psychiatric Central Research Register and deaths from the Danish Cause of Death register. All linked data sources contained longitudinal information covering all individuals aged 15–94 years living in Denmark between 1995 and 2014. We assessed cause-specific mortality differences using rate ratios and average life-years lost.


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Between 1995 and 2014, 6 107 234 individuals (3 026 132 men and 3 081 102 women) aged 15–94 years were living in Denmark. The study population was observed over 89 216 177 person-years (men: 43 914 948; women 45 301 229). Cause-specific mortality rates were higher for people with mental disorders than those without (total mortality rate per 1000 person-years in men 27·1 vs 11·4, respectively, and in women 21·2 vs 11·0). When compared with individuals without mental disorders, men and women with mental disorders had 10·20 and 7·34 excess life-years lost, respectively. The largest cause-specific differences between those with and without mental disorders in terms of excess life-years lost were for respiratory diseases (men: 0·9; women: 1·4) and alcohol misuse (men: 2·8; women: 1·2). Between 1995 and 2014, we noted an increase in excess life-years lost for neoplasms (men: 0·7; women: 0·4), heart diseases (men: 1·2; women: 0·3), and respiratory diseases (men: 0·3; women: 0·2), and a decrease for suicide (men: –0·7; women: –0·5) and accidents (men: –0·9; women: –0·5).

Interpretation

By applying a novel approach, more precise estimates of life-years lost were obtained. The increase in excess mortality due to medical diseases and disorders among people with mental disorders emphasises the need for future interventions to address these aspects as well as the continued high shares of excess mortality due to alcohol misuse, suicide, and accidents.

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