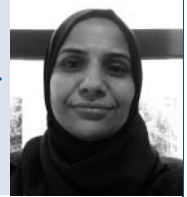


Editorial

Closing the mortality gap for severe mental illness: are we going in the right direction?†

Najma Siddiqi, Tim Doran, Stephanie L. Prady and Johanna Taylor

**Summary**

In this editorial, we discuss a UK-based cohort study examining the mortality gap for people with schizophrenia and bipolar disorder from 2000 to 2014. There have been concerted efforts to improve physical and mental healthcare for this population in recent decades. Have these initiatives reduced mortality and 'closed the gap'?

Declaration of interest

None.

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It has long been established that people with severe mental illness (SMI) (schizophrenia and bipolar disorder) have higher mortality than the general population. Studies from across the world spanning more than a century have consistently reported this disparity (many published in this journal).

Disparities in physical health

In this issue, Hayes *et al*¹ add to this body of evidence. In a longitudinal analysis of UK electronic primary care health records, they report mortality rates in people with schizophrenia and bipolar disorder to be around twice that in the general population. Unsurprisingly, they found self-harm and suicide rates elevated several-fold relative to the comparison population. However, the difference in mortality was not driven solely, or even predominantly by deaths from suicide. Consistent with previous research showing a high burden of physical disorders in SMI,² the number of cardiovascular (CVD) deaths was more than twice the number attributed to suicide. This is consistent with a recently published meta-analysis.³

The positive news from Hayes *et al*'s study is that all-cause mortality for people with SMI fell between 2000 and 2014. For bipolar disorder the rate of decline was similar to that in the general population; however, for schizophrenia the decline was slower, resulting in an increase in the absolute mortality gap. This is disappointing news given the plethora of national policies and initiatives pledging to improve the health of people with mental illness over this period and specifically to 'close the gap' and deliver 'parity of esteem'⁴ (including Modernising Mental Health Services (1998), National Service Framework for Mental Health (1999), Quality Outcomes Framework (2004), Choosing Health (2006), Increasing Access to Psychological Therapies (2008), No Health Without Mental Health (2011), Five Year Forward View (2014), and Closing the Gap (2014)).

†See pp. 175–181, this issue.

The mortality gaps – maintained for bipolar disorder and increasing for schizophrenia – are troubling. Addressing health inequality is important, not only because it represents a societal injustice, but also because health inequality is harmful from an efficiency viewpoint.⁵ In this regard, Hayes *et al*'s findings are alarming, particularly as the more recent trajectory suggests an acceleration of the disparity in mortality risk. After making gains in the 2000s, mortality for people with SMI appears to be plateauing or – particularly in the case of schizophrenia – actually increasing.

Drivers of disparities

What is driving these rising disparities? Disproportionate improvements in the health of the general population, increased burden of multimorbidity, poorer quality of general healthcare, inadequate mental healthcare provision, deteriorating socio-economic conditions for people with SMI unequally hit by economic austerity,⁶ or a combination of all of these? A nuanced understanding of the causal mechanisms is crucial for developing appropriately targeted interventions, but here, the evidence is limited.⁷

There has been a significant decrease in mortality for the UK general population during the past few decades, attributed largely to lifestyle changes, improvements in treatments, and initiatives for health promotion and prevention.⁸ Public health interventions (for example to reduce smoking and improve diet), however, appear to have largely failed to engage people with SMI.⁹ Lifestyle interventions such as support for smoking cessation and self-management of chronic diseases are predicated on high levels of literacy, health literacy and self-efficacy, and on individuals being able to make changes for themselves. This is problematic for people with SMI, who face additional social, cognitive, emotional and motivational challenges that affect their ability to benefit from these interventions.

Given the increased cardiometabolic risks in SMI (related to both the mental illness and its treatment with psychotropic medication), the increased risk of CVD mortality found by Hayes *et al* is expected. However, other conditions will also contribute to the mortality gap; the prevalence of multimorbidity is higher in people with SMI, and is increasing at a much greater rate than in the general population.² Identifying multimorbidity is important; it is known to be associated with poorer outcomes, and is thought to be one of the drivers of increased mortality for people with SMI.⁷ There is conflicting evidence on access to

– and quality of – primary care for people with mental illness.¹⁰ The number of contacts (adjusted for in the analysis by Hayes *et al*) is often used as a marker of the quality of healthcare, but frequency of contact can also be an indicator of illness severity. Examining results stratified by this variable and by multimorbidity may be helpful to furthering our understanding.

In recent decades, there have been dramatic changes to mental healthcare provision with the rise of community care and fall in number of in-patient beds both hailed as progress and criticised for leaving vulnerable patients inadequately supported. Unfortunately, resources from bed closures have not been adequately re-invested in community mental health services. National suicide rates – a crude indicator of social distress and the effectiveness of mental health provision – have been increasing since 2008 after years of decline and users of mental health services have been particularly affected.¹¹ Increased mortality associated with poorer physical health in SMI may have been compounded by a lack of adequate mental health service provision.

We know that morbidity and mortality are broadly related to wider societal influences.⁸ Under our current paradigm, remediation of social inequalities for people with SMI may be beyond the scope of what is achievable for healthcare. Nevertheless, the organisation of health services, health practitioners and choice of interventions, can and must respond to ensure that everything that can be done to reduce disparities is done. It is particularly important to monitor the impact of current austerity measures on health in people with SMI, who are likely to be disproportionately affected.¹² Unfortunately, there are limitations to using routine health databases to do this. Area-level deprivation measures do not adequately capture individual socioeconomic status, yet this is clearly important as a critical driver of people's ability to access and benefit from healthcare. Our understanding of causal relationships between socioeconomic factors and mortality in SMI would be improved by better data linkage between health and social care systems, and by including relevant social variables in statistical models.

The results of Hayes *et al*'s study show clear differences in the patterning of mortality risks between bipolar disorder and schizophrenia and may indicate different causal mechanisms. However, despite using data from one of the largest sources in the UK, exploration of such differences is limited by low event rates. One way around this may be to use more proximal outcomes, such as rates of myocardial infarction. However, these make poor proxies for mortality because of underrecording (as demonstrated in this study for CVD) and because the risks of mortality from comorbid conditions alongside SMI have not been fully elucidated, and are likely to differ from the general population. Larger sample sizes achieved through national databases or data harmonised across different sources are needed to improve our understanding.

Conclusions

Have recent policies and guidelines failed to deliver health improvements for people with SMI? Considering the timing of these initiatives and allowing for lags between implementation and impact,⁵ it may be too early to reach such a conclusion. However, we cannot ignore the sharp upward trajectory in hazard ratios for mortality in SMI in more recent years. We must continue to monitor mortality and make greater efforts to understand the causal mechanisms behind the increased risk of mortality for people with SMI. We must also, based on what we know already, intervene with screening and targeted interventions. Hayes *et al* found that risks were particularly elevated for the

under 50s, and this is consistent with previous evidence that people with SMI develop cardiometabolic disorders at an earlier age, are less likely to be diagnosed, and die earlier from these disorders than the general population.¹³ Screening for CVD and metabolic disorders among people with SMI should, therefore, be a public health priority, and screening thresholds based on age and cardiometabolic risk parameters need to reflect the differing risk profiles of this population. It is clear that in the drive for better lifestyle choices and greater emphasis on self-management for the general population, people with SMI are being left behind.⁹ We therefore need to develop and implement tailored lifestyle interventions for obesity, smoking, heart disease and diabetes that address the specific challenges faced by this population.

The mortality gap for people with SMI is an ongoing scandal that contravenes the universally accepted right to health for all. Urgent action to address it is long overdue.

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